



Employment Outcomes Summary Report

Graduates from 2009-10 thru 2019-20



CSCU Office of Decision Support
& Institutional Research

Table of Contents

Introduction	2
Important Definitions & Notes	2
Findings	4
<i>Key Points about Employment</i>	5
<i>Key Points about Wages</i>	8
<i>Employment by Industry</i>	12
<i>Demographic Details</i>	14
Methodology and Data Security	18
<i>Technical Notes</i>	19

This report was produced by the Connecticut State Colleges and Universities (CSCU) Office of Decision Support and Institutional Research (DSIR), June, 2024.

Introduction

The Connecticut Colleges and Universities (CSCU) provide excellent education programs that lead to credentials which employers value. This summary report is for anyone seeking a broad understanding of CSCU student employment outcomes. This report showcases the type of information that is available to elicit questions and enable conversations that will lead to further analysis and exploration. CSCU leaders and administrators who have questions can reach out to their local IR Director for more detailed information about graduates at the institution and program level.

The data in this report include ten years of CSCU completions from academic years 2009-10 through 2019-20. These records were matched to the Connecticut Department of Labor (DOL) Unemployment Insurance (UI) wage records to identify individuals who worked in Connecticut. UI law covers most employers in the state, but not everyone. For example, individuals who are self-employed or who work for the federal government are not included. For an accounting of who is included and excluded along with other important characteristics of the data, please read the section entitled “Important Notes & Limitations.”

Important Definitions¹ & Notes

- 1. Who is counted as a graduate?** Individuals are counted as graduates if they completed a credential during academic years 2009-10 through 2019-20. Data for some graduates of the 2020-21 academic year are included; however, the full cohort of graduates from that academic year was not available when data were extracted. Counts of graduates include all students regardless of whether they were enrolled as full-time, part-time, First time, or any other typical enrollment category. All credentials offered were included: certificates (both undergraduate and graduate), associates, bachelors, masters, and doctoral degrees.
- 2. Who is counted as employed?** Individuals are counted as employed and appear in the metrics about employment only if they were found to be employed in Connecticut. Individuals who are working out of the state are not included in these data. For institutions that have significant populations of students from other states (e.g., Charter Oak State College, CT State - Asnuntuck, Southern and Western State Universities), there is a greater likelihood that out of state students also find employment outside of Connecticut, and therefore, are not represented in this wage data. For employment outcomes data that includes out-of-state wages, review the [Postsecondary Employment Outcomes \(PSEO\) dashboards](#).
- 3. What does “Stable Employed” mean and why is this concept used?** To identify whether an individual worked in a given quarter of the year, one looks specifically at the data for the quarter of interest. Individuals are counted as employed if they earn any amount over zero dollars during that quarter. Individuals who are not working consistently or who start working part-way through the quarter may have earnings that are atypical of someone who is working consistently. In order to calculate an average wage for a given quarter that is more representative of consistent employment, it can be helpful to count individuals who are identified as “stable employed” for the given quarter. For someone to be counted as “stable employed” for a given quarter “t”, they will have employment in quarters “t-1” (the preceding quarter), “t” (the quarter in question) and “t+1” (the subsequent quarter). See the technical notes for details on the calculation of stable employment which varies for “pre-Q1” and “post-Q1” points in time.

¹ Definitions were developed in collaboration with the Connecticut Department of Labor

4. **Who is not counted?** The employment and wage record data only include employees who work for employers in CT that are covered by Unemployment Insurance (UI) law. Major exclusions from these data include those who are self-employed, all members of the Armed Forces, elected officials in most states, most agricultural workers on small farms, most employees of railroads, some domestic workers, most student workers at schools and employees of some types of non-profit organizations². According to the DOL, UI covered jobs generally include approximately 95% of wage and salary positions in the labor market.
5. **Why does this report refer to Connecticut Community Colleges (CCC) instead of CT State?** All data in this report are about individuals who completed a credential from a CT community college up to 2019-2020 which is three years prior to the consolidation of the community college campuses.
6. **Employment counts under-represent reality:** Employment counts under-represent the true number of employed graduates for several reasons: 1) Unemployment Insurance data exclude some classes of employees (see note above for 'Who is not counted'), 2) Unemployment Insurance data does not include graduates who work in other states, and 3) matches between education and UI records cannot be made for students without valid Social Security Numbers (SSNs) on file. CSCU System Office staff estimate that 1% of records used for these reports have missing or invalid SSNs.
7. **Level of wages under-represent typical annual salaries:** The wage data DOL receives from employers includes everyone whether they worked full-time, part-time, or intermittently (e.g., someone who starts or stops a job mid-quarter), and it does not include the number of hours or weeks individuals worked. Since they cannot be distinguished, employment metrics in this report combine data for everyone employed. Therefore, the total average wages reported for any given quarter are lower than what one would expect to earn if everyone in the calculation worked full-time and for all business days within the quarter.
8. **One cannot calculate 'Unemployed' from these data:** It is not accurate to calculate the number of individuals who are unemployed by subtracting the number of employed from the number of graduates. Individuals who are actively working may not be captured as employed because they are either working out of state or because their job is not covered by Unemployment Insurance (UI) law which is the source of wage and employment data for this report. In addition, those not working may be doing so voluntarily and therefore would not be counted in the labor force.
9. **Small variations with IPEDS:** The sources for student data used in these reports were the CCC College Institutional Research Database (IRDB) and the CSU Institutional Research Repository (IR Repository). Occasionally there are minor differences between the number of graduates reported to the Integrated Postsecondary Education Data System (IPEDS) and the number recorded in the IRDB and IRR Repository. These differences stem from variations in institutional processes for reporting completion data.
10. **What data suppression was applied?** CSCU Office of Decision Support and Institutional Research (DSIR) established Data Disclosure Avoidance guidelines to avoid disclosing individual identities while maximizing the utility of the data set. For data sets that combine information from other data sources, such as the Department of Labor in this case, any data point with a count of individuals less than 10 or a metric based on that data point is suppressed.
11. **Are wages adjusted?** Wage information has not been adjusted for inflation. All values are in current dollars for the represented point in time.³

² "Frequently Asked Questions." *U.S. Bureau of Labor Statistics*. U.S. Bureau of Labor Statistics, n.d. Web. 20 Oct. 2014. <http://www.bls.gov/cew/cewfaq.htm#Q14>

³ United States Census Bureau, "Current versus Constant (or Real) dollars", Web. 25 Apr. 2024. <https://www.census.gov/topics/income-poverty/income/guidance/current-vs-constant-dollars.htm>

Findings

The findings in this report represented in graphs and tables provide an overview of the employment outcomes for CSCU graduates from the system-level perspective. They provide a high system-level view that is also intended to pique interest so that inquiries are made to look deeper into available data. There is considerable value in the underlying data for each institution and campus. If you have questions, please reach out for assistance. You can contact your institution's IR Director, the AVP of the CSCU Office of Decision Support and Institutional Research, Nancy Becerra-Cordoba (nancy.becerracordoba@ct.edu), or the author, Jan Kiehne (jan.kiehne@ct.edu).

List of findings and page references

Key Points about Employment

1. The majority of CSCU graduates work in Connecticut shortly after graduation. (pg. 5)
2. Average quarterly wages rise slowly. (pg. 5)
3. Employment rates by race and ethnicity are similar within each sector. (pg. 6)

Key Points about Wages

4. Quarterly wages for CSCU graduates increase after completion. (pg. 8)
5. The higher the credential, the greater the wage. (pg. 8)
6. Sub-baccalaureate credentials provide value over time. (pg. 9)
7. Sub-baccalaureate credentials provide value for multiple years of graduates. (pg. 10)
8. Some certificate completers earn average quarterly wages higher than associate completers. (pg. 11)

Employment by Industry

9. CSCU graduates find employment in many Connecticut Industries. (pg. 12)
10. Many Community College completers find employment in Health Care and Social Assistance (pg. 13)

Demographic Details

11. Completers who received a Pell grant earned lower wages. (pg. 14)
12. Completers who received a Governor's Scholarship earned slightly lower wages (pg. 15)
13. Completers who received SNAP benefits received lower wages (pg. 16)
14. Women continue to receive lower wages than men. (pg. 17)



Key Points about Employment

1) The majority of CSCU graduates work in Connecticut shortly after graduation.

This chart shows the proportion of graduates from each academic year who were employed during the third quarter after they completed a credential (Post Q3). For example, 75% of individuals completing a degree in May of 2019 worked in Connecticut between January and March of 2020. Despite the slight drop off in the employment rate due to the Covid 19 pandemic, CSU, CCC and COSC graduates continue to find employment in Connecticut at consistent rates.

