Secretary of State Audit Report

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Community Colleges: Targeted Investments Could Improve Student Completion Rates

- Only 24% of the Oregon community college students we analyzed completed an associate's degree or certificate, putting Oregon's education and workforce goals in jeopardy.

- Community colleges have introduced sound practices to improve student success, but they can reach less than one-quarter of the students in need.

- Coordination, support, and analytic capacity are needed to improve student success and to assess proposed changes, such as outcome-based funding.

Executive Summary

Low community college completion rates jeopardize state goals

40-40-20 Goal:
Oregon is farthest from the middle 40 goal (Associate's/Certificate)
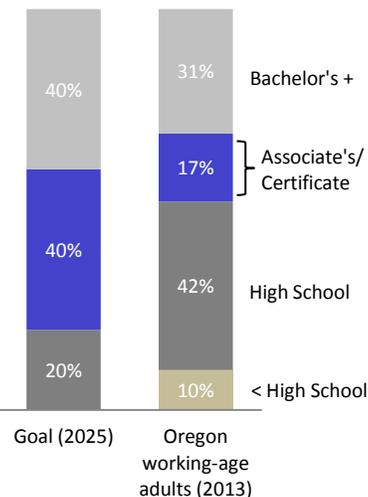
To improve the economy and quality of life of Oregonians, the state set an ambitious education goal that by 2025:

- 40% of adult Oregonians will have at least a bachelor's degree.
- 40% will have at least an associate's degree or certificate (middle 40).
- The remaining 20% or less will have a high school diploma or equivalent.

In 2013 only 17% of adults had an associate's degree or certificate. To meet the middle 40 goal, community college completion rates must improve.

We tracked degree-seeking students who started college in 2007-08, and found that only 24% completed a degree or certificate at an Oregon community college within seven years. In a national study, Oregon ranked 32nd out of 36 states studied for community college completion rates.

Oregon completion rates were even lower for black (15%), Hispanic (21%), American Indian (22%), Pacific Islander (16%), and multi-racial (19%) students.

Students face challenges to complete

Community college students can face multiple challenges to finishing a degree or certificate. Many students are returning students and have life responsibilities, such as work or caring for family members that compete with the classroom for priority. This may be part of the reason that most students attend part time and take longer to finish.

With open access policies, relatively affordable tuition, accessible locations, and a variety of programs, community colleges attract diverse students, including those who may need extra academic support or have fewer financial resources.

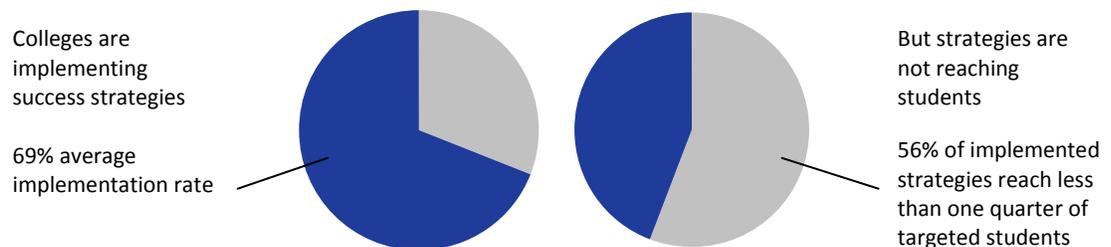## Student success has personal and statewide impacts

Many community college students come from underserved and diverse backgrounds. Providing additional supports to these students can help address opportunity gaps, end generational cycles of poverty, and increase opportunities for upward mobility.

A more skilled workforce can also fill high demand positions, improving state and local economies. State revenue also rises as graduates contribute more to tax rolls and are less reliant on public assistance.

Strategies that could boost completion rates do not reach most students

Oregon community colleges are implementing national leading practices to promote student success and support their students. An example is a student success course that covers topics such as finding campus resources, study skills, and time management. Due to capacity limitations, most of these strategies do not reach more than a quarter of the students they are targeted to serve.

Colleges are implementing success strategies

69% average implementation rate

But strategies are not reaching students

56% of implemented strategies reach less than one quarter of targeted students

Source: Audits Division conducted survey

State outcomes-based funding would require continued assessment and monitoring

The Higher Education Coordinating Commission (HECC) is considering a proposal to change the funding distribution model from one based solely on enrollment to one based partially on enrollment and partially on the number of completions and progression milestones reached. This change is aimed at improving student success. Some colleges have concerns about unintended consequences.

If the proposal is adopted, ongoing analysis and attention will be needed to assess the effectiveness of the model and monitor impacts on student education and colleges.

Capacity constraints hinder student success strategies

Community colleges report that the biggest challenges to expanding student success strategies are capacity constraints. These constraints, summarized below, exist both at the colleges and at the Department of Community Colleges and Workforce Development (CCWD).

Limited and Competing Resources: Community colleges have few resources to devote to student success initiatives.

State Coordination and Strategic Support: CCWD has less capacity than it once did to help community colleges coordinate and implement student success and completion initiatives.

Data Informed Decision-Making and Analysis:

- Most colleges have limited capacity and expertise to analyze data for decision-making and continuous improvement.
- CCWD has limited capacity to analyze data for state initiatives, to support small colleges, or to assess the implementation of outcomes-based funding.
- Community colleges lack information about their students before and after they leave college.

Recommendations: Targeted investments to support student success

To better support strategies that promote community college student success and completion, we recommend that the Oregon Education Investment Board, the Higher Education Coordinating Commission, and/or the Department of Community Colleges and Workforce Development coordinate to:

- Clarify roles and responsibilities and increase capacity for coordination and support of student success and completion initiatives.
- Continue to invest in developing the statewide longitudinal data system to track student progress and outcomes, and ensure that investment continues for ongoing administration.
- Increase capacity to analyze data to inform state strategic initiatives and support small colleges.
- If the state moves forward with outcomes-based funding, ensure capacity to assess the effectiveness of the model and monitor impacts on student education and colleges.
- Continue to use at least 1% of the Community College Support Fund-Strategic Fund to invest in community college student success initiatives.

To improve student outcomes and expand initiatives, we recommend the community colleges consider:

- Aligning budget allocation to strategic goals that forward student success initiatives.
- Prioritizing investment in increased analysis capacity for decision-making and continuous improvement.
- Coordinating and combining resources to fund statewide projects, materials and training to support student success initiatives.

Agency Response

The agency response is attached at the end of the report.

Background

Community colleges play a vital role in Oregon's education system

Community colleges serve diverse students with a variety of programs

Community colleges provide many different education opportunities to the areas they serve. Colleges offer a variety of education courses that serve degree-seeking students with diverse goals. In general, these students fall into one of two categories:

- **Lower Division Collegiate:** Courses and programs that parallel the first two years of four-year institutions, including transfer degrees that focus on 100 and 200 level general courses in math, writing, science, and/or business.

  These programs prepare students to transfer to a university but could also stand alone. Transfer students have the option of earning an associate's degree or certificate before transferring.

- **Career and Technical Education:** Courses that generally lead to an associate's degree or certificate in a professional program, such as medical assisting or welding.

  Though these programs are intended to lead directly to employment, some students continue on at universities to earn a bachelor's degree. For example, students can earn a Bachelor of Science in Nursing after earning an associate's.

