



Focus on the Finish Line

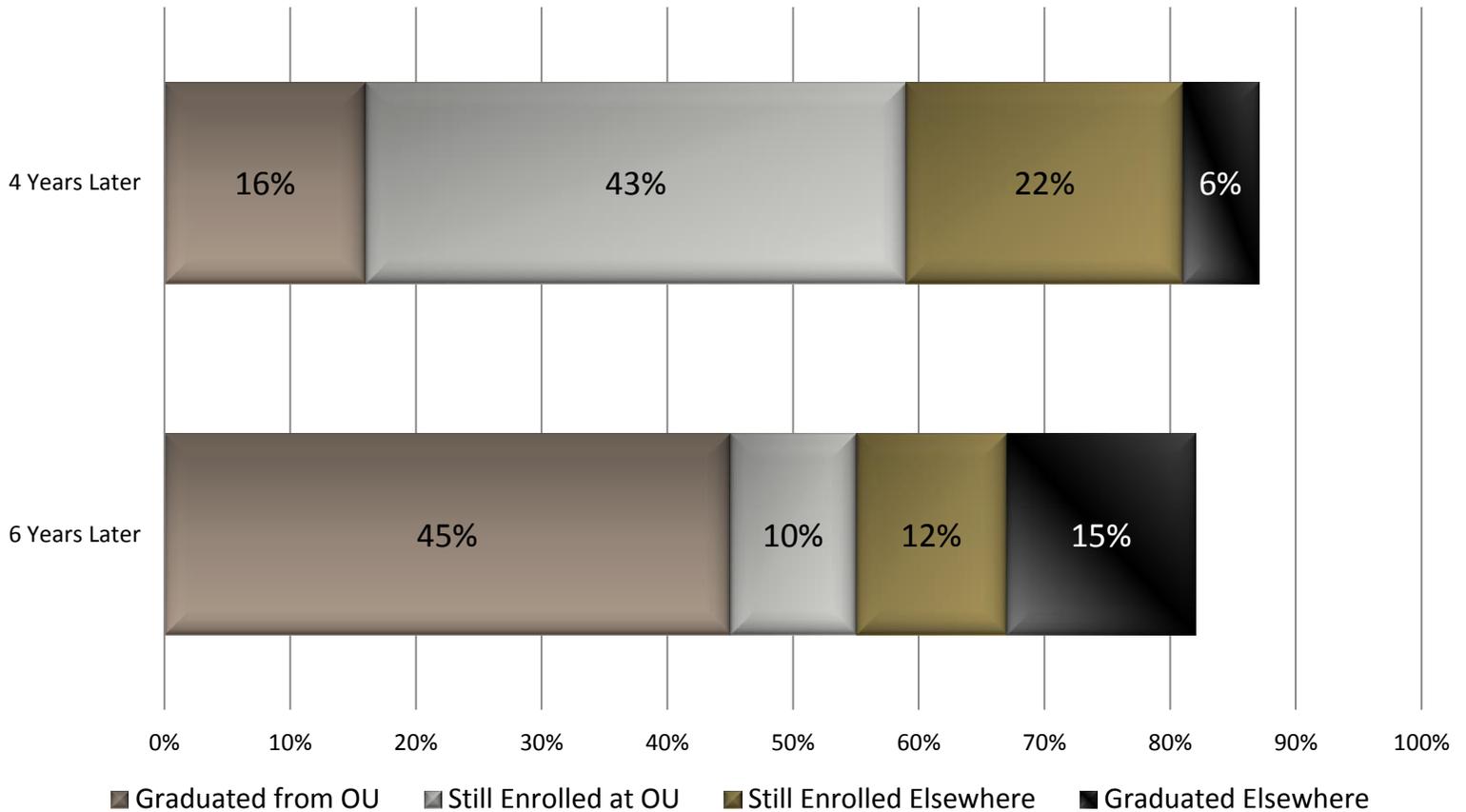
A Starter Guide to Examining Student
Success at Oakland University

Office of Institutional Research & Assessment (OIRA)

Overview

OU Student Success at a Glance

Success Rate for First Year Students Entering in 2008



After six years, about 82% of first-time, full time OU students have graduated or are still enrolled.

About half of those students (45%) have graduated from OU. The remaining portion are either still pursuing their education (at OU or another institution) or have successfully transferred to another institution and have already graduated.



Retention

Historical First Year Retention Rates

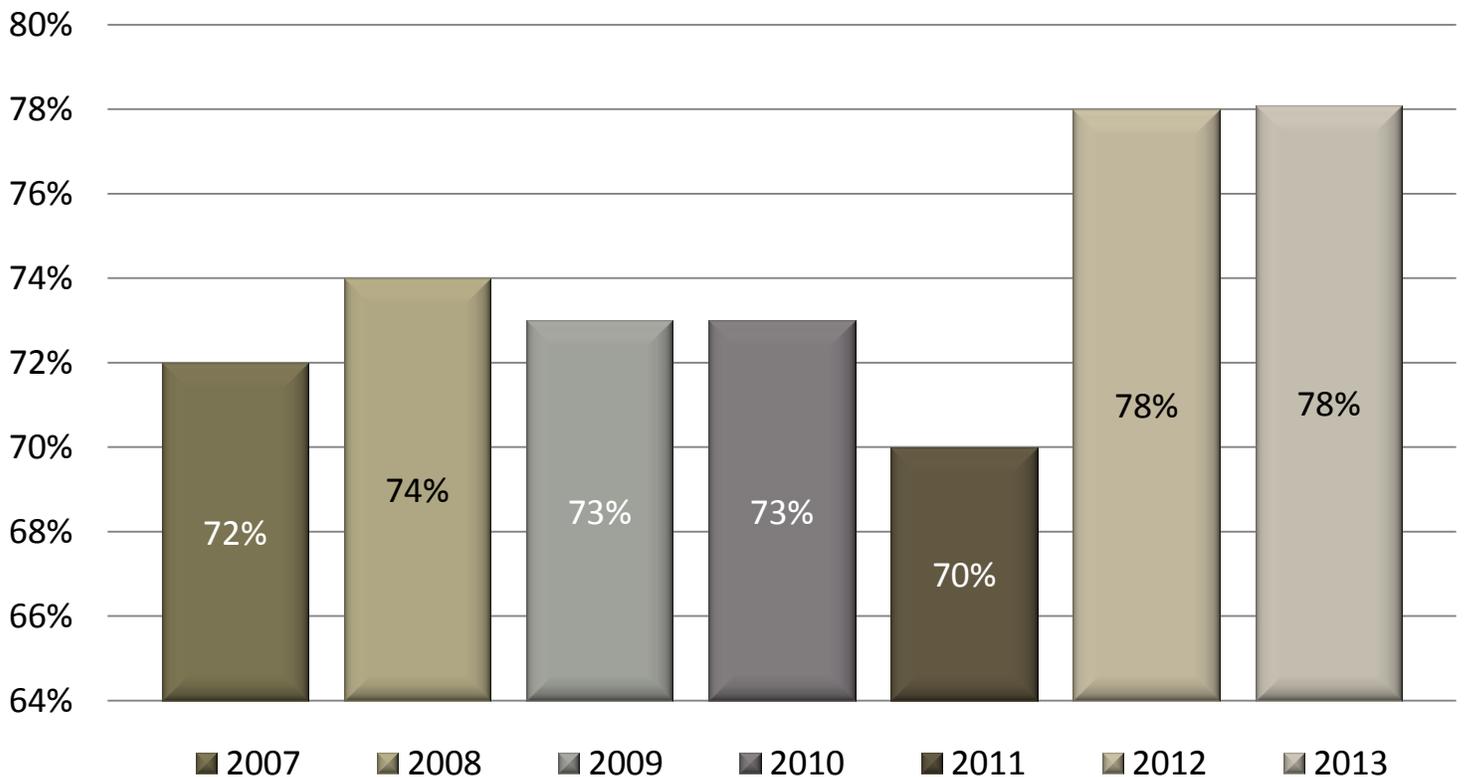


First year retention rates are one of the primary metrics that federal and state governments use to gauge the progress of a university's incoming class. It is the percentage of first-time, full-time college freshmen that return to start their second year. (We often refer to these students as full time 'FTIACs', for first-time in any college). It specifically excludes transfer students and students that start their first year as part-time students.

2012 & 2013 saw our highest first year retention rate in modern history, improving by 8% over 2011 rates.

The average first year retention rate for the 15 public Michigan institutions is 77%.