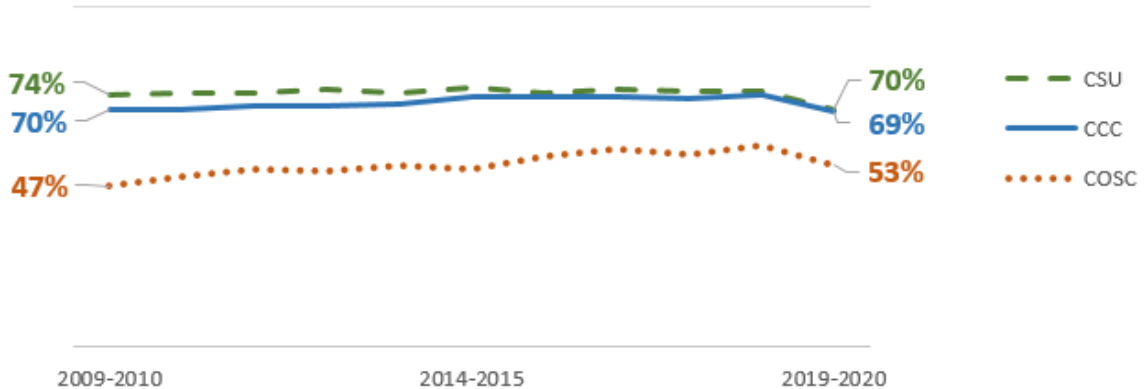


Figure 1: Percent Employed across academic years by sector at Post Q3

Sector	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
CSU	74%	74%	75%	76%	74%	76%	75%	75%	75%	75%	70%
CCC	70%	69%	71%	71%	71%	74%	73%	73%	73%	74%	69%
COSC	47%	50%	52%	52%	53%	52%	56%	58%	56%	59%	53%

Table 1: Percent Employed across academic years by sector at Post Q3.

2) Average quarterly wages rise slowly.

For completers in each academic year who were employed in the third quarter after graduation (Post Q3), average wages in Post Q3 have remained steady with a slight increase. Average wages have not been adjusted for increased cost of living, but are real wages received at that time. There is a slight expected dip for completers in 2019-20, presumably due to the COVID 19 pandemic.

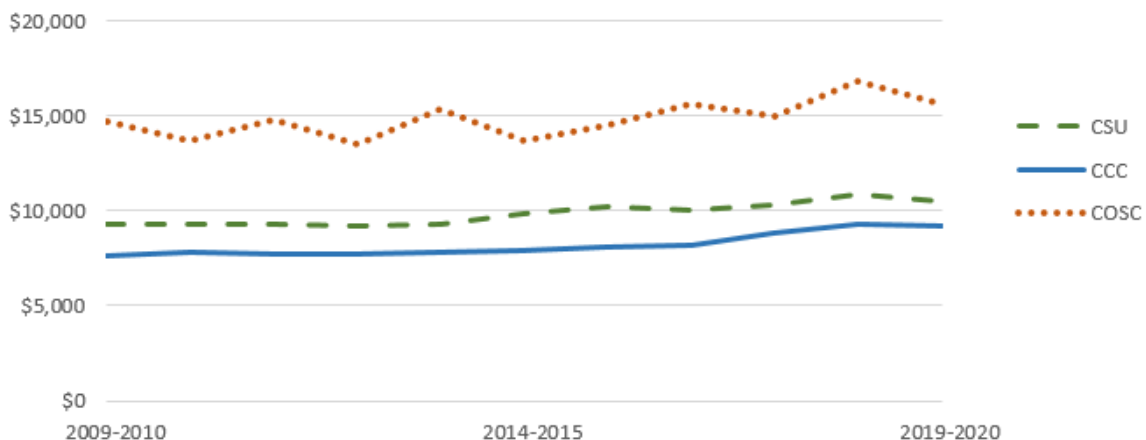


Figure 2: Average Wages across academic years by sector at Post Q3.

Sector	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
CSU	\$9,294	\$9,305	\$9,244	\$9,156	\$9,305	\$9,842	\$10,250	\$10,024	\$10,308	\$10,876	\$10,515
CCC	\$7,662	\$7,781	\$7,697	\$7,734	\$7,777	\$7,894	\$8,117	\$8,203	\$8,828	\$9,321	\$9,153
COSC	\$14,692	\$13,661	\$14,817	\$13,468	\$15,337	\$13,668	\$14,455	\$15,563	\$14,979	\$16,760	\$15,598

Table 2: Average Wage across academic years by sector at Post Q3

3) Employment rates by race and ethnicity are similar within each sector.

The following three graphs show the experience of completers of each academic year at Post Q3 by race and ethnicity. Data were not included for categories where more than half the quarters were suppressed due to small cell sizes. Data for those with an ‘unknown’ race or ethnicity are also not included.

CSU completers who identify as Asian were slightly less likely to be found working in CT compared to other groups. The difference between the rate of employment for Asian completers compared to the average rate of employment for those completers who identify as White, Black or African American, Hispanic/Latino or Two or More Races ranged from 5% to 14% for each year except for 2019-20 where the differences narrowed, likely due to effects of the pandemic. Graduates who identify as US Nonresidents have a much lower rate of employment.

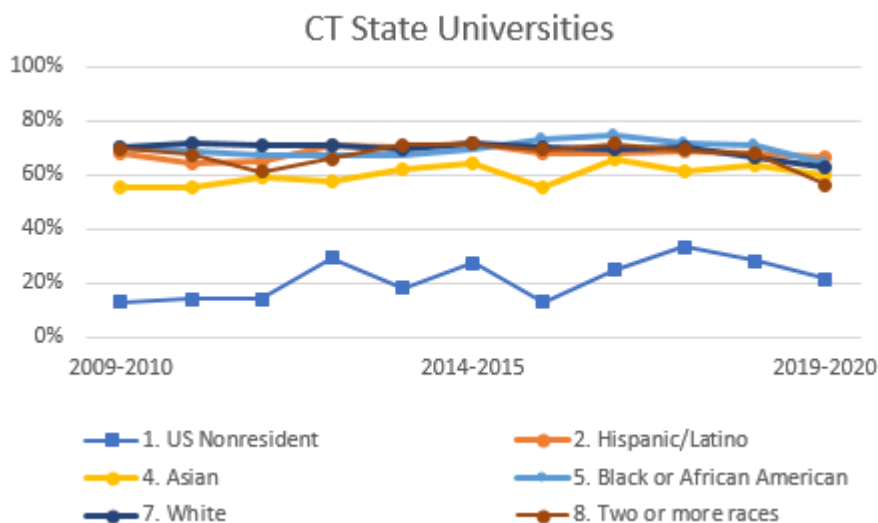


Figure 3: Employment Rate for each academic year at Post Q3 by Race-Ethnicity - CSU

CT State Universities	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
1. US Nonresident	13%	14%	14%	29%	18%	27%	13%	25%	33%	28%	21%
2. Hispanic/Latino	68%	64%	65%	71%	70%	72%	68%	68%	69%	68%	66%
4. Asian	55%	55%	59%	58%	62%	64%	55%	66%	61%	64%	60%
5. Black or African American	70%	68%	67%	67%	67%	70%	73%	74%	72%	71%	64%
7. White	70%	71%	71%	71%	70%	72%	70%	69%	70%	67%	63%
8. Two or more races	70%	67%	61%	66%	71%	71%	69%	71%	69%	68%	56%

Table 3: Employment Rate for each academic year at Post Q3 by Race-Ethnicity - CSU

The rate of employment for CT Community College (CCC) graduates are similar for those who identify as Black or African American, Hispanic/Latino, or White. Wages for those identifying as Two or more races were more variable, and those who identify as Asian were between 8% and 18% less likely to be found working in CT during the third quarter after completion when compared to the average employment rates of the aforementioned categories. For students who identify as US Nonresidents, the rate of employment is significantly less. Please note, the data are from years prior to the CT State consolidation in July 2023.