Community colleges also provide education opportunities for high school students and adult learners through:

- **Dual-credit or fifth year programs**, where students earn college credit while still in high school.
- **Developmental Education,** which includes Adult Basic Education, English as a Second Language, General Educational Development (GED), and post-secondary remedial courses.
- **Adult Continuing Education** that does not lead to a degree. Continuing education is required for many professions and to maintain professional licenses.

Also, many people attend community college to take one or more enrichment courses to build skills or for recreation, such as learning a foreign language or participating in fitness activities.

Community colleges are a primary point of access for students who may face challenges in higher education

Community colleges generally have open access policies, relatively low costs compared to universities, accessible locations, and a variety of programs. These characteristics attract diverse students, including those who may require additional academic support or have fewer financial resources.

Community colleges can provide a point of access for students who may not have otherwise gone to college, lack support, have commitments that prevent full-time enrollment or relocation, or face additional challenges. Challenges community college students face can include:

- Limited financial resources
- Needing additional academic support or developmental courses
- Lack of affordable child care
- Lack of reliable transportation

Many students identify financial concerns as their primary obstacle, including the cost of tuition, books, and navigating financial aid. Community college students can also have life commitments, such as family obligations, caring for children, and balancing a job.

For students who face these challenges, community colleges provide an affordable option and access point to higher education.

The mission of community colleges is shifting from access to access and completion

Traditionally, community colleges focused on providing access to higher education. They worked to reduce barriers to enrollment, such as keeping tuition low and reducing administrative hurdles.

Community colleges throughout the country have become more focused on helping students succeed in their programs and complete degrees and certificates, while still preserving open access.

Oregon's community colleges have collaborated to address student success and completion

Oregon community colleges have worked with each other and with state partners to share information and coordinate efforts for increasing student success. For example, the Student Success Oversight Committee (SSOC), established in 2007, identifies strategies that address student success and encourages colleges to focus on those strategies.

Oregon community colleges have also secured grants and worked with national organizations to address student success. This has enabled them to work on initiatives such as:

- Creating reverse transfer programs, which automatically award an associate's degree to community college students who transferred to a university prior to completing their degree. This ensures that even if students do not finish a bachelor's program they will have an associate's degree.
- Increasing the use of data to inform decision-making and ensure investments are directed toward strategies that improve student success.

Oregon's education policy goals emphasize student completion

Oregon's education policy goals are also focused on completion of degrees and certificates. In 2011, the Legislature established the 40-40-20 education goal that by 2025:

- At least 40% of adult Oregonians will have earned a bachelor's degree or higher.
- At least 40% of adult Oregonians will have earned an associate's degree or post-secondary credential as their highest level of educational attainment.
- The remaining 20% or less of all adult Oregonians will have earned a high school diploma or equivalent.

Figure 1: 40-40-20 goal vs. current education distribution

40-40-20 Goal:
Oregon is farthest from the middle 40 goal (Associate's/Certificate)
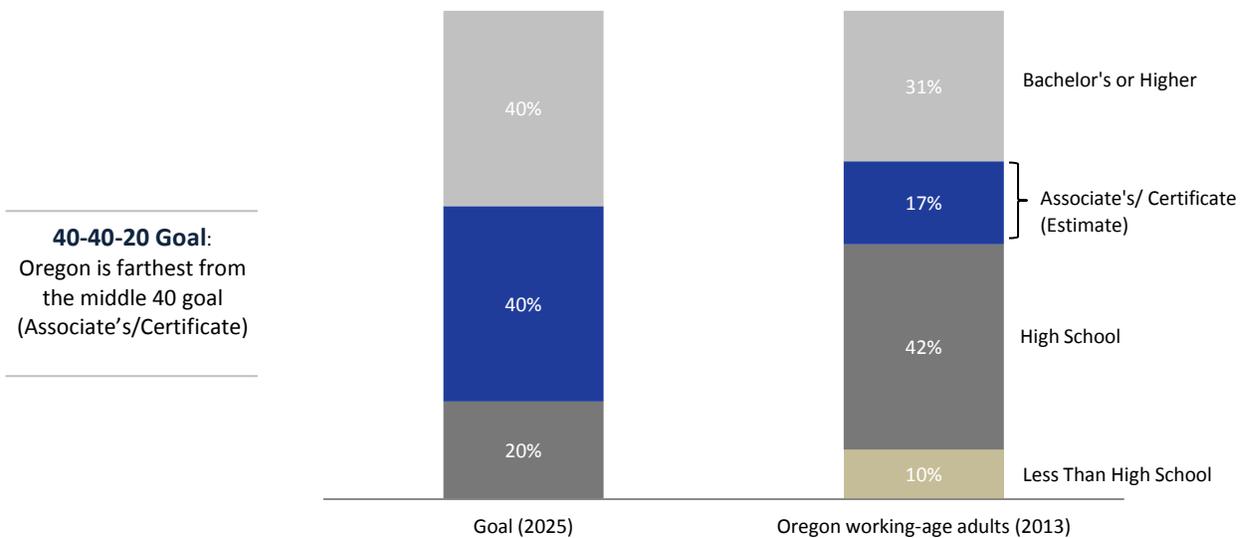
Source: HECC analysis of the American Community Survey

By establishing the 40-40-20 goal, Oregon set education as a strategic priority. Community college associate's degrees and certificates fall under the middle 40 category. Community colleges also contribute to the other two categories through transfers to universities and Adult High School Diploma and GED programs. As Figure 1 shows, Oregon is farthest away

from achieving the middle 40 goal, with only 17% of Oregonians currently holding an associate's degree or professional certificate.

The state reduced support during the recession and has undergone structural changes

State support for community colleges dropped during the recession and colleges now rely more on higher tuition rates

Community colleges are funded through a combination of state support, local property tax revenue, and tuition. The proportion of these three funding sources has changed significantly in the last 20 years. State support peaked in 1998-99 at 55% and fell to 35% in 2011-12. Tuition and fees have become more important, accounting for 44% of college revenue in 2011-12.

During the recession, this trend was pronounced. State support dropped at the same time that enrollment rose and colleges raised tuition. When accounting for funding per full-time equivalent (FTE) student, the state's method of calculating funding distribution, and for inflation, the funding drop during the recession is more visible, as shown below in Figure 2.

The state General Fund support for community colleges of approximately $465 million in 2013-15 was an increase from previous years, but did not reach the 2007-09 level of approximately $495 million ($550 million in 2014 dollars).

With enrollment decreasing after the recession and state support increasing, state support per student will likely increase.