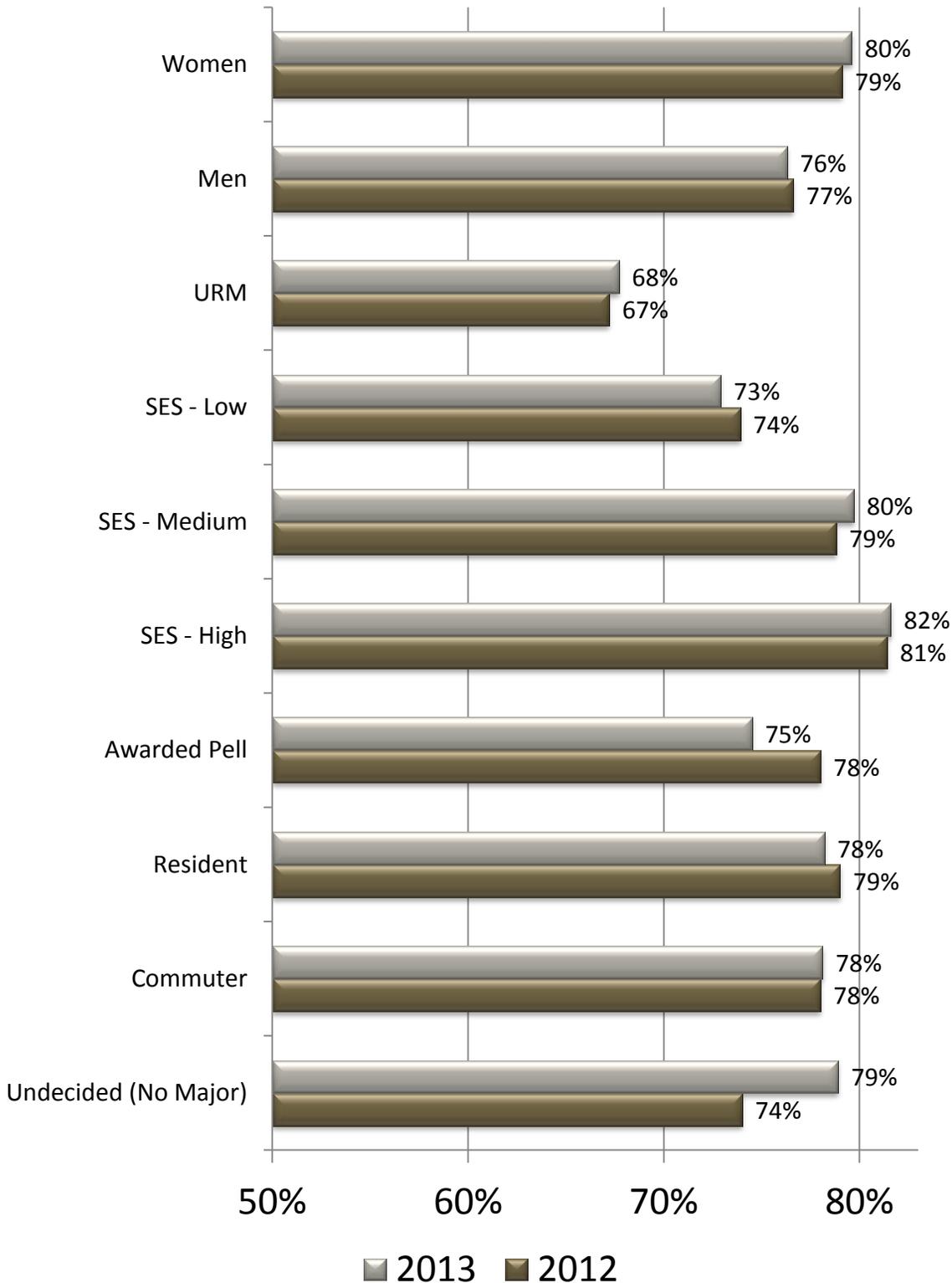
Historical First Year Retention Rates



What Kinds of Students Are More Likely to Be Retained?

Retention Rate by Subgroup

Full Time FTIACs



Not all students are equally likely to be retained.

Students that come from zip codes with traditionally lower socioeconomic status (SES), those with financial need (Pell recipients), undecided students, and underrepresented minorities (URMs) historically have had lower retention rates at OU.

(The 'URM' category includes African Americans, Hispanics, Native Americans, and Native Hawaiians).

Overall, 2013 retention rates are very similar to 2012 rates. Both of these years show substantial increases in retention rates over historical data, for all subgroups that OIRA has identified.

The OIRA website has a large amount of data about [retention rates for various groups](#), including rates by program, school/college, residency, ACT scores, and many other dimensions.

OU has many different initiatives and programs designed to improve retention rates throughout the university. Future OIRA research will examine the impact that these programs have on retention rates.

Graduation

6-Year Graduation Rates



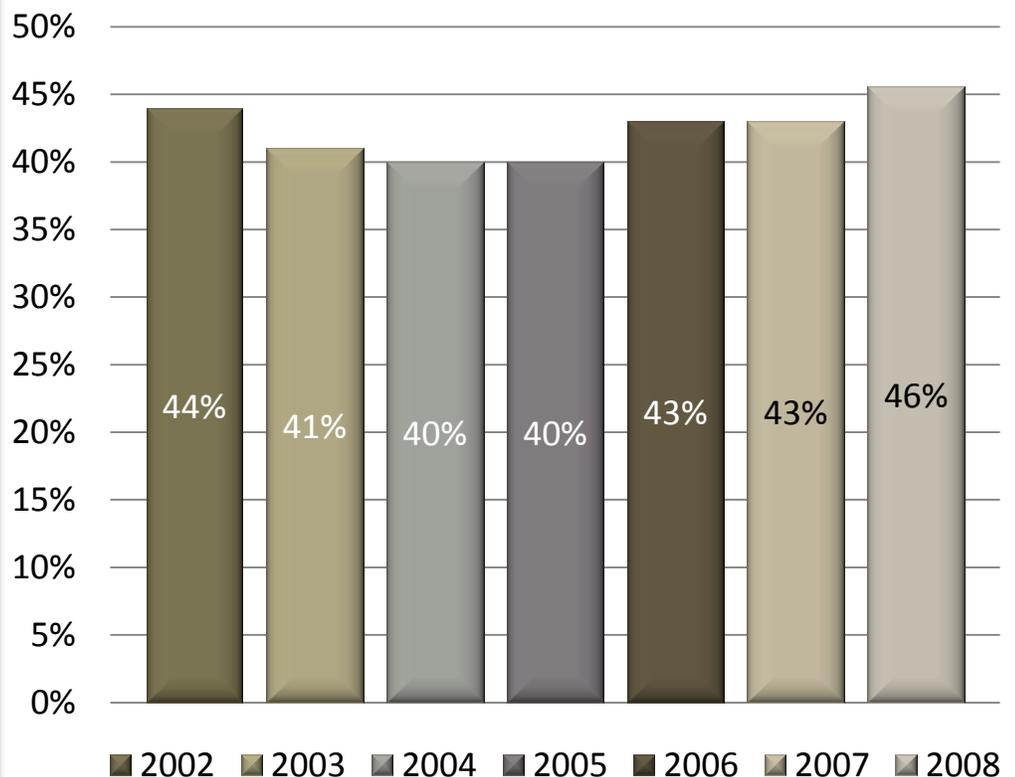
Graduation rates track the same groups of students that retention rates track (first-time freshmen that attended full-time their first semester). These rates specifically exclude transfer students.

Graduation rates are displayed most commonly in 6-year rates, though 4-year rates are also used. This section shows 6-year graduation rates over time.

Each year represents the year a specific cohort started at OU. We then track these students to see if they eventually graduated from OU at any point within 6 years.

Historically, OU's graduation rates hover in the low to mid 40s. Rates dipped for OU in the early 2000s but are now above historical averages. The average 6-year graduation rate for Michigan public 4-year institutions is 51%.

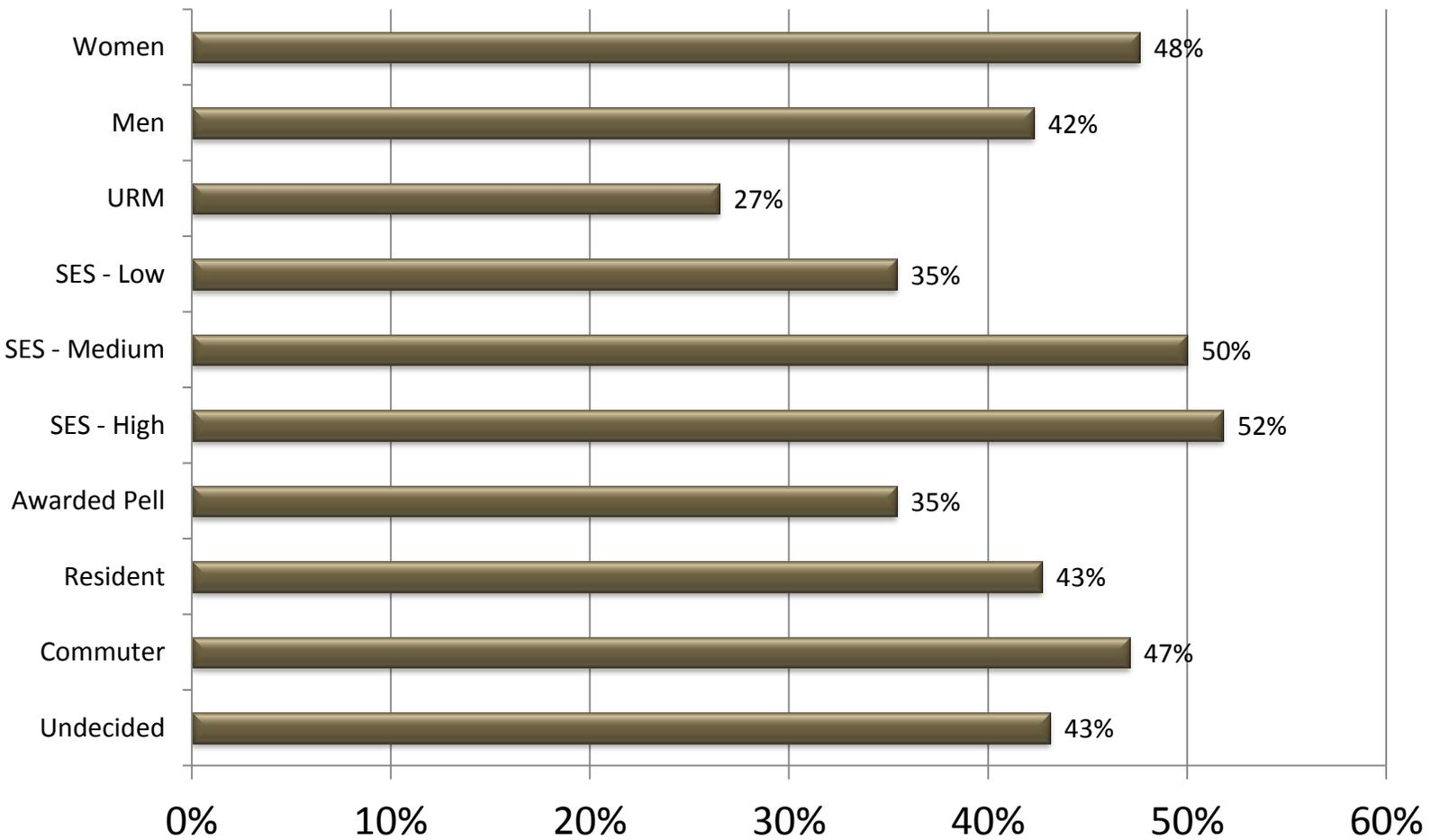
6-Year Graduation Rates by Cohort



Graduation

6-Year Graduation Rates by Subtype

Graduation Rate by Subtype (2008 Cohort)