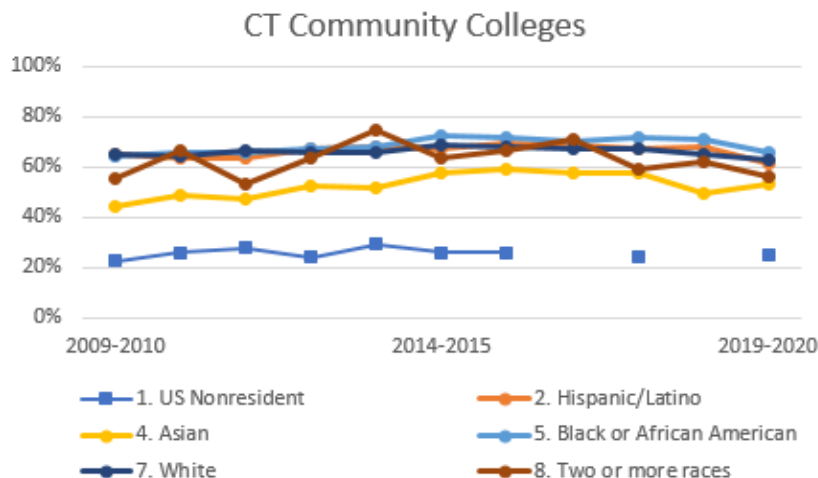


Figure 4: Employment Rate for each academic year at Post Q3 by Race-Ethnicity – CCC

CT Community Colleges	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
1. US Nonresident	23%	26%	28%	24%	29%	26%	26%		24%		25%
2. Hispanic/Latino	65%	64%	63%	67%	68%	67%	69%	68%	67%	68%	61%
4. Asian	44%	49%	47%	52%	52%	58%	59%	57%	58%	50%	53%
5. Black or African American	64%	65%	66%	67%	68%	72%	72%	70%	71%	71%	65%
7. White	65%	64%	66%	66%	66%	68%	68%	67%	67%	65%	63%
8. Two or more races	55%	66%	53%	63%	75%	63%	66%	71%	59%	62%	56%

Table 4: Employment Rate for each academic year at Post Q3 by Race-Ethnicity – CCC

As a smaller institution, COSC has fewer completers who identify themselves in some racial and ethnic categories; therefore, more of COSC’s data are suppressed. The employment trend for completers who identify as Black or African American has risen slightly across the graduating cohort from 48% to 65% for graduates in 2019-20.

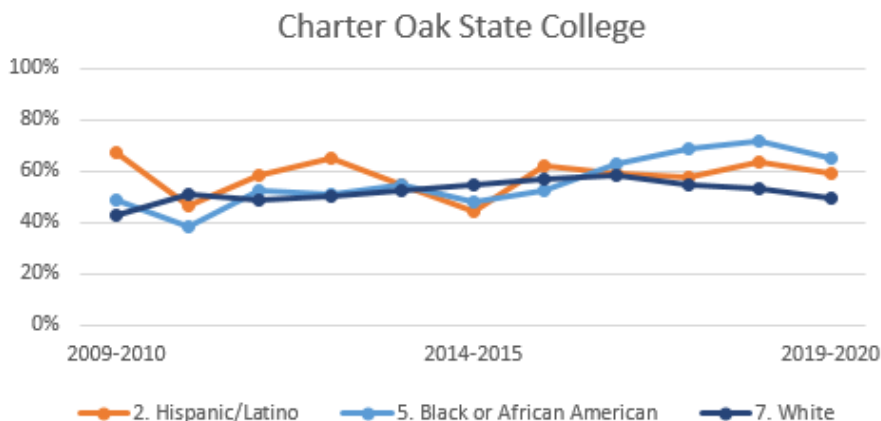


Figure 5: Employment Rate for each academic year at Post Q3 by Race-Ethnicity – COSC

Charter Oak State College	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
2. Hispanic/Latino	67%	46%	58%	65%	54%	45%	62%	59%	58%	63%	59%
5. Black or African American	48%	38%	52%	51%	55%	48%	52%	63%	68%	72%	65%
7. White	43%	51%	49%	50%	52%	55%	57%	59%	54%	53%	49%

Table 5: Employment Rate for each academic year at Post Q3 by Race-Ethnicity – COSC

Key Points about Wages

4) Quarterly wages for CSU graduates increase after completion.

This graph shows the average quarterly wages for graduates in the 2018-19 academic year starting with wages earned in the quarter before the student began their academic program (Pre-Q1) and each quarter after they completed their credential for eight quarters - two full years. The higher wages for COSC overall are likely because Charter Oak students skew older than those attending the CSUs or CCCs and likely have more professional experience. While COSC wages are higher overall, wages for community college students increased the most, raising 135% from what they earned in the Pre-Q1 to two years after completion.

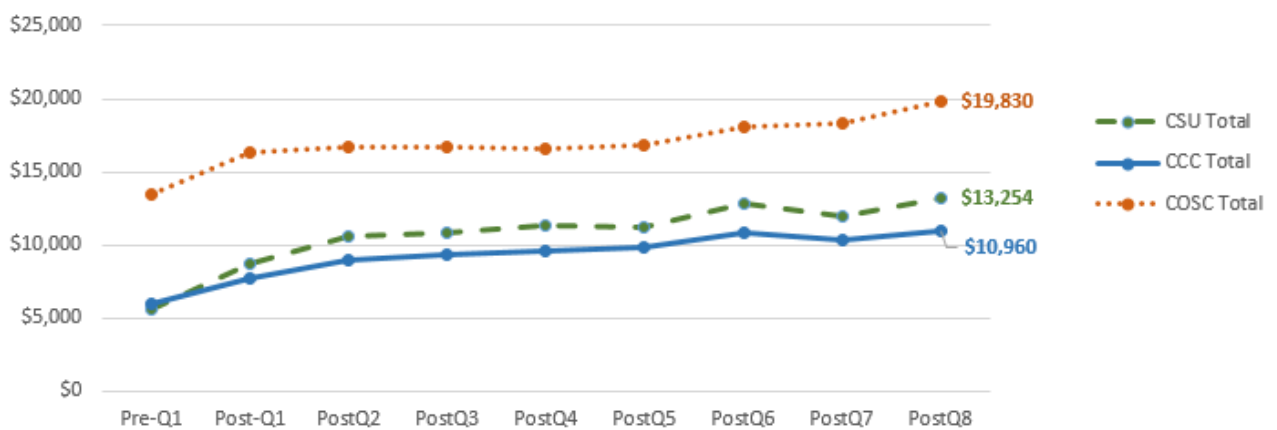


Figure 6: Wages for completers in 2018-19 over time

5) The higher the credential, the greater the wage.

For CSU graduates, credentials of a higher order provide a greater annual return. This table and the following table and chart show the average quarterly wages for individuals who graduated during the 2018-2019 academic year. Information for associates is suppressed due to small cell sizes.

Degree Type	Count	PreQ1	PostQ1	PostQ2	PostQ3	PostQ4	PostQ5	PostQ6	PostQ7	PostQ8
Bachelor's Degree	5,732	\$3,748	\$7,276	\$8,968	\$9,285	\$9,767	\$9,912	\$11,186	\$10,583	\$11,728
Cert. Post BA	52	\$6,639	\$7,862	\$11,031	\$10,717	\$11,177	\$10,370	\$12,940	\$11,887	\$13,471
Master's Degree	1,329	\$10,011	\$13,298	\$15,254	\$15,601	\$15,896	\$15,220	\$17,256	\$15,870	\$17,268
Cert. Post MA (6th yr)	139	\$19,323	\$19,640	\$24,234	\$25,133	\$28,048	\$21,991	\$27,965	\$24,948	\$29,442
PhD/Professional	29	\$22,963	\$32,078	\$35,751	\$31,820	\$32,565	\$31,369	\$35,443	\$27,523	\$34,200

Table 6: Wages for CSU completers in 2018-19 by degree type and quarter after completion

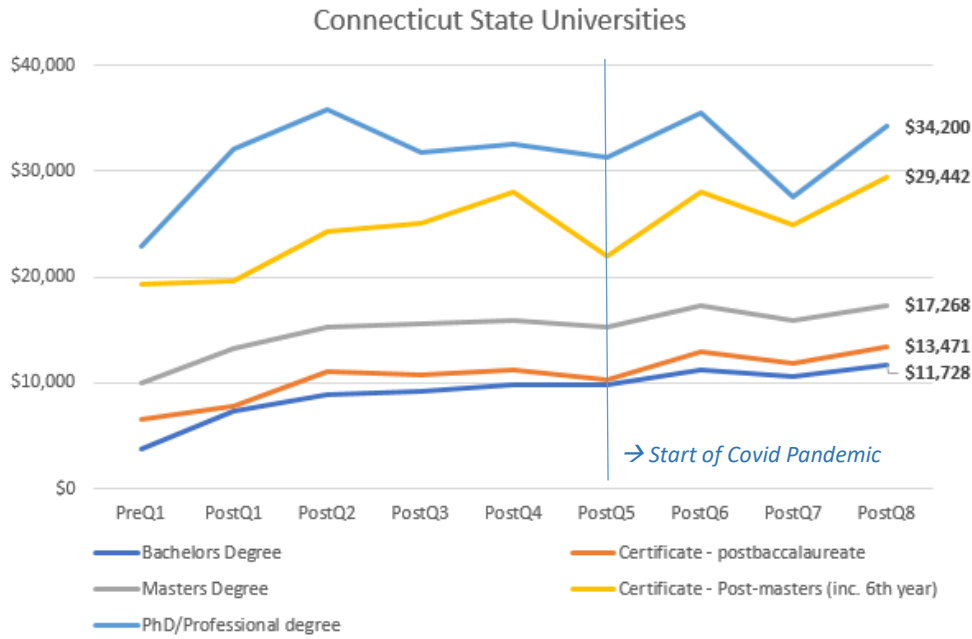


Figure 7: Wages for CSU completers in 2018-19 by degree type

6) Sub-baccalaureate credentials provide value over time

For Community College graduates, certificate and associate credentials provide value, with certificate completers having slightly higher average wages than those finishing an associate degree. This chart shows the average quarterly wages earned by those who graduated in the 2018-2019 academic year starting one quarter before they started their academic program through eight quarters after completion. The onset of the Covid 19 pandemic in Post Q5 (Jan-March 2020), did not seem to influence average quarterly wages for these individuals, in contrast compared to the CSU and COSC graduates.