Figure 2: Amount of state General Fund allocated to the Community College Support Fund by biennium (adjusted for inflation)
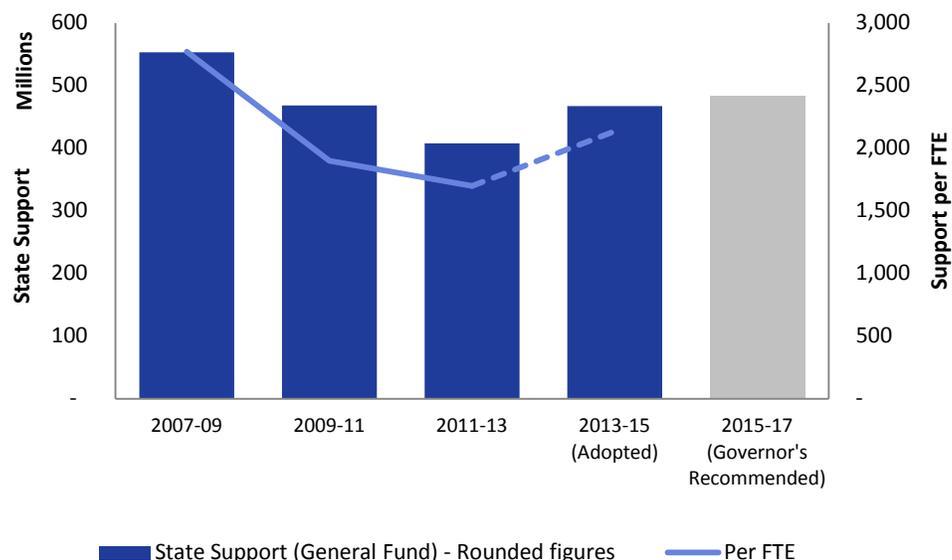
Sources: Legislative Fiscal Office Analysis; CCWD audited enrollment; Bureau of Labor Statistics

Staffing reductions at the Department of Community Colleges and Workforce Development have lowered capacity to support colleges

Staffing reductions at the Department of Community Colleges and Workforce Development (CCWD), particularly among general funded staff, have resulted in less flexibility for staff roles and less capacity to support community colleges. The full-time equivalent (FTE) of general funded staff has been reduced each biennium since 2007-09, with one exception. In 2013-15 two additional general funded FTE were added. However, these positions were dedicated to new workforce development activities.

Overall, around 10 FTE out of just under 60 overall staff are funded through the General Fund. The remaining FTE have specific requirements related to funding sources, primarily federally funded workforce activities. This limits the agency's flexibility to take on new student success initiatives or move staff to different projects.

Staffing reductions coupled with additional work demands led to a nearly $885,000 operating budget shortfall in the 2013-15 biennium. This shortfall was filled by leaving three positions vacant, transferring $121,000 from the Strategic Fund, allocating an additional $250,000 from the General Fund, and identifying others savings and revenue. The Strategic Fund is intended to be used for statewide strategic initiatives and activities.

Structural changes to Oregon's higher education system were implemented to improve key education transitions

The state has undergone significant structural changes in higher education in recent years, with the goal of improving alignment of the entire education system. However, these changes resulted in a lack of clarity about the role of the various state education agencies and other stakeholders. This includes lack of clarity about what roles fall to the Higher Education Coordination Commission (HECC) and the Oregon Community College Association, a council of governments of the 17 community colleges.

In 2011, the Oregon Legislature established the Oregon Education Investment Board (OEIB) to ensure that all public school students achieve the state's education outcome goals, help focus state investment on achieving student outcomes, and to build a statewide data system to measure student outcomes. OEIB is charged with unifying public education from preschool through graduate school (P-20).

Beginning July 2014, the HECC, established 2011, took over policymaking authority for community colleges from the State Board of Education. In July 2015, CCWD will officially move under the authority of the HECC.

As CCWD moves under the authority of the HECC, it is intended that the HECC will provide some consolidated functions for both community colleges and universities. For instance, the HECC has started to integrate executive functions, legislative affairs, internal operations (such as accounting, procurement, and human resources), and communications work. The HECC further plans to integrate information technology systems, data and research, and certain policy efforts that span community colleges and universities.

This has the potential to partially address some of CCWD's staffing constraints discussed above. Changes are still underway and results of changes are not yet seen.

Colleges and state agencies make efforts to coordinate

In Oregon, there is a decentralized system of 17 independent community colleges. The HECC distributes state and federal funds to each of the community colleges, sets broad policies, and approves new courses and programs. CCWD provides assistance and information to the colleges. Locally elected education boards are responsible for setting policy for their individual colleges.

The colleges collaborate on student success efforts and to leverage resources. CCWD has helped support and staff those efforts. The colleges also utilize statewide professional groups to share information. For instance, the college presidents, institutional researchers, and student service administrators each have their own councils that meet regularly.

Proposed changes to the community college funding model aim to improve outcomes, other proposals focus on affordability and access

Oregon's current funding model is based on enrollment

Oregon's distribution of state funding is primarily based on the full-time equivalent of students enrolled. This funding model does not account for student outcomes, including completion of degrees or certificates.

The state distributes a set amount of funding each biennium based on each college's enrollment numbers. The only way for a college to get a larger proportion of funding is to have faster enrollment growth than other colleges.

Oregon is considering implementing partial outcomes-based funding

Many states are moving away from funding based on enrollment to funding based partially or entirely on outcomes or performance, such as counting the number of degrees awarded or students earning 30 credits. Tennessee has moved to 100% outcomes-based funding. Other states, including Washington and Ohio, allocate part of their funding based on outcomes. The intent of this change is to align funding with student success strategies and incentivize college budget decisions to prioritize completion.

Oregon is discussing incorporating outcomes into the community college funding distribution model. The HECC recently approved a change to incorporate a partial outcomes-based funding model for universities. A similar proposal for community colleges is being examined.

Other proposed changes focus on improving affordability and access

Other recently proposed changes address affordability and access to community colleges. These proposals do not directly focus on student success and completion, though improved affordability could help reduce financial barriers to completion. They include:

- Establishing a statewide endowment for scholarships. This Oregon ballot measure was voted down in the November 2014 general election.
- Making community college tuition free for recent high school graduates. There have been proposals for this at both the national and state levels.
- Pay It Forward, a proposed Oregon pilot program that would allow students to pay a percent of their future earnings instead of taking out loans or paying tuition.
- Increasing funding for the Oregon Opportunity Grant, the state's need-based aid program, and focusing that program's limited

resources on the highest-need students, many of whom attend
community colleges.

Audit Results

Community colleges play a vital role in serving a diverse population of students. The colleges help create the highly skilled workforce required for Oregon businesses to be successful and competitive. However, with an overall community college completion rate of only 24%, the colleges must address the barriers that their students encounter when trying to earn a degree or certificate. These challenges could include anything from navigating financial aid to balancing life responsibilities.

Oregon colleges are aware of strategies that are effective in helping students succeed. However, their ability to expand these initiatives and serve more students is limited by lack of funding, capacity for analysis, and state support.

Changes being initiated at the state level, including outcomes-based funding and the longitudinal data system, could help colleges direct funding toward student success initiatives and track outcomes. These state initiatives will require ongoing attention and capacity for analysis.

Oregon's community college state level completion rate is low

Oregon's community college completion rate is low when compared to the national average and to other states. Only 24% of the students who entered college in 2007-08 went on to complete a degree or certificate at a community college within seven years. The completion rates are even lower for non-Asian students of color.

Traditional measures of community college completion rates do not capture students who took longer than three years to complete a two-year degree. Our analysis allowed more than twice as much time for a student to complete (seven years as opposed to three), and still found that less than a quarter of the cohort students completed a degree or certificate.

Completion rate is based on a 2007-08 student cohort

Completion (or graduation) rates are based on a student cohort calculation. For example, a university's graduation rate compares a freshmen class who all started in the same term to the same group of students four to six years later.