Under represented minorities (URMs) and students from lower socioeconomic status (SES – Low and Awarded Pell) have significantly lower graduation rates than the university average. (The URM category specifically excludes Asian and international students.)

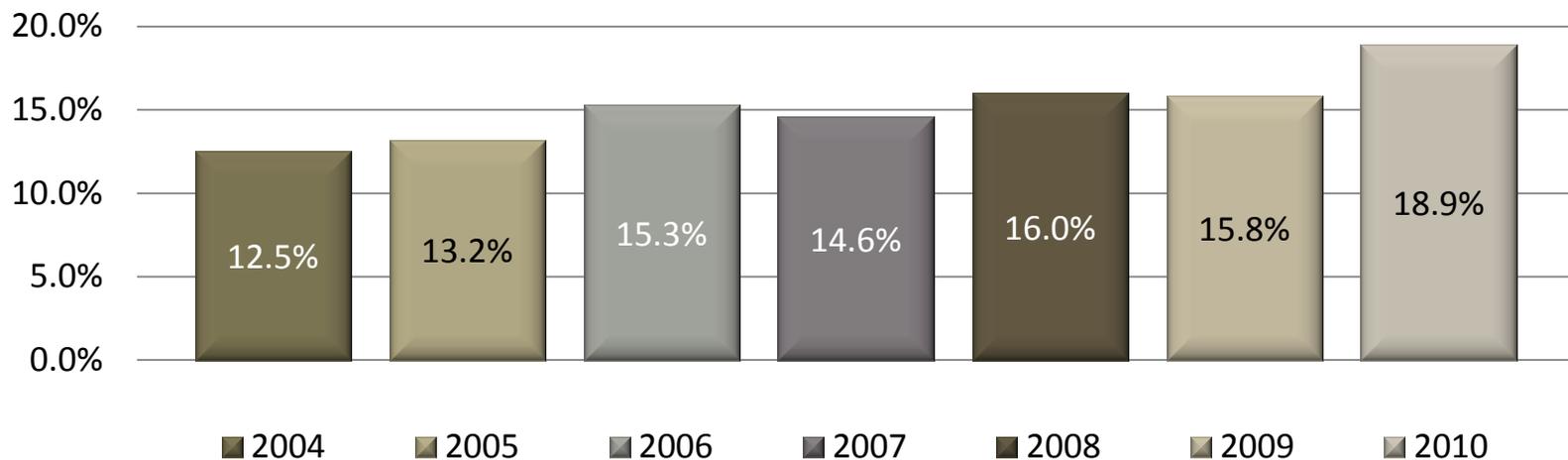
Men, residential students and undecided students show graduation rates that are slightly below the university average.



Graduation

Additional Data

4 Year Graduation Rates



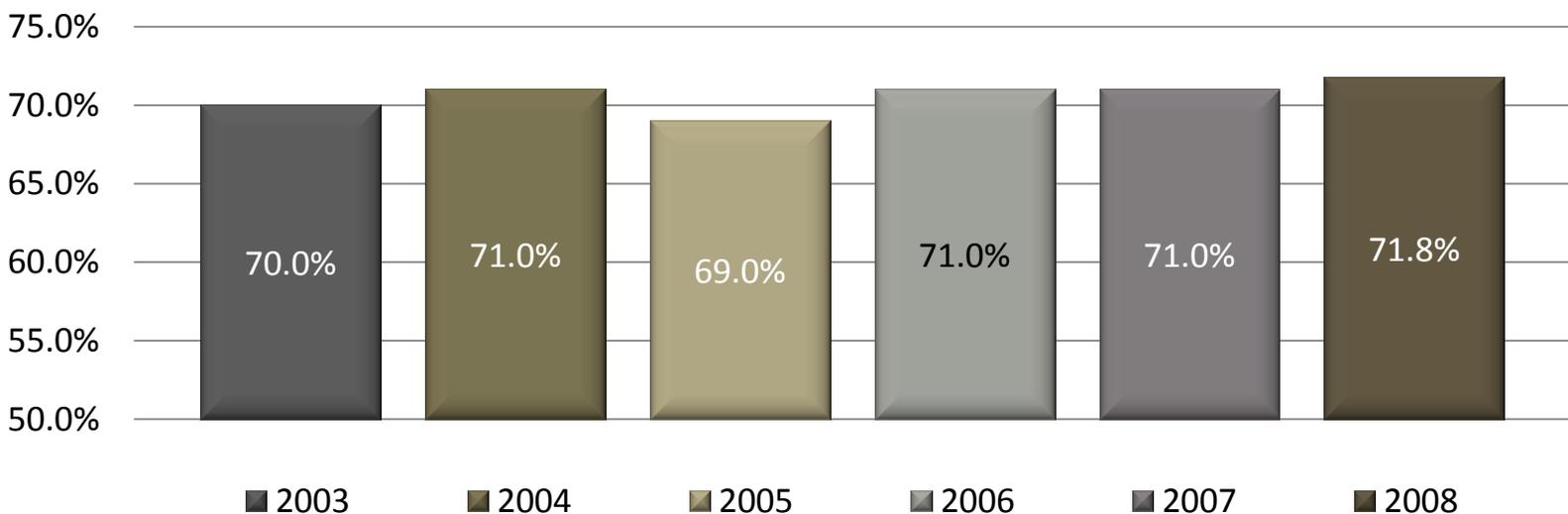
4 Year graduation rates at OU are somewhat low relative to its 6 year rates, though the rate is improving. The median 4 year rate for public institutions in Michigan is 17%.

Students that stay on track (i.e. are sophomores at the start of their second year) are much more likely to graduate within 6 years. In fact, there is remarkable consistency within the data year after year. (Bottom graph)

The university has made considerable progress in increasing the number of freshmen that return as sophomores. Because of this and an overall increase in retention rates, OIRA expects 4 year graduation rates to increase over the next few years.

6 Year Graduation Rates

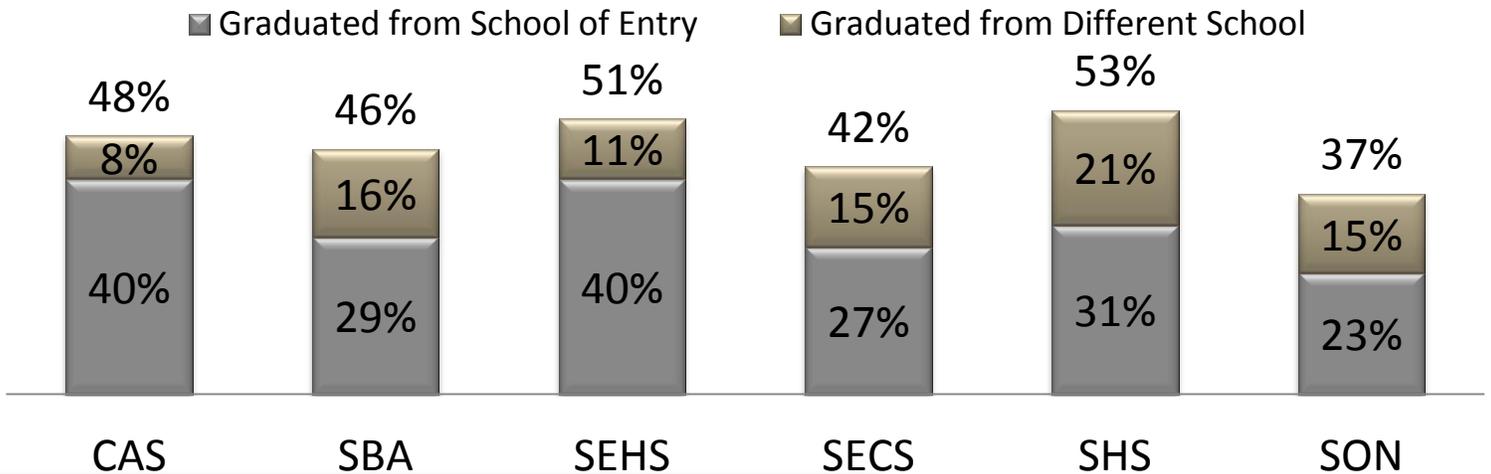
For Full Time FTIACs with Sophomore Status at the Start of Their Second Year