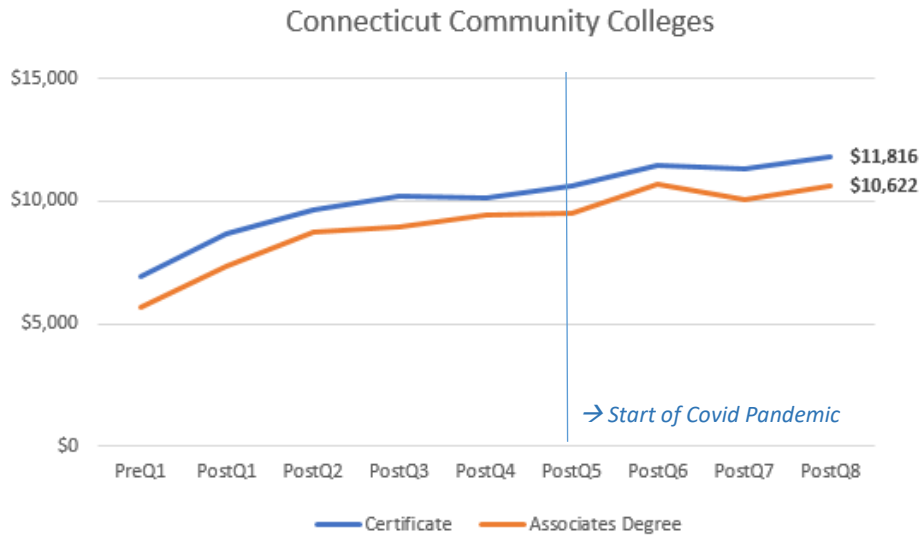


Figure 8: Wages for Community College completers in 2018-19 by degree type

Degree Type	Count	PreQ1	PostQ1	PostQ2	PostQ3	PostQ4	PostQ5	PostQ6	PostQ7	PostQ8
Certificate	2,013	\$6,932	\$8,703	\$9,675	\$10,218	\$10,168	\$10,623	\$11,494	\$11,313	\$11,816
Associates	5,288	\$5,651	\$7,333	\$8,716	\$8,970	\$9,408	\$9,535	\$10,661	\$10,033	\$10,622

Table 7: Wages for Community College completers in 2018-19 by degree type

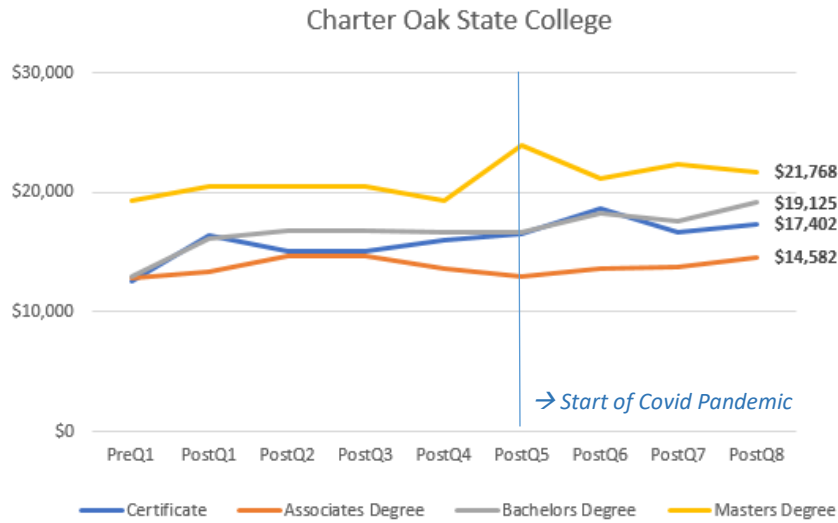


Figure 9: Wages for Charter Oak State College completers in 2018-19 by degree type

Degree Type	Count	PreQ1	PostQ1	PostQ2	PostQ3	PostQ4	PostQ5	PostQ6	PostQ7	PostQ8
Certificate	58	\$12,526	\$16,420	\$15,039	\$15,039	\$15,988	\$16,528	\$18,722	\$16,665	\$17,402
Associates	70	\$12,822	\$13,402	\$14,687	\$14,687	\$13,649	\$12,939	\$13,692	\$13,739	\$14,582
Bachelor's	465	\$12,922	\$16,191	\$16,875	\$16,875	\$16,700	\$16,648	\$18,213	\$17,575	\$19,125
Master's	41	\$19,323	\$20,511	\$20,547	\$20,547	\$19,377	\$23,923	\$21,172	\$22,414	\$21,768

Table 8: Wages for Charter Oak State College completers in 2018-19 by degree type

7) Sub-baccalaureate credentials provide value for multiple years of graduates.

Figure 8 above showed that sub-baccalaureate credentials provided increasing value for the degree holders over the two-year period after completion. That chart looked at one group of completers from the 2018-19 academic year, and revealed that for those completers, the average wages for certificates was slightly higher than for associates. Figure 10 shows that this trend is not an anomaly. On average, wages for certificate holders at Post Q3 are slightly higher for those who complete certificates than associate degrees for completers of each academic year from 2009-10 to 2020-21.

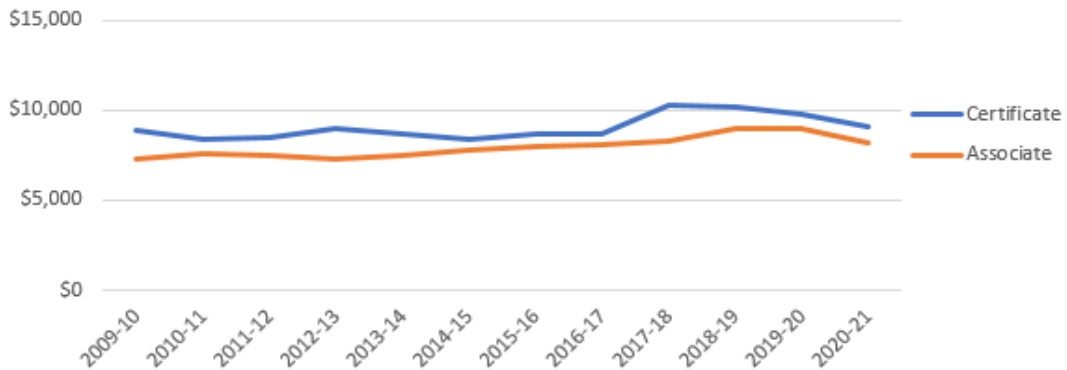


Figure 10: Wages for CCC completers by academic year of completion at Post Q3.

Degree Type	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Certificate	\$8,853	\$8,357	\$8,528	\$8,958	\$8,654	\$8,387	\$8,681	\$8,658	\$10,299	\$10,218	\$9,824	\$9,103
Associate	\$7,330	\$7,633	\$7,481	\$7,301	\$7,470	\$7,757	\$7,937	\$8,066	\$8,271	\$8,970	\$8,954	\$8,195

Table 9: Wages for CCC completers by academic year of completion at Post Q3.

8) Some certificate completers earn average quarterly wages higher than associate completers.

When average quarterly wages are aggregated by the two-digit Classification of Instructional Program (CIP) code, there are specific programs where the average quarterly wages for those who complete a certificate is consistently higher than for those who earn an associate degree in the same general academic area. These graphs show an aggregation of five years of completers for academic programs. Academic years include 2015-16 through 2019-20. The total number of completers for each program is listed below each graph. Not all completers were employed in every quarter.

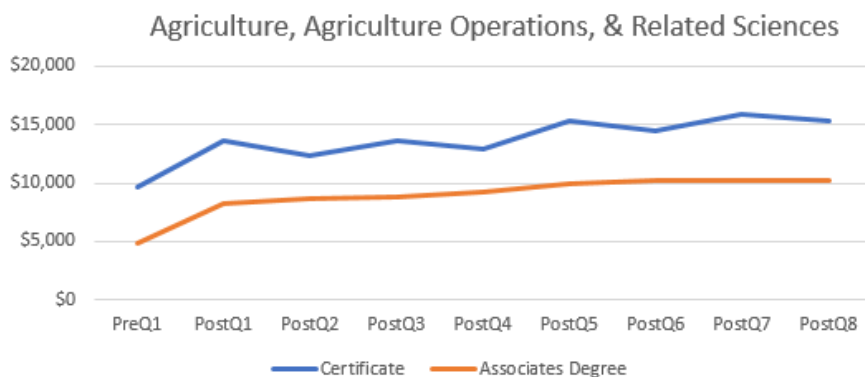


Figure 11: Average quarterly wage for five years of CCC completers by quarter for CIP 01. The total number of completions included 64 certificates and 253 associate degrees.

