Connecticut State Colleges and Universities Organizational Study Final Report

Prepared for the Connecticut Office of Policy and Management

December 2, 2024

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Executive Summary

In January 2024, the Office of Policy and Management (OPM) of the State of Connecticut contracted with the National Center for Higher Education Management Systems (NCHEMS) to conduct a study of the Connecticut State Colleges and Universities System (CSCU). The objective of the project is to "provide written

- Evaluation of CSCU's current organizational structure, as well as the organizational structure of its component institutions and their physical footprints to meet projected enrollment demand.
- Comparisons between CSCU and its peers, with an eye towards possible improvements to financial sustainability for the CSCU System Office (hereafter referred to as "the System Office"), the CSCU four-year universities, CT State, and Charter Oak State College.
- Recommendations of solutions to scale and restructure the CSCU to meet projected enrollment demand while considering improved student outcomes and workforce needs by the state.
- Short and long-term financial and operational plans that will support CSCU's long-term sustainability."

This study has been undertaken with full recognition of the importance of the CSCU institutions to the future well-being of the State of Connecticut and its citizens. These are institutions that are designed to provide access to postsecondary education opportunities that offer the widest possible pathway to the middle class for Connecticut residents. Their graduates tend to remain in the state and fill the workforce pipeline. And their published prices are lower than most other institutions in the state. Therefore, it behooves both the CSCU System and the State of Connecticut to work together to ensure that these institutions succeed at fulfilling their missions and remain financially stable and viable into the future.

To meet its obligations under the contract, NCHEMS conducted an extensive series of data analyses, not only about the CSCU System and its constituent institutions, but also about peer institutions selected for their similarities to the CSCU institutions. These analyses were augmented by substantial stakeholder engagement activities conducted at all campuses, the System, with executive branch staff, and with legislators. These activities included three trips to Connecticut, two of which were tours of all the CSUs, the CT State central office (NCHEMS also made visits to four of the main campuses), Charter Oak, and the CSCU System Office, where meetings were arranged with institutional leaders, faculty, staff, students, and community leaders and employers. NCHEMS also regularly met with OPM and with CSCU system leadership, and participated in conversations with board members and FAC leaders.

As products of its work, NCHEMS produced a draft diagnostic report that described the nature of the problems to be addressed and the context within which solutions must be developed as well as this final report. This report goes beyond the contents of the diagnostic report and adds a series of recommendations. In brief, the key findings of the report are as follows:

1. CSCU and its institutions will continue to confront conditions that will challenge their collective ability to attract students. Even optimistic versions of enrollment projections

suggest continued modest enrollment declines. It is unlikely that the CSCU institutions will be able to grow their way out of enrollment difficulties they face, and the accompanying fiscal challenges.

2. CSCU's response to enrollment declines over the past decade failed to bring its costs into alignment with its revenues.

3. There is only limited evidence that CSCU is undertaking successful system-level strategic approaches to addressing its current fiscal dilemmas or its future fiscal fragility. The primary issues include:

    a. Misalignment of personnel. Since the majority of college and university expenditures are for personnel, a core problem has been the inability to reduce staffing to levels commensurate with enrollment declines.

    b. Efforts to consolidate services. The System has initiated several well-intentioned efforts to consolidate services in order to provide improved services and reduce costs. These efforts were generally well-intentioned, but poorly executed. Engagement with institutional stakeholders to help shape the projects were routinely criticized as inadequate.

    c. Structural issues. There remain serious structural issues in organizing CT State Community College. More broadly, there is a lack of clarity about System versus institutional roles and responsibilities (including the CSUs) and the authorities that attach to each.

    d. Strategic use of resources/reserves. The infusion of federal ARPA funds has allowed CSCU to accumulate substantial reserves. These reserves have not been utilized in ways designed to prepare the system and its institutions for future realities. Instead, much of the money has been used to cover recurring costs; in effect, the funds have helped the System and its institutions reduce the urgency of making necessary changes.

    e. The CSCU institutions have sufficient facilities to meet the needs of current and projected enrollments. However, they have not been effective in utilizing the deferred maintenance funds made available by the state to ensure that buildings are brought up to date and adapted to the instructional needs of contemporary pedagogy.

    f. Data collection and data governance at the CSCU System Office—a critical area for ensuring that decisions are made with accurate and comparable data— remains a work in progress. Additionally, not contributing data to P20 WIN keeps CSCU from using a complete picture of student mobility and employment outcomes to improve performance, while policymakers and the public are also unable to make more fully informed policy based on these data for CSCU.

    g. CSCU's volunteer board has proven to be ill-equipped to provide the necessary guidance and the appropriate oversight and accountability that are needed for a system that must adapt by making controversial and unpopular decisions and do so on a systemic basis rather than campus-by-campus. (New board leadership seems to be in the process of setting a more vigorous tone to better emphasize accountability.)

4. CSCU's difficult circumstances are also the product of contributing factors that can undercut the kind of bold decision-making that is required.
    a. Unfavorable demographic conditions that have intensified competition for traditional-aged students; these have been made worse by falling college-going rates fueled in part by growing questions among students and their parents about the value of higher education.
    b. Provisions in collective bargaining agreements that CSCU negotiated put constraints on the system's ability to adjust the total number and deployment of employees in a timely fashion. To be clear, the agreements do establish procedures for managing the system's human resources, but there is little history in Connecticut of activating those provisions and what does exist has made CSCU leaders hesitant to take these steps. In addition, the salary ranges for most of CSCU's employees are established by CSCU; however, the annual increments have been largely established as a result in part from negotiations between SEBAC and the state. CSCU or its institutions are responsible for numerous additional decisions about work rules that also have significant budgetary impacts and affect other terms and conditions of employment.
    c. The resource allocation approaches used by the state of Connecticut to allocate funds to CSCU and by CSCU to allocate funds to institutions reflect neither priorities for state goals to be pursued nor the costs to institutions of achieving their different missions and serving their differing student bodies.
    d. The State of Connecticut does not have an effective set of policies concerning the provision of dual enrollment.

NCHEMS also identified several issues at the state, rather than the system, level. Most important among these issues are:

- The absence of an effective statewide higher education policy entity, which leaves the state without a thoughtful strategic plan for higher education or a source of independent, knowledgeable expertise to ensure that state investments are optimally effective.
- The state's non-strategic approach to state appropriations to postsecondary education. Though its approach of appropriating money largely on the basis of the prior year's level is common among states, it is becoming increasingly clear that this strategy is not equipped for a future in which states will need a much more evidence-based approach that help incentivize institutions to operate very differently.

This report offers several options for structural/governance reforms for Connecticut's leaders to consider as possible solutions to these two important issues. Accompanying the options is a discussion of the associated advantages and disadvantages of each. Ultimately, on the basis of evidence and drawing on the experience from other states, NCHEMS recommends the following for Connecticut:

1. Keep the current CSCU and System Office, but this must be accompanied by significant changes that lead to improved performance. A system is the best option for Connecticut because no other option is superior in organizing the governing authorities in a way most suitable to address future challenges. That is, a system offers the greatest likelihood of generating efficient operations while also ensuring that programs are as widely available

as possible. The fact that CSCU has fallen short of fully delivering on the advantages a system structure offers during its short history is concerning. But there is no guarantee that any alternative will perform better. It is almost certain that a major change will create disruptions that will linger, with uncertain effects on equitable student outcomes, productivity, affordability, and the achievement of state goals.

NCHEMS further recommends that the state (or system) strongly consider organizing the provision of shared administrative services under a separate entity. That entity, a services corporation, would be better positioned to capitalize on the promise of greater efficiency possible through scale by making its provision of shared services accountable to the institutions that use them. There are numerous examples of such entities to consider as a model, though most are in the private, nonprofit sector (which is generally unable to count on public subsidies that support operations, other than financial aid).

2. The state should create a mechanism for statewide coordination of higher education, ideally by establishing a new and independent coordinating board. Upon its successful launch, the state should incorporate the Office of Higher Education into it, where it can continue to administer the state's financial aid programs and conduct state authorization activities as it currently does, but from within an organization that is explicitly focused on creating aligned funding and regulatory policy across all sectors of higher education and in alignment with the needs of the state.

NCHEMS also makes the following recommendations to the CSCU System and to the state.

3. To the CSCU System:
    a. Act with urgency to address the financial and strategic issues that threaten Western Connecticut State University's (WCSU) accreditation and sustainability.
    b. Clarify the complementary roles and responsibilities of the System and its institutions.
    c. Require that each institution develop a staffing plan that indicates how the institution will achieve staffing levels that allow meeting the institutional mission, while staying within the constraints of a balanced budget that is based on realistic enrollment levels (see Figure 40-Figure 45 for NCHEMS' enrollment projections).
    d. Maintain the system but reorganize the System Office to better align its structure with the functions to be performed. Specific suggestions in this regard are provided in the full report.
    e. Pay particular attention to the development and implementation of personnel policies that better reflect the needs of the institution for flexibility in the use of human resources.
    f. Prioritize efforts by the human resources and legal units of the System Office toward in-depth training and ongoing assistance to campus decision-makers on matters related to managing personnel within the constraints of the collective bargaining agreements.
    g. Implement a more sophisticated model for allocating the block grant from the legislature to the CSUs.

h. Revise the Board policy on reserves with the goal of improving transparency and ensuring that accumulated reserves are utilized in a strategic fashion.
i. Provide campuses with much clearer guidance for preparation of annual budgets and exercise accountability for their accuracy and effectiveness. Ensure that the request for capital funding specifies a clear prioritization of projects and that the request is submitted in adherence to the processes established by the state.
j. Take the lead in establishing policies and procedures that smooth students' paths to credentials, make college more affordable, and more effectively prepare them for the workforce.
k. Work with each institution to develop a list of Key Performance Indicators (KPIs) that are tailored to the institutional missions, approved strategic plans, and expectations for that institution.
l. Develop a formal process for onboarding new Board members and arrange for ongoing education of all Board members and routine evaluation of the board's performance.
m. Develop a clear list of items that require action by the Board.
n. Develop a clear plan for the future of Charter Oak. Ideally, the plan should ensure that its efforts are efficient, sustainable, complementary and supportive of the activities of the other CSCU institutions. It should also focus on serving populations and providing programs for which its business model makes it distinctly capable. Recognize the potential value of Charter Oak as a place to test innovations in educational delivery.