In order to calculate a completion rate, we defined a cohort using an established methodology. We included full and part-time degree-seeking students who started in the 2007-08 academic year and did not include completion rates for noncredit, skill-building, adult-education, or GED students. It is important to note that the cohort comprised only a small fraction of the total enrolled students. See Appendix for more details on our methodology and reporting limits.

Figure 3: Community college completion rates by state

State	Rate
North Dakota	52%
Florida	
Minnesota	
Maine	
Wisconsin	
Montana	
Iowa	
Mississippi	
Kentucky	
Hawaii	
Washington	
New York	
Arkansas	
Illinois	
Nebraska	
Massachusetts	
Kansas	
North Carolina	
Tennessee	
Missouri	
Virginia	
U.S. Overall	30%
New Jersey	
Colorado	
Wyoming	
Pennsylvania	
Maryland	
Michigan	
Georgia	
Ohio	
Connecticut	
South Carolina	
Oregon	24%
Nevada	
California	
Utah	
Indiana	13%

Note: Based on a 2007-08 cohort.
Source: National Student Clearinghouse

Oregon has low completion rates compared to other states

The overall completion rate for students first enrolled in an Oregon community college in 2007-08 was 24% (all rates in this section are rounded to the nearest percent) after seven years and only 14% after three years.

This completion rate is low when compared to other states, as shown in Figure 3. In a nationwide comparison of a 2007-08 cohort, Oregon ranked 32nd out of the 36 states studied for community college completion rates. Oregon was six percentage points lower than the national average and 28 points lower than the top-ranked state (North Dakota).

The numbers are no better when looking at comparisons based on other methods of reporting that focus on full-time students. A comparison done by the Chronicle of Higher Education looking at 2010 graduation rates ranked Oregon 41st out of 50 states for two-year degree completion.

Some of the students who did not complete a degree or certificate at a community college transferred to a four-year university. A third of the cohort students who did not complete at a community college went on to enroll and take at least one class at a four-year university.

Students who transfer do not necessarily continue to complete a bachelor's degree. A national study found an overall completion rate of 30% for Oregon students that start at community college. That means less than a third of community college students completed a degree or certificate within six years anywhere, including at a four-year institution. This is 10 percentage points lower than the national rate.

Completion rates are lower for non-Asian students of color, particularly male non-Asian students of color

Non-Asian students of color had lower completion rates than white (25%) and Asian (25%) students. Oregon completion rates were lower for black (15%), Hispanic (21%), American Indian (22%), Pacific Islander (16%), and multi-racial (19%) students.

Male students also had lower completion rates than female students.

Combining these factors, the disparity is even larger. As Figure 4 shows, black male students had the lowest seven year completion rate at 11%, compared to white female students' rate of 27%. As discussed later in the report, targeted programs may help address these gaps and provide supports that students need to be successful.
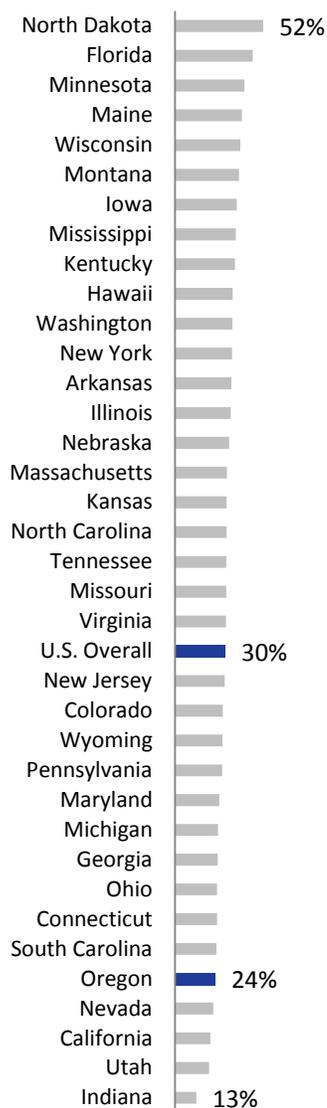
Figure 4: Cohort completion rates by race/ethnicity and gender.
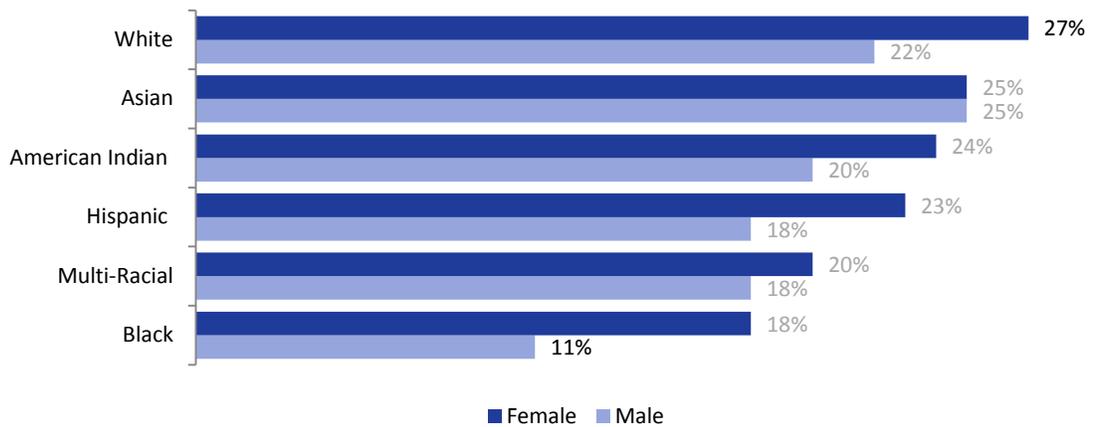
Note: 14% of cohort students did not report their race/ethnicity. Pacific Islander data were omitted due to small numbers.

Community college students take longer than two years to complete

Community college students can take up to seven years, or possibly longer, to complete a degree or certificate. Of the cohort we analyzed, most students took longer than two years to complete. Three quarters of those who completed did not receive their first degree or certificate until their third year or later. Nearly half did not receive their first award until their fourth year or later. This longer timeline makes sense as only a quarter of cohort students were enrolled full time.

After three years, half of the cohort students were no longer enrolled at community college and had not completed a degree or certificate. As mentioned above, some students transfer to four-year universities before completing an associate's degree or certificate. Of the students that were still enrolled after three years, nearly a third continued to complete a community college credential within seven years.

As shown in Figure 5 below, the completion rate continues to rise after the four year mark, though not as rapidly.

Figure 5: Cumulative percent of cohort that had completed, was still enrolled but had not yet completed, or was neither enrolled nor had completed at a community college from 2008-09 through 2013-14.

