

# Strategic Enrollment Management (SEM) 2018-2024

Clackamas Community College



Education That Works



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## Introduction

Strategic Enrollment Management (SEM) has been part of higher education planning for over 30 years and while it has taken longer for community colleges to move beyond “accidental” enrollment, Clackamas Community College (CCC) is now embarking on its first effort to strategically anticipate and respond to economic and demographic forces that impact our enrollment.

This report intends to provide the college community with an introduction to SEM concepts, key enrollment indicators for CCC, recommendations for the next phase of the SEM process, and access to data and analysis that shaped both the indicators and recommendations.

This report should serve as a foundation for future conversations related to institutional strategic planning, strategies and tasks that the college could undertake to ensure enrollment goals are met and is closely integrated with other initiatives on campus including diversity, equity and inclusion (DEI) and guided pathways.

If implemented well, the strategies and tasks developed based on this report should help stabilize enrollment, help keep the college focused on planning efforts and have a positive impact on CCC’s fiscal challenges.

## Institutional Overview

[Clackamas Community College](#) (CCC) is a publicly-funded, comprehensive community college—the fifth largest of the 17 community colleges in the state of Oregon. The college is comprised of three campus locations; Oregon City, Harmony, and Wilsonville. CCC is a values-driven, student-centered organization whose mission guides our collective decision-making. Voted into existence by the local community in 1966, CCC has adapted to the changing educational, social, and economic requirements of its communities.

CCC is governed by a seven-member Board of Education elected by constituents of its service district. The Board is a policy board, delegating operational authority for management of the College to the administration. The College's primary financial resources come from state funds, local property taxes, and student tuition and fees. Additional resource development activities include seeking private, state, and federal grants. CCC is also supported by a separate, non-profit foundation that raises money to support instruction at CCC primarily through scholarships provided to students.

Located near Portland—the largest metropolitan area in Oregon—Clackamas County is one of the largest counties in the state, covering 1,893 square miles and extending to the base of Mt. Hood. Clackamas County had an estimated population of 418,187, as of July 2019; population growth is on a positive trend, with a 11% increase from 2010 to 2019, according to the US Census Bureau. Clackamas County has a diverse economic base that influences the College's programs and services. For over 150 years, agriculture, timber, manufacturing, and commerce have been Clackamas County's principal activities. More recently, the County has seen a stronger focus on metals, machinery, healthcare, high tech, logistics, forestry, food and beverage processing, renewable energy, nursery/agriculture, tourism, and software development.

CCC served 24,565 students in the 2018-19 academic year, most of whom were Oregon residents (96%). The College serves a diverse student body, with female and male students evenly represented (50% and 49%, respectively) and a high percentage of non-traditional age students over the age of 30 (46%). By race and ethnicity, 19% identified as students of color, an additional one-third did not report a race/ethnic identification, and nearly one-half identified as white (49%). CCC has maintained a steady and significant presence in Clackamas County, with enrollments in 2016 and 2017 of 25,479 and 25,445 respectively. Preliminary data for 2019 shows that student enrollment is on track to maintain this trend. Student body demographics remain steady, though there has been an increase in the under 18 group (16% in 2019, up from 10% in 2018) and a slight decrease in the 18-21 group (21% in 2018, down from 22% in 2017). Additional demographic information about CCC students can be found in the [CCC Student Profile dashboard](#).

It should be noted that the global health crisis of 2020 will significantly impact enrollment. Double digit enrollment declines are anticipated for spring 2020 and likely to continue through the 2020-21 academic year.

In 2019-20, the College was staffed by 134 full-time faculty, 326 part-time faculty, 46 administrators, 10 confidential employees, 191 full-time classified staff and 119 part-time classified staff and considers itself a resource constrained institution. Our student to instructor ratio is 23:1.

## Purpose of Strategic Enrollment Management (SEM)

Strategic Enrollment Management represents a college wide collaborative effort, guided by the college mission, to achieve our goals for student recruitment, retention, transfer and graduation rates at Clackamas Community College. SEM aims to:

1. Establish clear goals for the number and types of students needed to fulfill the institutional mission;
2. Promote students' academic success by improving access, retention, transition, and graduation;
3. Promote institutional success by enabling effective strategic and financial planning
4. Create a data-rich environment to inform decisions and evaluate strategies;
5. Improve process, organizational, and financial efficiency and outcomes;
6. Strengthen communication and marketing with internal and external stakeholders;
7. Increase collaboration among departments across the campus to support enrollment goals<sup>1</sup>

## History of SEM at CCC

Consultants from the American Association of Collegiate Registrars and Admissions Officers (AACRAO) were hired in 2007-08 to provide recommendations to an emerging SEM task force. CCC established work groups to address the recommendations, many of which were resolved, but a true SEM plan wasn't developed due to significant leadership turnover amid increased enrollment combined with budget/staffing cuts during that time period. Though a charter for a SEM committee was established in 2007, the group met sporadically through 2010-11. Many initiatives related to SEM goals were accomplished through other efforts taken by the college. In 2015-16, the Access, Retention and Completion (ARC) Committee was established to inform and guide the college in institutional priorities for enrollment management practices and policies. The development of a SEM plan became an action item in the 2016-19 Institutional Strategic Priorities with concerted effort undertaken in 2018-19.

## Guiding principles

To ensure the goals of any strategic enrollment efforts align with CCC's mission, vision and purpose, it is important to include them here. Additionally, the on-going work of the SEM task force will be to consider the college mission with a lens toward "right sizing" Clackamas to ensure we continue to meet the needs of our service district.

The CCC mission is: "To serve the people of the college district with high quality education and training opportunities that are accessible to all students, adaptable to changing needs and accountable to the community we serve."

Our purpose is: "Creating lifetime opportunities for success through responsive education."

In the academic years of 2019 and 2020, the college began significant work in developing a strategic plan. Results of this process will ensure we have new strategic priorities. SEM goals, strategies and tactics will need to align with the institutional strategic priorities when they are established.

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<sup>1</sup> Tom Green, American Association of Collegiate Registrars and Admissions Officers, 2018

## SEM Guiding Principles for CCC

1. SEM is aligned with the CCC mission
2. SEM is a shared institutional responsibility with a focus on recruitment, retention and transfer and graduation rates
3. SEM requires a commitment of services, courses, and programs that support equitable student success
4. SEM includes a focus on the academic and employment needs of our community
5. SEM requires an ongoing effort to build and maintain collaborations with four-year college and university partners and employers

## CCC's Approach to SEM Planning

In the fall of 2018, a SEM task force was established to guide the data and analysis work culminating in a report with Key Enrollment Indicators (goals) and a plan for engaging the campus community to develop strategies and tactics to achieve those goals. That group includes:

- Jennifer Anderson, Associate Dean, Academic Foundations and Connections
- Stephen Brouwers, Lead Applied Information Technology Specialist (2020-21)
- Shalee Hodgson, Associate Dean, Technology, Applied Science and Public Services
- Jason Kovac, Dean, Institutional Effectiveness and Planning
- Lisa Anh Nguyen, Director, Institutional Research and Reporting (left in 2021)
- Jim Martineau, Director, Health/Physical Education (HPE) and Athletics
- Tara Sprehe, Dean, Academic Foundations and Connections

## Timeline for SEM Work

Year	Activity
2018-19	Data collection and analysis
2019-20	Present draft SEM report to Leadership Cabinet
2019-20	Present SEM concepts/project update to College Council, Access, Retention and Completion (ARC)
2020-21	Share draft report and Key Enrollment Indicators (KEI's) with college community
2020-21	Prioritize KEI's; Create repository of current activities; Identify strategies and tactics
2020-21	Review/update data tables (SEM task force)
2021-22	Implement year one strategies and tactics
2022-23	Assess prior year plan; adjust or add new strategies and tactics based on findings (Access, Retention and Completion (ARC) Committee)
2023-24	Assess prior year plan; adjust or add new strategies and tactics based on findings (ARC)

2024-25	Assess outcomes from prior years; begin internal/external environmental scanning for 2025-2030 strategic planning input (ARC)
2024-25	Final assessment of previous SEM plan; complete environmental scanning; inform new strategic plan and new SEM plan (ARC)

## Key Findings

The SEM Task Force identified and prioritized key data elements to determine Key Enrollment Indicators (KEI's). These elements include enrollment data beginning from the 2016, 2017 and 2018 academic years, and an environmental scan of demographics, economics, market opportunities, and external competition. Additionally, a brief review of national and regional data was included. This is what we currently know about CCC and our environment within this time frame. Prioritization efforts included a review of accessible data at this time. Some key findings:

### National Demographic/Other Data

- Across the United States, college enrollment has declined each year for the past eight years. Though the overall decline among all college students was 1.7% from 2017 to 2018, the decline of community college students was 3.4% for the same time period. While numerous variables exist to explain changes in enrollment, community colleges in particular are susceptible to a changing economy leading to declining enrollment when there are more job opportunities.<sup>2</sup>
- High school graduation rates are also declining with the greatest decline occurring between 2013 and 2023. While overall graduation rates are declining, the demographics of those students is changing rapidly with a significant increase in Hispanic (projected to increase 50% between 2014 and the mid 2020's) and Asian/Pacific Islanders (projected to increase 30% over the same time period). High school graduation rates are projected to increase between 2024 and 2026, and then drop again (dipping below even 2013 rates) between 2027 and 2032. Changes in projected enrollments vary significantly by region with the Northeast and Midwest seeing the sharpest declines, the South seeing the greatest increase, and the West seeing slight increases.<sup>3</sup>
- Regarding race and ethnicity, the following is worth noting:
  - Fewer black students are enrolling in colleges and universities with a 7.7% decline between 2010 and 2017. At the community college level, the decline is 27%.
  - Hispanic students were enrolling at a 7% increase during 2010-2015, but have since declined by 1.9%.
  - Asian students continue to enroll in colleges and universities at an increase (4.7% during 2012-2017).<sup>4</sup>

<sup>2</sup> Inside Higher Education, College Enrollment Continues to Decline; <https://www.insidehighered.com/quicktakes/2019/05/30/college-enrollment-declines-continue> (May, 2019)

<sup>3</sup> Knocking at the College Door, WICHE Projections of High School Graduates: <https://knocking.wiche.edu/>

<sup>4</sup> The Chronicle of Higher Education Almanac, 2019-20 (August 2019)



- Largely related to the COVID-19 health crisis, the U.S. officially entered into a recession in June of 2020.

## Regional Demographic/Other Data

- Across Oregon, high school graduation rates are expected to change between -5 to +5% during 2013-2020. Projections between 2013 and extended through 2030, graduation rates will be:
  - Between 2013 and 2025, graduation rates will increase between 5-10%.
  - Between 2013 and 2030, graduation rates will return to the range of -5 to +5%.
- Population projections for Clackamas County<sup>5</sup> include the following:
  - Countywide growth of 24% between 2015 and 2040 with the highest growth between 2017 and 2025, peaking in 2020.
  - Largest growth within the Metro Urban Growth Boundary\* will be Happy Valley.
  - Largest growth areas outside the Urban Growth Boundary will be Canby, Estacada, and Molalla. Note that Sandy and Barlow are also expected to grow but are not in CCC's district.
- CCC is located in a highly educated county with 93% of residents (age 25+) holding a high school diploma/GED or higher and 35% holding a bachelor's degree or higher.
- While well educated, Oregon has the fourth lowest college-going rate in the nation (48%). Clackamas County has one of the lowest college-going rates in the state at 17% compared to 20-25% in neighboring counties.
- The median household income is \$72,000 and 8% of the county lives in poverty.
- Will the state of Oregon (HECC) consider performance based funding? If yes, this could change Key Enrollment Indicators and strategies/tactics to meet those indicators.
- There are 53 colleges or universities within 50 miles of our zip code (97045) which includes trade schools but not satellite campus locations.
- Several colleges or universities in Clackamas County have closed in the past five years including three for-profit institutions.

\*The Metro Urban Growth Boundary in Clackamas County as it applies to our service district includes: Gladstone, Happy Valley, Milwaukie, Oregon City, West Linn and Wilsonville.

## CCC Strategic Initiative Data

Clackamas Community College is currently striving to align data points for multiple initiatives (e.g. SEM, Diversity, Equity, and Inclusion (DEI), and Guided Pathways). While this alignment has not been finalized, it is important to note the following:

- Guided pathways is focused on retention, reducing excess credits, and reducing achievement gaps. Data points:
  - Over the past 3 years, 30% of CCC students completed an average of 23 excess credits equating to \$1.6 million dollars in extra tuition.
  - 30% of first year, first term students do not return for the winter term (retention rate of 70%). The average retention rate for our peer institutions is 73%.
    - While our students who identify as Hispanic (77%) White (72%), and two or more race/ethnicities (72%) exceed the overall 70% retention rate, American Indian/Alaska Native (68%), Asian (58%), unknown race/ethnicity (58%), Black/African-American (46%) and Native Hawaiian/Pacific Islander (40%) do not.

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<sup>5</sup> Population Research Center, College of Urban and Public Affairs at PSU, <https://www.pdx.edu/prc/opfp>

- 50% of our students do not obtain a degree, certificate and/or transfer to a four-year institution within three and six years.
- The DEI Committee will identify key achievement gap indicators and to the best extent possible, align them with SEM indicators.

## CCC Key Student and Enrollment Data Points

The following data represents all three campus locations combined for the 2018-19 academic year:

- Binary gender is split by female (50%) and male (49%).
- Students of color comprise 19% of our student body. It is important to note that 33% of our students do not respond when asked their race or ethnicity.
  - Among 10-14 aged students, the number of students of color is 22% (U.S. Census)
- 46% of our student population is over the age of 30.
- 96% of our students are Oregon residents.
- 19% of our students are Pell recipients.
- 23% of our students receive some sort of financial aid.
- 42% of our degree/certificate applicants enroll.
- Overall, nearly 50% of our students attend part-time (6-11 credits) and less-than-part-time (1-5 credits).
- On the application for admission, students indicate the following as their educational goal (by descending order with the highest percentage listed first): 1) to graduate and transfer, 2) to take job related courses, and 3) for personal interest. Course taking behavior mirrors these goals with most of our students enrolled in 1) transfer/general studies, 2) community education and 3) technical degrees and certificates. It should be noted that community education includes staff activities (e.g. in-service trainings) that count as reimbursable FTE.
- Between the academic years of 2013 and 2018, headcount decreased by 6.5% but remained around 25,000 students. FTE has decreased by 7.8% and continues to decline. This is due to roughly the same number of students enrolling but taking fewer credits.
- Overall, CCC students are more likely to be enrolled less than full-time (taking fewer than 12 credits).
- Data indicates that as the college going rate in our district increases, the selection of CCC as a destination decreases. For example:
  - West Linn and Wilsonville high schools have the highest college-attending rates in our service district (83% and 81% respectively) but the percentage attending CCC is 16% and 13% respectively)
  - Colton and Milwaukie have the lowest college-attending rates in our service district (46% and 52% respectively) but percentage attending CCC is 25% and 28% respectively).
  - As a comparator, 68% of Oregon City High School students attend any college. They represent the highest number of enrollees in our district at 40%.