4. To the state of Connecticut:
a. Develop a set of statewide goals/priorities for higher education that are agreed on by both the executive and legislative branches of government.
b. Create more systematic and transparent approaches to funding the state's institutions of higher education and its student financial aid programs.
c. Exercise discretion to ensure that CSCU uses additional funding provided to transform into a system of institutions that are well positioned for the challenges of the future.
d. Revise capital funding approaches to emphasize remodeling or demolition of existing space rather than creating additional space. Require the development of campus facilities plans and the maintenance of up-to-date facilities inventory and utilization data as a prerequisite for considering capital requests. Utilize a transparent rubric for evaluating capital funding requests.
e. Establish a requirement for annual training of college and university Board members.
f. Conduct a systematic "audit" of state legislation, policies, regulations, and procedures to identify any of these that create barriers to accomplishment of state goals.
g. Develop a state policy that ensures the availability of dual enrollment to reach and lower barriers to participation for all students.

It will take commitment and persistent focus over several years from both leaders of the CSCU System and its constituent institutions, as well as the State, to make the changes outlined above

that are necessary to ensure that these critical state assets meet their obligations in the most cost-effective way possible.

Introduction

In January 2024, the Office of Policy and Management (OPM) of the State of Connecticut contracted with the National Center for Higher Education Management Systems (NCHEMS) to conduct a study of the Connecticut State Colleges and Universities System (CSCU). The objective of the project is to "provide written

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The study is a response to financial challenges within CSCU as its institutions endure a multi-year decline in enrollment and related revenue, while also anticipating an unfavorable demographic future that their leaders expect will further constrain their ability to carry out their respective missions. CSCU was formed in 2011 and is a relatively young system that has faced substantial challenges ever since it was founded. Besides struggling to deal with enrollment decline, CSCU has also recently formally consolidated its 12 previously independent two-year institutions into Connecticut State Community College (CT State) as a single accredited institution with 22 sites (of which 12 are the main campuses of formerly independently accredited institutions and the remainder are sites of those institutions). The *Students First* plan, the label attached to this consolidation initiative, created widespread tension within CSCU during its implementation. Although CT State's single accreditation was secured effective July 1, 2023, much work remains to be done to fully operationalize the intended changes. In the process, many of the original initiatives that were embedded into that plan have been reconsidered or abandoned.

The study also raises considerable concern about the direction of CSCU and the performance and cost of its System Office. As this report will attest, these concerns are widespread among legislators, the governor's office and OPM, faculty, staff, and the public. NCHEMS' assignment to evaluate the current organizational structure to meet projected enrollment demand and offer recommendations to scale and restructure accordingly is an effort to help the state and the system respond to in sustainable ways that also lead to improved student outcomes and better satisfaction of employment demand.

NCHEMS is pleased to submit this final report, which is the product of an extensive review of available quantitative data and substantial stakeholder engagement activities conducted at institutional campuses throughout the state. These events were designed to elicit input

concerning CSCU's performance in recent years (and that of the respective institution hosting our team) from institutional leaders, faculty and staff, students, community members and employers in the surrounding region. The events also collected input on challenges and obstacles the groups perceive as hindering progress toward meeting statewide, regional, institutional, and student needs.

This study has been undertaken with full recognition of the importance of the CSCU institutions to the future well-being of the State of Connecticut and its citizens. These are institutions that provide access to postsecondary education opportunities that offer the widest possible pathway to the middle class for Connecticut residents; CT State is an open access institution that accepts all students and even the CSUs accept the vast majority of their applicants. Their graduates tend to remain in the state and fill the workforce pipeline. And their published prices are lower than most other institutions in the state. Therefore, it is critical that CSCU implements changes that strengthen student outcomes and financial sustainability so that it can serve its mission effectively into the future. The State of Connecticut will also need to make policy changes that are important to the success of CSCU and the higher education ecosystem throughout the state.

Throughout the project, NCHEMS has been keenly aware of the importance of the CSCU institutions to the future of the state. Readers should recognize that the purpose of the report was to identify and recommend ways that CSCU can take corrective actions to more successfully fulfill its essential role and to more effectively and efficiently serve the students and the state. Our recommendations become a playbook for CSCU and the State to draw upon to strengthen higher education in Connecticut. Although we recommend specific solutions for some topics, we have generally resisted being overly prescriptive in recognition of the fact that System and institutional leaders, faculty, and staff must work together to find solutions that work for them.

As NCHEMS finalizes this report, it is important to note that the intent has not been solely to find fault, nor fail to credit the System where appropriate. Notably, the System Office and/or the Board has shared recent steps to begin to tackle the issues we identify, including:

- Adopting a new credit transfer policy to eliminate barriers to student mobility and to provide transparency about how courses will apply at the CSUs.
- Engaging the Association of Governing Boards to help bolster the effectiveness of the Board of Regents.
- Charging each institution and the System Office with developing detailed five-year sustainability plans.
- Seeking external consultation to identify cultural and leadership challenges in human resources, prepare enrollment projections, and conduct a space utilization study.
- Establishing statewide councils for leaders in key functional areas.
- Charging task forces to review how CSCU can be better deploy its resources to address the health care needs of the state and to explore scaling opportunities for Charter Oak State College.
- Charging CSCU with setting new system-wide goals for accessibility, completion, and talent development.

These activities represent appropriate first steps in addressing some of the opportunities for improvement identified in this report. In addition to making recommendations intended for CSCU to implement, this report also outlines opportunities for state leaders to do their part in creating

and sustaining a supportive policy environment that will create more fertile ground for CSCU—strengthened by the changes it needs to make—to thrive.

Approach

Upon executing the contract, NCHEMS immediately organized kick-off meetings in Hartford that took place in January 2024. These meetings included visits by two NCHEMS senior leaders with OPM leadership and staff, members of the governor's office, CSCU leadership, the then-chair and then-vice chair of the Board of Regents, and institutional presidents. NCHEMS also met with the co-chairs of CSCU's Faculty Advisory Committee. During these meetings, NCHEMS staff introduced themselves and their assignments and gathered input from all about the central issues to be addressed, information about the context and recent history, and perspectives on the ways in which the CSCU system functions.

Concurrently, NCHEMS began gathering the data necessary to establish the baseline for understanding the challenges facing CSCU and the needs for higher education in Connecticut. An early step in this process involved the development of peer groups for each of the CSCU institutions and for the CSCU system itself. Appendix A describes NCHEMS' methodology in selecting institutional peers. Using these groups, NCHEMS gathered publicly available data about trends in the recent performance of each CSCU institution in comparison with its peers. For CT State, having become a single community college with multiple campuses, NCHEMS identified similar multi-campus and statewide community college systems.

Next, NCHEMS prepared an extensive request for data from CSCU and worked closely with the appropriate leaders at the System Office to clarify and refine the request. This request focused on student enrollments and completions, as well as financial data. CSCU routed the request to the institutions for the data the System Office itself was unable to provide. CSCU gathered and organized these institutional submissions and provided the results to NCHEMS.

Equipped with preliminary analyses using these data, two teams of two NCHEMS staff members toured Connecticut in April 2024, visiting as many of CSCU's campuses as was feasible in a week. At each site, NCHEMS conducted focus groups with important stakeholders to gather input. This feedback helped provide additional meaning and context to the quantitative work, capture the perspectives of members of the campus communities, and hear ideas about how stakeholders would address the challenges as well as how CSCU might capitalize on opportunities. In addition, these visits allowed the project team to appreciate the distinctiveness of each institution and CT State campus. Visits were organized for each NCHEMS team to spend time with the institution's president, the cabinet, faculty, staff, students, and local or regional employers and civic leaders. In general, all the meetings were well attended by committed members of the campus community, who were promised that their comments would not be for attribution to encourage candor. Most meetings began with a short presentation to ground the discussion in data. The subsequent conversations varied purposefully for different groups, e.g., the questions we sought answers from students were quite different and more personal than those posed to institutional leaders or faculty. The discussions generally centered on key topics, including the challenges posed by recent enrollment declines and Connecticut's bleak demographic outlook, the functioning of both the institution and the System, and how each institution currently meets the needs of the state and its surrounding region. Additionally,

NCHEMS sought to give priority to hearing what stakeholders felt was most important to share with the research team. During their week in Connecticut, the teams held meetings at each of the CSUs, the System Office, the CT State headquarters in New Britain and Charter Oak's office. The teams also held meetings at CT State's campuses at Northwestern, Capitol, Asnuntuck and Three Rivers. The teams visited with OPM, the governor's office, and Rep. Gregg Haddad and Sen. Derek Slap.

Following these meetings, NCHEMS prepared a draft diagnostic report that was shared with OPM and CSCU, each of which provided verbal and written feedback incorporated into the draft. The diagnostic draft forms the first part of this report. Additionally, NCHEMS met regularly with OPM and periodically with CSCU leadership throughout the summer and fall to share progress, ask and answer questions. NCHEMS collaborated with CSCU to discuss how best to engage CSCU stakeholders as the work moved forward, and ensure the final product is communicated widely. NCHEMS also met with the new chair of the Board of Regents to ensure he had an opportunity to add his perspective to the report.

In September, NCHEMS traveled for a third time to Connecticut; this trip's purpose was to review major findings and discuss an outline of tentative recommendations with the System Office, institutional leaders, and OPM over the course of a week. During this trip, NCHEMS also met with leaders of the faculty senate and the unions for the same purpose.

Lastly, OPM and CSCU's System Office leadership had an opportunity to review a draft of this final report before its release, with any last feedback considered for inclusion in the final report. While NCHEMS did not formally engage in dialogue with the University of Connecticut (UConn) or the Office of Higher Education (OHE) in the course of this project, OPM made excerpts of the draft report available to UConn and OHE, and conveyed feedback received. The feedback received was considered for inclusion in this final report.