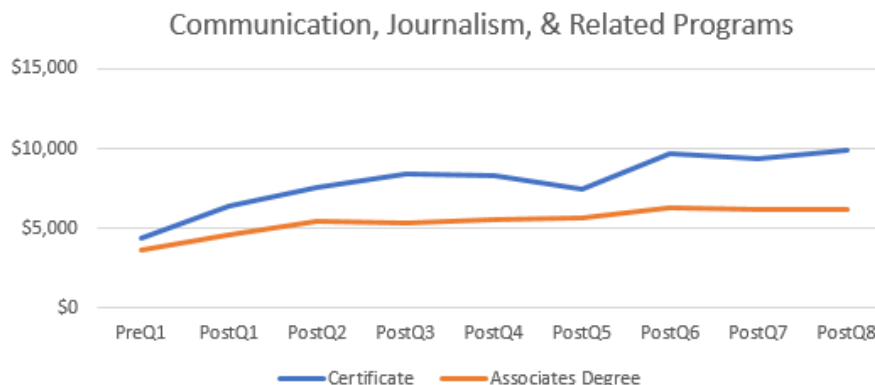


Figure 12: Average quarterly wage for five years of CCC completers by quarter for CIP 09. The total number of completions included 48 certificates and 369 associate degrees.

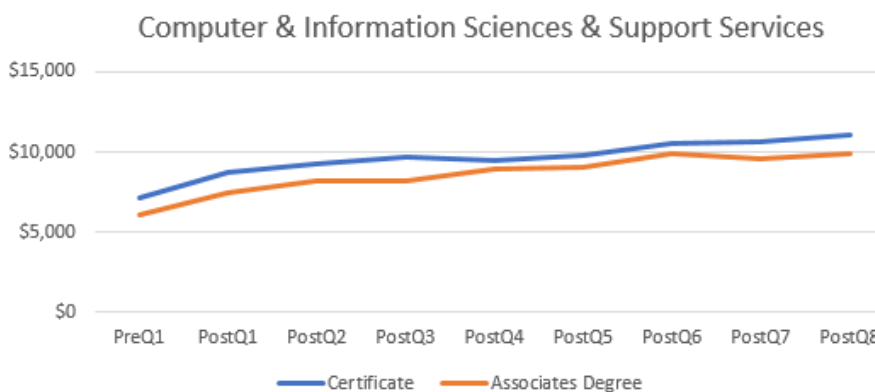
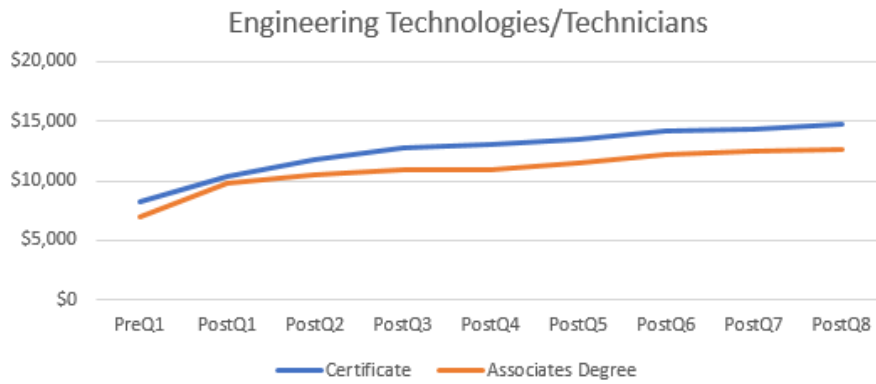


Figure 13: Average quarterly wage for five years of CCC completers by quarter for CIP 11. The total number of completions included 424 certificates and 528 associate degrees.



Figures 14: Average quarterly wage for five years of CCC completers by quarter for CIP 15
The total number of completions included 1178 certificates and 938 associate degrees.

Employment by Industry

9) CSCU graduates find employment in many Connecticut industries

Tables 11 and 12 include CSU and COSC students who completed a credential anytime within five academic years (2015-16 through 2019-20), and show how many were found to be employed in the respective industry at the third quarter after degree completion (Post Q3). Industries that had fewer than 10 students employed in them over the selected five year period were suppressed. The level of green shading corresponds to the number of people represented, where a darker green color indicates more people. Education & Healthcare and Social Assistance industries employ a significant number of CSCU graduates.

Industry (2-digit NAICS)	Central	Eastern	Southern	Western	COSC
Accommodation and Food Services	587	377	562	293	26
Administrative and Support and Waste Management and Remediation Services	497	272	348	234	81
Agriculture, Forestry, Fishing and Hunting	16				
Arts, Entertainment, and Recreation	171	118	205	111	24
Construction	252	58	65	58	20
Educational Services	2446	775	2364	606	300
Finance and Insurance	756	309	252	169	104
Health Care and Social Assistance	1666	679	2376	1122	614
Information	163	100	126	80	41
Management of Companies and Enterprises	141	33	38	52	36
Manufacturing	879	175	275	133	60
Other Services (except Public Administration)	198	85	197	81	35
Professional, Scientific, and Technical Services	790	316	371	301	53
Public Administration	284	97	133	73	128
Real Estate and Rental and Leasing	85	41	66	57	13
Retail Trade	835	464	788	545	41
Transportation and Warehousing	100	55	106	38	11
Utilities	12		10		11
Wholesale Trade	218	81	108	85	39

Table 10: Industry of employment for five years of CSU and COSC graduates – counts by institution

Industry (2-digit NAICS)	Central	Eastern	Southern	Western	CSUs	COSC
Educational Services	24%	19%	28%	15%	23%	18%
Health Care and Social Assistance	16%	17%	28%	28%	22%	37%
Retail Trade	8%	11%	9%	13%	10%	2%
Accommodation and Food Services	6%	9%	7%	7%	7%	2%
Professional, Scientific, and Technical Services	8%	8%	4%	7%	7%	3%
Finance and Insurance	7%	8%	3%	4%	6%	6%
Manufacturing	9%	4%	3%	3%	5%	4%
Management and Remediation Services	5%	7%	4%	6%	5%	5%
Arts, Entertainment, and Recreation	2%	3%	2%	3%	2%	1%
Public Administration	3%	2%	2%	2%	2%	8%
Other Services (except Public Administration)	2%	2%	2%	2%	2%	2%
Wholesale Trade	2%	2%	1%	2%	2%	2%
Information	2%	2%	1%	2%	2%	2%
Construction	2%	1%	1%	1%	2%	1%
Transportation and Warehousing	1%	1%	1%	1%	1%	1%
Management of Companies and Enterprises	1%	1%	0%	1%	1%	2%
Real Estate and Rental and Leasing	1%	1%	1%	1%	1%	1%
Agriculture, Forestry, Fishing and Hunting	0%	*	*	*	0%	*
Utilities	0%	*	0%	*	0%	1%
Unclassified Industry	1%	1%	0%	0%	1%	1%
Grand Total	100%	100%	100%	100%	100%	100%

Table 11: Industry of employment for five years of CSU and COSC graduates – percent by institution

10) Many Community College completers find employment in Health Care and Social Assistance.

Approximately one-third of community college completers from 2015-16 to 2019-20 who were working in Connecticut during the third quarter after completion (Post Q3) were working in the Healthcare and Social Service industry. All completions were prior to the consolidation into CT State; however, an aggregated total is provided for comparison.