## Academic Program and Industry Need Data

CCC is committed to providing academic programs that meet the wage demands of students in our community while also meeting the needs of industry in the future. We also recognize that

some members of our community need access and training for low wage/low demand job opportunities.

- We strive to offer programs that prepare people for high wage/high demand jobs. High wage is defined as \$22.44 per hour and high demand is 10% or higher job growth by 2027.
- There are four community colleges (Clackamas, Clark, Mt. Hood and Portland Community College) in the four-county Portland Metro Area (Clackamas, Clark, Multnomah and Washington) with a total student enrollment (headcount) of 142,500. In 2017, Clackamas Community College had 18% of that enrollment.
- CCC offers 39 programs that serve the high-wage/high-demand occupations (see appendix K) in the Portland metro area, and twenty-one of those programs have enrollment lower than 18%.
- CCC graduation data was also reviewed in relation to labor market demand. Overall, the average graduation rate is 1.03% across the 39-high wage/high demand programs, meaning we are preparing or graduating only 1% of the labor market demand for the four-county area.
- A review of high-wage/high-demand occupations in the four-county Portland Metro Area, provided information about industries/occupations not currently being served by CCC. Many of these occupations are in the building and construction industry. Some occupations do not require education beyond high school for entry level and some require a bachelor's degree. There are also some occupations on the list that will be impacted by automation.

## Right Size

President Tim Cook is asking CCC to explore who we are and who we want to be in the future. This includes attempting to determine the “right size” of our institution. To make this determination, we should be asking what resources are needed to provide instruction and services given the number of instructional buildings, number of staff employed, and number of students enrolled. Table 1 shows a historical snapshot of CCC that includes data of the College prior to the great recession, during the peak of the great recession and today.

*Table 1. Historical snapshot of CCC*

Year/Term	Enrollment	Number of Instructional Facilities (all three campus locations, includes GF)	Number of Active sections with enrollment	Staff (includes all full and part-time employees)	State Funding (biennium/Community College Support Fund/Percentage of state funds)
2006/Fall	Headcount: 11,589 Enrolled: 27,084 FTE: 2,095	16	7,661	1,077	2005-07 \$428/3.4%
2009/Fall	Headcount: 17,438 Enrolled: 39,343	17	8,480	1,044 (945 in 2010)	2007-09 \$431/3.7%

	<i>FTE: 2,487</i>				
2012/Fall	<i>Headcount: 14,786 Enrolled: 33,946 FTE: 2,285</i>	17	7,525	830	2011-13 \$395/2.8%
2018/Fall	<i>Headcount: 13,395 Enrolled: 27,374 FTE: 1,993</i>	19	6,313	966	2017-2019 \$570/2.9%

Data source: All student data retrieved from Reporting Services, 17-Enrollment by Student Enrollment Status (RSWH012).

## Key Enrollment Indicators (KEIs)

Table 2 identifies Key Enrollment Indicators (KEI's) which are the metrics we will use to assess our success in meeting enrollment goals. These KEI's provide the bridge between aggregate enrollment goals and more specific goals needed for SEM planning. These goals are broad in scope.

The college should consider the following questions as we determine our KEI's and the strategies and tactics that will help us meet our goals:

1. Who are we as a college?
2. What do we want to be as a college?
3. What are we known for as a college?
4. How do we balance the needs of the community while faced with dwindling resources?
5. How do we best balance supporting/marketing some programs and/or saying no to some initiatives or requests?
6. What is the right size for CCC?

Table 2. Key Enrollment Indicators (KEI's)

<i>Indicator</i>	<i>Measure</i>	<i>Baseline (3-year average for 2016-17, 2017-18 and 2018-19 unless noted; these are credit only students)</i>	<i>2024-25 Targets (start tactics 2021-22)</i>	<i>2029-30 Targets*<sup>1</sup></i>
Enrollment	Applicant to enrolled (yield rate) <sup>2</sup>	10,812/6,084 (56%)	10,812/6,762 (59%) <sup>3</sup>	TBD July 2022
	<ul style="list-style-type: none"> <li>Degree Certificate Seeking</li> </ul>	3,679/1,563 (42%)	3,679/1,610 (45%) <sup>3</sup>	TBD Fall 2022

	<ul style="list-style-type: none"> <li>• First Generation<sup>4</sup></li> </ul>	10,812/721 (6%)	10,812/836 <sup>3</sup> (3% compounded)	TBD Fall 2022
	<ul style="list-style-type: none"> <li>• First term, first year (FTEIC)</li> </ul>	10,812/2,967 (27%)	10,812/3,440 <sup>3</sup> (3% compounded)	TBD July 2022
	<ul style="list-style-type: none"> <li>• High School<sup>5</sup></li> </ul>	N/A	N/A	TBD July 2022
	<ul style="list-style-type: none"> <li>• Adult Learner<sup>6</sup></li> </ul>	334/233 (70%)	387/270 (3% compounded)	TBD July 2022
	<ul style="list-style-type: none"> <li>• Race/ Ethnicity</li> </ul>	534 (18% of first term, first year)	619 (3% compounded)	TBD July 2022
	High School Connections			
	<ul style="list-style-type: none"> <li>• ACC Yield Rate (ACC applicants enrolled in ACC courses)</li> </ul>	2,508/2,297 (92%)	2,508/2,297 <sup>7</sup> (92%)	TBD July 2022
	Total Headcount	25,652	29,737 (3% compounded)	TBD July 2022
FTE	Annual total (includes non-credit)	6815.7	7,901 (3% compounded)	TBD July 2022
	Full-time status (12+ credits)	2,879	3,337.5% (3% compounded)	TBD July 2022
	Half-time status (6-11 credits)	1,783.6	2,067.6 (3% compounded)	TBD July 2022
	Less than half-time status (1-5 credits)	1,142.8	1,324.8 (3% compounded)	TBD July 2022
Retention	Fall-to-winter – all new credit students (FA/16-FA/18)	67.7%	73.7% (Strategic Priority 4 percentage points above state average)	TBD July 2022
	<ul style="list-style-type: none"> <li>• Race/ Ethnicity</li> </ul>	66.0%	70.2% (4 percentage points above CCC average)	TBD July 2022

	• First-Generation	63.4%	67.4% (4 percentage points above CCC average)	TBD July 2022
	• Pell Recipients	77.2%	81.2% (4 percentage points above CCC average)	TBD July 2022
	Fall-to-fall – all new credit students (FA/15-FA/17 Fall 2018 coming soon)	46.2%	50.2% (4 percentage points above CCC average)	TBD July 2022
	• Race/Ethnicity	43.4%	46.4% (4 percentage points above CCC average)	TBD July 2022
	• First-Generation	38.1%	42.1% (4 percentage points above CCC average)	TBD July 2022
	• Pell Recipients	50.6%	54.6% (4 percentage points above CCC average)	TBD July 2022

\*1Discussion will be needed to address COVID-19 impacted 2020 and 2021 enrollment data.  
 2Universe of all applicants, including ACC, Adult Learner, duplicate and spam. See Appendix B for additional information.  
 3Given the current status of applicant pool (e.g. ACC students, duplicate applicants and spam), and declining number of high school graduates, we are strategically increasing the yield rate without increasing the applicant pool size.  
 4Due to Colleague technical issue, CCC is missing several years' worth of data. Issue has been resolved but benchmark and targets will need to be determined in 2022 for 2029-30.  
 5First generation data is self-reported on the admissions application.  
 6For this KEI only, adult learners are those students who applied to CCC's ESOL or GED programs. See Appendix E for new definitions to be used in 2022 for the 2029-30 targets.  
 7Due to enrollment trends and intent to better identify which of High School Connections programs students attend CCC and when, the target is intentionally left as flat.

## Strategies and Activities

In conjunction with other campus-wide initiative activities (e.g. Diversity, Equity and Inclusion), the SEM Task Force will present the SEM data and KEI's to the college community and elicit input to shape strategies and tactics. Table 3 identifies an example of a strategy, tactic, related KEI and who will coordinate the tactic and when it should be completed. As future strategies

and tactics are identified by the community, a SEM plan will be developed and will help shape future institutional strategic priorities.

*Table 3. SEM Strategies and Tactics*

<i>Strategy</i>	<i>Tactic</i>	<i>Related KEI (Objective)</i>	<i>Who</i>	<i>When</i>
<b>Example:</b> Increase conversion rates	<b>Example:</b> Explore understanding why students apply and don't enroll	<b>Example:</b> Applicant to enrolled	<b>Example:</b> Chris Sweet, Jennifer Anderson	<b>Example:</b> Fall 2019
TBD with input from college community				

It should be noted that several strategies surfaced related to defining “right size” during high or low enrollment periods. During times of high enrollment, the number of tuition waivers and dollar amount awarded should be explored. Additionally, when enrollment is low, the college should consider implementing a tuition corridor (reduced tuition for certain credit thresholds).

### Limitations and Next Steps

While the SEM task force has identified meaningful data elements that will shape enrollment planning in the future, some questions remain unanswered due to time, resources, or accessibility constraints. Some data/analysis gaps include:

- Exploration of three- and six-year completion rates.
- Exploration of what “success” means (e.g. completion, transfer, students meeting their stated education intent) and how to measure success.
- Creating shared meaning of top 25 transfer majors with a cross-reference to CCC offerings.
- National Student Clearinghouse data on number of students who transfer and to what institutions.
- Data trends and analysis of self-identified first-generation students.

## Appendices

### Appendix A: Demographics at CCC

#### Gender, Race, and Ethnicity

The College serves a diverse student body, with female and male students evenly represented (49% and 50%, respectively) and a high percentage of non-traditional age students over the age of 30 (51%). By race and ethnicity, 18% identify as students of color, an additional one-third did not report a race/ethnic identification, and nearly one-half identify as white (49%).

Among new incoming students, they are similar in demographic composition, but males are more represented compared to female students by 16 percentage points. Also, as expected among incoming students, there is a higher percentage of traditional college-going age compared to the general CCC student population. Table A-1 provides an overview of the general CCC student population and the new incoming student population.

*Table A-1. Demographics overview of all and new students at CCC*

Group	All students (2017-18)	New students (Fall 2017)
Female	48.8%	32.2%
18-21	21.0%	29.5%
Students of color	17.7%	18.1%
Oregon residency	97.0%	80.2%
Veteran	4.1%	3.9%
First generation		12.5%
Pell recipient	14.8%	11.0%

*Data source: All student data retrieved from [CCC Student Profile](#) dashboard. New student data retrieved from [Incoming Student Profile](#) dashboard.*

#### Service Area and Shifting Demographics

Currently, traditional college-age individuals (18 and 19 years old) residing in Clackamas, Marion, and Multnomah Counties comprise 2.2% of the total population. To estimate the percentage of potential college-going students in four to eight years, we examined the data for those who are currently age 10-14 in these counties. This age group comprises 6.1% of the population in these three counties. While age groups are not entirely comparable given the number of years in each age range--18 and 19 being two years and 10 to 14 being five years--one can see proportionally that there is still a slight increase among future potential college students.

$$(6.1 / 5 \text{ years}) * 2 \text{ years (to see what the percentage would be for two years)} = 2.4\%$$

Table A-2 below provides a look at the current age group of traditional college-age students of 18 and 19 years old as well as potential future college students of current 10-14 years. As previously mentioned, a limitation in this data is the difference in years for the two age groups



under comparison. However, the focus here is the rate of change between the two, as if the “Potential future college students” were the new make-up of college-age students. The formula for this different is as follows:

$$(\text{Potential students} - \text{Current college-age students}) / \text{Current college-age students}$$

Disaggregated by race, we can use White as a proxy to gauge the change in potential future college students in the near future. When compared to those who identify as White (Non-Hispanic), the group that is expected to experience the most growth in representation is Hispanic/Latino.

*Table A-2. Current and future college-age students by race*

Race	Current college-age students (18 and 19 yrs.)	Potential future college students (10 - 14 yrs.)	Difference*
Black / African American	2.4%	6.2%	1.58
American Indian / Alaska Native	2.7%	7.2%	1.67
Asian	2.4%	5.2%	1.17
Native Hawaiian / Pacific Islander	3.5%	8.7%	1.49
Other	3.9%	10.1%	1.59
Two or more	3.9%	10.1%	1.59
Hispanic / Latino	3.6%	10.5%	1.92
White (Non-Hispanic/Latino)	1.9%	4.8%	1.53

*Data source: 2013 - 17 American Community Survey 5-Year Estimates (B01001 SEX BY AGE)*

## Appendix B: Applicant and Enrollment Data

Applicant to enrolled is referred to as “yield” data. Tracking yield data is a standard college practice of understanding and predicting enrollment data. Table B-1 shows applicant and enrollment data (or yield) for the academic years of 2016, 2017 and 2018.

**Table B-1 Yield Data**

Applicant and Enrollment Data Summary for SEM Summer 2016 – Spring 2019

Entry Term	Total # of Applicants	Total # of Applicants Enrolled	% Yield	Total # of Degree & Certificate Applicants	Applicant to Enrollment	Degree Certificate Applicant Yield %	Total # of ACC Applicants	Total # of ACC Applicants Enrolled	ACC Yield %
16-'17 Total	9041	5412	60%	630	410	65%	2415	2173	90%
17-'18 Total	10394	6188	60%	3963	1667	42%	2479	2358	95%
18-'19	13000	6652	51%	6443	2611	41%	2631	2361	90%
<b>3 Year Average</b>	<b>10812</b>	<b>6084</b>	<b>56%</b>	<b>3679</b>	<b>1563</b>	<b>42%</b>	<b>2508</b>	<b>2297</b>	<b>92%</b>
3 Year Total	32435	18252	56%	11036	4688	42%	7525	6892	92%

Data set:

- Pulled from Institutional Reports: Student – Admissions – Admissions Master Report
- All applicants and those that enrolled broken out for entry terms SU 2016 – SP 2019
- Data range from July 1, 2015 – January 17, 2020
- Degree and Certificate applicants and those that enrolled broken out for entry terms SU 2016-SP 2019
- ACC applicants and those that enrolled broken out for entry terms SU 2016 – SP 2019

Issues with the Data: The following issues with the data set have implications for our ability to be confident in our yield data and may cause us to be cautious when setting future enrollment yield goals.