By School

Graduation and Retention

6 Year Graduation Rates by School of Entry (2008 FTIACs)

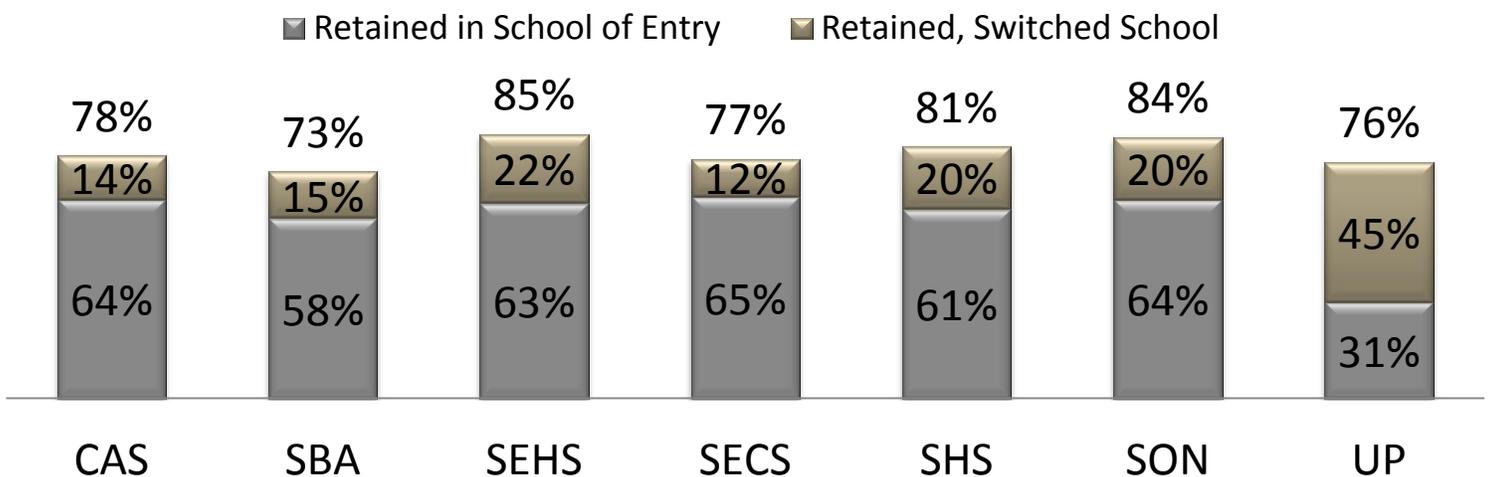


OIRA also tracks retention and graduation data by the school or college of entry. The top graph shows the rate at which students graduate by school or college. The grey area shows the proportion of students that started in that school or college and graduated from that school or college, while the gold area shows the proportion of students that started in that school or college, but switched to a different school or college prior to graduation. Summing the grey and the gold bars will give you an overall rate for each school or the college.

The bottom graph shows one year retention rates in the same manner as the top graph displays graduation rates. University Programs (UP) is composed mostly of undecided students – most of these students move to another school or college later in their academic lives.



First Year Retention Rates by School of Entry (2013 FTIACs)

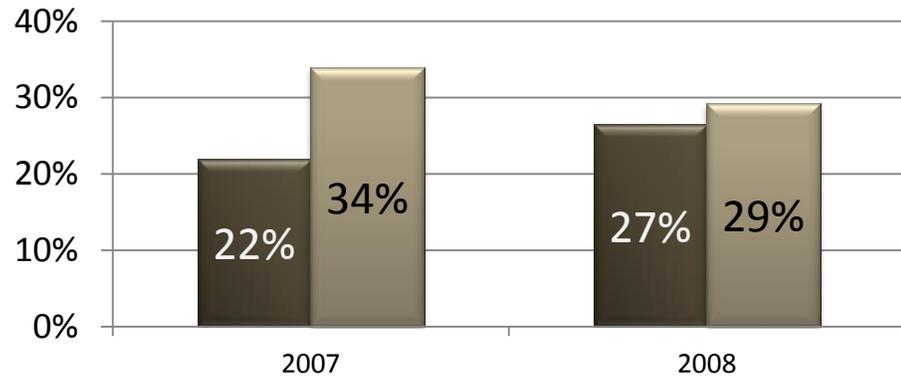


Other Metrics

Focus on Underrepresented Minorities

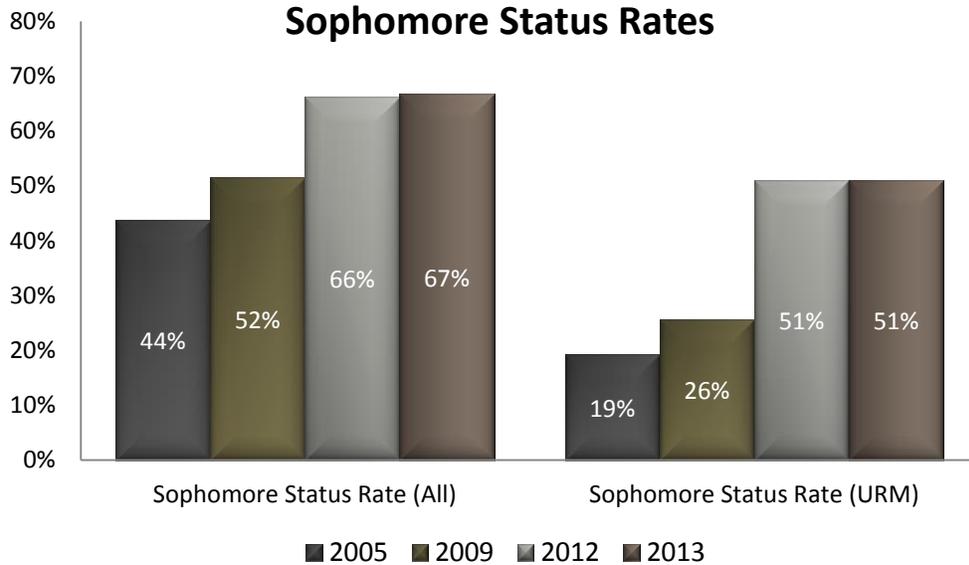
6-Year Graduation Rates

■ URM's ■ Non-URMs with similar backgrounds



Historically, URM's have had lower graduation rates even relative to their peers with similar academic and SES backgrounds. More recent data suggests that this gap is closing as URM graduation rates slowly increase. Unfortunately, non-URMs with similar backgrounds saw a decrease in graduation rates in 2008.

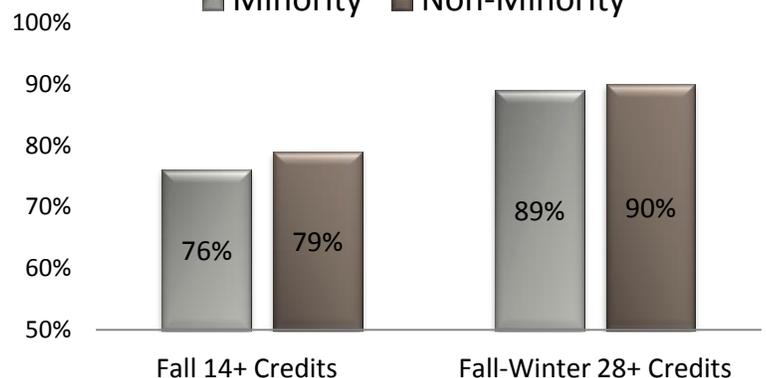
Sophomore Status Rates



Sophomore Status Rates are both a retention metric and an achievement metric. They show the rate at which students return to OU to start a second year with enough credits to be considered a sophomore (28+). Students need to accumulate 16 credits each semester to stay on track to graduate each year, even though federal aid uses 12 credits to indicate full-time status. Minority students lag all students on this measure.

First Year Attempted Credits for Returning FTIACs (2013 Cohort)

■ Minority ■ Non-Minority



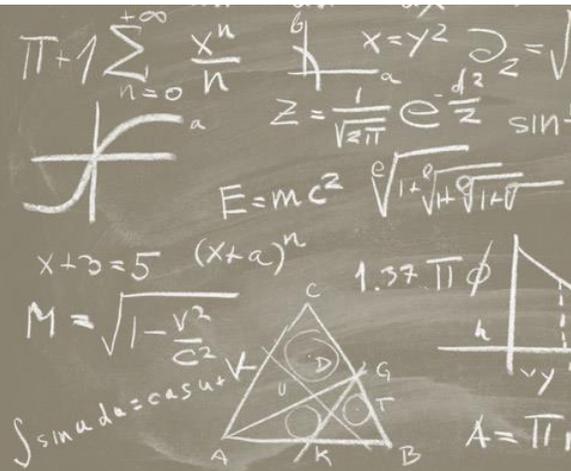
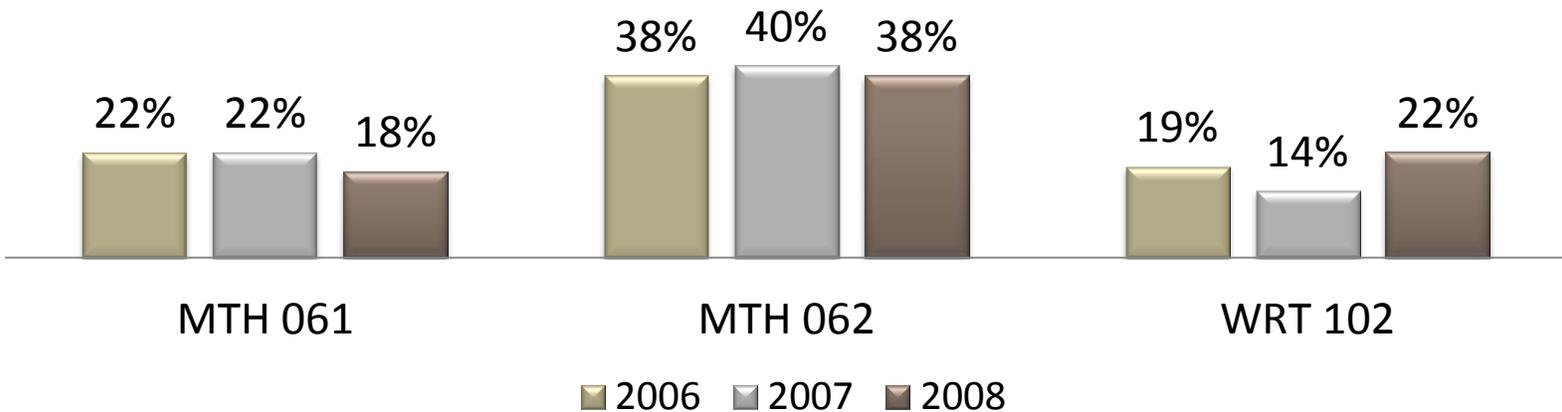
This last chart shows the rate at which minority and non-minority students attempt credits. Historically, URM's attempted fewer credits than their peers, but current rates are nearly identical.