PostQ3 2 digit NAICS	Asnuntuck	Capital	Gateway	Housatonic	Manchester	Middlesex	Naugatuck Valley	Northwestern Ct	Norwalk	Quinebaug Valley	Three Rivers	Tunxis	CCC Total
Accommodation and Food Services	106	58	244	136	358	119	247	71	220	82	279	236	2156
Administrative and Support and Waste Management and Remediation Services	63	57	141	138	147	55	143	20	104	30	55	89	1042
Agriculture, Forestry, Fishing and Hunting							16						44
Arts, Entertainment, and Recreation	18	10	46	42	77	27	32	16	90		81	29	474
Construction	21	24	28	15	39	17	35		26	12	36	41	302
Educational Services	35	84	206	88	140	64	140	52	85	65	107	86	1152
Finance and Insurance	31	90	63	69	133	34	100	24	74	20	42	74	754
Health Care and Social Assistance	117	1021	1165	602	650	419	1188	275	719	185	528	429	7298
Information			25	20	27	17	25		25		16	17	194
Management of Companies and Enterprises	11	11	11		18	11	21					14	118
Manufacturing	323	26	155	188	285	103	461	29	33	170	181	149	2103
Other Services (except Public Administration)	23	30	71	42	80	50	101	27	81	14	25	63	607
Professional, Scientific, and Technical Services	20	29	71	48	154	108	104	74	137	18	73	67	903
Public Administration	18	45	32	16	84	31	42		21		53	36	396
Real Estate and Rental and Leasing		15	25	11	28	13	20		29				181
Retail Trade	174	103	450	353	604	257	524	101	375	148	298	335	3722
Transportation and Warehousing	30	38	81	49	71	27	65		20		18	32	454
Utilities			28								21		77
Wholesale Trade	29		43	35	59	39	58		29	14	26	47	400
	1037	1677	2898	1874	2976	1409	3348	745	2081	811	1859	1758	22473

Table 12: Industry of employment for five years of community college graduates – counts by campus

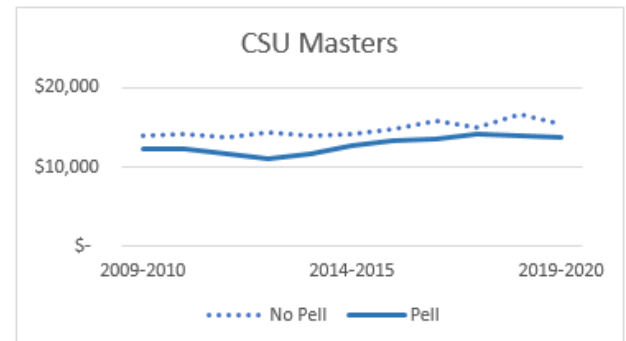
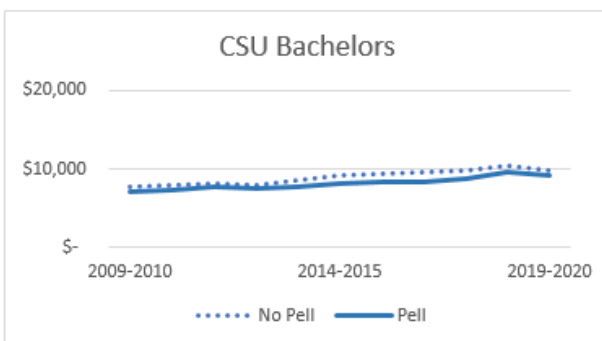
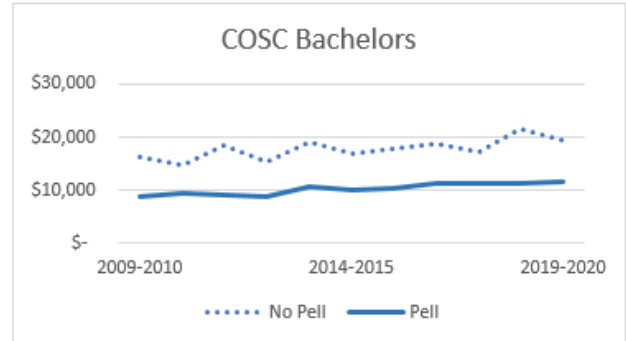
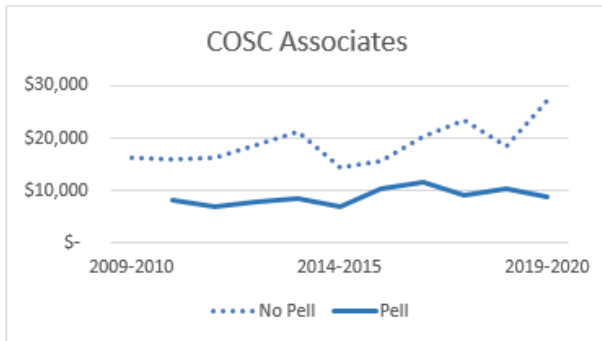
PostQ3 2 digit NAICS	Asnuntuck	Capital	Gateway	Housatonic	Manchester	Middlesex	Naugatuck Valley	NW Ct	Norwalk	Quinebaug Valley	Three Rivers	Tunxis	CCC Total
Health Care and Social Assistance	11%	61%	40%	32%	22%	30%	35%	37%	35%	23%	28%	24%	32%
Retail Trade	17%	6%	16%	19%	20%	18%	16%	14%	18%	18%	16%	19%	17%
Accommodation and Food Services	10%	3%	8%	7%	12%	8%	7%	10%	11%	10%	15%	13%	10%
Manufacturing	31%	2%	5%	10%	10%	7%	14%	4%	2%	21%	10%	8%	9%
Educational Services	3%	5%	7%	5%	5%	5%	4%	7%	4%	8%	6%	5%	5%
Administrative and Support and Waste Management and Remediation Services	6%	3%	5%	7%	5%	4%	4%	3%	5%	4%	3%	5%	5%
Professional, Scientific, and Technical Services	2%	2%	2%	3%	5%	8%	3%	10%	7%	2%	4%	4%	4%
Finance and Insurance	3%	5%	2%	4%	4%	2%	3%	3%	4%	2%	2%	4%	3%
Other Services (except Public Administration)	2%	2%	2%	2%	3%	4%	3%	4%	4%	2%	1%	4%	3%
Arts, Entertainment, and Recreation	2%	1%	2%	2%	3%	2%	1%	2%	4%	*	4%	2%	2%
Transportation and Warehousing	3%	2%	3%	3%	2%	2%	2%	1%	1%	2%	1%	2%	2%
Wholesale Trade	3%	1%	1%	2%	2%	3%	2%	*	1%	2%	1%	3%	2%
Public Administration	2%	3%	1%	1%	3%	2%	1%	*	1%	1%	3%	2%	2%
Construction	2%	1%	1%	1%	1%	1%	1%	*	1%	1%	2%	2%	1%
Information	*	*	1%	1%	1%	1%	1%	*	1%	*	1%	1%	1%
Real Estate and Rental and Leasing	*	1%	1%	1%	1%	1%	1%	*	1%	*	*	*	1%
Management of Companies and Enterprises	1%	1%	0%	*	1%	1%	1%	*	0%	*	*	1%	1%
Utilities	0%	*	1%	*	*	*	*	*	*	*	1%	*	0%
Agriculture, Forestry, Fishing and Hunting	*	*	*	*	*	*	0%	*	*	*	*	*	0%
(blank) = Unclassified Industry	*	1%	0%	*	0%	*	1%	*	*	*	*	*	0%
Grand Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 13: Industry of employment for five years of community college graduates – percent by industry

Demographic Details

11) Completers who received a Pell grant earned lower wages.

Across CSCU, individuals who received a Pell grant at any point in their time attending CSCU had lower wages at Post Q3 than individuals who never received a Pell grant. The difference is greatest for Charter Oak associate and bachelor's completers. Wages are included for individuals who were Stable Employed. Data are suppressed for credentials with fewer than ten completers for each academic year.