- Missing “Applicant type”: This field is not consistently filled in for 32% of the applicants in the data set (10,694/32,435). The “student type” shows as “none” or blank and this is the field we look for to see who is degree and certificate seeking, non-credit, etc. This is probably an indication that we weren’t asking for this information at one time on the application or it could reflect the “back door” registrations that have occurred through various means in our system that may indicate that this information was not known at the time the account was created. This has a significant implication for our yield goals as this means that we are missing information to help us better understand the applicant yield for each applicant type including degree/certificate seeking students.
- Enrollment data: This information is based on a tag in the “Master Report” that says “yes or no”. I believe this tag indicates whether the applicant has enrolled at any point at CCC. If this is true, it does not show whether the applicant applied for the entry term that they originally applied for which is what we set our yield goals on. This also doesn’t differentiate between type of credit (e.g. ACC versus non-degree, versus degree type credits) so we can’t know if a degree seeking applicant is showing as enrolled for degree seeking courses.
- Duplicate records: There are 2,642 duplicate applicants within term and across years included in the data set.

- Students will submit multiple applications for a variety of reasons including forgetting their credentials, being enrolled in high school, apprenticeship, or continuing education and not remember that they had previously enrolled. They will also apply again to return after an absence. We can't tell the difference between those that are returning versus those that are submitting another application for other reasons.
- SPAM – In the past 18 months we saw an increase in SPAM applications seeking access to our systems. Levers are in place to reduce the amount of SPAM applications getting into the system but it is not 100% foolproof. This has implications for our yield data as these applicants never intend to enroll and falsely boost our applicant data making it difficult for us to know who “true” applicants are versus others.

## Appendix C: Program Intent and Type

At the time of entry, students are asked to identify the primary purpose of attending CCC. The following table C-1 reflects three years of educational goals. Trends (2017 and 2018) indicate that by headcount, the top three educational goals are: 1) graduate and transfer, 2) take job related classes, and 3) personal interest.

*Table C-1. Enrollment by Student Educational Goals*

EDUCATIONAL GOAL	2016			2017			2018		
	Head Count	Enroll	FTE	Head Count	Enroll	FTE	Head Count	Enroll	FTE
Asked, No Response	1230	2460	198.23	669	839	46.11	307	459	25.63
Complete GED	268	699	114.25	138	282	31.85	89	181	22.31
Complete High School	2119	5788	535.83	789	1282	127.34	599	1213	119.31
ESL - Citizenship exam	42	114	6.26	49	130	6.47	23	68	3.62
ESL - Daily communication	156	459	24.94	186	498	26.90	67	189	9.51
ESL - Get job unemployed	89	278	15.90	72	197	10.69	25	73	3.86
ESL - Keep current job	51	122	6.45	65	166	8.62	34	75	3.42
ESL - Public assistance	17	44	2.20	10	27	1.45	6	15	0.92
ESL - Work in profession	62	166	8.86	52	136	7.54	24	52	3.09
Exploring career options	2712	10772	884.71	947	2497	192.76	771	2057	158.62
Get a better job	1929	7578	644.44	734	1882	153.20	648	1826	145.91
Graduate and transfer	5494	44551	3,562.16	3358	11091	900.61	2830	9528	758.88
Graduate and work	3861	21423	1,819.06	2151	5962	490.07	1870	5106	428.04
Improve writing or math	1136	4104	335.28	448	1222	89.84	346	954	70.96
Learn English	500	1295	94.74	170	413	26.59	218	543	33.50
Other	2111	6390	526.72	894	2199	219.45	817	1917	142.97
Personal interest	3250	9529	697.43	2288	3936	208.29	2129	3953	230.68
Take job related classes	2916	8049	574.85	2002	3344	190.25	2208	3537	186.31
Transfer with no degree	2770	10186	760.77	1140	2729	179.59	907	2091	143.23

*Data source: All student data retrieved from Reporting Services, 18-Enrollment by Student Educational Goal (RSWH018).*

## Program Type

Program of study is the specific degree or certificate path students complete. Program type refers to groups of courses or programs to reflect a meta-level understanding of courses. Trends (2017 and 2018) indicate that by headcount, the top three program types are: 1) transfer/general studies 2) community education and 3) technical degree/certificate. It should be noted that community education includes staff activities such as in-service that increases enrollment in that category. For example, in the summer of 2019, there were 19 sections of staff development trainings, with 254 registrants. Seven of the 19 sections were FTE reimbursable, resulting in a .26 additional reimbursable FTE.

*Table C-2. Enrollment by Program Type*

PROGRAM TYPE <i>(includes ACC)</i>	2016			2017			2018		
	Head Count	Enroll	FTE	Head Count	Enroll	FTE	Head Count	Enroll	FTE

Transfer	3071	9844	766.46	2549	8203	649.99	2517	7879	616.81
Tech Degree/Certificate	3440	7880	651.50	3451	7980	655.93	3362	7516	619.66
General Studies	2077	4104	310.68	1818	3693	254.72	1405	3037	188.61
Community Education	3286	4639	190.14	3632	5036	192.23	3543	5156	204.49
Developmental Education	554	1097	101.38	440	928	75.89	464	982	81.75
Other	1086	1372	156.11	1726	2165	219.68	2104	2804	282.67
<b>Total</b>	<b>13514</b>	<b>28936</b>	<b>2,176.27</b>	<b>13616</b>	<b>28005</b>	<b>2,048.44</b>	<b>13395</b>	<b>27374</b>	<b>1,993.98</b>

*Data source: All student data retrieved from Reporting Services, 19-Enrollment by Program Type (RSWH013)*

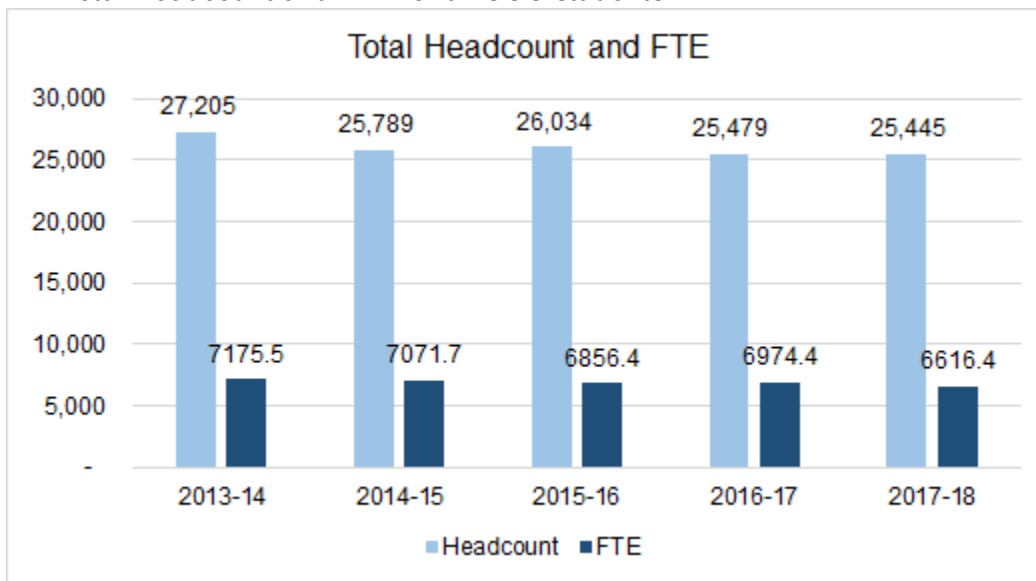
## Appendix D: Enrollment

Between academic years 2013-14 and 2017-18, the number of students served at CCC decreased by 6.5%, from 27,205 to 25,445. During this five-year period, headcount decreased most from 2013-14 to 2014-15 by 5.2%, and has remained relatively stable since. Despite this, FTE decreased most between academic years 2016-17 and 2017-18, where it fell by 5.1%. It should be noted that Advanced College Credit (ACC) students (dually enrolled in district high schools) comprise almost 20% of our FTE.

Per the Community Colleges and Workforce Development FTE Guidelines, FTE is calculated as follows:

$FTE = (\text{Number of students in course} \times \text{Number of hours the course meets per term}) / 510 \text{ clock hours}$

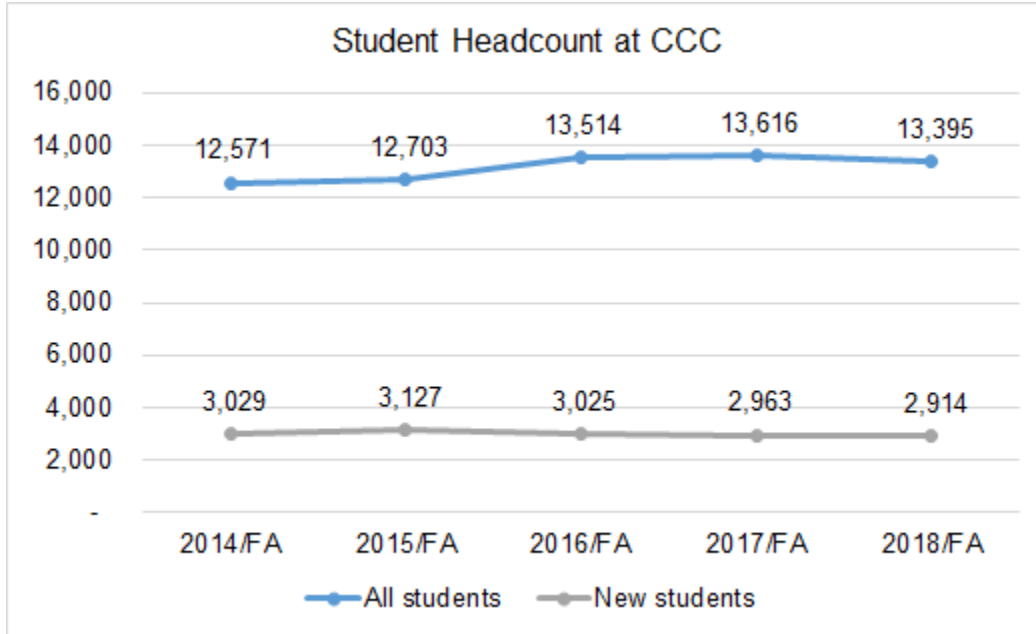
Figure D-1. Total Headcount and FTE for all CCC students



Data source: [CCC at a Glance](#)

Because most new students begin college in the fall term, Figure D-2 focuses on fall headcount. Of the total number of students who enroll at CCC in the fall, approximately one-fifth are new students coming to CCC for the first time. As depicted in Figure D-2 below, the number and percentage of students enrolling during the fall terms has also remained stable over the last five years.

Figure D-2. Fall headcount of all and new students at CCC (five-year trend)



Data source: All student data retrieved from Reporting Services, 17-Enrollment by Student Enrollment Status (RSWH012). New student data retrieved from Incoming Student Profile dashboard.

Overall, CCC students are more likely to be part-time at nearly 50% of the entire student population. Between fall 2014 and fall 2018, the percentage of full-time students decreased (-4.8 percentage points) while part-time students also decreased by 1.5 points. Among new students, enrollment status trends are similar, with a slight decrease of full-time students (0.7 points) while the percentage of part-time students remained flat.

Table D-3. Enrollment status for all and new students at CCC

		Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018
<b>New students</b>	Full-time	18.6%	19.1%	21.1%	20.2%	17.9%
	Part-time	37.7%	38.1%	38.8%	37.3%	37.9%
<b>All students</b>	Full-time	21.7%	20.3%	19.5%	19.0%	16.9%
	Part-time	40.1%	41.6%	47.8%	46.6%	38.6%

Data source: All student data retrieved from [CCC at a Glance](#) dashboard. New student data retrieved from [Incoming Student Profile](#) dashboard.

### Enrollment Status

While headcount has remained consistent, with a slight decrease in fall of 2018, enrollment status (full or part-time) has changed significantly with more students taking fewer credits.

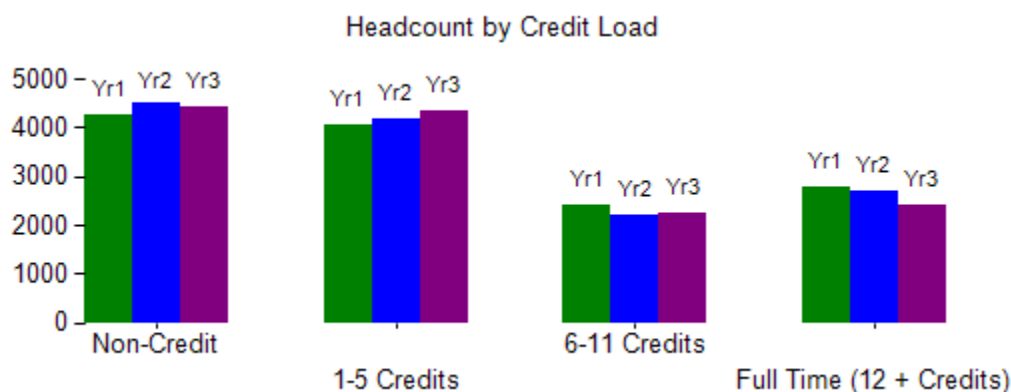
**Table D-4. Headcount, Enrollment and FTE, by Enrollment Status**

Enrollment Status	2016 (rounded to nearest whole)			2017 (rounded to nearest whole)			2018 (rounded to nearest whole)			2016-18 % change (rounded to nearest tenth)		
	Head count	Enroll	FTE	Head count	Enroll	FTE	Head count	Enroll	FTE	HC	Enroll	FTE
Non-credit	4263	6383	273	4523	6549	227	4418	6729	252	3.6%	5.4%	-7.6%
Less than part-time (1-5 credits)	4067	4636	403	4187	4694	397	4334	4879	424	6.5	5.2	5.16
Part-time (6-11 credits)	2403	5976	535	2204	5514	485	2242	5459	483	-6.7	-8.65	-9.7
Full-time (12+ credits)	2781	11941	965	2702	11248	938	2401	10307	834	-13.7	-13.7	-13.5
Total	13514	28936	2176	13616	28005	2048	13395	27374	1994	-0.9	-5.4	-8.3

Data source: Reporting Services, 17-Enrollment by Student Enrollment Status (RSWH012)

It should be noted that community education (non-credit) includes staff activities such as in-service that increases enrollment in that category. For example, in the summer of 2019, there were 19 sections of staff development trainings, with 254 registrants. Seven of the 19 sections were FTE reimbursable, resulting in a .26 additional reimbursable FTE.