In part, graduation is about credit accumulation. It's difficult to imagine a scenario in which the graduation rate gap closes without an accompanying increase in credit accumulation. The first step in accumulating credits is attempting them. Graduation rates for minority students will hopefully rise as their credit attempts align with their peers.

Remediation

Graduation & Retention of Remedial Students

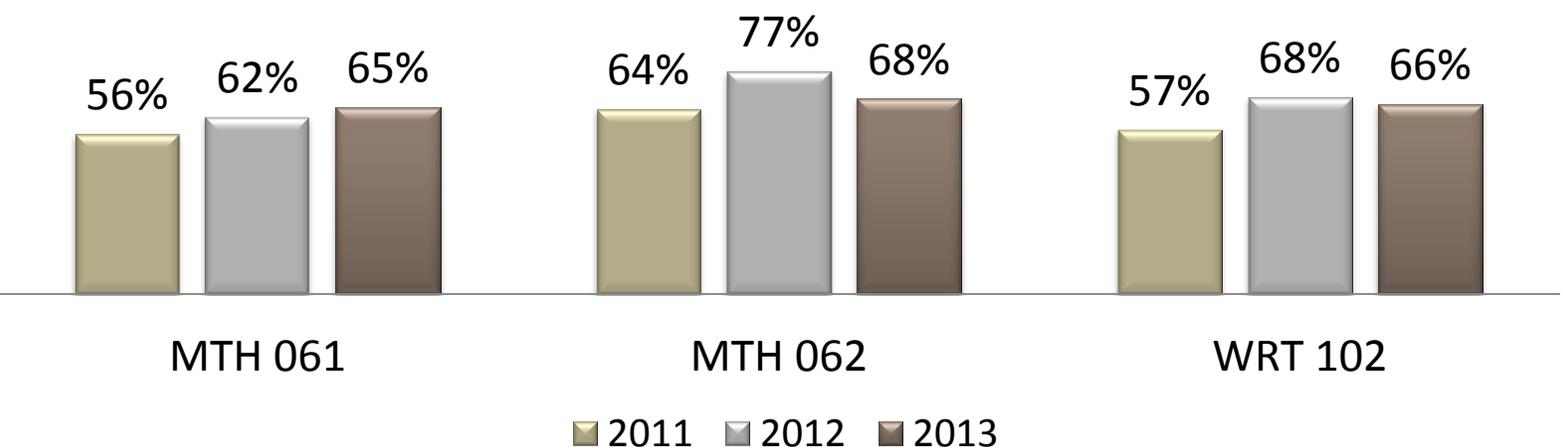
6 Year Graduation Rates
Full-Time FTIACs Starting in Remedial Courses



Students placing into remedial mathematics and writing often struggle to graduate on-time. Not only are these students underprepared, but they are required to take additional courses – lengthening both their time to degree and it's cost. Graduation rates for these students are fairly stable over the last three years, though rates for Math 061 & 062 decreased slightly while rates for WRT 102 increased.

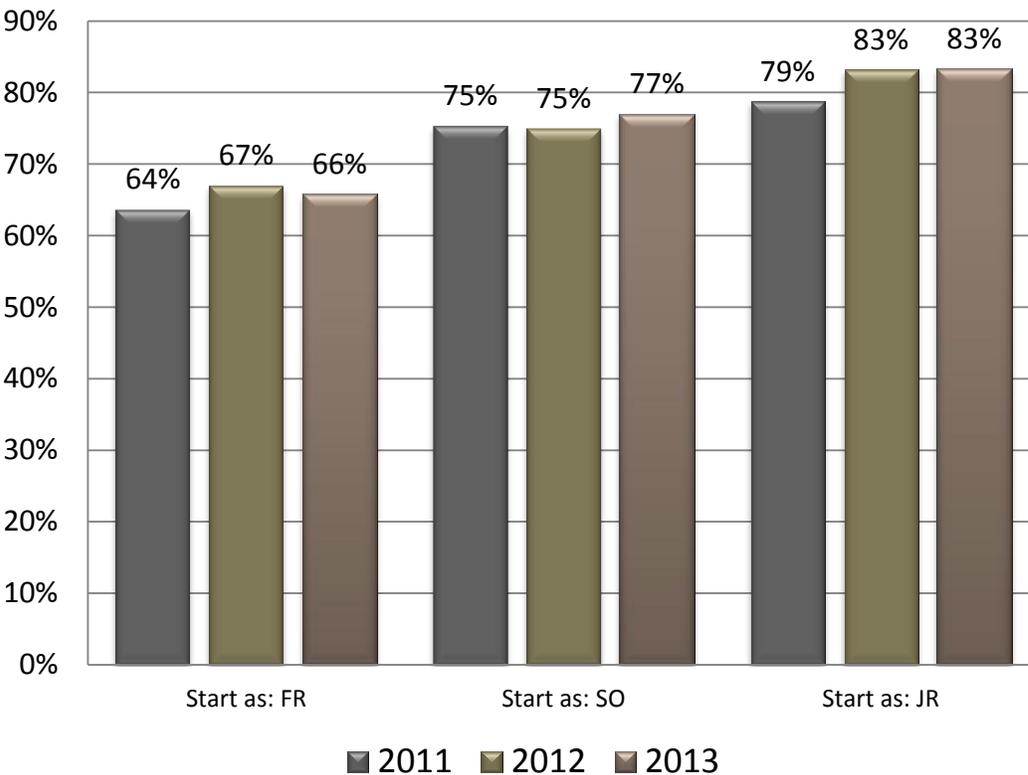
Examining retention rates allows the university to look at more recent data, which more accurately reflects current practice around these courses. Retention rates for all remedial students are up relative to 2011 (before the implementation of the First Year Advising Center). However, 2013 rates for MTH 062 dropped considerably over 2012 rates.

First Year Retention Rates
Full-Time FTIACs Starting in Remedial Courses

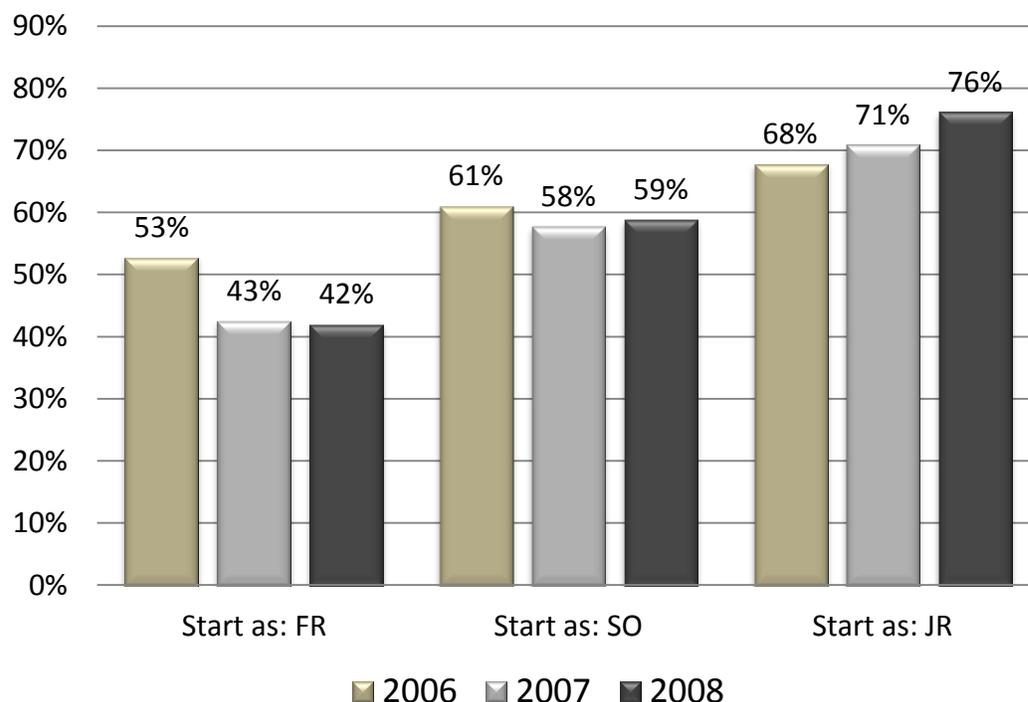


What About Transfer Students?