National Context

The challenges facing CSCU and its institutions are similar to those being encountered in many other states and higher education institutions. These are especially like those in the Northeast and Midwest where demographic changes are creating the most substantial impacts on postsecondary enrollment demand. Before taking a closer look at specific challenges for Connecticut and its institutions, it is helpful to provide a brief overview of national trends in college participation and higher education funding.

Generally, downward trending enrollments cannot be pinned solely on the pandemic. While it is true that the pandemic—like other major shocks such as Hurricane Katrina—has had a long, lingering impact and exacerbated enrollment and fiscal challenges, it did so unevenly across institutional sectors. Nationally, enrollments are down (Figure 1), and the numbers are significantly worse in New England (Figure 2). The community college sector has led these declines, unsurprising given the strong economy that has persisted since the Great Recession. Community colleges and broad-access institutions were also most impacted by the pandemic, while public flagships and other large research and selective institutions largely maintained or grew enrollments.[1] In New England, private nonprofit institutions saw substantial growth at a

rate five times faster than their growth nationally, although Southern New Hampshire University and its rapidly growing online programs account for much of this growth.

Figure 1. Annual Headcount by Sector, U.S. Total
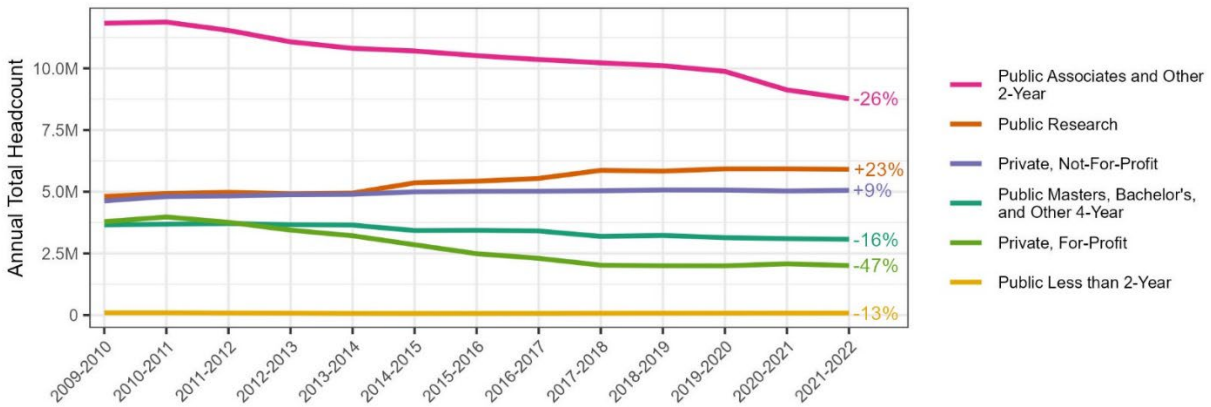
Source: NCES IPEDS 12-Month Enrollment Survey, effyYYYY files 2012-2021 final release; 2022 provisional release. Includes all Title IV eligible institutions in the 50 states plus DC.

Figure 2. Annual Headcount by Sector, New England Total
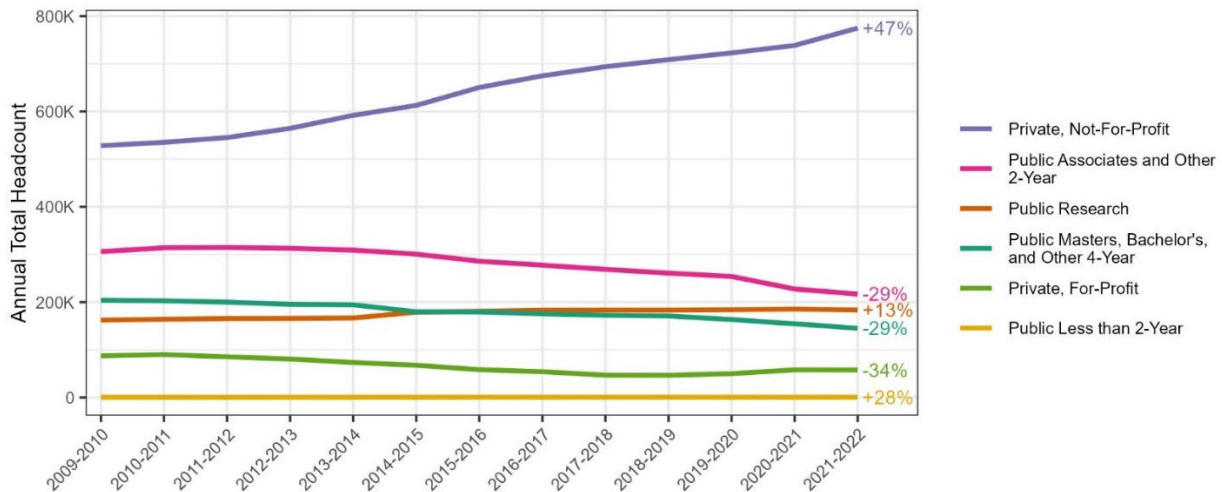
Source: NCES IPEDS 12-Month Enrollment Survey, effyYYYY files 2012-2021 final release; 2022 provisional release. Includes all Title IV eligible institutions in CT, RI, MA, VT, NH and ME.

College participation rates among recent high school graduates have also eroded in recent years (Figure 3). Though Connecticut's college-going rate has consistently been among the highest in the nation, it has declined over time and declined more rapidly than the national rate (Figure 4). Again, this downturn may be expected during and immediately following the pandemic, but it is clear that the consistent increases in the nation's college-going rates stretching back many years reached a peak before the pandemic. Affordability concerns, questions about the value of higher education, campus unrest and allegations about political bias have all contributed to a climate of fresh headwinds opposing the choice to attend college.

Figure 3. Percent of Recent High School Graduates Enrolled in College, U.S., 1960-2022
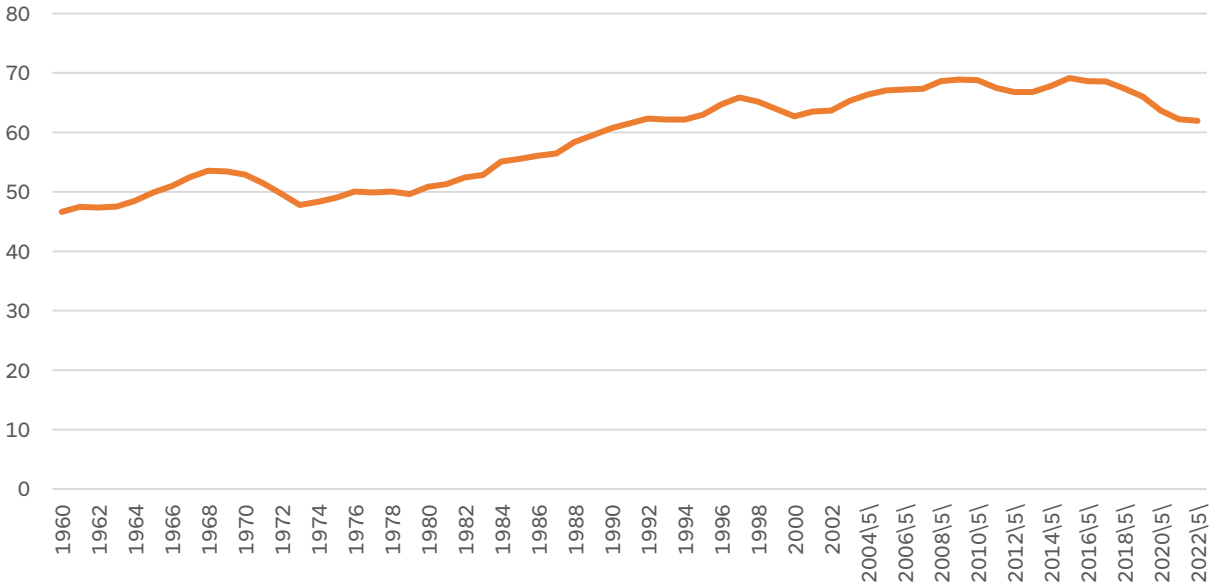
Source: Digest of Education Statistics (2023), Table 302.20.

Figure 4. Percent of High School Graduates Enrolling Directly in College
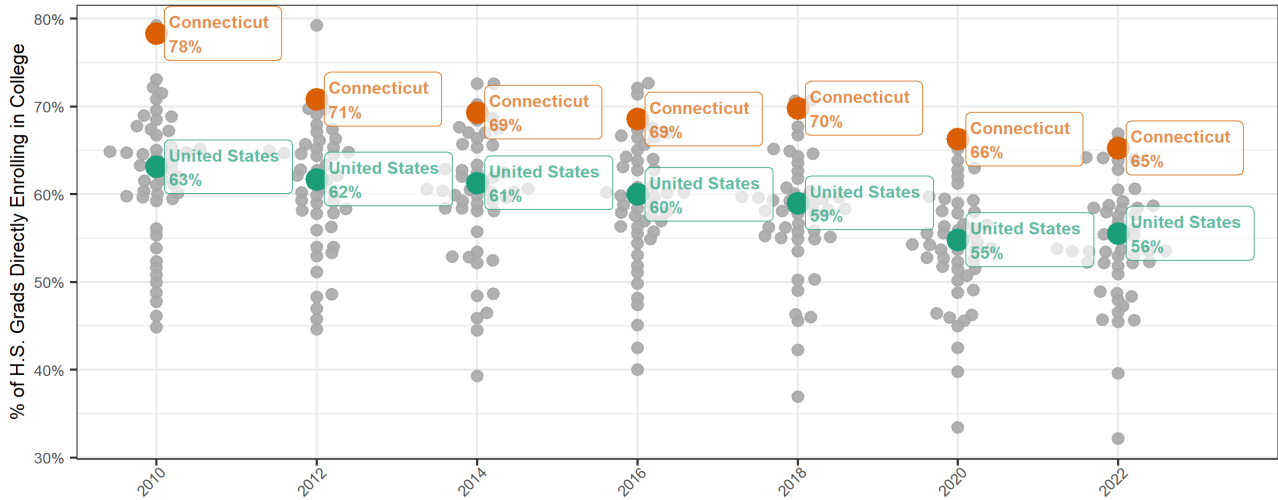
Sources: WICHE Knocking at the College Door: Projections of High School Graduates; NCES IPEDS Fall Residency and Migration Files efYYYYc. Note: Each dot represents one state.