Legend: Not Enrolled, Still Enrolled, Completed

| Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
6%	13%	18%	21%	23%	24%
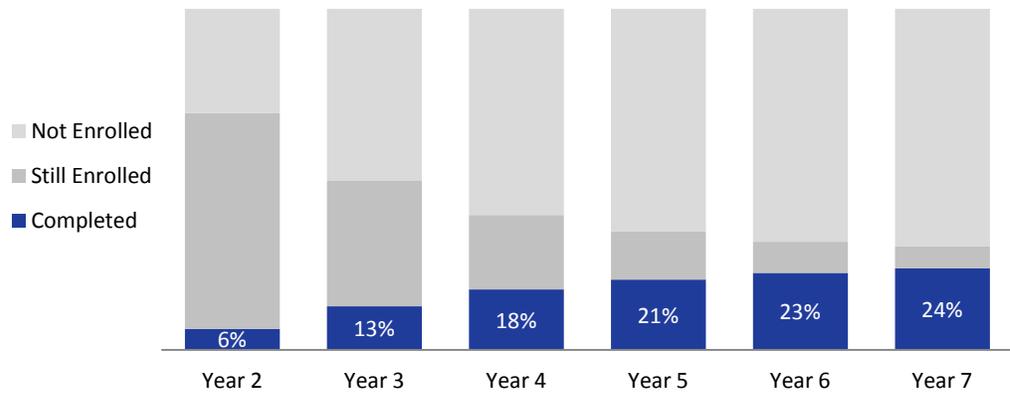
Community college completions have increased but fall short of estimate needed to reach 40-40-20

The number of degrees and certificates that Oregon community colleges award per year has more than doubled since 2007-08 but still falls short of estimates needed to reach 40-40-20.

As shown in Figure 6 below, average completions awarded per year varies by college and region.

A study performed by the National Center for Higher Education Management Systems (NCHEMS), using 2007 data, estimated that Oregon would need to produce 600,000 degrees and certificates by 2025 to meet its middle 40 goal. Around 100,000 associate's degrees and certificates were awarded in Oregon from the 2007-08 through 2013-14 academic years. However, over 25,000 of those completions were the second or third degree or certificate awarded to the same student. This level of production will leave Oregon far short of reaching the middle 40 goal.

Figure 6: Oregon's 17 community colleges' average annual degree and certificate production from the 2009-10 through the 2013-14 academic years.
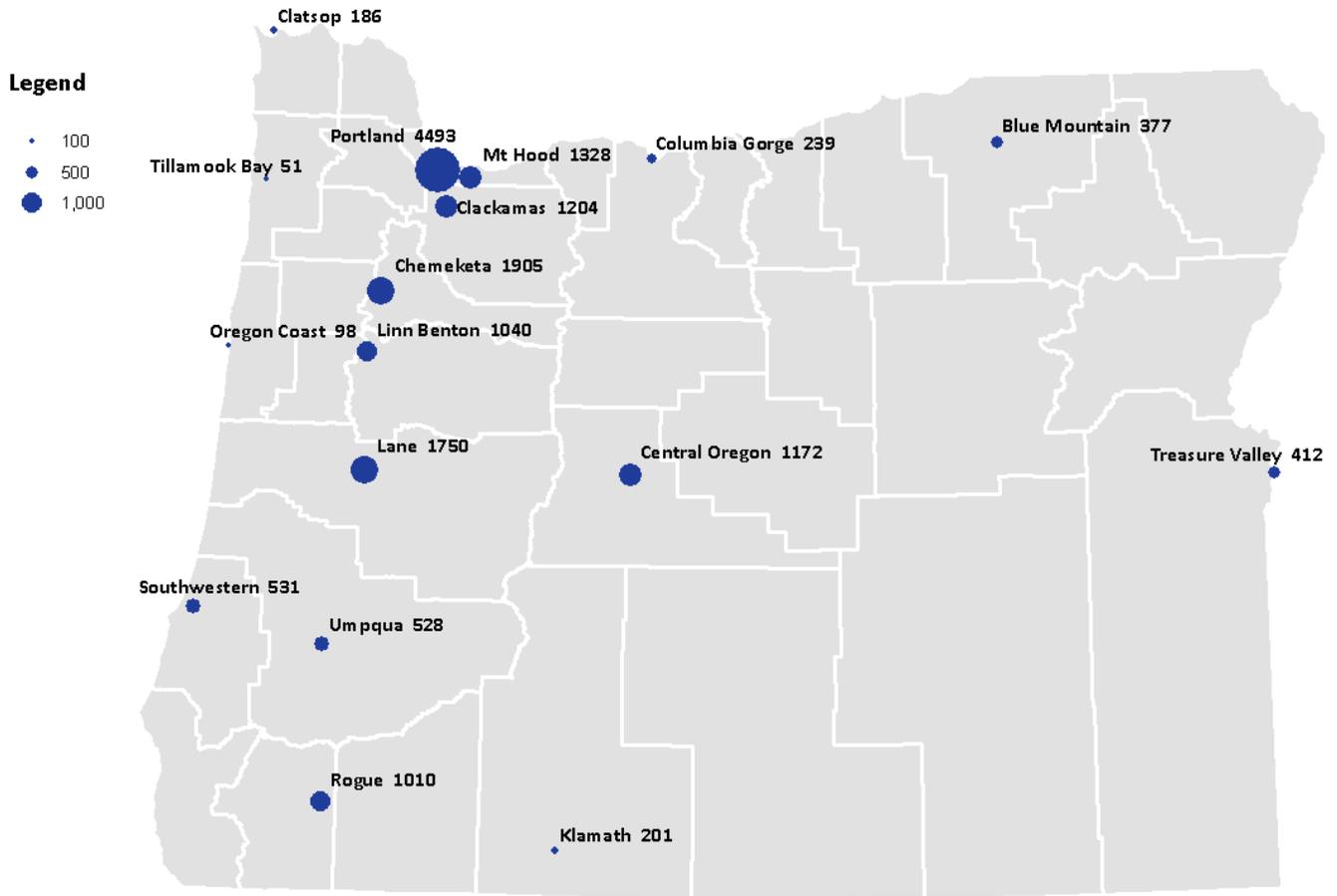
Note: The number of degrees and certificates awarded is related to the size of the college's enrollment. The completion totals include multiple degrees and certificates awarded to a single student. Source: Audits Division created map, data obtained from CCWD

Low community college completions have personal and statewide impacts

The purpose of the 40-40-20 goal is not simply about reaching numbers. It is about realizing the economic and social gains that come from a well-educated population. When students earn an associate's degree or a certificate they are more likely to have higher earnings and better job prospects.

A well-educated population is also expected to bring statewide benefits. A more educated workforce can fill high skilled jobs, improving state and

local economies. State revenue also rises as graduates contribute more to tax rolls and rely less on public assistance.

On the other hand, when students take courses toward a degree or certificate but do not complete, they may end up with student debt but no credential. This could leave them financially worse off than when they started college.

If the completion rate at Oregon community colleges does not improve well beyond 24%, the state will not reach its education goals or realize the benefits associated with those goals.

Students who complete a degree have better employment opportunities and higher wages

Evidence clearly shows that students who complete an associate's degree have greater employment opportunities and earn higher wages than their peers with only a high school diploma or equivalent. As Figure 7 shows, national average earnings go up and unemployment rates decrease with each level of education attained.