First Year Retention Rates of Transfer Students
By Incoming Cohort, Full Time Students Only



6-Year Graduation Rates of Transfer Students
By Incoming Cohort, Full Time Students Only



Though FTIACs are often the focus of national data, we should understand that a substantial portion of our undergraduate student body is composed of transfer students (about 41%).

The first graph on the left shows retention rates for transfer students, spliced by how many credits these transfer students came in with. Comparing freshmen transfer students with FTIACs suggest that our retention rates for transfer students is quite a bit lower than a similar rate for FTIACs. Notice that 2012 and 2013 freshmen transfer students did not have a large increase in retention rates as seen with 2012 & 2013 FTIACs.

The second graph shows 6-year graduation rates for transfer students. If we look at freshmen transfer students once again, you'll notice that their graduation rates are similar to FTIACs, though that was not always true, as rates have declined in recent years.

It's also worth noting that transfer students who start OU with sophomore status graduate at lower rates than FTIACs that return with sophomore status (their graduation rate is around 70%). Though the difference is interesting, it's not necessarily an apples to apples comparison, as the two groups of students have unique situations.

Encouragingly, graduation rates for junior transfer students are on the rise since 2006.

Do We Know Why Students Leave?



Students leave for a large variety of reasons. They may have financial difficulties or academic problems, they may have health issues or family related problems, they may have never intended to stay at OU and have always sought to transfer, or they may just not feel like they fit in with OU's culture and climate.

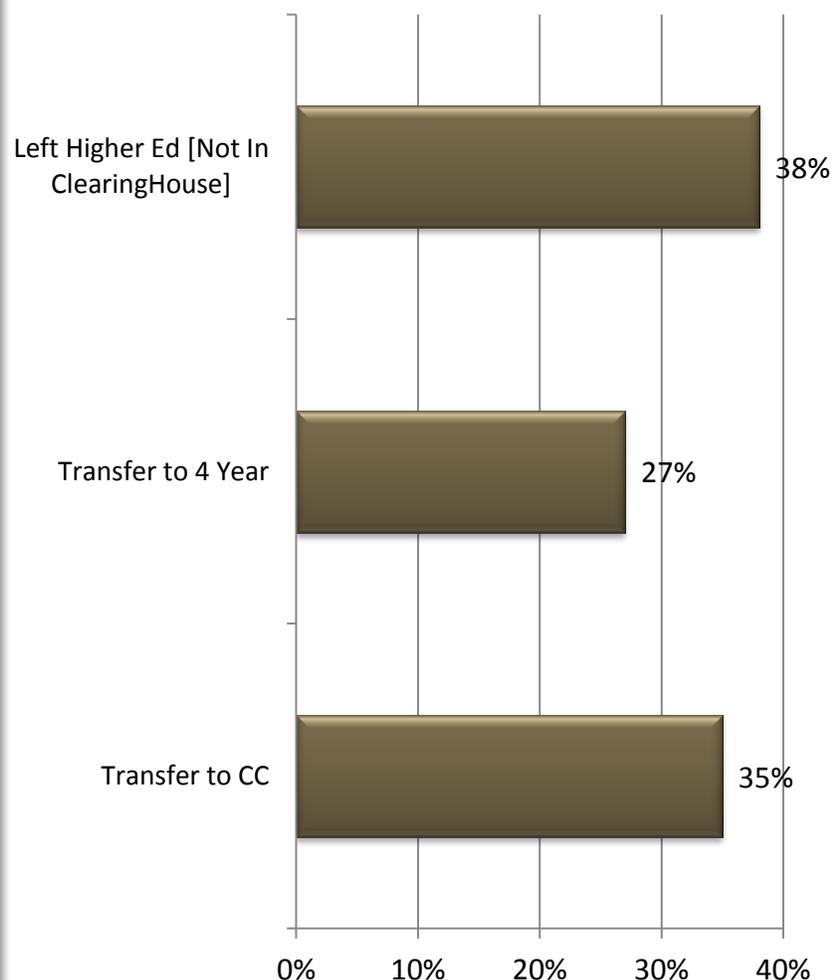
Broadly speaking, OIRA research suggests that there are three essential reasons why students leave a university: cost, academic performance, and social satisfaction (making friends, feeling welcomed, overall fit, etc.).

With these categories in mind, there are four areas that OIRA believes the university should focus on regarding first year retention: financial aid, probation rates, general student satisfaction, and gateway courses.

OIRA routinely analyzes the impact of OU's various financial aid policies on retention rates (and other success indicators). In particular, OIRA has focused on scholarships and need based financial aid. Interested readers within the OU community can request a comprehensive overview of the topic by contacting OIRA.

However, the next section showcases the types of analyses that OIRA conducts regarding financial aid and retention.

Of the 2013 FTIACs That Did Not Return in 2014... (N=535)



Financial Aid

Financial Aid Research Highlights

Merit Scholarships

1. Help attract better academically prepared students
2. Are responsible for only a small increase in retention rates
3. Appear to dissuade students from transferring to other institutions

Academic & Housing Grants

1. Improve retention rates by about 5% to students that receive it
2. Provide a greater retention boost to students with lower academic preparedness (quite possibly related to lower SES)

100% Tuition Grant

1. Improves retention rates by about 1.7% to students that receive it
2. Provides the greatest retention boost to students with moderate expected family contributions (as determined by the FAFSA).

The graph at the bottom shows a good example of the types of financial aid research that OIRA conducts. The graph is broken down into 4 distinct groups – with each grouped graphed in a different color.

Both of the groups on the right hand side have ACT scores above a 20, and are eligible for the OU Housing Grant and the OU Academic Grant – OU grants that are given to needy students. Students on the left have an ACT of 20 or less, and are not eligible.

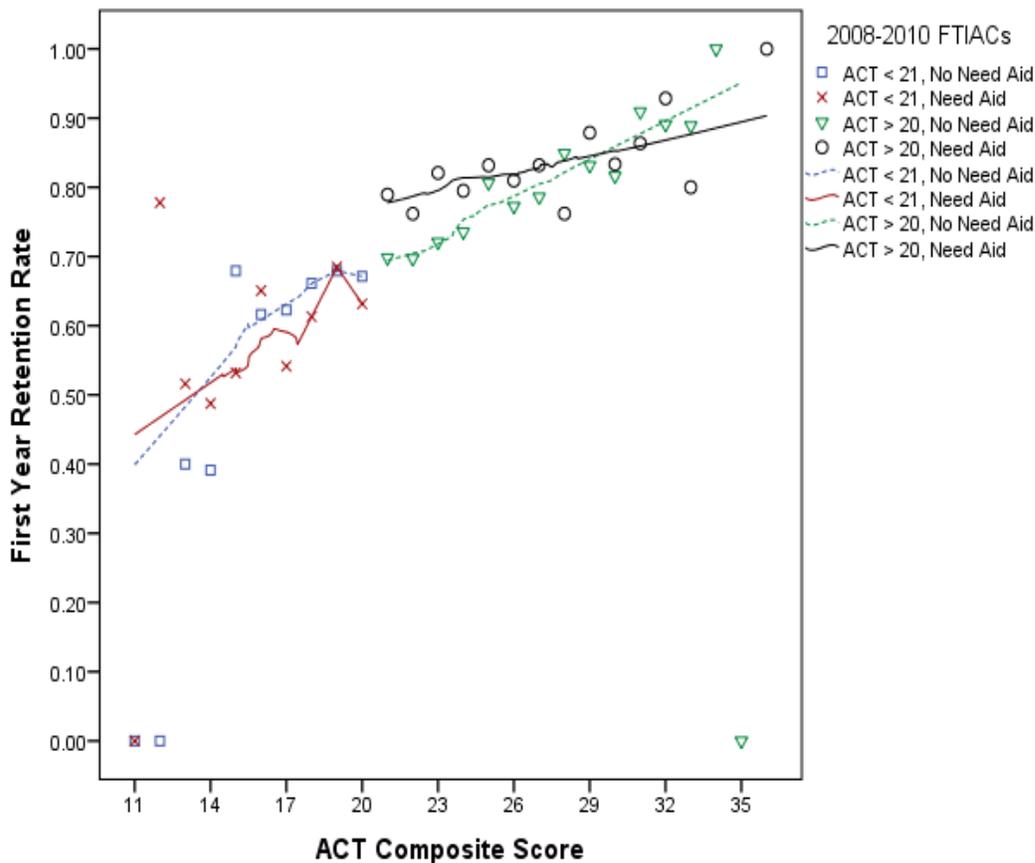
For both ACT groups, students that are represented by the 'dashed' line do not have financial need. These students have not received need based aid. Students represented by the solid lines have received either Pell, OU need-based aid, or both.

Therefore, students on the left hand side of the graph that are represented by the solid (red) line have received federal or state aid (i.e. Pell grants) but have not received OU's Housing or Academic Grant (because they did not meet the minimum ACT requirement).

Separating the groups in this manner creates a pattern of results that allows for at least some *causal* interpretations surrounding OU's need-based aid policies.

Focusing on the left hand side, it becomes easy to see that the need group (solid-red) has slightly lower retention rates than the non-need group (dashed-blue). The gap isn't large, but it is noticeable. Also notice that the dashed blue line does not look appreciably 'out of place' relative to the dashed green line. It would be difficult to tell these lines apart were they not drawn in different colors.