On the fiscal front, although the long-term picture remains concerning—highlighted by a long-term trend of families shouldering a larger portion of higher education costs—recent years have seen renewed investment in public higher education. These increases have been driven by the persistently strong economy and are also thanks to the infusion of federal funding created in the wake of the pandemic. Relative to most other states, Connecticut provides more public support to higher education at $18,105 per student, 64% more than the national average (Figure 5). It is also the most generous of the northeastern states. Among them only Massachusetts also

outspends the national average; New Hampshire, Rhode Island, and Vermont are all among the least generous funders of higher education. (The other New England states are highlighted in each of the three figures that follow.)

Figure 5. Education Appropriations Per Student FTE, by State, FY23

In addition to funding for operational support, Connecticut also provided an estimated $1.17 billion in public capital appropriations between FY20 and FY23 to CSCU and UConn.[2]

Connecticut's public institutions also collect more than the national average from students and their families in tuition revenue, although it ranks among the middle third of the states on this measure (Figure 6). Still, that results in total educational revenue from state and local appropriations and tuition that is well above average among states (

Figure 7).

Figure 6. Public Higher Education Net Tuition Revenue per Student FTE, by State, FY23

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Figure 7. Public Higher Education Total Education Revenue per Student FTE, by State, FY23
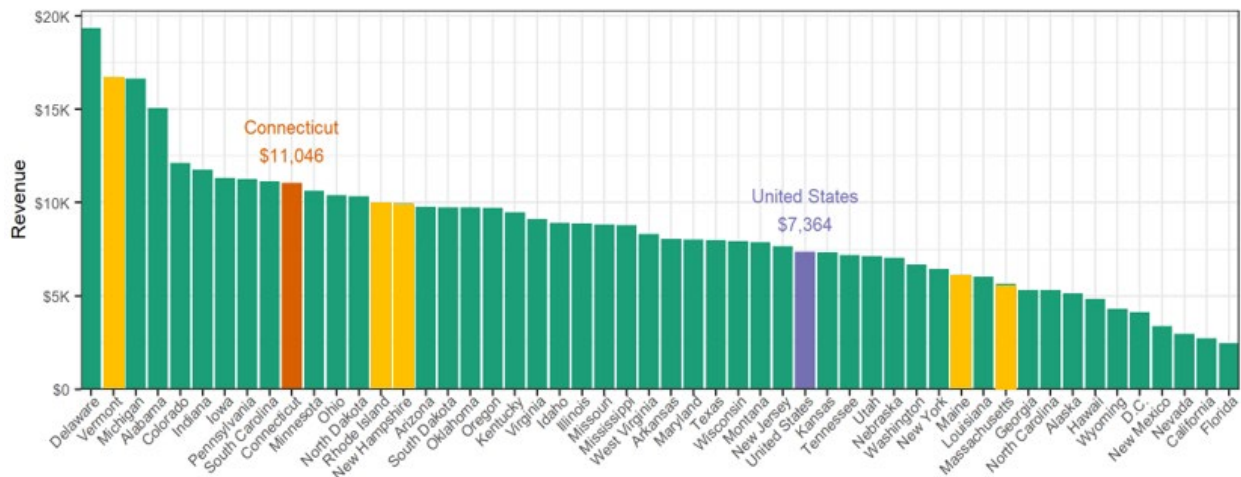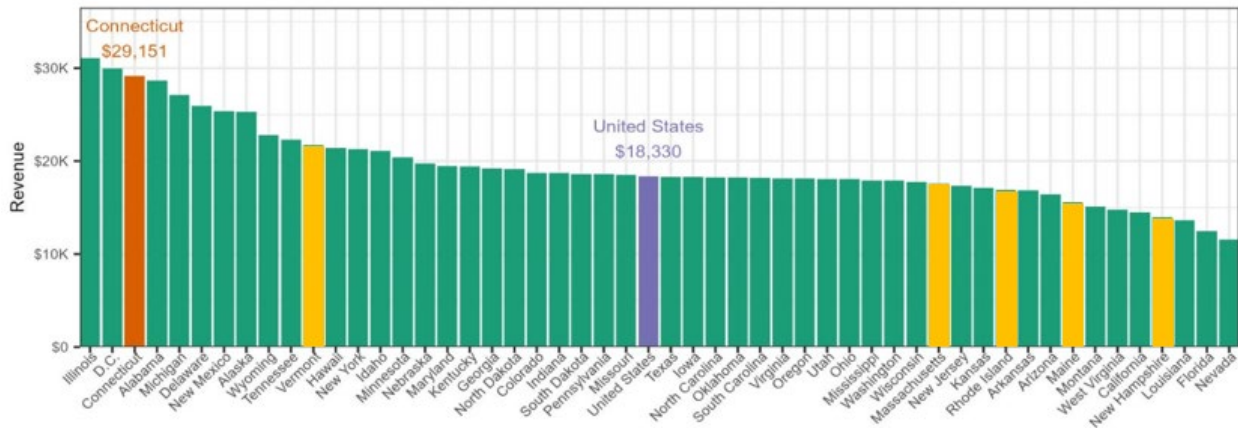
Source: State Higher Education Executive Officers Association. (2024)
State Higher Education Finance: FY 2023. Note: Values adjusted for cost of living (COLI) and enrollment mix (EMI).

Over the years, Connecticut has become more generous to higher education, relative to the U.S. as a whole, in terms of its tax effort. This refers to the extent to which the state has proven a willingness to commit tax revenue to pay for public services (including higher education) relative to its tax capacity (Figure 8). Since 1980, Connecticut has allowed its effective tax rates to vary between 6.7% and 8.9%, with the most recently measured rates being substantially higher than they were throughout the 1980s and even during the 2000s. This variation has been more volatile than the U.S. and since 2011 Connecticut's effective tax rate exceeded the nation's rate.

In terms of support to higher education relative to income, over the last 40 years Connecticut has consistently been less generous than the U.S., although the gap has narrowed and was nearly closed by 2022. Akin to the observations about effective tax rate, Connecticut has continued to provide relatively stable support for higher education from its available resources. Connecticut has been outperforming the nation, for which support relative to income has fallen by more than 40% since 1980. In Connecticut, the trend in this indicator was generally downward during the 2010s.

Figure 8. State Tax Effort
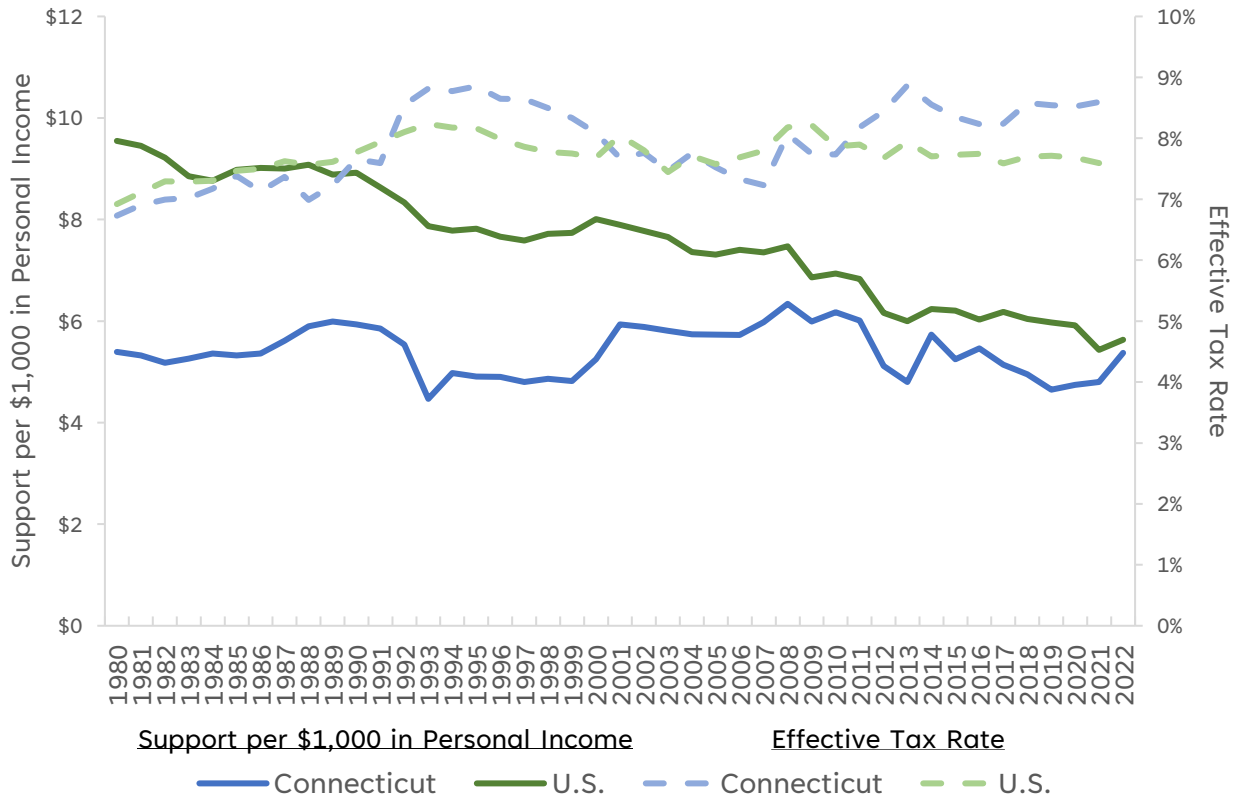
Source: SHEEO SHEF.