**Figure D-5. Headcount by Credit Load (fall terms 2016-2018)**



Data source: Reporting Services, 17- Enrollment by Student Enrollment Status (RSWH012)

### High School Enrollment

The top two college-attending high schools in our district (West Linn and Wilsonville respectively) have the lowest enrollment at CCC. The top three schools sending students to CCC are Oregon City, Molalla and Gladstone.

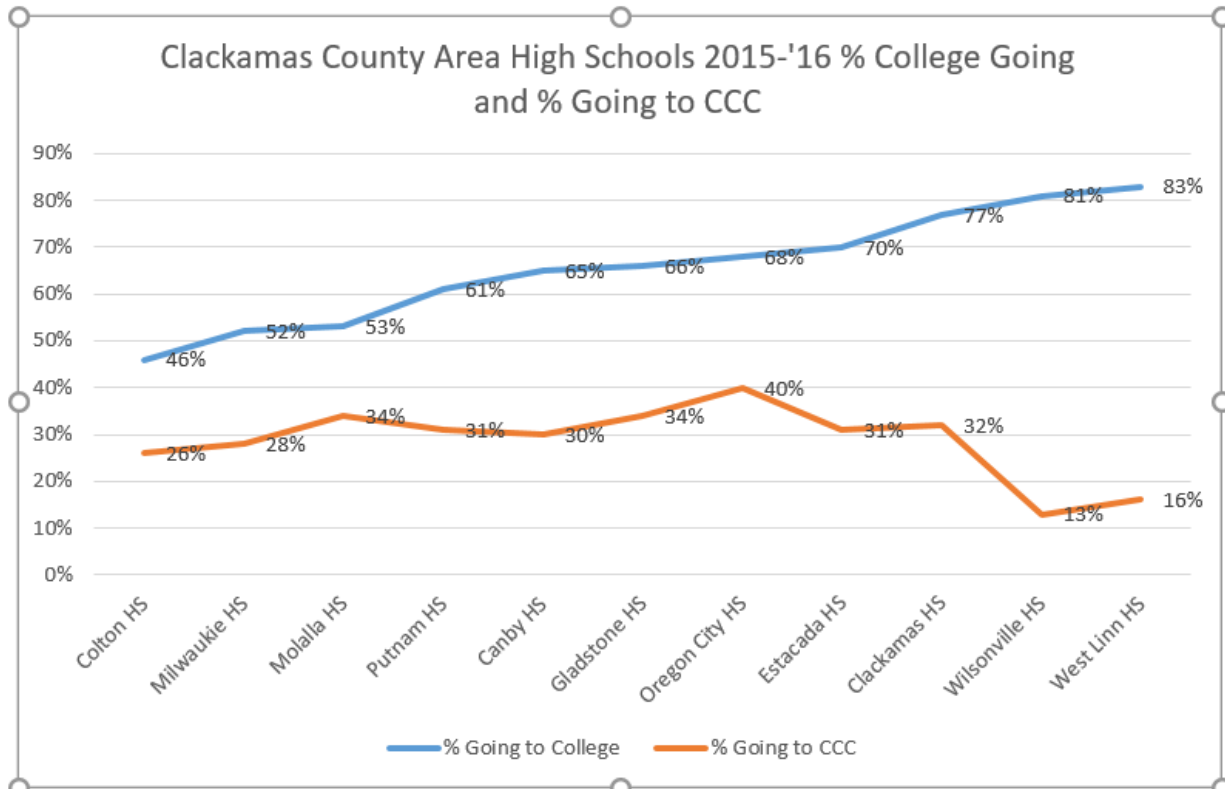
Four high schools providing the largest feed to CCC each fall term for the past two years:

- Oregon City high school has the highest percent of graduates from 2015-'16 attending CCC with 40% of their graduates starting at CCC. College going graduates from Molalla and Gladstone high schools have the second highest rate of attending CCC from that same year at 34% with graduates from Clackamas high school enrolled at CCC at the fourth highest rate that year at 32%.



When reviewing the high school graduate college going rate and the rate of graduates enrolling at CCC together, these data indicate that as the college going rate at the high school increases, the selection of CCC decreases.

Figure D-6. Clackamas County Area High School students attending any college and attending CCC:



Data source: Oregon Department of Education

## Appendix E: Specific Student Populations

Some populations of students are easily identifiable and can be recruited and retained with specific support structures. Data for these specific populations are listed below.

### Adult Learners

The task force determined the following definitions for CCC Adult Learners.

Postsecondary students can be divided into the following three categories:

- Traditional college students are those between the ages of 18-24
- Adult Learners are those individuals 25 years or older, with the following subsets:
  - Without a high school credential or for whom English is not their native language.
  - All others, which would include individuals with a high school or college credential but may be underemployed and/or are interested in gaining new skills to improve their employment status.

In Clackamas County:

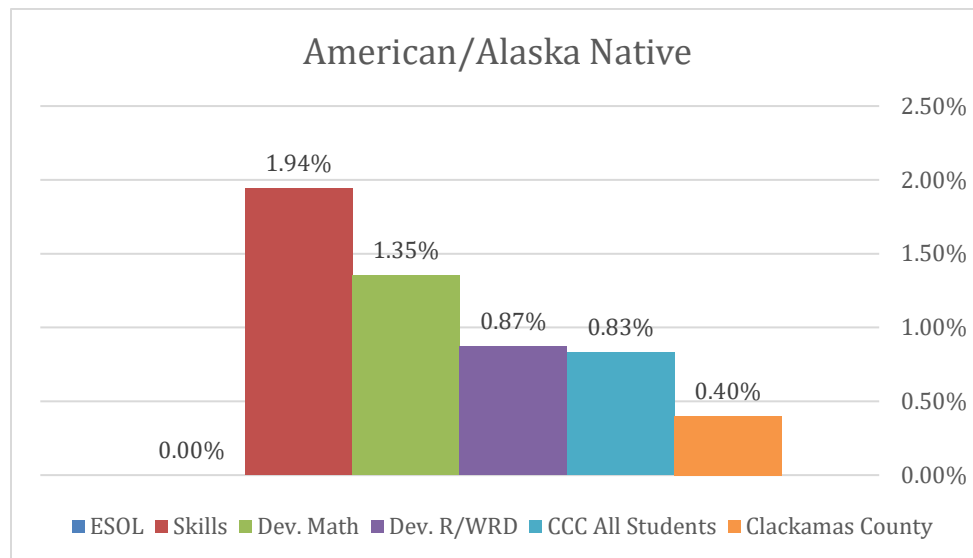
- 3,964 individuals between the ages of 18-24 lack a high school equivalency
- 20,671 adults 25 or older lack a high school equivalency
- 13,238 residents between the ages of 18-64 report speaking English as “less than well”

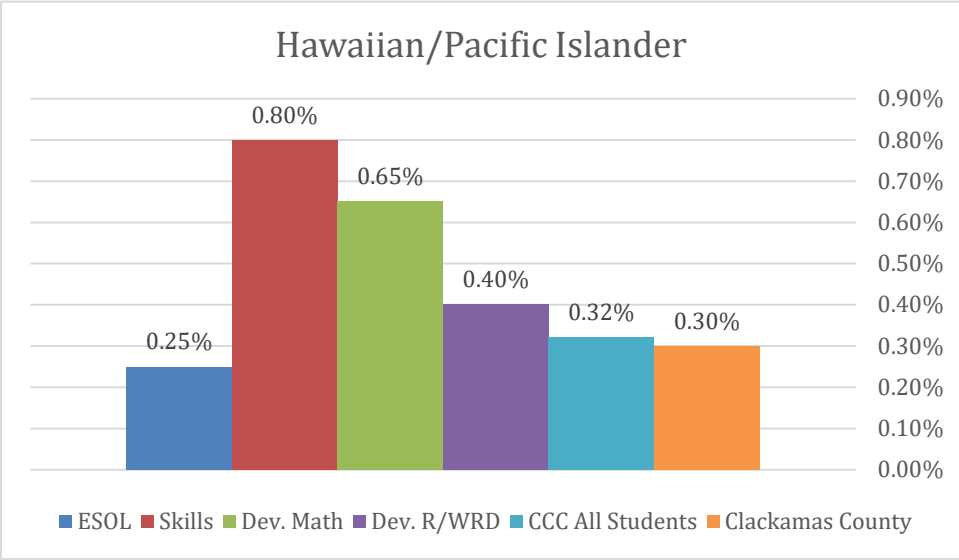
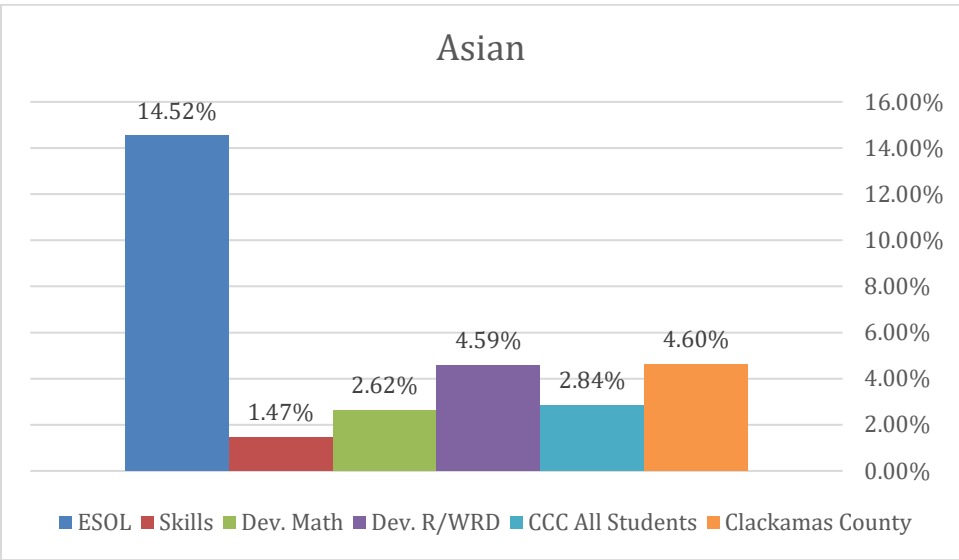
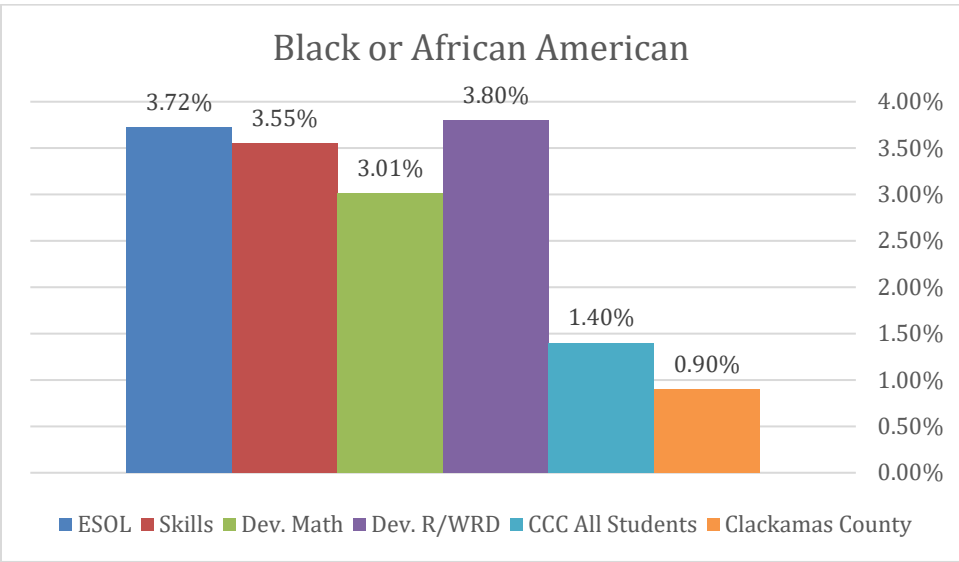
*Source for above statistics is the 2018 American Community Survey (Census Bureau)*

- 31,000+ adults are unemployed or are working but making less than \$15 per hour

*Source for above statistic is Oregon Employment Department analysis of 2018 American Community Survey & Oregon Department of Education 2018-2019 data.*

At CCC, the demographic make-up of our Adult Learner program significantly increases the racial and ethnic makeup of the student population at the college:





## Athletes

Clackamas competes in the Northwest Athletic Conference (NWAC) in the following sports: Basketball (men and women), Baseball, track and field (men and women), volleyball, cross-country (men and women), softball, and soccer (women). Our wrestling team competes in the National Junior College Athletic Association (NJCAA). Athletes must attend class full-time (12+ credits) and bring in substantial revenue to the college.

*Table E-1. Enrollment by sport over three years*

<b>Sport</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Baseball	45	43	41
Men's Basketball	17	17	16
Men's Track and Field and Cross Country	55	41	40
Women's Basketball	10	12	12
Wrestling	41	41	38
Volleyball	14	15	15
Women's Track and Field and Cross Country	32	28	28
Women's soccer	27	22	23
Softball	25	21	20
<b>Total</b>	<b>265</b>	<b>240</b>	<b>233</b>

*Source: Athletics Office*

## First Generation

Students are asked at the time of applying, if there are a first-generation (i.e. the first member of their immediate family to attend college). CCC has been collecting this data for several years but has identified retention data nor analyzed trends associated with this group of students. This is an area in which to explore further. CCC is reporting 777 first-generation students applied for admission for the 2019-20 academic year.