But notice as soon as we cross the threshold where students become potentially eligible for the OU Academic Grant and the OU Housing grant (at an ACT score of a 21), the data undergo a transformation. Students that receive need-based aid (solid-black) are now 10% *more* likely to be retained than non-need students (dashed-green), whereas previously needy students were *less* likely to be retained. This is strong evidence that OU's need based grants actually cause an increase in retention rates.



Each dot in the above graph is composed of dozens to hundreds of students. Because ACT scores are normally distributed – the extreme ends of the graphs have more inherent variability. Thus, generalizations about students with either really high or low ACT scores are not advised. Readers should concentrate their attention towards the middle of the graph, where rates are most stable.

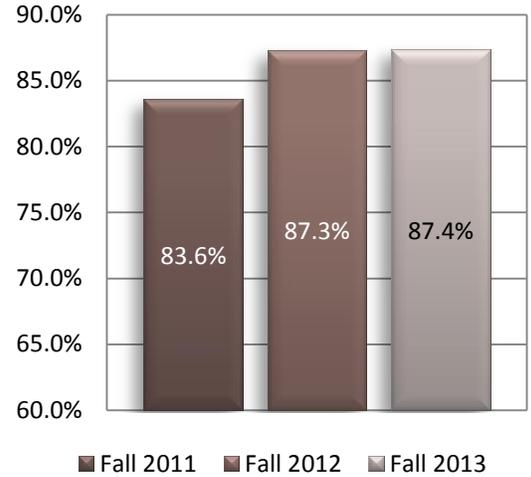
Academic Probation

It is difficult to determine whether poor student performance is a symptom or a cause of attrition. In all likelihood, it is probably a symptom for some students and a cause for others.

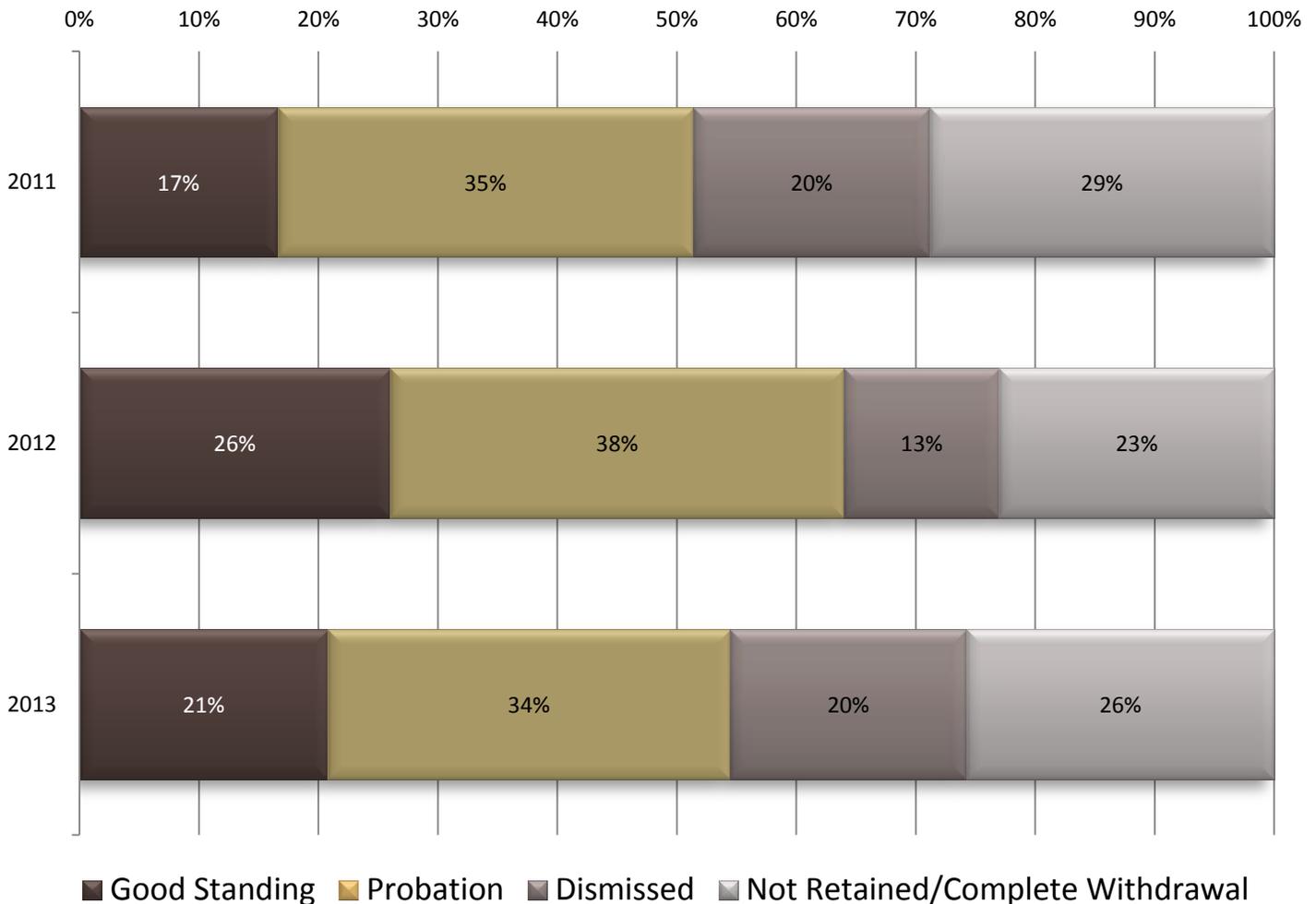
Since the creation of the First Year Advising Center (FYAC) there has been an increased focus for first year students on probation. OIRA has partnered with the FYAC to explore this data in more detail.

Both the 2013 and the 2012 cohort had fewer overall students on probation than historical cohorts (right graph). Additionally, those students that were on probation had more success by the end of their first year, with more students being retained by the university. Though the 2012 cohort showed remarkable gains in boosting the success of students that were on probation, the 2013 cohort had more modest improvements (bottom graphs).

Percentage of FTIACs in Good Standing at End of Term



End of Year Probation Status for Fall Probation Students



Student Satisfaction and Engagement

OIRA uses the National Survey on Student Engagement (NSSE) to track general satisfaction levels as well as a general sense of student engagement.

NSSE data is far from perfect, and caution should be used when interpreting some of their findings. However, it does provide several useful pieces of information.

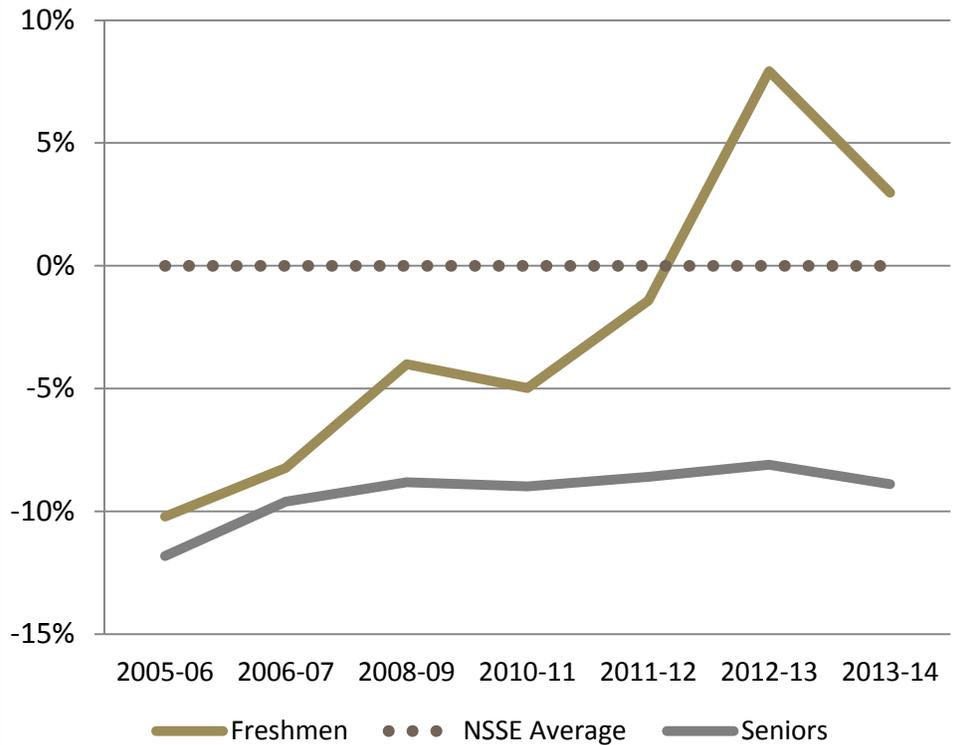
First, it gives general satisfaction levels for both freshmen and seniors. While not overly specific, OIRA does see these types of questions as good indicators of general student satisfaction.

Second, specific questions in the NSSE can be tracked over time. Strong temporal changes can be linked to policy and programmatic changes within the university to help inform our understanding of student behavior.