As this short overview of the national context suggests, the challenges facing CSCU, and Connecticut higher education more broadly, are not unique to Connecticut. Each state has confronted demographic changes and shifting fiscal conditions in recent years in varying degrees, and similar challenges will continue to shape higher education policy in the years ahead. Like other New England states with bleak demographic outlooks, Connecticut has been forced to adapt to these challenges earlier than the rest of the nation. CSCU's attempts to address these conditions stretch back more than a decade, most obviously through the consolidation of the community colleges but also in how it responded to the pandemic and its use of federal stimulus funding. The system's efforts are ongoing and still affecting the higher education landscape in the state. This report must be read in the context of these challenges that have roiled the higher education industry and will continue to do so in the future.

Findings and Observations

1. **CSCU and its institutions will continue to confront conditions that will challenge their collective ability to attract students.**

   Connecticut has seen its population of traditional college-aged students diminish over the last several years and the future is unlikely to provide any relief, as projections indicate continued declines residents aged 15-24 (Figure 9). Other states in the Northeast can also

expect to face a shrinking pool of recent high school graduates (Figure 10). These realities mean that CSCU and its institutions can anticipate rising competition for students.

Figure 9. Projected 2015-2040 Change in Connecticut Population, Selected Age Groups
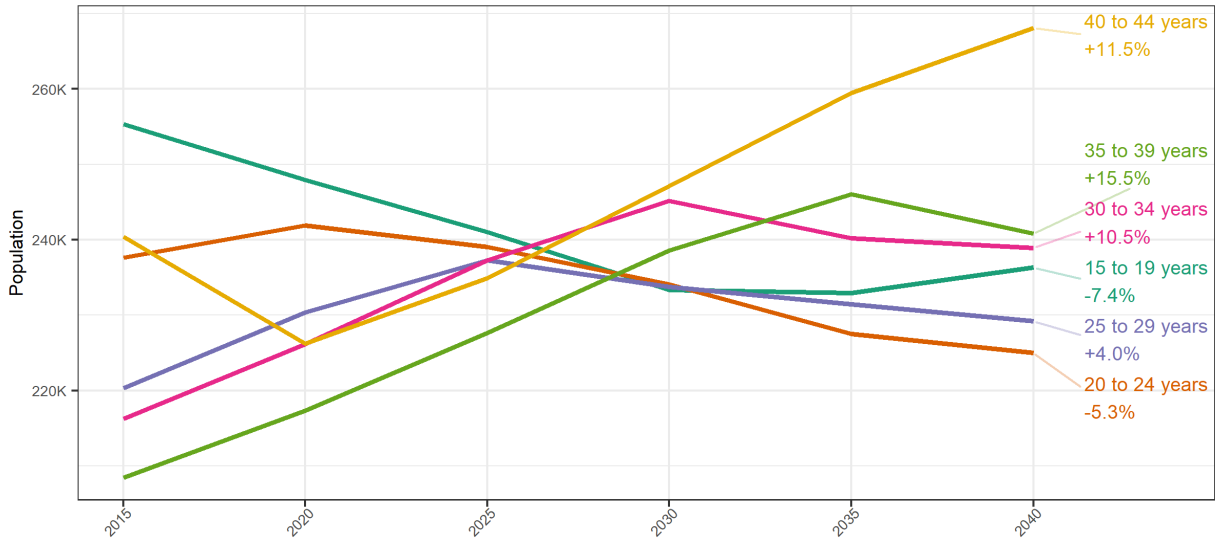
Source: Connecticut State Data Center.

Figure 10. Projected Change in High School Graduates by State, 2019-2034
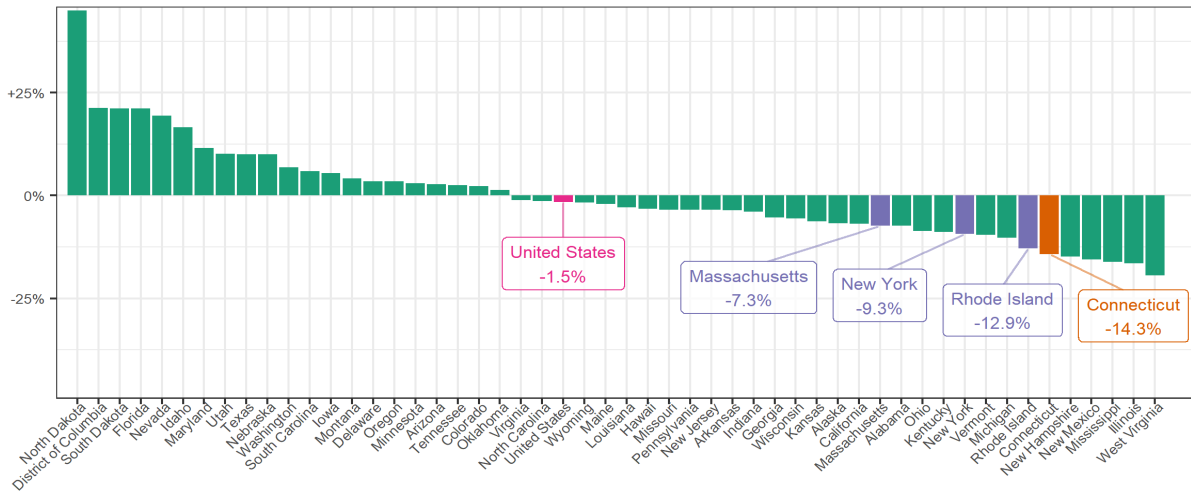
Source: Western Interstate Commission for Higher Education, Knocking at the College Door: Projections of High School Graduates, 2020.
https://knocking.wiche.edu/data/knocking-10th-data/

The effects of this increased competition are apparent when looking at enrollment patterns of first-time Connecticut residents. The patterns reveal how much CSCU institutions have struggled. Between 2012 and 2022, CSCU institutions saw their share of first-time students from Connecticut decrease relative to UConn and its branch campuses and relative to the private nonprofit institutions in the state. The formerly independent two-year institutions that are now part of CT State experienced significant enrollment losses throughout the

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period until a significant upturn in fall 2022. This uptick may be pandemic-related, as students were more likely to remain closer to home. It could also reflect the initiation of free tuition for Connecticut residents attending CT State who meet the eligibility requirements. In the first six years of this period, the CSUs gained market share from the community colleges and proprietary institutions. But CSUs shares dropped after 2018 and by 2022 were below their 2012 level. Meanwhile, UConn's main campus at Storrs and its branch campuses increased their share of first-time Connecticut residents, as did the state's private nonprofit institutions, throughout the period. Only in fall 2022 did UConn's branch campuses see a drop, which, given that the branch campuses compete directly for similar students as the CSUs, is probably related to the pandemic.

Figure 11. Change (in Percentage Points) in Shares of First-Time In-State Students
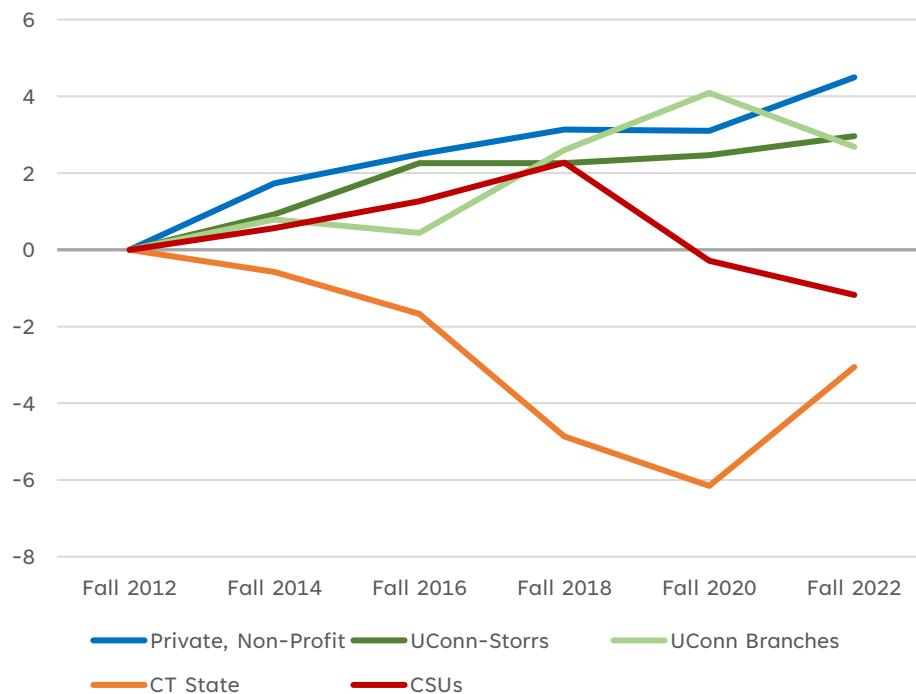
Note: Data are based on the headcount of all Connecticut residents enrolling for the first time at an institution located in Connecticut. The change in proprietary institutions' shares is not shown.
Source: NCES IPEDS.

While these data point to a shifting of preferences among Connecticut's postsecondary options toward UConn, its branch campuses, and private nonprofit institutions, it is worth noting that these shifts are principally due to declines among CSCU enrollments rather than significant gains at the other institutions.[3] UConn's main campus at Storrs has not substantially increased the size of its first-year class, while its branch campuses collectively enrolled only 317 more Connecticut residents in fall 2022 than they did in fall 2012 (Figure 6).[4] That relatively small number obscures how volatile enrollments of in-state students have been among UConn's branch campuses. While by fall 2022 the Waterbury campus lost nearly 13% of the number of first-time in-state students it had enrolled in fall 2012, UConn's Stamford campus more than doubled the number of Connecticut residents it attracted.

Additionally, UConn opened a new Hartford campus location that enrolled approximately 600 Connecticut residents as first-time students, or 36% more than in fall 2012.