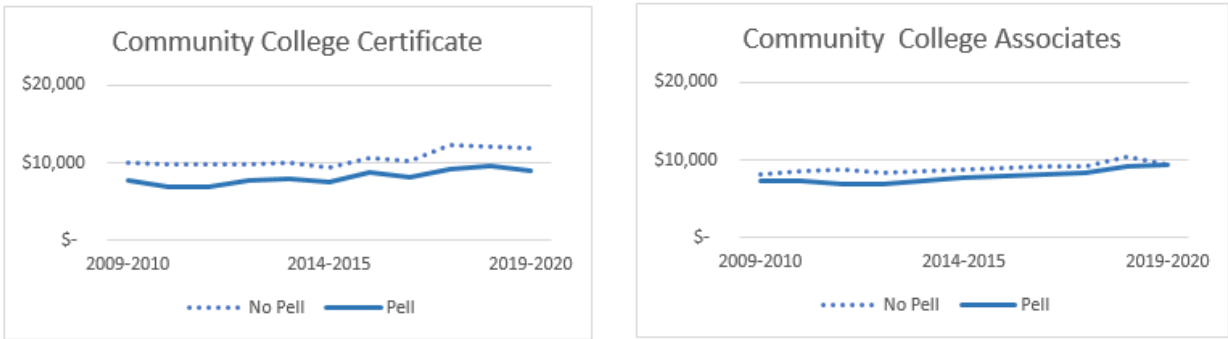
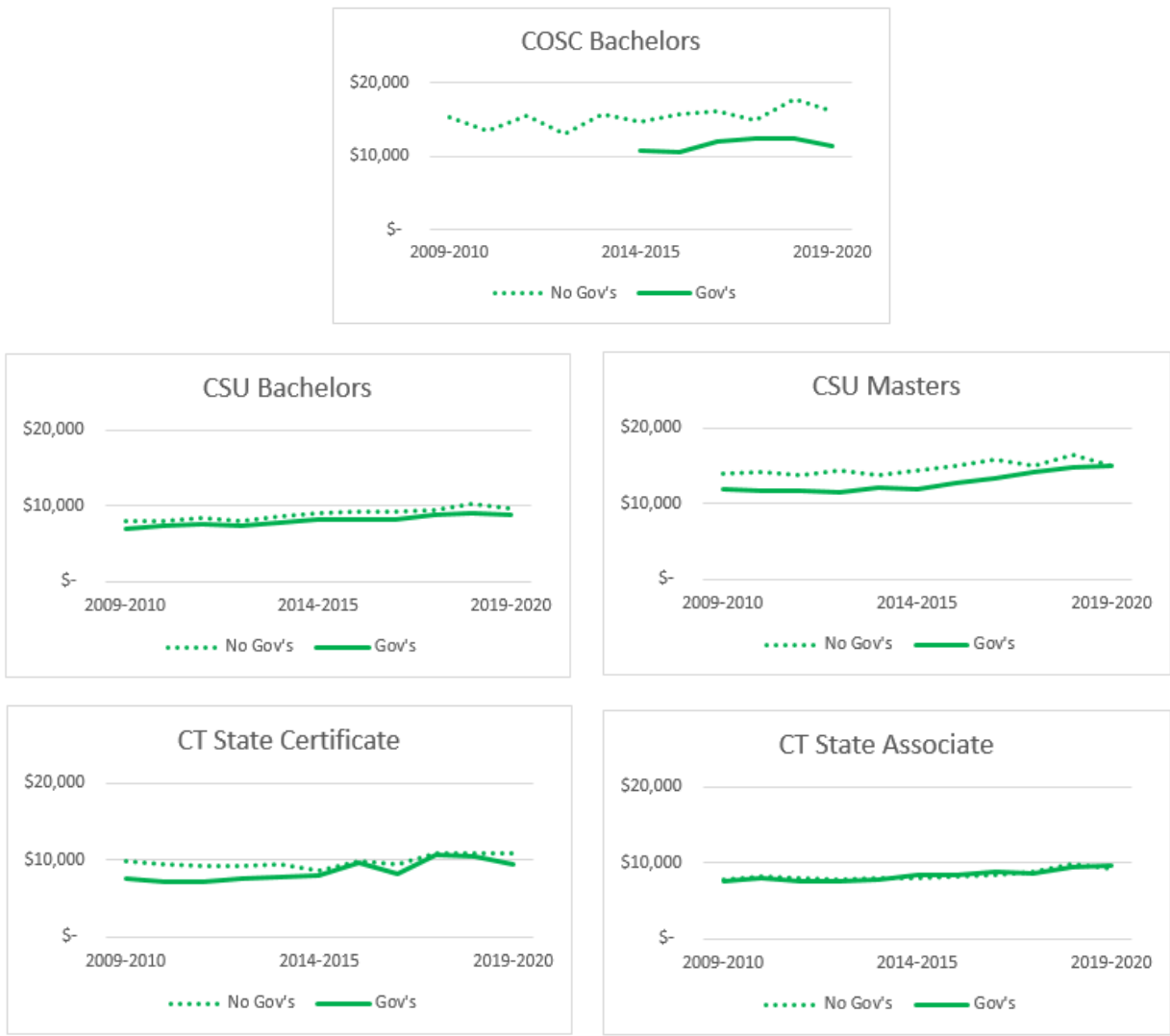


Figure 15: Average quarterly wage by academic year at Post Q3 for Pell and non-Pell recipients for some credentials

12) Completers who received a Governor’s Scholarship earned slightly lower wages.

COSC students who received a Governor’s Scholarship and completed a bachelor’s degree in 2019-20 received wages that were 29% lower compared to COSC bachelor’s completers who did not receive a Governor’s scholarship. This gap between recipients and non-recipients is much smaller for the CSU’s and Community Colleges, where differences for the most recent year of completers ranged from zero to 12.5%. Wages are shown for those who were Stable Employed.



Figures 16: Average quarterly wage for each academic year of completers at Post Q3 for Governor’s Scholarship recipients

13) Completers who received SNAP benefits received lower wages.

Completers who receive Supplemental Nutrition Assistance Program (SNAP) benefits are similar to those who receive Pell grants and the Governor’s scholarship in that these are all individuals who have financial need. Those who qualify for SNAP benefits typically have a greater level of financial need, so it is not surprising that we see the same trend as with Pell and the Governor’s scholarship. Individuals who received SNAP benefits at any time during at their insitution receive lower wages Post Q3 than individuals who have never received SNAP benefits. Wages are shown for those who were Stable Employed.

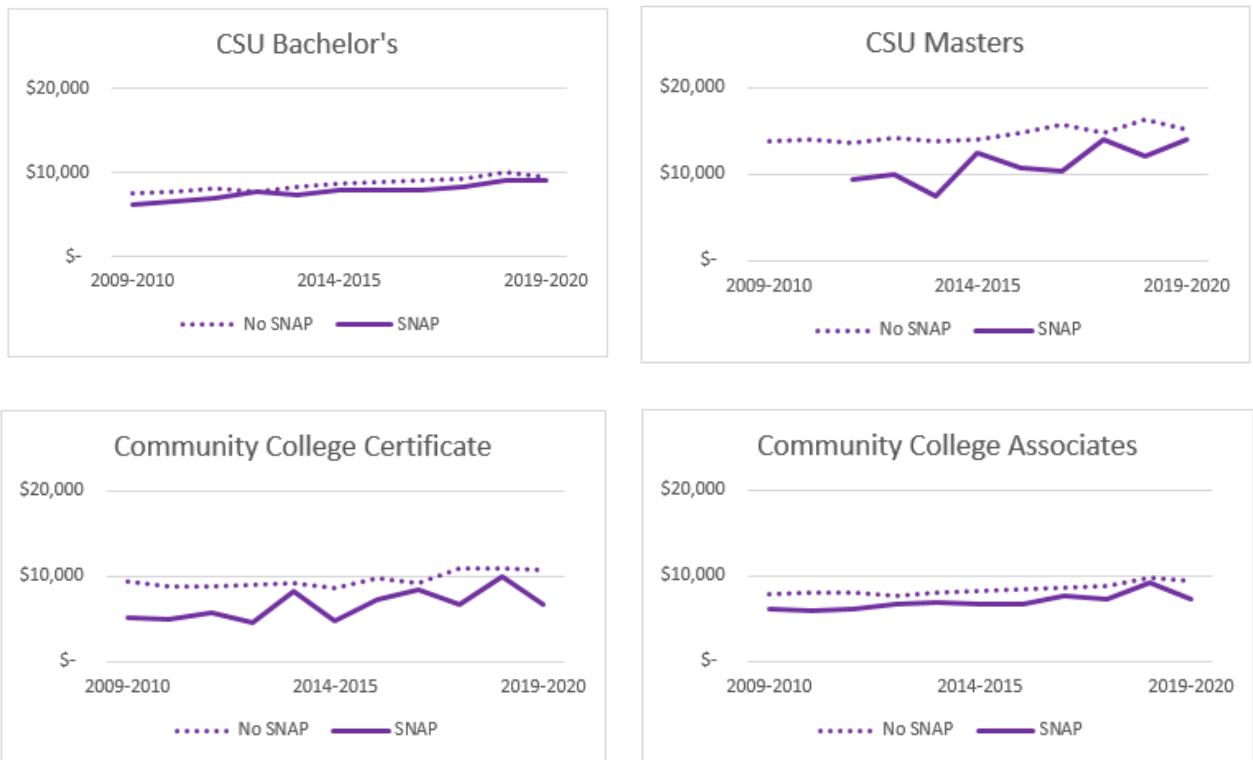


Figure 17: Average quarterly wage for each academic year of completers at Post Q3 for SNAP recipients

14) Veteran completers obtain higher wages.

Average wages at Post Q3 tends to be higher for individuals who are veterans than non-veterans. This increase could be the result of veterans having additional life experiences which supports their success in the workplace. Veterans may also come into their education with prior work experience such that they continue employment after the completion of their credential starting from a higher baseline than individuals without prior work experience. Wages are shown for those who were Stable Employed.



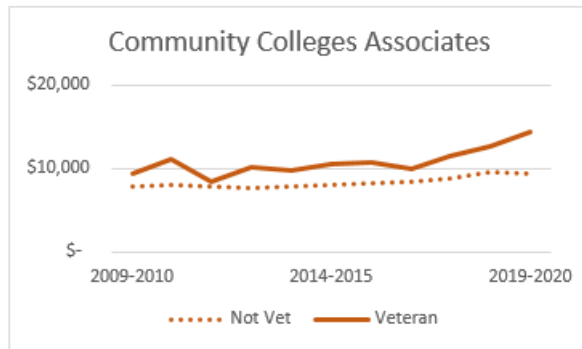


Figure 18: Average quarterly wage at Post Q3 for veterans

15) Women continue to receive lower wages than men.

Average quarterly wages are provided for credentials where data are not suppressed for any of the academic years. Average wages were calculated at the third quarter after completion for individuals who were identified as Stable Employed at Post Q3.