## International Students

International students at Clackamas are assessed prior to enrollment for placement in the Program for Intensive English (PIE) program or in college-level coursework. Though a small program at CCC, international students bring perspectives and experience to our campus, enriching the lives and experiences of students and staff. International students pay out-of-state tuition (significantly higher than in-state tuition) but they are not FTE reimbursable. Nationally,

colleges and universities are experiencing a significant decline in enrollment due to current administration policies related to immigrants and students on certain visas.

In the fall of 2017, we had 44 international students representing 13 countries with the most students come from the Middle East and Asia. In the fall of 2018, we had 30.

### Veterans

Clackamas County is home to 28,024 Veterans. With an award-winning Veterans Center, CCC actively supports veterans seeking an education. Table E-2 shows the number of Veterans served at CCC and the type of benefits received.

*Table E-2: CCC Veterans enrolled and benefits received.*

<b>Benefit type:</b>	<b>Fall '15</b>	<b>Fall '16</b>	<b>Fall '17</b>	<b>Fall '18</b>
Chapter 33 (post-9/11 GI Bill)	161	165	159	151
Chapter 31 (vocational rehab)	18	23	24	20
Chapter 35 (dependents education assistance)	20	19	14	18
Chapter 30 (Montgomery GI Bill)	3	1	1	1
Chapter 1606 (MGIB—Selected Reserve)	4	8	3	1
DoD Tuition Assistance	3	2	5	6
<b>TOTAL:</b>	<b>209</b>	<b>218</b>	<b>206</b>	<b>197</b>

*Source: CCC Veterans Office*

## Appendix F: Clackamas County Data

The following data in table F-1 reflects estimates from the United States Census Bureau as of July 1, 2018.

Table F-1. Clackamas County Census Data

Total Population	416,075
Growth since 2010 (percentage change)	+10.7%
Persons under 18 years of age	21.7%
Persons over 65 years of age	17.4%
Female persons	50.8%
White alone	89.4%
Black or African American alone	1.1%
American Indian and Alaska Native alone	1.1%
Asian alone	4.6%
Native Hawaiian and Other Pacific Islander alone	0.3%
Two or More Races	3.5%
Hispanic or Latino	8.7%
White alone, not Hispanic or Latino	82.0%
Median Household income (in 2017 dollars), 2013-2017	\$72,408
Per capita income in past 12 months (in 2017 dollars), 2013-2017	\$37,551
Persons in poverty	8.3%

Source and for additional Clackamas County Data:

<https://www.census.gov/quickfacts/fact/table/clackamascountyoregon,US/PST045218>

Oregon has the fourth lowest college-going rate in the nation (48%) (1). Clackamas County has one of the lowest college-going rates in the state at 17% compared to 20-25% in neighboring counties (2).

Sources:

1. NCES, IPEDS Enrollment Survey and WICHE, Projections of HS Graduates, 2016.
2. American Fact Finder, College Undergraduate School Enrollment by County, 2017.

## Appendix G: Retention

Retention answers the question: Did students return? Persistence answers the question: Did students transfer or graduate?

### Fall to Winter

Outlined in Table G-1 is the percent of students who were enrolled at CCC for the first time in the given fall term, and were enrolled at CCC in the following winter term.

*Table G-1. Fall to winter retention rates for all new CCC students*

	Fall 2014		Fall 2015	
	CCC	Oregon	CCC	Oregon
All students	69.4%	69.6%	69.5%	69.7%
Credential seeking	94.3%	92.6%	94.0%	92.0%
First time in college	95.4%	93.5%	95.0%	93.6%

*Data source: Voluntary Framework of Accountability (VFA)*

CCC's current strategic priority Guided Pathways also has an established indicator for overall retention rate, with a target of 73.7% by 2021. (Note: This target was established by looking at the state average retention rate of 69.7% for cohort fall 2014 (reporting year 2017). Target was first calculated as  $[\text{State} + (\text{State} \times .05)]$ . This yielded targets very similar to simply adding four percentage points to the State average. For simplicity in terms of explaining and communicating out established targets, the methodology was changed to  $[\text{State} + 4 \text{ Percentage Points}]$ )

### Fall to Fall

Table G-2 outlines the percentage of first-time degree/certificate-seeking students who enrolled in the previous fall and either re-enrolled or successfully completed their program by the current fall. For example, of all first-time degree/certificate-seeking students who enrolled in fall 2017, 42% of part-time and 58% of full-time students returned to CCC in fall 2018 or completed their program by fall 2018.

Looking at most recent data available for other colleges (2017), the state average fall to fall retention was 33% for part-time and 53% for full-time students. Looking at the average rates for our peer institutions (Central Oregon, Lane, Linn Benton, Mt. Hood), part-time was at 49% and full-time at 57%.

*Table G-2. Fall to fall retention rates for first-time degree/certificate-seeking students*

	Part-time		Full-time	
	CCC	Oregon	CCC	Oregon
2014	33%	35%	50%	53%
2015	44%	34%	57%	52%
2016	43%	33%	53%	53%
2017	40%	33%	57%	53%
2018	42%	n/a	58%	n/a

*Data source: CCC [IPEDS Retention Rates](#) dashboard*

### Retention Dashboard

This section outlines the retention of CCC students from fall to winter and fall to fall, for all students as well as for specific demographic groups.

*Table G-3. Fall to winter retention rates for credit students*

Term	All credit students	Students of color	Pell recipients	First generation
2016/FA	66.8	68.9	77.1	61.0
2017/FA	69.0	67.2	77.0	65.9
2018/FA	67.5	62.4	77.6	63.3
<b>3-yr average</b>	<b>67.7</b>	<b>66.0</b>	<b>77.2</b>	<b>63.4</b>

*Data source: Institutional Research Office [Retention](#) dashboard*

Note: Data for students of color include those who identify as Native American/Alaskan Native, Asian, Pacific Islander, Black or African American, Hawaiian, Hispanic/Latino, and multiple races.

*Table G-4. Fall to Fall retention rates for credit students*

Term	All credit students	Students of color	Pell recipients	First generation
2015/FA	47.2	44.5	52.8	37.9
2016/FA	45.4	44.2	49.9	35.2
2017/FA	45.9	42.5	49.2	41.2
<b>3-yr average</b>	<b>46.2</b>	<b>43.4</b>	<b>50.7</b>	<b>38.1</b>

*Data source: Institutional Research Office [Retention](#) dashboard*

Notes: Data for students of color include those who identify as Native American/Alaskan Native, Asian, Pacific Islander, Black or African American, Hawaiian, Hispanic/Latino, and multiple races. 2018/FA to 2019/FA retention rates will not be available until after 2019/FA term is completed.



Below in Table G-5, the data is disaggregated by full-time and part-time status as well as by race/ethnicity. Review of the data shows that regardless of enrollment status, inequitable outcomes are consistently evident among one particular group--Black/African American students.

This trend is highlighted in the two tables below, which focus on retention over one term (fall to winter) and over two terms (fall to winter to spring). Table G-5 focuses on full-time students, while Table G-6 focuses on part-time students. In both tables, data are provided for all students and for black/African American students. Cells highlighted in orange draw attention to areas where Black/African American students perform less than 80% of the overall student performance.

*Table G-5. Retention rates for full-time students*

Term	All Students		Black/African American	
	One term	Two terms	One term	Two terms
2014/FA	83.4	69.0	52.6	36.8
2015/FA	83.8	74.4	61.8	52.9
2016/FA	83.1	72.3	66.7	57.6
2017/FA	85.5	72.5	88.2	58.8
2018/FA	83.1	--	60.9	--
Average	83.8	72.0	66.0	51.5

*Data source: Institutional Research Office [Retention](#) dashboard*

*Table G-6. Retention rates for part-time students*

Term	All Students		Black/African American	
	One term	Two terms	One term	Two terms
2014/FA	57.3	43.8	45.0	30.0
2015/FA	59.0	46.3	32.4	21.6
2016/FA	55.9	40.9	38.7	29.0
2017/FA	57.8	44.0	43.3	30.0
2018/FA	58.7	--	56.0	--
Average	57.7	43.8	43.1	27.7

*Data source: Institutional Research Office [Retention](#) dashboard*

## Appendix H: Financial Data and Financial Means

CCC has a policy of maintaining a balanced budget (10% minimum ending fund balance throughout a three-year forecast, with an emphasis towards balancing revenues and expenditures over a five-year planning horizon). FTE and Enrollment play a large role in projecting future revenue toward meeting a balanced budget. The projections used by CCC's Business Office are based enrollment remaining flat for the next four academic years beginning in 2019-20. Table H-1 demonstrates the difference in revenue if enrollment increases 3% just once over the next four years.

*Table H-1. Tuition, revenue credits and impacts with increased enrollment*

Academic Year	2019-20	2020-21	2021-22	2022-23
Tuition Revenue (in millions)	\$14,239M	\$14,654M	\$15,069M	\$15,483M
Assumed Tuition	\$103.00 per credit (actual)	\$106.00	\$109.00	\$112.00
In credits	138,232*	138,245	138,248	138,241
Tuition Revenue (in millions and assumes 3% growth in first year and then flat)	\$14,665M	\$15,093M	\$15,520M	\$15,947M
In credits	142,379	142,387	142,385	142,384
Net revenue	\$426,104.00	\$439,030.00	\$450,933.00	\$472,294.00

*Source: F9 Reports*

\*The 138,232 is paid credits (doesn't include the credits waived through tuition waivers).

In determining the number of credits needed to equal tuition revenue, divide the tuition revenue (in millions) by the cost of tuition per credit. To determine the net revenue, subtract the first row of credits from the second row of credits and multiply the difference by the tuition cost. When adding each row of tuition revenues and subtracting the flat enrollment from the one-time 3% enrollment growth, we know that the college generates an additional \$1.78 million dollars. \*

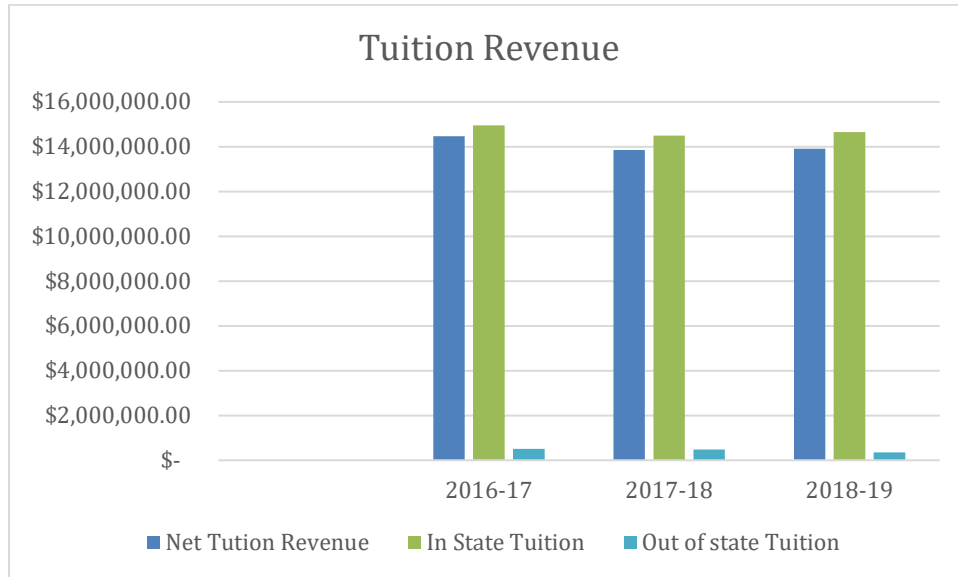
The 3% gain equates to 4,147 credits (we should be thinking in terms of credits when interpreting budget projections). Translated, this means 106 full-time students at 13 credits per term (or 39 credits over 3 terms) would take care of meeting the 3%. We are essentially converting the number of students to an FTE number. The total FTE and credits taken each year are slightly higher when you factor in waived credits.

Additionally, we work on a three-year rolling average and our peers are not declining at the same rate (it should be noted we weren't declining at their rate previously).

### Tuition

Tuition has steadily climbed since 2006 when it was \$56 per credit. Tuition increases are in response to declining state funding. The following table represents tuition revenue for the academic years 2016, 2017 and 2018.

Figure H-2. Tuition revenue three-year comparison



Data source: F9 Reports

### Financial Means

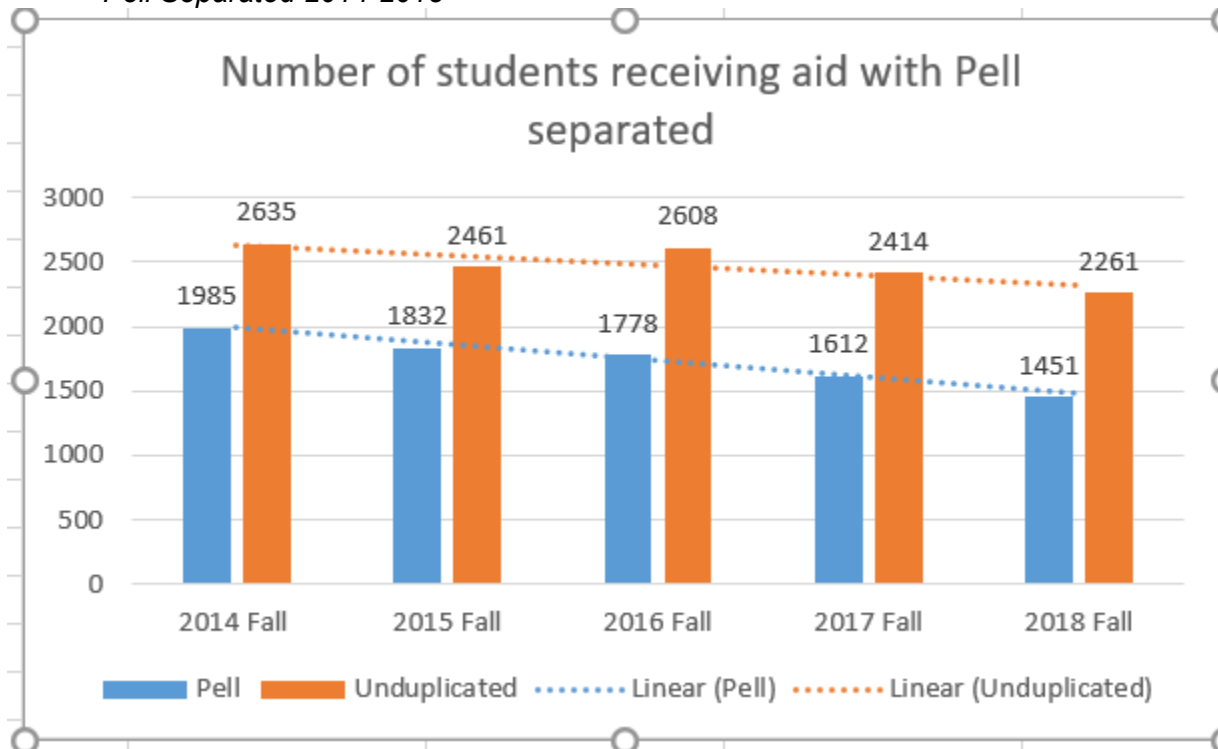
The number of students receiving Pell grants has decreased each fall term from a high of 1,985 in fall 2014 to 1,451 in fall of 2018. The number of students receiving other forms of financial aid has also decreased over the past four years but at a slower rate of decline and with a high of 2,635 students in fall 2014 to 2,261 students in fall 2018.