Figure 12. First-Time In-State Students, 2012 and 2022, by Sector

Legend:
- Connecticut State Community College
- CSUs Total
- University of Connecticut
- UConn Branches
- Private Not-for-Profit
- Proprietary
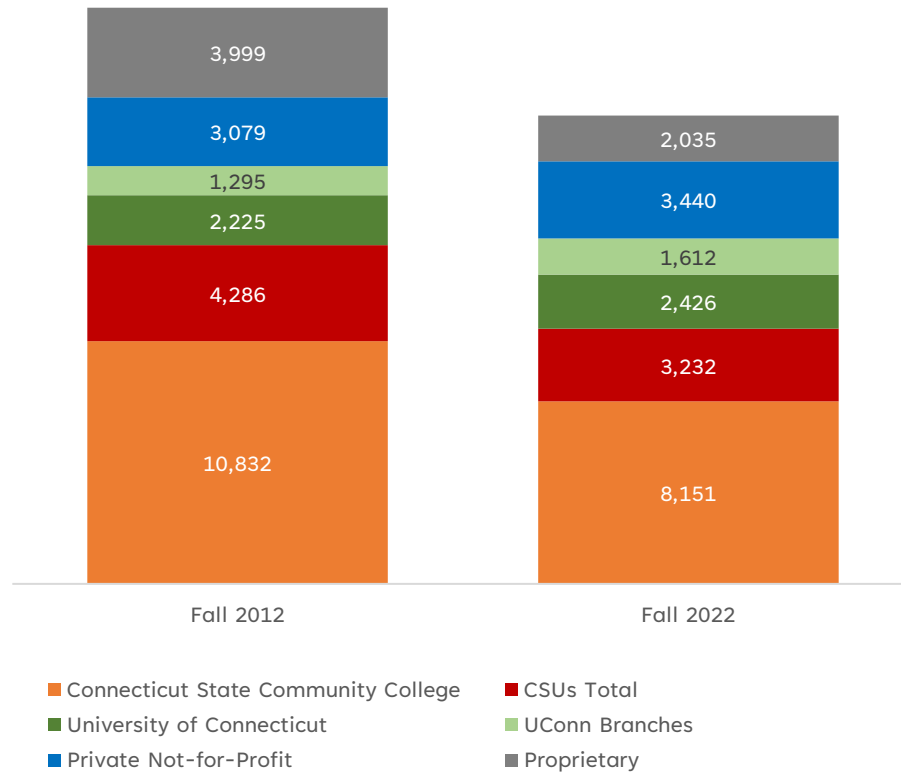
Note: Excludes Charter Oak.
Source: NCES IPEDS.

Contributing to the heightened competition has been a sharp decline in the college-going rate of Connecticut residents generally, especially among those who choose an in-state college. The bad news for CSCU is somewhat tempered when one examines the data on out-of-state enrollments by sector. Historically, Connecticut has been a net exporter of college students. That is, more Connecticut residents opt to attend college elsewhere than out-of-state students choose to enroll in a Connecticut institution. Between FY12 and FY22, net migration (the difference between in-migrants and out-migrants) showed improvement, though it remained a significant loss.

Figure 13. Migration of First-Time Students, State of Connecticut, 2012-2022
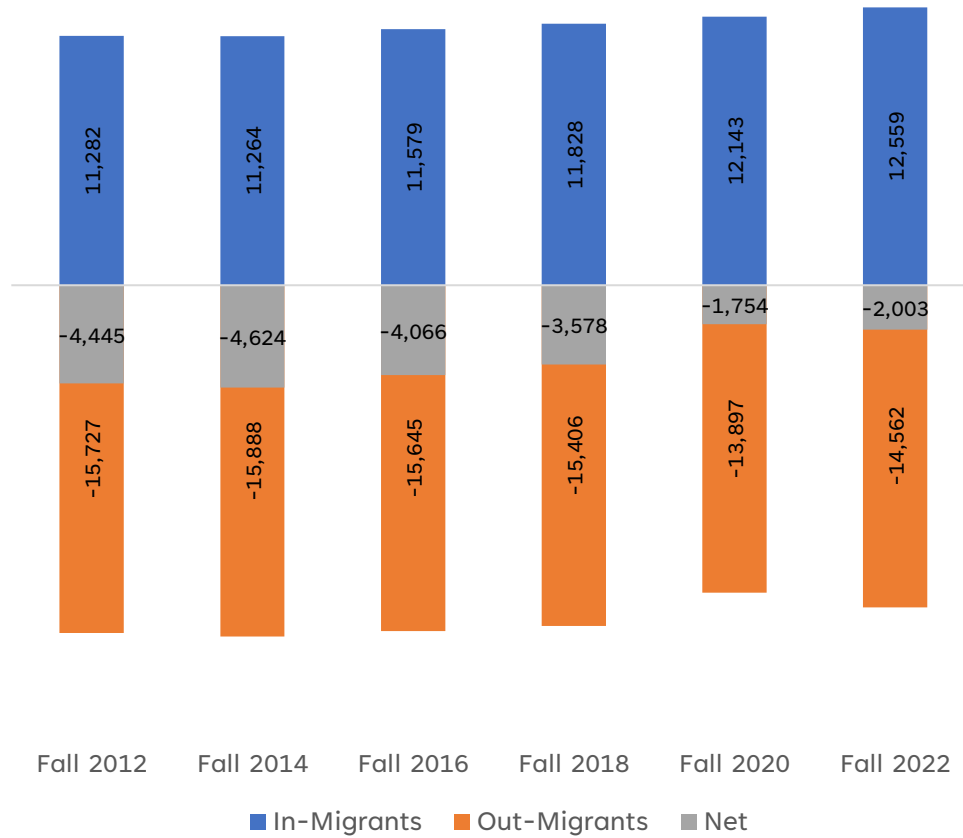
Note: In-migrants are residents of other states who enroll at an institution located in Connecticut; Out-migrants are Connecticut residents who enroll at an institution located in another state; Net represents the difference. A negative number indicates more Connecticut residents are leaving for college than the state is attracting from elsewhere.

Source: NCES IPEDS.

During this period, the number of Connecticut residents enrolling in college for the first time fell dramatically—by nearly 15%. However, the number of outbound Connecticut residents remained relatively flat (Figure 14). As a result, the share of Connecticut residents enrolled in out-of-state institutions climbed (Figure 15[5]). Breaking down that rate by institution type reveals that this loss of Connecticut residents to other states was largely among students enrolling in an out-of-state public research institution (Figure 16). In contrast, students enrolling at public comprehensive institutions—similar to the CSUs—became more likely to stay home for college. This latter point is a bit of a bright spot for the CSUs amidst all the enrollment challenges they have faced. But these patterns still hint at how fraught the market is for the CSUs. If UConn-Storrs is losing Connecticut residents to other states' flagships, it may elect to fill its resulting enrollment gap (if not the out-of-state tuition revenue gap) with Connecticut residents who would otherwise attend CSUs.

Figure 14. Change in First-Time Enrollment of Connecticut Residents, by Location of Institution
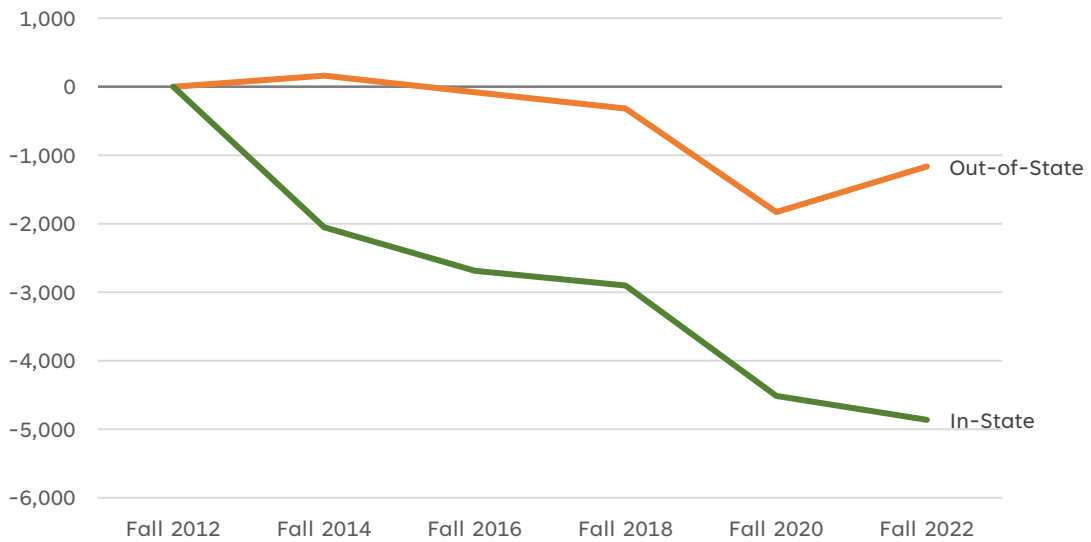
Source: NCES IPEDS.

Figure 15. Percent of College-Going Connecticut Residents Who Enrolled at an Out-of-State Institution as a First-Time Student
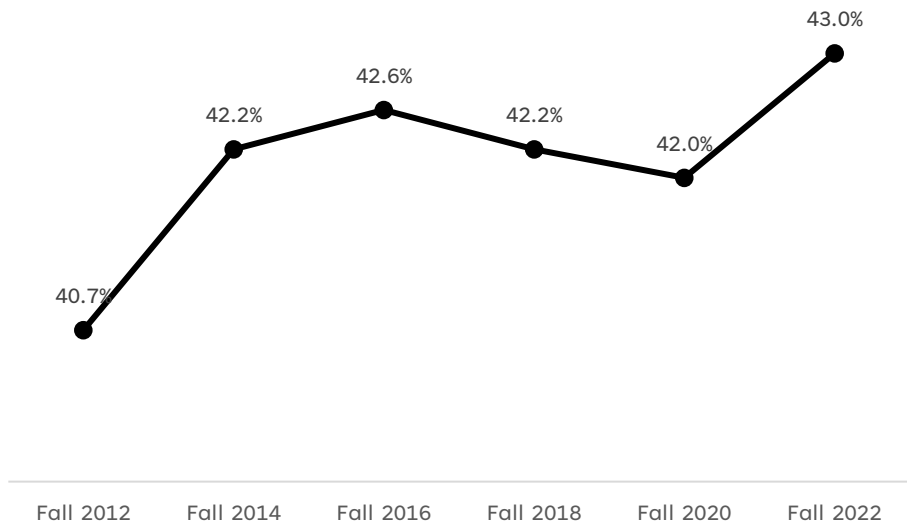
Note: Excludes students who enrolled at private, for-profit institutions.
Source: NCES IPEDS.