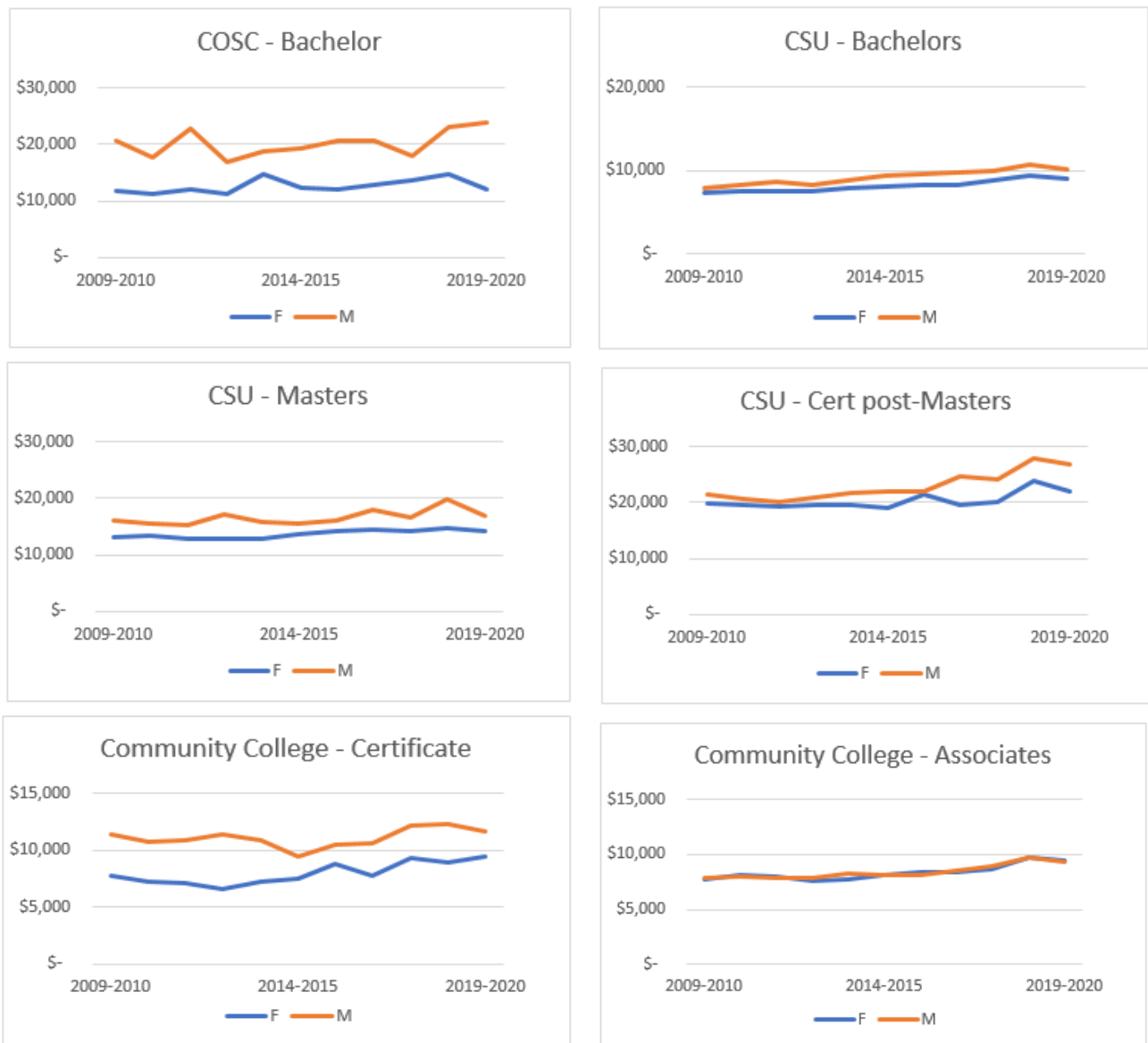


Figure 19: Average quarterly wage at Post Q3 by gender.

Methodology and Data Security

This report is produced by the Connecticut State Colleges and Universities (CSCU) Office of Decision Support and Institutional Research (DSIR) to provide information about the postsecondary outcomes of CSCU graduates. Data show employment rates and wages earned by students completing undergraduate and graduate education programs by institution and by academic program for ten years.

Data were shared and linked using Connecticut's Preschool through Twenty and Workforce Information Network (P20 WIN) and the P20 WIN Data Request and Management Procedure. This procedure is a component of the data sharing agreement between BOR and DOL and can be accessed on the P20 WIN website at: <http://www.ct.edu/files/pdfs/P20-WIN-Data-Management-Procedure.pdf>. Interactive Tableau visualizations of data from prior years are here: <http://www.ct.edu/p20win/requests#visualizations>.

At the time the data match was completed between CSCU and DOL records, there were three key characteristics of P20 WIN that maximized data security and student privacy. First, there is no centralized data warehouse where linked data are stored; therefore, there is no permanent location where linked data can be breached. Instead, each agency retains ownership of its source data, responsibility for its management and control over how it is used. Second, a two-step process is used for linking data that retains separation between information that might identify an individual (such as name) and information about that individual (such as gender, race or program studied). These different types of data are never brought together during the data exchange, matching or analytical processes; therefore, no-one can see identities of specific individuals in the data. Third, there is a high degree of control over data requests. Only designated authorized representatives of state and local educational agencies or other federal officials are approved to conduct analysis on the redacted data. The P20 WIN process for linking data maximizes data security.

In addition to having processes to maintain data security, the Family Education Rights and Privacy Act (FERPA) requires that a written data sharing agreement be established when data from student records are shared. Each of these agreements sets a timeline for data destruction and provides for additional securities such as how data are to be secured and managed. In addition to the restrictions for education data, limitations are also established by state law for wage and employment data obtained through unemployment insurance records (UI). P20 WIN data sharing agreements, procedures and policies are in compliance with both state and federal law for education and UI data.

CSCU data about graduates were matched to unemployment insurance (UI) data from the Connecticut State Department of Labor (DOL). Graduates were included if they completed a credential or degree at any time during academic years 2009-10 through 2019-2020. The data tables and summary analysis contain wage and employment data at the system and institution levels with detailed data by program of study, using the Classification of Instructional Program Codes (CIP codes), and by degree type (e.g., Associates, Bachelor's, etc.). Additional categories included in the data tables include gender, race and ethnicity, Connecticut residency and whether individuals received a Pell Grant or Governor's scholarship. Counts of individuals found to be employed in Connecticut, their average quarterly wages and difference in wages over time are provided at multiple points in time beginning with one quarter prior to the beginning of the program of study (Pre-Q1), for each subsequent quarter through eight quarters after graduation (PQ8), two years later.

It is necessary to keep in mind that these reports provide only a high-level view of CSCU institutions and student outcomes. On their own, this report and the underlying data tables do not justify action. Rather, this information opens the doorway for further discussion and analysis. There are critical limitations to the source data sets that need to be understood and considered when utilizing this report and the underlying source data tables. See section labeled "Important Definitions & Notes" above.

Technical Notes

- Cell suppression is not required for counts of graduates by program because this information is publicly available through the Integrated Postsecondary Education Data system (IPEDS).
- Employment data are suppressed when the cell size is less than ten and in instances where secondary cell suppression is needed to avoid situations where information about individuals may be determined through calculation. Suppression affects the counts of individuals employed and all related wage data that would be calculated from the suppressed cell.
- When a Participant Start Date was not available, when the start date is after the student graduation date or when it is earlier than ten years prior, DOL applies a calculated Program Start Date based on the average program length for other students receiving the same credential. The 'Start Date' may be after the 'Graduation Date' in situations where students return to class after the initial graduation. In the 'return' they may register for, take, and complete additional classes or they may register but drop. This approach is in keeping with the process for prior reports.
- Some community college records did not have a CIP code attached to the degree earned. Manual additions were made based on the description of these programs and their alignment to descriptions of national standard codes and by matching to data from additional system extracts.
- Across the community colleges, approximately 10% of records did not have an SSN and were, therefore, unmatchable to wage data.
- There are differences between how the four CT State Universities determine whether a student is a US non-resident. These distinctions likely result in an undercount of students who have US non-resident status from the CSUs.
- The calculation for “stable employment” is as follows for these specific quarters
 - o Pre-Q1: Individuals are counted as stable employed if they earned wages in Pre-Q1 (t). While this is not technically in keeping with the definition of “stable employed,” CT DOL did not determine employment for the quarters prior to or after Pre-Q1.
 - o Post-Q1: Individuals are counted as stable employed if they earned any wages in Post Q1 (t) and the quarter after Post Q1 (t+1). The prior quarter is not used because there is no expectation that graduates will have employment in the quarter prior to when they finish their credential.
 - o Post-Q2 through Q8: Individuals are counted as “stable employed” if they earned any wages in the quarter prior to the selected quarter (t-1), the selected quarter itself (t), and the quarter immediately after the selected quarter (t+1).