Figure 7: Average earnings and unemployment by education level
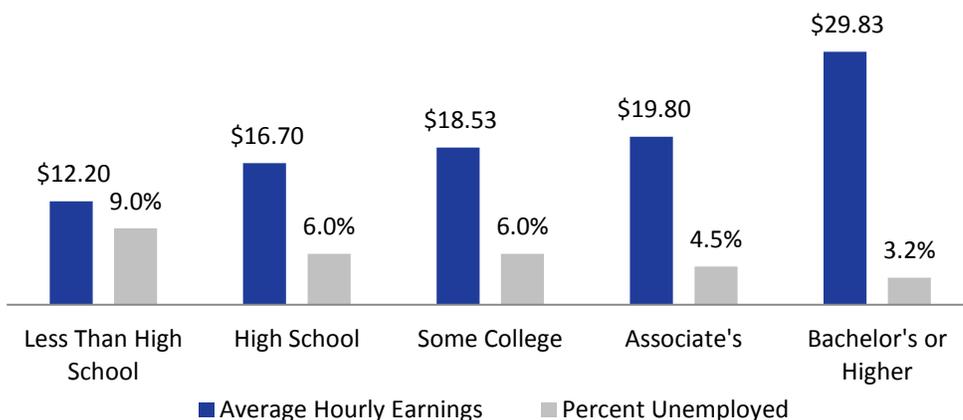
Source: Oregon Employment Department, based on 2014 national averages from the Current Population Survey

The potential for increased earnings is particularly important within the context of social equity and economic mobility. Community colleges are a primary access point to higher education for low income, diverse, and first generation students, some who may not otherwise have gone to college. For these students, earning a degree or certificate can help end generational cycles of poverty and provide opportunities for upward mobility.

Increasing completion rates would boost local and state economies

Oregon leaders recognize the need to boost residents' skill levels in order to improve the economy and economic competitiveness. Oregon is not only

competing against other states but also globally. Other nations are producing more college degrees than the United States and other states are outpacing Oregon.

Many Oregon businesses require higher skilled employees to meet workforce needs. Having higher skilled employees can make businesses more competitive. Employers report a lack of skilled applicants for some high skilled positions. Some businesses have to find qualified employees from other states. This skill shortage could increase in the future as the economy becomes more complex. A study from Georgetown University projects that by 2020, 65% of American jobs will require post-secondary education and training.

Oregon would also boost its revenues with a more educated workforce. States that have the highest levels of education also have the highest per capita incomes. Increasing income is important in Oregon since the state relies more heavily on income tax than other states. Additionally, as people become more educated, they are also less likely to rely on public assistance, such as food stamps and Temporary Assistance to Needy Families (TANF). A higher educated population could therefore reduce government costs while increasing tax revenue.

Students who do not complete a degree or certificate may leave with high student debt and no credential

Students who do not to complete their intended degree or certificate may end up financially worse off than when they started. Many community colleges students take out student loans while in school. Some students reduce their working hours and lose wages while enrolled.

Students typically understand that this investment will pay off in the future with better job opportunities and higher wages. However, students who fail to complete a program will not have a credential to help them secure higher earnings in the workforce but may still be responsible for paying back student debt.

Low completion rates may impact Oregon's education goals

It will be hard for Oregon to realize its middle 40 education goal by 2025 without increasing community college completion rates. This is particularly true since most community colleges have seen a drop in enrollment since the end of the recession.

Using broad estimates, if Oregon community colleges had the same completion rate as the national average, the 2007-08 cohort could have added roughly 1,500 additional completers to the middle 40 category. Holding all factors constant, that rate would have added around 10,000 additional completers over the past seven years and 15,000 completers over the next 10 years. This is closer but still far short of estimates needed to reach the middle 40 goal.

Oregon community colleges are addressing student success by implementing leading practices

Community college students can face significant challenges that may make it difficult for them to succeed in school. These include family obligations, lack of financial resources, inadequate college readiness, and lack of access to services like housing and health care.

Community colleges have been proactive in supporting students, but they currently lack the resources and capacity to scale student success initiatives to meet the needs of all students.

Community college students can face multiple challenges in earning a degree or certificate

Most community college students have at least one recognized challenge to succeeding in higher education. These include being the first in the family to go to college, being low income, or having a need for developmental (remedial) education. With supports, students that face challenges are more likely to complete a degree or certificate.

Community colleges are making efforts to improve student success

Some of the challenges community college students face can be academic. For instance 65% of Oregon community college students require developmental (or remedial) education, typically in math, reading, and writing. Students may also struggle with navigating college, including how to register for classes, identify which credits are needed for their degree, and how to access resources, such as tutoring services.

Oregon community colleges are implementing national leading practices to help students succeed and improve completion. Examples of strategies that some colleges are implementing include:

- Mandatory orientation for new students
- Mandatory student advising
- Student success courses
- Fast track developmental education

Colleges also offer targeted programs with individualized support

In addition to academic challenges, colleges are also implementing targeted programs that help students who may face challenges not related to academics. We interviewed current students and asked them what challenges they face toward completing their degree. They identified financial and "life" challenges as barriers.

PCC's Future Connect program provides success coaches and financial assistance to low income, first generation students.

70% of participants continue on to their second year of college.

Lishao Chen is a Future Connect participant.

Chen moved from a small village in China to Portland where she entered the fifth grade. She said that it wasn't until Future Connect and the PCC Transitions program helped her gain confidence speaking English that Portland really felt like home. Before that, she was shy and afraid to speak, worried that people would laugh at her.

These programs helped her learn to ask for help and access campus resources, such as volunteer conversation partners. She appreciates the support. "I know they [coaches] are always there for me," she said.

Chen said Future Connect helps her to live "with purpose." In her second year at PCC, she joined student leadership as the Sustainability Coordinator for the Associated Students of PCC (ASPCC). In her third year, she became ASPCC's Director of Legislation for the Southeast Campus.

Chen plans to transfer to Pacific University this fall. The guidance she received from Future Connect, she said, inspired her to pursue a career as a college advisor.

"[Future Connect] made me feel like I can do better. I will be successful in life."

Students reported that financial challenges go beyond the high cost of tuition and books. One frequently reported challenge was finding access to affordable child care. In addition, some students may not have access to basic health care or have enough income to buy food, pay their rent, or obtain adequate transportation.

Balancing life challenges with the stress of college can be overwhelming. Some students face mental health issues, such as depression, personal relationship issues, or a lack of family support while in college.

Many of Oregon's community colleges provide counselors or coaches who are there to support students dealing with these life challenges. Some also have programs that target particular groups that may have unique challenges, such as veterans.

Targeted supports may be one solution for addressing opportunity gaps. For example, the Future Connect program at Portland Community College serves first generation, low income, and predominantly students of color who may not otherwise attend college. It provides students with financial aid and a college success coach. The coaches in Future Connect provide comprehensive support that helps students with everything from in-depth advising to bus tickets to providing encouragement through personal issues. They also help students find other resources that are available in the college or in the community.

Student success strategies are not reaching most students

Strategies to improve student success reach less than 25% of students

While the services community colleges are focusing on are in line with national leading practices, the strategies are limited in the number of students they reach. A survey we conducted of all 17 colleges found that most of the strategies implemented do not reach more than a quarter of the students they target. Depending on the strategy, examples of targeted student groups may include: all students, all first time students, or those placed into developmental education.

Most strategies do not reach more than ¼ of targeted students.

Other programs, such as Future Connect, that target students with the greatest need, succeed at improving completion rates for the students they serve. However, these require significant investment, and colleges are not currently in a position to scale up these services.

Many strategies are not mandatory, limiting reach

The strategies reach even fewer students outside their target populations, given that the majority of practices are not mandatory. Some national groups advise that, to be effective, strategies should reach many students, in part by requiring students to participate. Examples include mandatory advising and mandatory orientation.

One reason some colleges may not make programs mandatory is that they do not have enough staff or instructors to provide the service to all students.