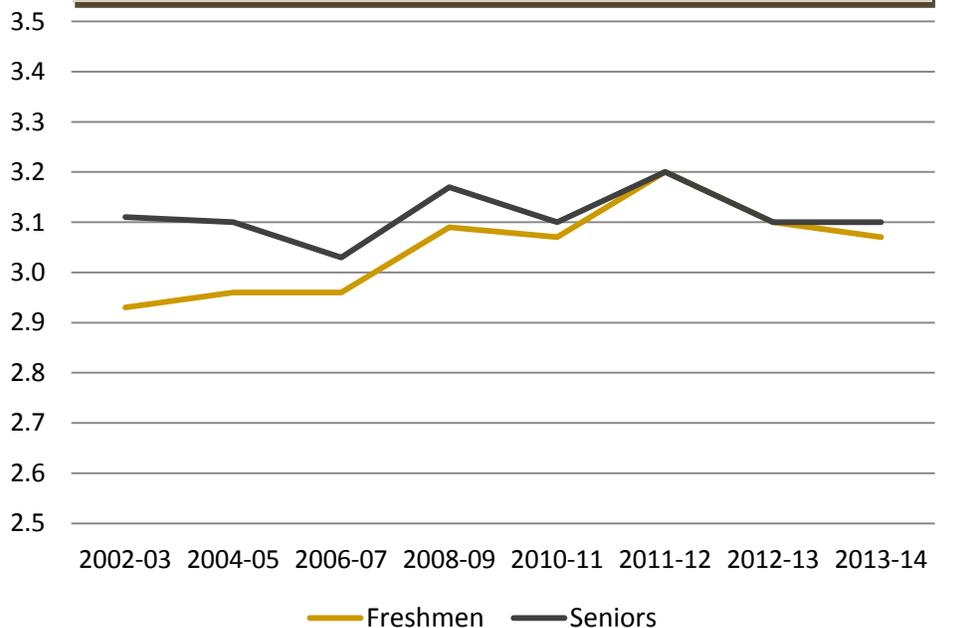
OIRA presents two examples of this usage here. First, we note that changes in the response of freshmen students' perception of advising has improved over the years, reaching a high in 2012. We also note that general satisfaction levels for freshmen were once noticeably lower than that of seniors. That gap has now almost disappeared.

NSSE contains a great deal of additional questions, such as how many hours students work, interactions with faculty, how many hours students spend studying, how many courses with service learning components students take, etc. Each question is also benchmarked with other institutions so that we can try and gauge our relative position. [Complete NSSE data](#) can be found on the OIRA website.

Quality of Academic Advising
(As a relative percentage above or below of the NSSE average)



How would you evaluate your entire educational experience at this institution?
(4=Excellent; 3=Good; 2=Fair 1=Poor)



Gateway Courses

Oakland also pays close attention to a number of courses that it believes are ‘gateway courses’ – critical courses that serve as either theoretical or practical prerequisites for other courses on campus, or courses that just have high enrollment for first year students. Each year, OIRA produces a gateway score card, similar to the one below, that tracks the success of students in these courses (i.e. the percentage of students that receive a 2.0 or higher - a reverse DFWI rate).

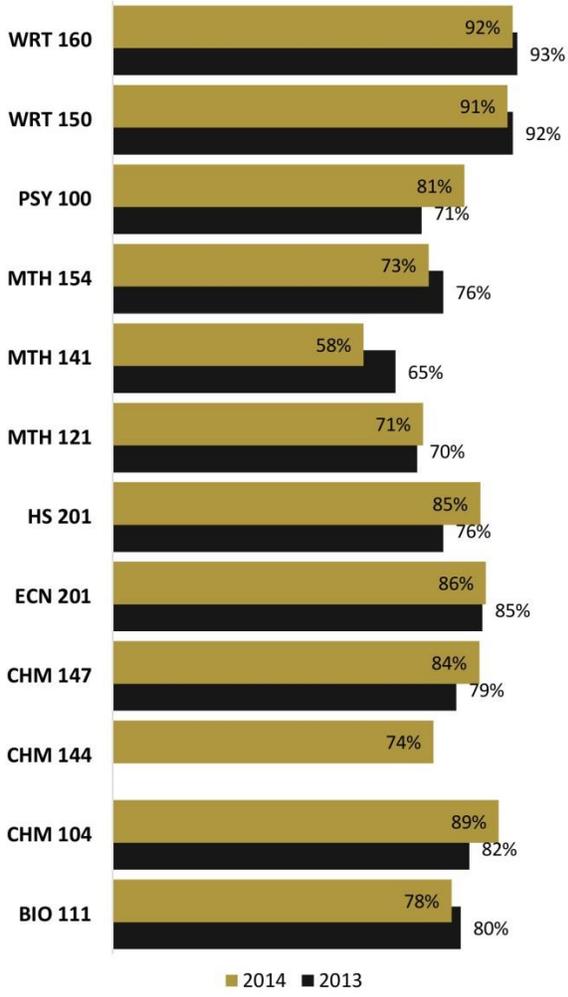
Gateway courses form the bulk of courses that freshmen take. In many ways, these courses are the ‘first impression’ that students receive of OU. Several of these courses are also the first course in a sequence of courses that students will need to take in order to complete a degree. For these reasons, it becomes critical that OU focuses on the quality of these courses.

2014 FTIACs students fared much better in developmental mathematics than 2013 FTIACs. Notable improvements were also seen in chemistry courses as well as PSY 100, HS 201, and CIN 150.

Fall 2014 Scorecard

Critical Gateway Courses at OU: Fall 2013 to Fall 2014 Comparison of Success Rates

Chart 1



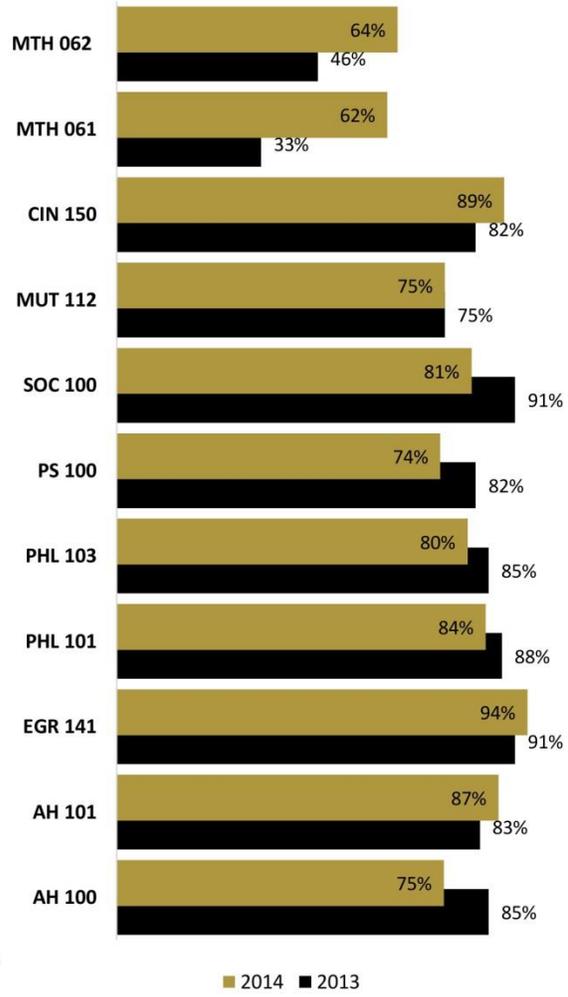
Gateway courses are courses that freshmen commonly take during their first semester that serve as prerequisites for other courses.

Each chart shows the percentage of students earning a 2.0 or higher for that course.

Chart 1 contains a selection of critical courses that have high FTIAC enrollment and are used as prerequisites for many other courses.

Chart 2 contains another selection of important gateway courses, though these courses have slightly lower enrollments or are listed slightly less often as a prerequisite for other course.

Chart 2



■ 2014 ■ 2013

■ 2014 ■ 2013

Forward Progress



OIRA obviously does not have a crystal ball when it comes to figuring out how to improve student success. But we have seen a number of things that we would like others to be aware of. From our perspective, this is where we need to go from here:

- 1) Think Big.** OU had tried for years to create small pockets of retention initiatives in order to ‘move the needle’ on retention rates. Individually these programs sometimes showed success, but collectively they did not seem to impact retention rates. Small initiatives impact only a few students; if OU wants to really change campus culture then we need to think in terms of structures, policies, strategies, and organizations that impact most, if not all, of our students. Large programs such as mandatory first year advising or systematic changes in the way the university awards financial aid are much more likely to impact student success than smaller programs – simply because of their size.
- 2) Think Progress.** The further away someone is from a goal, the less likely they are to reach it. If Oakland’s goal for students is a degree, then the university should think in terms of all the things that can derail them from their goals – difficult gateway courses, course scheduling problems, credit evaluations, attempting enough credits, curricular complexity, and long course sequences. One area of focus that our office is investigating is the role that curricular flexibility plays in advancing student success. Degree paths that are flexible (i.e. have fewer course prerequisites and/or shorter sequence lengths) offer more opportunities for students to catch up if they get off track. Degree paths that are too rigid may increase both the cost and the time it takes to get a degree. Both of these consequences may result in some students dropping out or transferring before completing their degree.

More Data

An Overview of OIRA Resources

Page 18



This report was produced by the Office of Institutional Research and Assessment (OIRA). OIRA has a tremendous amount of data available for further exploration.

For complete listings of our available data, please see our website:

www.oakland.edu/oira

Some of these resources have been highlighted on the right for easy navigation.

Enrollment

- By Gender, Ethnicity, and Program
- Historical Headcount & FYES
- Of new FTIACs and Transfers
- Credits by Rubric, School/College, Level

Retention & Graduation

- By School/college of entry
- By department
- Minority Retention by ACT score
- Retention by Pell
- Ethnicity, Gender, Residence, etc.

Degrees Awarded

- By Program, Gender, Ethnicity, and Level

Distribution of Grades

- By Term, Faculty, and Course