Table H-3. Financial means

Financial aid by Term	2014 Fall	2015 Fall	2016 Fall	2017 Fall	2018 Fall
Pell	1985	1832	1778	1612	1451
% of Pell Recipients	15.8%	14.4%	13.2%	11.8%	10.8%
Number of students with some form of financial aid	2635	2461	2608	2414	2261
% of students with some form of financial aid	21.0%	19.4%	19.3%	17.7%	16.9%
Total CCC Headcount	12,571	12,703	13,514	13,616	13,395

Data source: CCC Financial Aid Office

Figure H-4. Number of Students Receiving Financial Aid Fall by Fall Comparison with Pell Separated 2014-2018



Data source: CCC Financial Aid Office

## Appendix I: Online Learning

This section focuses on online learning, specifically for the 2017-18 academic year. Here, online is defined as both fully and partially online. As outlined in Table I-1, CCC offered many courses that were both fully and partially online, but did not offer any fully online programs. [Note: Table I-1 excludes ACC data.]

*Table I-1. Count of Enrollment, Courses, Sections, and Programs for Online Learning (2017-18)*

Student Headcount Enrollment	Credit: 11,794	Non-Credit: 42
Online Programs	0	
Courses	239	
Sections	370	

*Data source: CCC Institutional Research Office*

In terms of demographics, most online enrollments are among students residing in the state of Oregon (95.7%). Slightly less than half of online students are enrolled full-time at 42.0%, with an additional 54.4% enrolled part-time in online classes (see Table I-2).

*Table I-2. Online learning by enrollment and residency status (2017-18)*

Enrollment Status	In-State					Out of State	Null	Grand Total
	CA	ID	NV	OR	WA			
Full-time	0.6%	0.2%	0.2%	40.1%	0.5%	0.4%	0.0%	<b>42.0%</b>
Half-time	0.2%	0.1%	0.0%	30.5%	0.4%	0.0%	0.0%	<b>31.2%</b>
Less than half-time	0.5%	0.1%	0.0%	21.9%	0.3%	0.3%	0.0%	<b>23.2%</b>
Non-credit	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	<b>1.1%</b>
Null	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.5%	<b>2.6%</b>
<b>Grand Total</b>	<b>1.3%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>95.7%</b>	<b>1.2%</b>	<b>0.7%</b>	<b>0.5%</b>	<b>100.0%</b>

*Data source: CCC Institutional Research Office*

Note: NULL value under residency status indicates the college does not have this information for the student(s). NULL value under enrollment status indicates the student(s) took courses other than credit-based coursework (e.g., CEU) or dropped all courses.

## Appendix J: Scheduling Efficiency

CCC sees significant variation in enrollment averages across departments and course offerings. During the 17-18 school year, average enrollments in same-prefixed courses ranged from .81 to 34.5. Several lower-average-enrollment prefixes have significant numbers of single-person courses (e.g. private lessons), and many prefixes have factors that affect their average enrollment numbers. In general, the College is limited by imperfect information that might otherwise inform discussion about scheduling efficiency, including course enrollment caps that are artificially large, which compromises meaning from measuring enrollment as a percentage of course cap. This report on same-prefix enrollment averages is offered as an alternative, with the recommendation that better measures of scheduling efficiency be pursued in the near future.

Clackamas has not set a universal minimum enrollment for a course to run; faculty, departments, and deans will navigate decisions regarding course offerings and cancellations on a term-by-term basis. Several departments/prefixes have used this system to achieve a high-level of scheduling efficiency, including Table J-1, a sample of the top 10 enrollment averages from the 17-18 school year:

*Table J-1. Sample of top 10 enrollment averages by subject*

Subject	Average enrollment
WS (Women's Studies)	34.5
FN (Food and Nutrition)	27
ESR (Environmental Science)	26.75
SPN (Spanish)	25.17419
HE (Health)	24.59459
SOC (Sociology)	24.27778
HPE (Health/Physical Education)	24.25
Z (Zoology)	24.18182
PS (Political Science)	23.8
PSY (Psychology)	23.36842

*Data source: Office of Curriculum and Scheduling*

As the College continues to consider strategic ways to use limited resources, these departments could serve as reference points for best practice in scheduling efficiency at CCC.

### Classroom Use Efficiency

A June 2018 study by the Paulien group helped the College consider classroom use by day and hour, to identify the most- and least-scheduled times of week at the Oregon City Campus. "The Outcomes of the analysis reveal that the heaviest classroom use occurred at 10:00 am and 11:00 am on Tuesdays where 80% or 53 of the 66 classrooms were in use. Classroom use drops only slightly on Thursday mornings at 10:00 am with 74% or 49 of the 66 rooms in use. Classroom use begins to decline around 2:00pm and remains low through the rest of the day. Data shows only minimal use of classrooms during the evening hours. Afternoon and evening use is minimal on Friday, as compared to the rest of the week" (Paulien, 2018, pp. 49-50).

These results were based on space utilization during the fall 2017 term—before the Industrial Technology Center and DeJardin expansion were complete.

A Classroom Qualitative Research Group also convened in the 18-19 school year to consider strengths and weaknesses of the 66 classrooms on the Oregon City campus. The work of this group is ongoing; the group will use faculty input to identify work needed to improve the quality of CCC classrooms, and identify spaces that should no longer be used for teaching and learning. While there are a few rooms that may fit into this latter category, the majority of feedback collected during the 18-19 school year suggests that, while improvements are required, only a very few rooms may be removed from use as classrooms.

While CCC experiences some challenges related to accommodating classroom preferences during peak activity periods, availability of classrooms does not seem to be a limiting factor in sustaining or growing course offerings in the near future. Similar studies may be performed in the future for the Harmony and Wilsonville campuses.

## Appendix K: Labor Market Information

### Academic Relevance for CTE Programs:

In winter 2018 the Labor Market Information Workgroup conducted an analysis of Career and Technical Education Programs offered at CCC. The data gathered included the following:

- CTE Programs - All CTE certificate and degree programs offered at CCC
- Occupations - Occupations related to the CTE certificate or degree
- Other institutions and programs - institutions in the four-county area, both private and public, offering similar programs
- Industry Sector Partnership - regional economic and workforce development focus on strengthening specific industries (Advanced Manufacturing, Health Care, IT/Software, Agriculture and Construction)
- Projected change in the number of jobs by 2027- size of the industry
- Projected growth in the occupation over 10 years - growth or decline in the industry compared to the statewide average (demand)
- Salary range 10th and 90th percentile of the salary range for the occupation
- Average salary - for the occupation in Oregon
- Living wage is defined as the amount of money necessary to support two adults and one dependent, currently at \$22.44/hour according to the MIT living wage table. (<https://livingwage.mit.edu/counties/53011>)

The analysis focused on the program, occupation, number of jobs, demand and average wage. Programs were benchmarked by two data points, resulting in four categories.

- 1) High Wage - above \$22.44 per hour average wage
- 2) High Demand - above 10% change in jobs by 2027
- 3) Low Wage – below \$22.44 per hour average wage
- 4) Low Demand – below 10% change in jobs by 2027

High Wage/Low Demand (HW/LD) Wage above \$22.44 and demand below 10%	High Wage/High Demand (HW/HD) Wage above \$22.44 and demand above 10%
Low Wage/Low Demand (LW/LD) Wage below \$22.44 and demand below 10%	Low Wage/High Demand (LW/HD) Wage below \$22.44 and demand above 10%

Analysis was conducted for 89 occupations that are related to CCC CTE degrees and certificates in relation to three-year trends for enrollment and graduation data. Overall 38 programs are increasing enrollment, 47 programs are decreasing enrollment, 32 programs are increasing the number of graduates and 51 programs are decreasing in the number of graduates.

- High wage/high demand programs are overall increasing enrollment, but decreasing the number of graduates. There is also a program in this area with no enrollment or graduation data, as the program is new.



- High wage/low demand programs are similarly overall increasing enrollment, but decreasing the number of graduates. There are also three of these programs with no enrollment and completion data and two with no completion data as they are new programs.
- Low wage/high demand programs are overall decreasing enrollment and number of graduates.
- Low wage/low demand programs are similarly decreasing enrollment and are equal between increasing and decreasing the numbers of graduates.

*Table K-1. Wage and demand in relation to enrollment and graduation trends over three years (2015-2018).*

	<b>Increased Enrollment</b>	<b>Decreased Enrollment</b>	<b>Increased Graduates</b>	<b>Decreased Graduates</b>	<b>No Data</b>	<b>Total Programs</b>
HW/HD	21 (54%)	17 (44%)	13 (33%)	23 (59%)	3 (7%)	39
HW/LD	6 (46%)	4 (31%)	3 (23%)	7 (54%)	3 (23%)	13
LW/HD	7 (30%)	16 (70%)	9 (39%)	14 (61%)	0	23
LW/LD	4 (29%)	10 (71%)	7 (50%)	7 (50%)	0	14
<b>Total</b>	<b>38 (44%)</b>	<b>47 (53%)</b>	<b>32 (36%)</b>	<b>51 (57%)</b>	<b>6 (7%)</b>	<b>89</b>

*Data Sources: EMSI 4 County Area (Clackamas, Clark, Multnomah and Washington). Quality Info Statewide Labor Market information and Clackamas Community College Enrollment and Graduation Data. Note, enrollment data is not disaggregated across term and includes duplication and graduation data is limited to students who apply to graduate.*

**Advisory Committee feedback-** Each CTE program has an advisory committee that provides feedback to the program about courses, curriculum, opportunities, threats, and weaknesses. These advisory committees are composed of individuals from local businesses and other organizations in the region. A relevant program has an advisory committee that works with the program to keep the curriculum up-to-date and meeting the needs of local businesses and industries.

Historical note regarding programs. When the state of Oregon explored performance/outcomes-based funding, we were told to add programs without any data/evidence to support the value of those programs. We could explore whether these programs should be career pathways or part of stackable credentials/EFAs.

### High Wage/High Demand

This section covers programs that prepare people for high wage/high demand jobs (Wage above \$22.44 per hour and 10% or higher job growth by 2027.)

There are four community colleges (Clackamas, Clark, Mt. Hood and Portland) in the four-county (Clackamas, Clark, Multnomah, and Washington) Portland Metro Area with a total student enrollment (headcount) of 142,500 in 2017, Clackamas Community College had 18% of that enrollment. In review CCCs programs that serve the high-wage/high-demand occupations in the Portland metro area, there are thirty-six programs, twenty-one of these programs have enrollment lower than 18% (see Table K-2).

In addition to enrollment, CCC graduation data was also reviewed in relation to labor market demand. Overall the average graduation rate is 1.03% across the thirty-four high-wage/high-demand programs (see Table K-2).

*Table K-2. High wage/high demand enrollment and graduates*

Program	Occupation	Jobs in 2027	Average enrollment	% students enrolled compared to demand	Graduates	% of graduates compared to demand
AAS Accounting Assistant	Tax preparers	671	328	48.88%	9	1.34%
AAS, CPCCs and CC Automotive Service Technology	Automotive Service Technicians and Mechanics	3,930	255	6.49%	33	0.84%
AAS Business, CC Business Management, CC Management Fundamentals	General and Operations Managers	23,077	1047	4.54%	51	0.22%
	Managers	6,614	1047	15.83%	51	0.77%
AAS Business, CC Business Management	Admin Services Managers	2,655	1034	38.95%	35	1.32%
CC Human Resource Management, CC Human Resource Management Essentials	Human Resources Assistants	5,563	123	2.21%	18	0.32%

CC Integrated Marketing & Promotion, CC Marketing	Market Research Analysts and Marketing Specialists	6,500	52	0.80%	9	0.14%
CC Computer Application Support	Computer Occupations	4,868	22	0.45%	2	0.04%
AAS and CC Computer and Network Administration	Computer Network Support Specialists	1,470	222	15.10%	15	1.02%
	Computer user support specialist	7,917	222	2.80%	15	0.19%
	Network and Computer Systems Administrators	2,875	222	7.72%	15	0.52%
AAS Criminal Justice	Police and Sheriff's Patrol Officers	2,894	310	10.71%	10	0.35%
AAS Degree Digital Media Communications	Producers and Directors	998	231	23.15%	11	1.10%
	Multimedia Art and Animators	887	231	26.04%	11	1.24%
	Media and Communication Equipment Workers	266	231	86.84%	11	4.14%

CC Entry Level Multimedia Journalist	Writers and Authors	587	12	2.04%	0	0.00%
CC Video Production Technician	Camera Operators, Television, Video and Motion Picture	131	17	12.98%	2	1.53%
	Film and Video Editors	210	17	8.10%	2	0.95%
CC CTE Instructor	CTE Teachers Middle School	50	0	0.00%	0	0.00%
	CTE Teachers Secondary	290	0	0.00%	0	0.00%
CC Energy Systems Maintenance Technician	Heating, Air Conditioning and Refrigeration Mechanics and Installers	2,099	21	1.00%	2	0.10%
AAS and CC Wildland Fire, CPCC Wildland Fire Forestry and CPCC Wildland Firefighter 1	Firefighters	1,721	150	8.72%	6	0.35%
CC Geographic Information Systems Technology	Surveying and Mapping Technicians	518	19	3.67%	4	0.77%
AAS Nursing	Registered Nurses	24,632	113	0.46%	27	0.11%