Some colleges may also be reluctant to make programs mandatory out of concern that it will affect their enrollment and therefore their funding. For example, a student may be discouraged by a mandatory orientation that conflicts with their work schedule and not enroll in classes. Some colleges that have made changes such as mandating strategies or prohibited late registration stated that their enrollment did go down. Colleges may also be concerned that mandatory practices will interfere with students' ability to access higher education.

Upcoming state initiatives are aimed at improving student success

A statewide longitudinal data system could improve tracking and assessing student success

Efforts are underway in Oregon to develop a statewide longitudinal data system to link data from preschool through graduate school (P-20) to employment. The responsibility for this new data system falls to OEIB, but

other agencies are preparing their data to be compatible with it. CCWD is currently working on ensuring data integrity and rolling out a new community college database with the functionality of a longitudinal data system.

Having a longitudinal data system in Oregon would allow the community colleges to have access to information about students before and after they leave community college. One college expressed that having access to high school records would help them better target programs and placement.

Colleges also want to know if their students were successful in graduating from a four-year university, obtaining employment in their field of study, or if they experienced wage increases. Having this information would help colleges assess the long-term success of their programs.

A longitudinal data system could also improve decision-making at the state level. State agencies, decision-makers, and stakeholders could ask research questions and conduct analyses that look at students' progress and success over time. Overall and long-term effectiveness of state initiatives could be evaluated.

Increasing the state level Strategic Fund is also proposed

The college presidents have supported increasing the percentage of state support allocated to the Strategic Fund. Currently, up to 1% of the total available state support is set aside to fund statewide strategic initiatives and activities. For example, this fund could be used for enhanced research and data support or implementing best practices.

Increasing the fund could increase coordinated strategic efforts between colleges, but would do so by reducing the funding colleges receive from the state for operations. Any amount not used for statewide initiatives is distributed back to the colleges.

Proposed changes to the funding model aim to align with student success

The current state funding model is based on student enrollment. This model may limit investments in practices that promote student success and completion because they are not reimbursed through enrollment. The HECC is exploring the possibility of a partial outcomes-based funding model for community colleges. The model would formally fund colleges partially based on completion of certificates and degrees and progress toward degrees. Outcomes-based funding is intended to align resources with activities that are best for students and improving completion rates.

Outcomes-based funding proposal addresses some risks but continued attention will be needed

Any funding model will create incentives, and some incentives may produce unintended results. When implementing outcomes-based funding,

safeguards should be put in place and quality can be monitored to reduce the risk of unintended results. The current proposal includes mechanisms to address some of these risks.

There are risks of unintended consequences in outcomes-based funding

One study suggests outcomes-based funding could unintentionally result in lowering academic standards, narrowing the community college mission, favoring those students most likely to complete, or requiring a higher than expected cost of compliance.

Many at the colleges we visited expressed similar concerns. Some were also concerned that it would disproportionately affect funding at small, rural colleges. While some had concerns, some also expressed that funding that incorporates outcomes could be an improvement over funding based solely on enrollment.

Measurement challenges can complicate outcomes-based funding

There are also challenges to measuring success and completion that complicate outcomes-based funding. Some measurement considerations include:

- Student success initiatives take time to affect completions.
- Small colleges have more volatility in year to year completions.
- Transfer and "swirling" students can be difficult to measure or track.

Many colleges have implemented student success initiatives in the past few years. Resulting effects could take time to appear in completion outputs. Our analysis found some students taking as long as seven years to complete a degree or certificate.

Small colleges that have a small numbers of completers each year will experience more volatility than larger colleges.

Deciding which college receives funding for transfer student completions or students who take courses at multiple colleges, known as "swirlers," may be another challenge. This could be especially problematic if there are uneven transfer or "swirling" patterns.

Outcomes-based funding proposal includes mechanisms to address risks

The partial outcomes-based funding proposal being considered includes mechanisms to address some of the risks and challenges outlined above. These mechanisms also reflect national recommendations for outcomes-based funding. Mechanisms include:

- Measuring progress as well as completion.
- Using three year rolling averages to smooth volatility.

- Including incentives for the success of traditionally underserved groups.
- Allowing flexibility for colleges to adjust measures to local needs and broader missions.
- Using a phased-in approach, with a stop loss provision to prevent any drastic drops in funding.

Building these mechanisms in up front may help alleviate concerns and prevent potential unintended consequences of outcomes-based funding. Assessing the ongoing effectiveness of the funding model and ensuring that unintended consequences are not realized over time will require continued assessment.

Community colleges face limits to expanding student success strategies

Community colleges have few resources to devote to student success initiatives

Total state and local funding for community colleges decreased during the 2009-11 and 2011-13 biennia at the same time that enrollment increased. Colleges increased tuition and made cuts to faculty and administrative positions, especially in student support services. Some colleges reported that small, rural colleges were especially affected by state funding cuts.

State funding went up slightly during the 2013-15 biennium allowing colleges to reinvest somewhat in support services and completion initiatives. Colleges we visited say more funding is needed. For example, one college has initiated an early alert system to identify students who may be at risk of failing a course. The college can now identify at risk students but is limited in staff capacity to reach out directly to those students and refer them to services that can help.

Many of the colleges we visited said even just a little bit of additional funding targeted to student success and completion initiatives would go a long way toward providing those services. Some colleges said the biggest barrier is obtaining resources for initial planning and setup of new services. One college said once a new service or program has been implemented, the college could allocate budget resources to sustain the program.

All of the colleges we visited reported recent investments in new student success and completion initiatives. A notable example is the unique budgeting approach used by Klamath Community College. Though the college is small with significant resource constraints, Klamath has taken steps to prioritize and align budget allocation to strategic planning goals focused on student success. To do this, the college initiated a new collaborative budgeting process, flattened the organization and eliminated some administrative positions, and built in capacity for evaluation and continuous improvement.

Some colleges lack the capacity to assess whether implementing student success initiatives has improved student completion

Colleges are well aware of the national literature and best practice research that has identified effective student success strategies. But they also lack the financial resources and staff to monitor the strategies they have implemented to ensure they are successful.

Education experts encourage colleges to use data to inform decision-making when implementing strategies to improve student success. Colleges are encouraged to tailor implementation to the unique needs of their students. They should also use data to learn and continuously refine the design of implementation as needed.

Some colleges we visited reported having little or no capacity to conduct analysis to support continuous improvement efforts. For example, a small, rural community college we visited has one-fifth of an FTE assigned to institutional research. Another college reported that their institutional researcher only works on mandatory reporting, not analysis. Outcomes-based funding could also place additional burdens on college institutional research staff.

Some colleges have made employing staff with expertise in analysis a priority. For example, Linn-Benton Community College has two employees assigned to analyzing and disseminating data to inform decision-making around student success initiatives. However, some colleges, particularly in rural areas, have difficulty recruiting employees with the necessary data skills.

In addition to limited staff capacity for institutional research, many colleges we visited said their information technology systems present barriers to addressing student success. For example, one college could not make their orientation mandatory because they could not program the information technology system to stop the registration of students who did not attend.