Figure 16. Percent of College-Going Connecticut Residents Who Enrolled at an Out-of-State Institution as a First-Time Student, by Sector
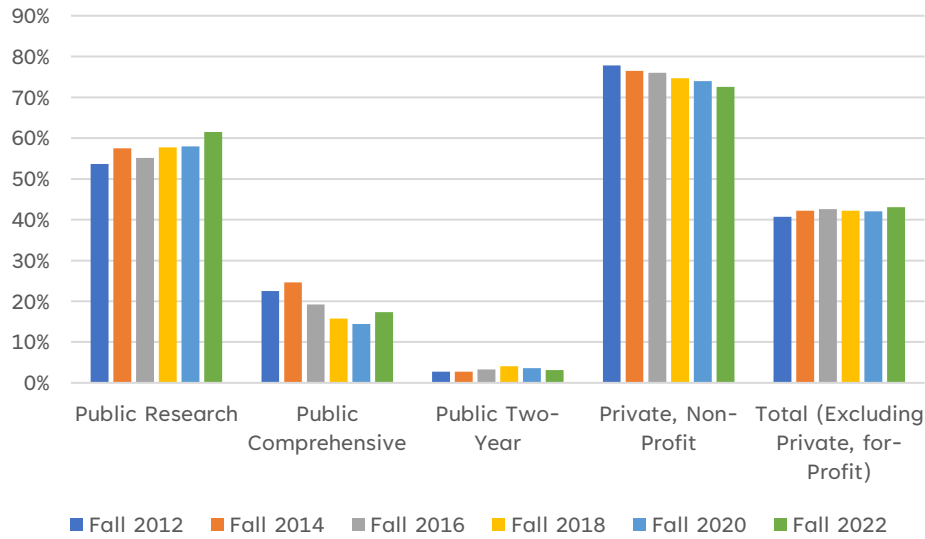
Note: The denominator in this calculation is all Connecticut residents who enrolled at an institution of each type. Charter Oak State College and the UConn branch campuses are included with the CSUs in the Public Comprehensive Group. The corresponding shares represent the number of Connecticut residents who remain in-state attending an institution of the specified type (e.g., in fall 2022, just under 40% of college-going Connecticut residents who attended a public research university in the U.S. enrolled at UConn-Storrs).

Source: NCES IPEDS.

2. **CSCU's response to similar conditions over the past decade, during which time nearly all its institutions experienced substantial enrollment drops, failed to bring its costs into alignment with its revenue.**

Because personnel costs comprise the large majority of costs in higher education, systems must be able to calibrate their employee complement to enrollment levels or bear the financial stress of employing a larger number of people to serve fewer students. For CSCU, between FY14 and FY22, the number of full-time equivalent (FTE) employees per student FTE grew by nearly one-quarter for both instructional and non-instructional staff. This change indicates that the number of FTE staff has not decreased as rapidly as the drop in enrollment (Figure 17-Figure 18). Not reported in these data is that in April 2024 there were 216 employees (headcount) at the System Office.[6]

Figure 17. Student FTE and Employee FTE by Type of Employee at CSCU Institutions, FY14-22
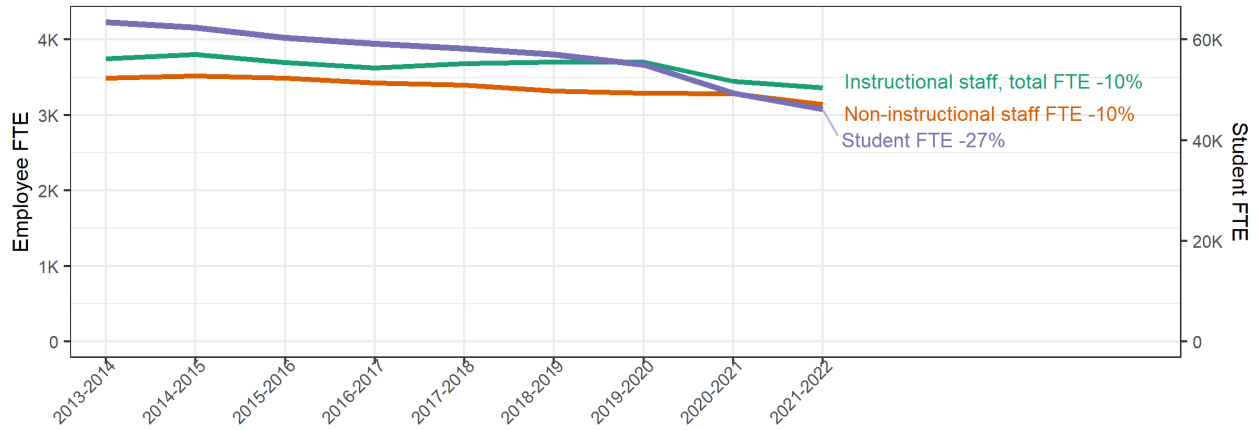
Instructional staff, total FTE -10%
Non-instructional staff FTE -10%
Student FTE -27%

Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release.

Note: The data in this graph do not include CSCU System Office employees.

Figure 18. CSCU Employee FTE per 100 Student FTE Over Time
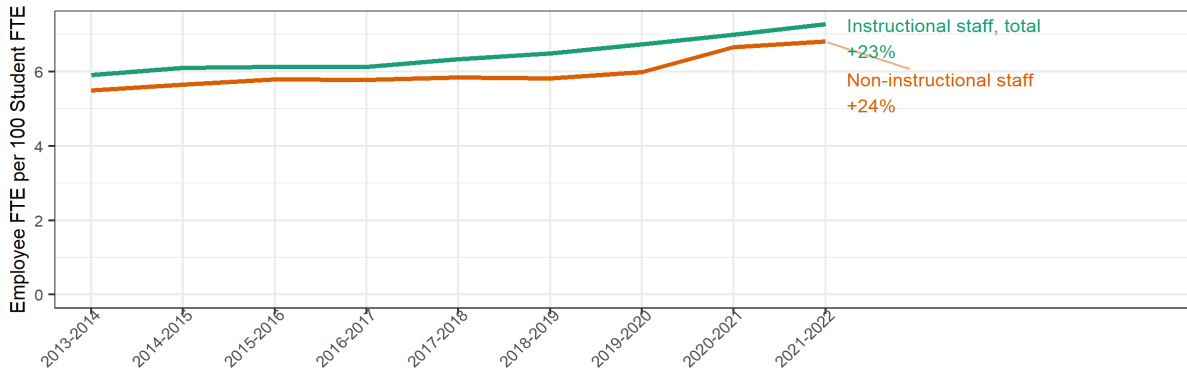
Instructional staff, total +23%
Non-instructional staff +24%

Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Note: The data in this graph do not include CSCU System Office employees.

Alignment between the number of employees and students is difficult to obtain in practice; that reality is evident in numerous other states with similar experiences with enrollment decline. However, conditions present in Connecticut (further explored below) make the challenge particularly acute for CSCU. A review of the CSCU institutions' peer data shows that all the CSCU institutions spend considerably more money per FTE than their peers and that a major contributor to the difference is spending on personnel. CSCU institutions have more instructional staff relative to their enrollment than their peers; some of them offset those higher staffing costs by reducing non-instructional personnel below their peers. The peer analysis indicates that institutions in other systems and states—which are also facing enrollment decline— may have more nimbly calibrated their staffing to current enrollment.

Detailed data about each institution are provided in Appendix B. The primary takeaways from these data are:

a. CSCU's institutions, as well as their peers, had significant enrollment declines over the past decade. The exception is Charter Oak whose peers experienced significant growth over the period while Charter Oak showed only very modest increases.

b. Total expenses per FTE student are considerably higher than those of peer institutions for all the CSCU institutions and the expenses per student increased substantially over the period for which data are available. Only Charter Oak showed some sign of cost stabilization after initial increases.

c. With some exceptions, CSCU institutions spend more than their peers in all functional categories, with expenses on instruction being particularly high. For instruction, these costs ranged from 52% to 82% above the median of each institution's peers in 2021-2022 (graphs comparing each institution with its respective peer group can be found in Appendix B). Besides instruction—the costs of salaries, benefits, classrooms, equipment, software platforms, and other expenses associated with teaching students—costs fall into categories such as research, public service (museums, community programming, etc.), academic support (libraries, student information systems), institutional support (central administration, human resources, procurement, facilities management, etc.), and student services (student affairs). Some of the CSCU institutions spend less than their peers in several of these categories, though the categories in which they underspend their peers tend to be the smallest ones, expense-wise (e.g. Public Service; Auxiliaries).