AAS Computer Aided Manufacturing	Numerical Tool and Process Control Programmers	534	92	17.23%	3	0.56%
	Machinists	2610	92	3.52%	3	0.11%
AAS Manufacturing Technology, CC Mastercam and CPCC CNC Machining Technician	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	11,019	356	3.23%	32	0.29%
AAS and CC Manufacturing Technology	Industrial Machinery Mechanics	2,776	339	12.21%	20	0.72%
AAS and CC Project Management, CC Project Management Tools/Techniques	Business Operations Specialists	13,852	144	1.04%	10	0.07%
AAS and CC Project Management	Management Analysts	5,240	162	3.09%	14	0.27%
AAS Water and Environmental Technology	Environmental Engineering Technicians	201	100	49.75%	10	4.98%

AAS Water and Environmental Technology and CC High Purity Water	Water and Wastewater Treatment Plant and Systems Operators	479	111	23.17%	13	2.71%
AAS Water and Environmental Technology and CC Water and Environmental Technology	Environmental Science and Protection Technicians	247	512	207.29%	19	7.69%
AAS Web Design and Development and CC Web Design	Web Developers	2,021	119	5.89%	3	0.15%
AAS Landscape Management - Arboriculture	Tree Trimmers and Pruners	261	15	5.75%	Data not available	Data not available
AAS Industrial Maintenance Technology, CC Industrial Maintenance Technology, CC Industrial Maintenance Technology-Mechanical Maintenance	Industrial Machinery Mechanics	3132	20	0.64%	Data not available	Data not available

Data source: EMSI and CCC

### Low Wage/Low Demand

This section provides information on programs that prepare people for low wage/low demand jobs (Wage below \$22.44 and less than 10% job growth by 2027):

Table K-3. Low wage/Low Demand enrollment and completions

Program	Occupations	Jobs in 2027	Enrollment per year - three-year average	% students enrolled compared to demand	completion per year - three-year average
CC Accounting Clerk	Bookkeeping, Accounting, and Auditing Clerks	14,963	62	0.41%	11
AAS Admin Office Professional and CC Admin Office Assistant	Secretaries and Administrative Assistants	19,366	236	1.22%	16
CC Admin Office Assistant Training and CC Admin Office Assistant	Office Clerks	24,837	92	0.37%	13
CC Human Resource Management Essentials	Human Resource Assistants	1,075	123	11.44%	18
CC Entry-Level Multimedia Journalist	Photographers	312	12	3.85%	0
AAS and CC Microelectronics Systems Tech	Semiconductor Processors	3,145	131	4.17%	6
CC Horticulture, CC Organic Farming, CC Plant Health Mgmt.	Farmworkers and Laborers, Crop, Nursery and Greenhouse	5,257	105	2.00%	4

AAS Computer-aided Manufacturing	Computer-Controlled Machine Tool Operators - Metal and Plastic	1,539	92	5.98%	3
AAS Music Performance and Technology	Music Directors and Composers	508	76	14.96%	1

Data source: EMSI and CCC

Consideration for future program offerings:

A review of EMSI data for high-wage/high-demand occupations in the four-county (Clackamas, Clark, Multnomah and Washington) Portland Metro Area, provided information about industries/occupations not currently being served by CCC (see Table K-4). Many of these occupations are in the building and construction industry. Some occupations do not require education beyond high school for entry level and some require a bachelor's degree. There are also some occupations on the list that will be impacted by automation.

Recommendations: Review of the occupations with employer groups to validate the need for formal training. Review occupations that require a bachelor's degree to determine if there are viable two-year pathways. Review the occupations to determine competition with other local colleges. Assess the costs of starting a new program against the need and employer demand. Determine potential partnerships with local high schools for dual enrollment and potential Perkins Programs of Study articulation.

**Table K-4. In demand occupations - training not offered at CCC**

Description	2027 Jobs	2017 - 2027 Change	2017 - 2027 % Change	Annual Openings	Avg. Hourly Earnings	Automation Index*	Typical Entry Level Education
Carpenters	11,233	2,541	29%	1,175	\$25.07	125.9	High school diploma or equivalent
First-Line Supervisors of Construction Trades and Extraction Workers	5,531	1,546	39%	621	\$37.62	106.2	High school diploma or equivalent
First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	3,198	432	16%	351	\$27.72	93.8	High school diploma or equivalent
Paralegals and Legal Assistants	3,217	457	17%	348	\$29.84	89.4	Associate's degree



Production, Planning, and Expediting Clerks	2,790	379	16%	303	\$25.94	94.0	High school diploma or equivalent
First-Line Supervisors of Mechanics, Installers, and Repairers	3,241	441	16%	300	\$33.89	94.0	High school diploma or equivalent
Operating Engineers and Other Construction Equipment Operators	2,478	503	25%	296	\$30.80	120.3	High school diploma or equivalent
Massage Therapists	2,523	715	40%	291	\$31.64	86.5	Postsecondary nondegree award
Insurance Sales Agents	2,510	238	10%	251	\$34.84	96.0	High school diploma or equivalent
Food Service Managers	2,091	330	19%	239	\$26.80	104.4	High school diploma or equivalent
Cost Estimators	2,210	425	24%	237	\$36.40	96.5	Bachelor's degree
Sheet Metal Workers	2,103	273	15%	233	\$29.39	117.7	High school diploma or equivalent
Cement Masons and Concrete Finishers	1,807	488	37%	220	\$26.40	126.6	No formal educational credential
Logisticians	1,948	290	17%	206	\$36.34	82.1	Bachelor's degree
Dental Hygienists	2,903	458	19%	204	\$42.21	96.8	Associate's degree
Property, Real Estate, and Community Association Managers	2,057	487	31%	190	\$35.74	83.8	High school diploma or equivalent
Refuse and Recyclable Material Collectors	1,298	221	21%	164	\$23.38	119.7	No formal educational credential
Drywall and Ceiling Tile Installers	1,354	396	41%	162	\$28.93	132.7	No formal educational credential
Medical Records and Health Information Technicians	2,221	363	20%	158	\$24.21	91.7	Postsecondary nondegree award
Structural Iron and Steel Workers	1,137	217	24%	131	\$34.60	132.2	High school diploma or equivalent

Construction and Building Inspectors	1,123	207	23%	131	\$35.37	92.7	High school diploma or equivalent
Transportation, Storage, and Distribution Managers	1,537	197	15%	130	\$43.20	88.2	High school diploma or equivalent
Architectural and Civil Drafters	1,331	215	19%	126	\$27.65	88.9	Associate's degree
Mobile Heavy Equipment Mechanics, Except Engines	1,169	161	16%	124	\$27.50	109.6	High school diploma or equivalent
Flight Attendants	1,062	128	14%	120	\$39.76	97.0	High school diploma or equivalent
Real Estate Brokers	1,112	160	17%	111	\$43.99	99.2	High school diploma or equivalent
Radiologic Technologists	1,161	180	18%	73	\$37.51	94.1	Associate's degree
Physical Therapist Assistants	541	111	26%	72	\$28.16	88.1	Associate's degree
Surgical Technologists	788	111	16%	68	\$26.49	89.0	Postsecondary nondegree award
Tapers	421	82	24%	51	\$34.21	132.5	No formal educational credential
Aircraft Mechanics and Service Technicians	591	73	14%	50	\$32.76	101.2	Postsecondary nondegree award
Occupational Health and Safety Specialists	774	127	20%	50	\$36.85	92.5	Bachelor's degree
Control and Valve Installers and Repairers, Except Mechanical Door	571	81	17%	50	\$28.85	109.4	High school diploma or equivalent
Respiratory Therapists	841	140	20%	49	\$34.01	93.2	Associate's degree
Glaziers	382	88	30%	48	\$29.83	127.1	High school diploma or equivalent
Diagnostic Medical Sonographers	718	145	25%	48	\$41.72	93.3	Associate's degree
Police, Fire, and Ambulance Dispatchers	480	71	17%	47	\$29.34	90.6	High school diploma or equivalent

Excavating and Loading Machine and Dragline Operators	387	58	18%	45	\$26.33	116.3	High school diploma or equivalent
Mechanical Drafters	467	43	10%	43	\$29.70	84.6	Associate's degree
Maintenance Workers, Machinery	375	41	12%	41	\$23.35	111.5	High school diploma or equivalent
Environmental Science and Protection Technicians, Including Health	312	48	18%	39	\$27.60	88.5	Associate's degree
Ophthalmic Medical Technicians	390	124	47%	39	\$22.05	91.4	Postsecondary nondegree award
Septic Tank Servicers and Sewer Pipe Cleaners	297	52	21%	39	\$24.53	118.6	High school diploma or equivalent
Medical Equipment Repairers	400	66	20%	39	\$28.57	102.0	Associate's degree
Occupational Therapy Assistants	273	50	22%	37	\$29.10	87.3	Associate's degree
Commercial Pilots	305	66	28%	33	\$32.82	89.6	High school diploma or equivalent
Brick masons and Block masons	319	100	46%	33	\$29.30	133.5	High school diploma or equivalent
Pipe layers	273	33	14%	30	\$32.48	124.9	No formal educational credential

\* EMSI automation index, above 100 indicates the industry will be impacted by automation.

## Unemployment and Enrollment

According to a survey of economists (Thomson-DeVeaux, 2020), conducted in the fall of 2020, 66% of economists predicted that the economy won't truly be back to normal until 2022 or later. The double-digit unemployment rate in April 2020 of 14.7% was down to 7.9% by September of 2020. Still, lingering doubts about future stimulus packages have economists concerned the rebound will not be as quickly as originally hoped.

The Bureau of Labor Statistics include widely reported unemployment rates (U-3 in the table below). They also provide what is called the "real unemployment rate," (U-6 in the table below) which includes the underemployed (those not having enough paid work or not doing work that makes full use of their skills, abilities and experience), those that are able and willing to work and have either held a job or searched for employment within the last year but are not actively seeking employment now (referred to as the marginally-attached workers), and the discouraged

worker (prefer to work but no longer actively seeking employment due to inability to find work). These numbers are often significantly higher than the unemployment rate.

Table K-5 reflects both unemployment rates (considered official) and the real unemployment rates from key years in the life cycle of community college enrollment with key CCC enrollment indicators. Table K-6 looks at unemployment and enrollment at a much more granular level.

*Table K-5 -National Unemployment Trends and CCC Enrollment*

	2000	2010	2018	2020 (April)	2020 (Sept.)	2021	2022	2023
National Unemployment Rate (U-3)	3.9%	9.5%	3.7%	14.7%	7.9%	5.5% (predicted)	4.6% (predicted)	4.0% (predicted)
National <b>Real</b> Unemployment Rate (U-6)	7.0%	16.9%	7.5%	22.8%	12.8%	N/A	N/A	N/A
Oregon U-3	5.1%	10.6%	4.2%	14.9%	7.9%			
Oregon U-6	N/A	20%	8.3%	N/A	N/A			
Clackamas County (U-3)	4.0%	10.1%	3.7%	13.8%	7.4%			
Clackamas County (U-6)	N/A	N/A	N/A	N/A	N/A			
CCC Headcount	27,406	36,163	24,565					
CCC FTE (Reimbursable)	6,863	8,761	6,272			Increased enrollment	Increased enrollment	Begin to see decrease
CCC FTE (Total)	7,026	8,942	6,353					

Data source: U.S. Bureau of Labor Statistics. Databases, Tables & Calculators by Subject  
[www.bls.gov/data/](http://www.bls.gov/data/)

*K-6 - Unemployment rates (U-3 by percentages) at the national, state and county level combined with CCC enrollment trends.*

	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019
National	4.2	4.7	6.0	5.1	4.6	9.3	8.9	7.4	5.3	4.3	3.7
Oregon	5.5	6.4	8.1	6.2	5.2	11.3	9.5	7.9	5.6	4.1	3.8
Clack Co	3.9	5.3	7.5	5.5	4.6	10.4	8.9	7.1	5.1	3.7	3.4
CCC HC	28,577	28,073	25,290	25,024	35,008	38,639	35,191	27,235	26,034	25,445	21,657
CCC FTE (Reimb.)	6,750	7,793	7,982	7,580	7,416	8,834	8,528	7,059	6,734	6,521	5,575
CCC FTE (Total)	6,879	7,933	8,204	8,009	7,722	9,127	8,748	7,175	6,856	6,616	5,641

Data source: U.S. Bureau of Labor Statistics. Databases, Tables & Calculators by Subject;  
[www.bls.gov/data/](http://www.bls.gov/data/) <https://fred.stlouisfed.org/series/ORUR>

## Appendix L: Competition

National Center for Education Statistics (NCES) College Navigator lists [53 colleges \(including CCC\) within 50 miles of zip code 97045](#). This list of 53 colleges does include several trade schools; it does not include several local satellite campuses of out-of-district schools.

Several colleges in or around Clackamas County have closed in the last five years, including at least three for-profit colleges (closure date in parentheses):

- Heald College (2015)
- ITT Technical Institute--Portland Campus (2016)
- Corinthian College (2018)
- Marylhurst University (Summer 2018)
- Art Institute of Portland (December 2018)
- Oregon College of Art & Craft (May 2019)
- Concordia University (2020)

New colleges or campuses have also opened in or around Clackamas County (areas of focus in parenthesis):

- Oregon State University--Portland Campus (Architecture, Product Design, Business, Journalism, Law)
- University of Oregon--Portland Campus (Business, Engineering, Psychology, Public Health and Human Science)

Non-college-based training programs are growing in popularity across the country. Examples include coding boot camps, MOOCs and online micro-credentials, competency-based education programs, and in-house workplace-based training programs. The 2014-15 reauthorization and implementation of the Workforce Innovation and Opportunity Act emphasized strategies such as on-the-job training, and made significant funding available through regional workforce boards. A 2017 monograph from the American Academy of Arts & Sciences, titled [The Complex Universe of Alternative Postsecondary Credentials and Pathways](#), offers a more in-depth profile of non-traditional training programs that are growing in our communities.

Table L-1 reflects a select list of institutions in or near Clackamas County. Total undergraduate and graduate enrollment during fall 2017 at these institutions (where available via NCES) exceeds **116,000**. This enrollment figure does not include the enrollment of local campuses of out-of-district schools (e.g. OSU--Portland, National American University--Tigard, Walla Walla University @Adventist Health).

For context, 2017 US Census Bureau data indicates that the total number of 15- to 17-year-olds in Clackamas, Multnomah, and Washington counties totals **63,032**. This number reflects multiple classes of rising students; any single graduating class in this three-county region will be significantly smaller, before accounting for high school graduation rate, percent of graduates who decide to attend college, and other factors. Assuming that all colleges listed here will strive for flat or growing enrollment to maintain fiscal stability, competition for these future students will be significant. Collectively, colleges and universities in the Clackamas County region will need to go well beyond the borders of the tri-county region to fill their future freshman classes.