CCWD has less capacity to assist community colleges in increasing completions

CCWD has less capacity to help community colleges implement student success and completion initiatives

Prior to recent staffing reductions, CCWD played a greater role helping community colleges implement student success efforts aimed at improving completion rates. Currently, CCWD provides limited support and technical assistance to community colleges due to staffing cuts, turnover, and uncertainty about the future of the agency. With shifting state governance, there is less clarity around who will or should perform all of these roles and responsibilities.

Areas where CCWD previously provided support included:

- Obtaining and managing student success grants.
- Convening and supporting statewide initiatives that were designed in partnership with the colleges to increase student preparation, persistence, and completion. This included being the convener of the Student Success Oversight Committee.
- Providing assistance, research, and best practice information to colleges.
- Creating collaborative partnerships with other educational sectors, the workforce system, and employers at the state level.

CCWD requested three positions in part to reinstate capacity for providing the colleges with support for student success initiatives. However, this request was not included in the Governor's recommended 2015-17 budget.

As CCWD's capacity lessened, either other groups have taken on providing the colleges with these supports or the work is not being done. For example, CCWD recently stepped down as the lead convener of the Student Success Oversight Committee and that role has shifted to the Oregon Community College Association.

In preparation for CCWD's integration into the Higher Education Coordinating Commission agency structure, HECC staff has assumed responsibility for some communications and policy work that was previously the responsibility of CCWD alone.

The state lacks capacity to assess community college student success and completion initiatives

Increasing analytic capacity at the state level to support colleges in improving student success and completion may provide significant benefits. The continual analysis of student data would allow the state to better target statewide initiatives and planning, monitor efforts for improvement, and also support smaller colleges with less capacity.

Community colleges said they desired more data support from the state, especially for small colleges. Colleges would like access to more data sooner, especially P-12, university, and employment data. This data could help colleges better serve students and evaluate the long-term effectiveness of programs. Some colleges also suggested the state could produce more of the federally mandated reports. This would allow the colleges to focus research on their student success and completion initiatives.

The OEIB formed a unit in 2014 to conduct research that supports alignment of education policy. The research this unit has performed thus far has been focused on K-12. There is an opportunity for OEIB to perform analysis focused on community colleges or partner with CCWD's research staff.

The state will need capacity to assess the impacts of outcomes-based funding on an ongoing basis

National experts recommend that states with outcomes-based funding provide colleges with resources to hire additional researchers to conduct the types of analyses necessary to drive institutional improvement. The current proposal being considered by the HECC also recommends continued research, including identifying research questions early in the process.

In order to assess the impacts of outcomes-based funding on student success and stay alert to potential unintended consequences, the HECC and CCWD will need to ensure capacity for ongoing assessment and monitoring. Colleges, especially small colleges, will also require additional research support.

Recommendations

To better support strategies that promote community college student success and completion, we recommend that the Oregon Education Investment Board, the Higher Education Coordinating Commission, and/or the Department of Community Colleges and Workforce Development coordinate to:

- Clarify roles and responsibilities and increase capacity for coordination and support of student success and completion initiatives.
- Continue to invest in developing the statewide longitudinal data system to track student progress and outcomes, and ensure that investment continues for ongoing administration.
- Increase capacity to analyze data to inform state strategic initiatives and support small colleges.
- If the state moves forward with outcomes-based funding, ensure capacity to assess the effectiveness of the model and monitor impacts on student education and colleges.
- Continue to use at least 1% of the Community College Support Fund-Strategic Fund to invest in community college student success initiatives.

To improve student outcomes and expand initiatives, we recommend the community colleges consider:

- Aligning budget allocation to strategic goals that forward student success initiatives.
- Prioritizing investment in increased analysis capacity for decision-making and continuous improvement.
- Coordinating and combining resources to fund statewide projects, materials and training to support student success initiatives.

Objectives, Scope and Methodology

Our audit objective was to determine how OEIB, HECC, CCWD, and Oregon's community colleges can increase the number of students who complete degree and certificate programs in line with the state's 40-40-20 education goals.

We reviewed applicable state laws and rules, policies, and management best practices related to our audit objective. We reviewed CCWD policies and procedures, performance measures, and strategic planning documents. To understand historical context and budgets, we analyzed documents prepared by the Oregon Legislative Fiscal Office. We reviewed reports prepared by national foundations, universities, the American Association of Community Colleges, and more. We also reviewed academic literature regarding the link between associate's degrees and certificates and earnings.

We reviewed other higher education audits completed at states and local governments to identify risks associated with community college completion.

We interviewed CCWD and HECC managers and employees to identify common challenges across community colleges and the state's capacity to assist colleges in addressing those issues. In addition, we interviewed members of the Oregon Community Colleges Association, OEIB, Oregon Business Council, and community college representatives at all levels.

We conducted six site visits to identify common challenges across community colleges and areas the state might assist colleges. The colleges we visited are: Blue Mountain, Clackamas, Clatsop, Klamath, Linn-Benton, and Portland. Colleges were selected to ensure variation in location, size, and student population.

We conducted an online survey of all 17 community colleges to gauge the current level of implementation of leading practices to promote student success and completion. Leading practices were selected based on practices identified by the University of Texas that were also cited in other sources. We received 100% response rate.

We analyzed data provided by CCWD to ascertain a completion rate for a 2007-08 cohort of students. We conducted data reliability tests and concluded that the data were sufficiently reliable.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix: Cohort Methodology and Limitations

Completion rates in this report are based on a student cohort methodology

Community college student enrollment and goals are varied, which makes defining a cohort challenging. Many community college students attend part time, may take courses to build skills, and may not have any intention of earning a degree. Statewide community college data do not provide a reliable way to identify a student's intent.

In order to understand which students intended to complete a degree or certificate we identified degree-seeking students based on enrollment intensity. To be defined as degree-seeking, students had to be enrolled full time (12 credits) at least once between fall 2007 through summer 2008 or half time (6 credits) at least twice between fall 2007 through fall 2008. We also looked only at students who were new for the 2007-08 academic year, based on their enrollment in the previous academic year. This methodology was modeled closely after the National Student Clearinghouse's signature report series.

We went back seven years in order to give part-time students adequate time to complete a degree or certificate. Traditional measures of completion only give students three years to complete an associate's degree, which does not account for the large percentage of part-time students. We wanted to ensure that those students would be counted as completers to get the most accurate picture.

Limitations to methodology

Our strategy for identifying a cohort has several limitations. Due to data limitations it is difficult to narrow our cohort down to truly first time students. Additionally, our definition of a degree-seeking student is based on course-taking behavior and not a self-reported intent.

Since we went back seven years, our data cannot be linked to more recent efforts to address student completion. Student success strategies take time to affect completion rates and this cohort started before many strategies were in place.

Due to various concerns and data challenges, we also did not report completion rates by college. We faced challenges in determining how to address students who had transferred between community colleges. Comparing one time college cohort completions rates can also be misleading. This is especially true considering potential volatility in completion rates at colleges with small numbers and the different student populations served by different colleges.

Program level completion rates could not be reported due to inadequate data about what programs students are in. We did not include other

groupings based on concerns about unreliable, unavailable or potentially misleading data. While we were able to obtain data on whether students transferred, we were unable to obtain data regarding the success of these students at universities.

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The courtesies and cooperation extended by officials and employees of the Department of Community Colleges and Workforce Development, the Higher Education Coordinating Commission, and the 17 community colleges during the course of this audit were commendable and sincerely appreciated.