Table L-1. Competing colleges/universities table

School	Main location	Public/Private	Type	Enrollment FL 2017	Founded
American College of Healthcare Sciences	Portland	Private (for-profit)	Health professions school	663	1978
Art Institute of Portland	Portland	Private (for-profit)	School of art		1963
Clackamas Community College	Oregon City	Public	Community College	6,326	1961
Charter College	Vancouver, WA	Private (for-profit)	Primarily associates	2,664	Unknown
Clark College	Vancouver, WA	Public	Community College	10,000	Unknown
Concorde Career College	Portland campus	Private (for-profit)	Associates	448	Unknown
East West College of the Healing Arts	Portland	Private (for-profit)	Certificates	249	Unknown
Le Cordon Bleu College of Culinary Arts in Portland	Portland	Private (for-profit)	Associates college	Unknown	1983
Lewis & Clark College	Portland	Private	Liberal arts college	3,339	1867
Linfield College	Portland campus	Private	Bachelors, allied health	344	
Mt. Hood Community College	Gresham	Public	Associates college	8,680	1965
Multnomah University	Portland	Private	Religious school	654	1936
National American University	Tigard Campus	Private (for-profit)	Unknown	Unknown	Unknown

National University of Natural Medicine	Portland	Private	Health professions school	597	1956
Northwest College	Beaverton, Hillsboro, Tualatin, and Clackamas Campuses	Private	Cosmetology school	50 at Clackamas campus	Unknown
Oregon College of Art and Craft	Portland	Private	Art and Craft College	143	1907
Oregon College of Oriental Medicine	Portland	Private	Graduate degrees, Health professions school	260	1983
Oregon Health & Science University	Portland	Public	Medical school	2,895	1974
Oregon Institute of Technology	Wilsonville Campus	Public	Baccalaureate college	Unknown	1947
Oregon State University	Portland Campus	Public	Research university	Unknown	1858
Pacific Northwest College of Art	Portland	Private	School of art	512	1909
Pacific University	Forest Grove	Private	Research university	3,893 (significant increase since 2005)	1849
Pioneer Pacific College	Wilsonville	Private (for-profit)	Associates college	1,036	1981
Portland Community College	Portland	Public	Associates college	28,005	1961
Portland State University	Portland	Public	Research university	26,693	1946
Reed College	Portland	Private	Liberal arts college	1,470	1911

Sumner College	Portland	Private	Associates college	322	1974
University of Oregon	Portland Campus	Public	Research University	Unknown	Unknown
University of Portland	Portland	Private	Masters university	4,396	1901
University of Western States	Portland	Private	Health professions school	1,050 (growing)	1904
Warner Pacific University	Portland	Private	Baccalaureate college	409	1937
Washington State University, Vancouver	Vancouver, WA	Public	Research University	Unknown	
Western Oregon University	Monmouth	Public	Masters university	5,336	1856
Western Seminary	Portland	Private	Religious school	736	1927
Carrington College	Portland campus	For-profit	Career training in medical, dental, veterinary, and criminal justice fields	243	
University of Phoenix	Portland campus	For-profit	Unknown	Unknown	Unknown
Embry Riddle Aeronautical University	Portland campus (PDX airport); Florida-based	Private	Aviation & aerospace school	Unknown	Unknown
Emporia State University	Programs at Portland State University; Kansas-based	Public	Master's in Library Science only	Unknown	Unknown
University of the Pacific	Programs at Intercultural Communication	Private	Master's in Intercultural Relations only	Unknown	Unknown



	Institute, Portland; California- based				
Walla Walla University	Portland campus at Adventist Medical Center; Washington -based	Private	School of Nursing, junior/senior classes	Unknown	Unknown

Others include:

- Phagans School of Hair Design
- Birthing way College of Midwifery
- Summit Salon Academy
- Beau Monde College of Hair Design
- Paul Mitchell School
- Portland Actors Conservatory
- Aveda Institute
- International Air and Hospitality Academy

Of the 87 occupations and associated CTE programs offered by CCC, only eleven are not offered at another community college or private career school (see Table L-2). Our primary competition comes from community colleges in the Portland Metro Area; Clark College in Vancouver Washington, Mt. Hood Community College in Troutdale, Oregon and Portland Community College in Portland, Oregon. CCC CTE programs also compete with private colleges and career schools including Charter College, Concordia University-Portland, DeVry, Everest College-Portland and Vancouver, National American University Tigard, Pioneer Pacific and Warner Pacific. In addition, there is some competition from regional public and private universities, but most are offering bachelor's degrees and transfer pathways.

Table L-2. The number of CTE programs similar to those offered at CCC which are offered by competing institutions.

Community Colleges	Number of competing programs	Private Colleges and Career Schools	Number of competing programs
Clark College	44	Charter College	22
Mt. Hood Community College	54	Concordia - Portland	6
Portland Community College	52	DeVry	5
		Everest College	13
		National American University	6
		Pioneer Pacific	17
		Warner Pacific	6

Data Sources: EMSI 4 County Area (Clackamas, Clark, Multnomah and Washington) and Quality Info Statewide Labor Market information.

## Appendix M: Future Data Analysis

- Of those students who declared (select one: AAOT, Nursing, Computer Science, Welding) as their program of study when they registered as a new student in fall of 2015, how many completed a certificate or associate degree in that same area by June of 2018?
- Table M-1 was our original data set. Items that have been clearly reported in this report are deleted. Much of the text remains for tracking purposes.

Table M-1. Data elements needed for SEM planning.

Data Element	Yes/No	Accessibility	From Where?	Who is Responsible?	Priority (Y/N)	Definitions
What percentage of seats are filled, per course, for the past three terms?	Yes *current reports look at term master and what the seat load was set. If we are operating on a low fill rate – how do we fill the other seats.	Easy if we look at a straight fill rate for all courses without making any exclusions.  Hard if certain courses and sections need to be excluded in this data review.	Curriculum Sustainability research	IR	Y	<a href="https://myreports.clackamas.edu/Reports/Pages/Report.aspx?ItemPath=%2fDepartments%2fSection+Enrollment+Report+for+Depts+-+RSDP010">see Reporting Services "Section Enrollment Report for Depts - RSDP010" (https://myreports.clackamas.edu/Reports/Pages/Report.aspx?ItemPath=%2fDepartments%2fSection+Enrollment+Report+for+Depts+-+RSDP010)</a>
How does Clackamas define retention and completion, and report those rates?	Yes No, we are not consistently defining or reporting these rates (but we are making progress. Lauren the rock star is working on dashboards)	Easy if looking at IPEDS and VFA retention rates.  Medium if looking at retention beyond just fall to fall.	IR Website  Retention Dashboard coming soon (IR Data Warehouse )	IR	Y	see Lauren's persistence and retention notes
Have we sorted retention rates by population(s), by time of year, by program of study? (Cohort retention rates)	Yes. In progress (need to define retention v. persistence). Who should be engaged in	Medium/Hard: depending on level of disaggregation and if we focus on primary	IR Data Warehouse; Colleague	IR	Y	<a href="#">Retention Dashboard - Tableau Public</a>

and year-to-year progression)?	that conversation? And when?	program of study.				
Of applicants who end up not enrolling at CCC, where do they enroll instead?		Medium	Colleague	Jay Anderson; IR	Y	NSC (Jay and Lauren mostly Jay). End of April
What percentage started as inquiries (or admits) and converted to registrants? Have we conducted demographic profiles of those who do not follow-through?	NO (but important from recruitment and should be for SEM- lower priority)	Hard/No	Application data		N	
Of those students who declared (select one: AAOT, Nursing, Computer Science, Welding) as their program of study when they registered as a new student in fall of 2015, how many completed a certificate or associate degree in that same area by June of 2018?	Yes Is there merit in looking at two cohorts? (Good at telling us how many students are finishing that particular program.	Easy if we look at students' primary program of study. Note though that "primary" is not based on what students indicate but alphabetically if there are multiple.  Hard if we want first program of study. Dates to identify first program of study would have to be pulled from Colleague into the DW.	Colleague	IR AFAC Applied Tech?		

What student-faculty ratio is published by Clackamas (is it published?) On what is it based?	Yes FT/PT combined and number of students. Relevant because of "who we are" Define "small", compare to public higher ed. in Oregon	Easy	IPEDS Human Resources Survey		N	
What is the average financial aid package awarded to students?	yes	Medium	Financial Aid	Karen Ash/Terrie Sanne	N	
What percentage of our enrollment is in online courses? What is the demographic profile of those students (use same demographic as #3)? What is the pass rate in those courses compared to on-campus classes?	Yes (and for college) Could be an opportunity for growth? Hesitation – tradition of student affairs but there will be a need for this (SEM) to be college wide with Academic implications	Medium	IR Data Warehouse		N	
What percentage of our prospective student inquiries convert to applicant, to enrollee? (Knowing that many students now use the web for learning about our school, are collecting website and	YES -	Hard: need to understand which applicants have a true intent/interest in coming to CCC vs filling out application as part of high school assignment	CRM		N	

other app analytics?						
Is data available (and used) through Moodle, Facebook, other platforms?	No – (not yet) but Justin showed us some cool analytics/stats of website usage	Hard	Marketing		N	

How clean and accurate is our internal data?

- Data is a little murky

Who is actually using data in decision-making in our organization?

- Mission Fulfillment Committee
- Leadership Cabinet
- Budget Advisory Group
- Access, Retention and Completion Committee
- Guided Pathways
- Add as needed

Which external data sources are we reviewing? (WICHE, NCES, IIE, Lumina, Census, ACT, College Board, Clearinghouse, etc.)

- WICHE – yes
- NCES – yes (IPEDS)
- IIE (international education) – yes
- Lumina – future jobs/gap analysis for county credentials for jobs
- Census – yes
- ACT – No
- College Board – No
- Clearinghouse -yes

Legend for accessibility:

- Easy - readily available via existing Tableau dashboard, Reporting Services, or some other data source that requires a simple data pull/update
- Medium - will take some time for one office to gather data
- Hard - will take multiple offices' coordination and time to gather data

## Appendix N: Original Strategic/Tactics Table

This table is being kept with the intent of being used if the college community does not generate some of these recommendations.

Objectives are in the Related KEI column (i.e. our objective is to do X related to the KEI or meet that KEI). The strategy is the plan and the tactic is the specific action needed to meet that plan.

<i>Strategy</i>	<i>Tactic</i>	<i>Related KEI (Objective)</i>	<i>Who</i>	<i>When</i>
Create shared understanding of applicant to enrolled data	Discussion and documented results	Applicant to enrolled	Jennifer Anderson, Chris Sweet, Ryan Stewart	Summer 2019
Narrow KEI for focused tactics	Engage key stakeholders	N/A	Executive team, Deans, ARC?	Fall 2019
Increase conversion rates	Explore understanding why students apply and don't enroll	Applicant to enrolled		
Increase Pre-college transition populations (ESL, ACC, ABE/GED, etc.)	TBD	No related KEI?		
Increase FTE	Explore on-line degrees and certificates	FTE/Annual FTE	TBD	TBD
Increase FTE	Explore accelerated certificates and online degrees	FTE/Annual FTE		
Increase retention of CTE students	Identify early leavers of CTE programs	Annual FTE		
Increase enrollment	Explore viability of low wage/low demand programs	Enrollment : Adult Learner		
Increase enrollment	Review 19 CCC high wage/high demand programs with advisory committees. Programs are listed in appendix.	Enrollment		

Increase enrollment	Explore badges/competency based education	Enrollment	TBD	2025
From appendix K	Review high wage/high demand programs with CTE Advisory Committees to validate the data and determine whether or not enrollment can be increased.			
From appendix K	Review graduation rates across programs, strategies to increase graduation rates and a conversation with CTE Program Advisory Committees to determine the value of graduation in the specific industry as well as completion strategies employers can support.			
Work of CSRC	Review low wage/low demand programs to determine ongoing viability. The review should consider whether or not these programs are part of a larger career pathway or meet a specific need in the community. Etc.			
From appendix K – multiple recommendations related to fields that are in demand with no CCC offerings.	Recommendations: Review of the occupations with employer groups to validate the need for formal training. Review occupations that require a bachelor’s degree to determine if there are viable two-year pathways. Review the occupations to determine competition with other local colleges. Assess the costs of starting a new program against the need and employer demand. Determine potential partnerships with local high schools for dual enrollment and potential Perkins Programs of Study articulation.			
Increase enrollment	Explore not charging a non-resident tuition rate except for international students.			



## Appendix O: Definition of terms:

**Adult learner:** student who graduated high school at least one or more years prior to enrolling at CCC. Given the limitation of high school data, students 19 years old and older are considered an adult learner.

**Applicant to Enrollee:** a prospective student who submits a CCC application, and eventually enrolled in courses for the term during which they applied. For example, a student who submits an application in fall 2019, and registers for a course offered during fall 2019. Significant caveats include high school students submitting practice applications, and spam and phishing applications are also being submitted.

**Enrolled:** registered for a course at CCC

**Fall-to-winter retention rate:** pulled from Voluntary Framework of Accountability, tracks all new students to CCC from their first fall term to the following winter term.

**First term, first year:** all new students who enrolled in credit coursework during a given term for the first time ever in college. This group would include students who enrolled in dual credit, college courses during high school. It also includes students who enrolled in courses during the immediately prior summer term.

High school: student who graduated high school within the last academic year.

- Student entering CCC in Fall 2019 and graduated high school in Spring 2019 is counted as a high school student.
- Student entering CCC in Fall 2019 and graduated high school in Spring 2018 is not counted as a high school student. They are now counted as an adult learner.

**FTE:** (Number of students in course X Number of hours the course meets per term) / 510 clock hours

**Full-time and part-time status:** Students enrolled for 12 or more credits are considered full-time for financial aid purposes. CCC defines part-time students as those enrolled between 6-11 credits and those that are enrolled for fewer than 6, are considered less than part-time. Note, for financial aid purposes, three-quarter time is 9-11 credits. CCC uses full-time, part-time and less than part-time.

**Prospect:** an individual who the college reaches out to, to develop an interest in attending CCC. This data is captured via the upcoming CRM.