d. While CSCU institutions have reduced staffing levels in recent years, their employee-per-student FTE has generally climbed, indicating that the number of employees has not been reduced at a rate commensurate with enrollment declines. This pattern has become more obvious in recent years. Institutions have differed in how they adjusted staffing levels in response, in terms related to how quickly they adjusted, which categories of employees were affected, and how closely the responses to staffing matched the enrollment decline. Although staffing adjustments will not follow enrollment changes in a lockstep fashion—it takes some time to respond—all CSCU institutions continue to have more staffing relative to their student enrollments. From the data, it is evident that some institutions have been more successful at managing staffing levels and at prioritizing resources than others. For example, CCSU stands out for its relatively strong management of resources and staffing adjustments. Its steep decline in enrollment started in FY19 and within two years the university had reduced its instructional staffing sharply. By FY22 its non-instructional staffing levels were also down significantly. CCSU continued to reduce both categories of employees through FY23 at a commensurate rate as enrollment continued to decline. Staffing patterns at the other institutions in the system are somewhat less clear, but they have been less responsive to enrollment declines. WCSU continued to add instructional staff through FY20 despite a consistent downturn in enrollments stretching back years. WCSU belatedly started to make adjustments. SCSU also struggled to align its staffing with enrollments; staffing among non-instructors has been uneven and it does not seem to have made serious efforts to match instructional staff to shrinking student demand

until annual enrollment decreases accelerated during the pandemic. At CT State, staffing trends have been generally downward, although at a rate much slower than enrollment declines, until 2020-2021 through 2022-2023, when staffing levels remained stable while enrollment declines accelerated.[7] Moreover, ECSU and WCSU employed more non-instructional staff than instructional staff, while the opposite was true at the other institutions.

e. CSCU's System Office does not report data to IPEDS, unlike many systems across the country. As a result, these data do not provide a full picture of the level of staffing across the system. Further, the System Office centralized various services that were previously being performed by institutions and affected staff members became employees of the System Office. Some of these System Office employees are being reclassified back to CT State. Thus, any reported declines in institutional staffing levels are likely exaggerated by prior attempts to aggregate the system as a whole. These changes have made it difficult for all stakeholders to understand how staffing levels across the entire system have changed over time.

f. The relatively high levels of expenses are largely due to much higher employee salaries and fringe benefits levels. The differences in spending on fringe benefits are particularly notable. In FY22, fringe benefit levels at Connecticut's institutions (Figure 19, which includes UConn but does not include the CSCU System Office because it has not reported these data to IPEDS) were the highest in the nation when measured relative to student FTEs, though these numbers do not reflect that in FY22 the state reimbursed CSCU for more than 78% of the FY22 expense. The gross fringe benefit expenses are likely to be considerably lower in more recent years due to the change in how the state and institutions share the costs of fringe benefits.

g. First-year retention rates for all CSCU institutions are at or near peer averages. The exception is Charter Oak whose retention rates are lower than their peers.

h. Graduation rates among the CSU institutions are also generally higher than their peers with the exception of WCSU, which lags its group. Data also indicate that at CT State, SCSU, and WCSU a disproportionate share of students transfer after initially enrolling.[8] CT State's graduation rate among students who start as full-time enrollees is much lower than its peers, but that accounts for a relatively small share of the total students. Looking at student outcomes eight years after beginning, CT State performs better, though it still falls short of the group average. CT State graduates students at a much lower rate, but including students who transfer on to another institution before having earned a degree brings CT State's outcomes measures closer to its peers.

i. Because of high expenses per FTE student, CSCU institutions produce far fewer degrees per $100,000 of revenue than their peers. Charter Oak also produces fewer than its peers but is relatively more efficient than other CSCU institutions according to this measure, largely due to its lower cost structure. Expenses for instruction, student services, and academic support at Charter Oak are substantially lower than for other CSCU institutions and its distinct business model means that is not penalized even when it offers small classes.

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j. The CSCU institutions are generally similar to their peers when productivity is defined by total degree and certificate production relative to their enrollment (awards per 100 FTEs), a measure that recognizes the enrollment of part-time students. The exception is Charter Oak, which does much better than its peers on this measure.

Figure 19. Fringe Benefits Expenses per Student FTE, U.S. Public Institutions, FY22
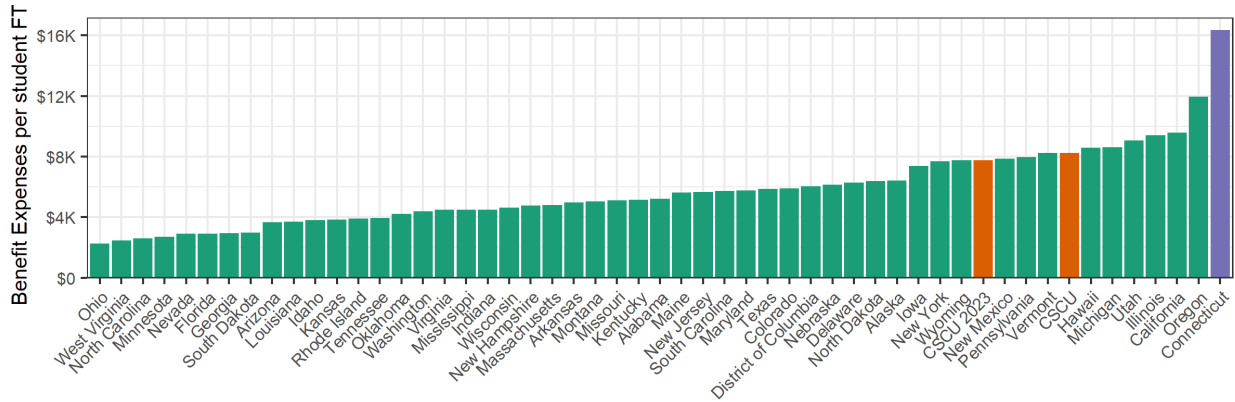
Sources: NCES IPEDS finance survey f2122_f1a, f2122_f2, f2122_f3, and 12-Month Enrollment Survey, files efia2022, provisional release files. FY23 data for CSCU system provided by system office. Note: Includes all 2-year and above public institutions plus system offices, excluding US military service academies. Connecticut includes the Stratford School for Aviation Maintenance Technicians as well as CSCU/UCONN. The CSCU system office does not report expenses to IPEDS.

Note: The expense data in this figure are for total expenses for fringe benefits, excluding the System Office (as the figure notes mention). In FY23, the Office of the State Comptroller reimbursed CSCU $348 million out of a total expense of $444 million (including the System Office) for fringe benefits. In FY22, CSCU recovered $325 million of its fringe benefit expenses from the state resulting in a total expense of $88.5 million for FY22.

It is important to point out, however, that planning for human resource requirements has never been as straightforward as it might seem. As much as the decline in student-faculty ratios is driven by a decade or more of enrollment declines, a look back a bit farther in history would show that CSCU's institutions were responding to an equally rapid increase in enrollment from FY04 through FY11 (Figure 20). As public access institutions, CSCU's institutions are expected to grow as demand increases, necessitating hiring to meet the additional needs. The pivot from rapidly escalating growth to plummeting enrollment is a significant economic shock, one that hit the CT State institutions especially hard. Even if a reduction in the number of births two decades previously indicated that enrollments might fall, the long-term health of the economy since the Great Recession and the fallout from the pandemic along with lost market share have had a large impact on enrollments in CSCU institutions, especially CT State and among adult students. The most informed enrollment projection experts did not foresee the drop in college-going participation rates of recent high school graduates.

Figure 20. FTE Enrollment, FY04-22
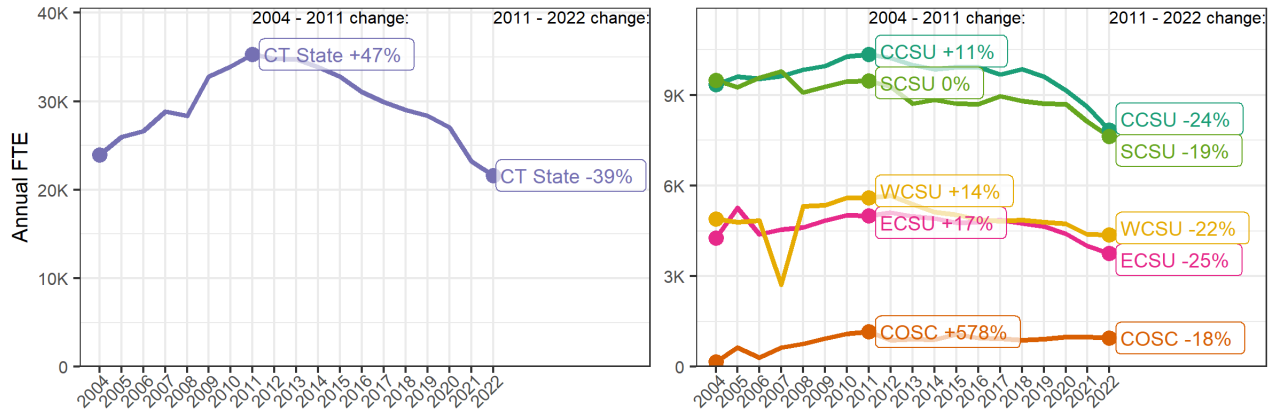
Source: NCES IPEDS 12-Month Enrollment Survey, files efiaYYYY. Notes: The two graphs are on separate y-axis scales. Percentage changes represent change from previous dot.

3. **There is only limited evidence that CSCU is undertaking successful system-level strategic approaches to addressing its current fiscal dilemmas or its future fiscal fragility.**

    CSCU's struggles to adapt to the challenges it is facing are evident in its hesitancy to take the bold but necessary steps to adjust staffing levels to the new enrollment realities, in its difficulties in righting the ship at WCSU, in widespread complaints about communications gaps with and among the constituent institutions, and in a number of poorly implemented (often reasonable) initiatives intended to increase operational efficiencies across the system.

Misalignment of Personnel

With respect to the need to adjust staffing levels, CSCU is understandably concerned about the effect such a step would inevitably have on morale, relationships with its unions, and interactions with politicians representing districts across the state whose constituents may be affected. Additionally, there are concerns about legal and other costs that could accompany any significant number of layoffs. Such an action could also further compromise an already fragile enrollment pipeline, sending a signal to potential students that the system is not adequately resourced to serve them well.

Yet, as presented to NCHEMS, it does not seem to us that the choice is between "mass layoffs" and little or no action at all. The failure to make some meaningful progress to bring expenses in line with revenues, given recent and anticipated enrollment declines and projected future conditions, is simply unsustainable.

There are numerous steps the institutions and the System Office could take to align employment levels with enrollment realities. All adjustments would take some time, but failure to initiate these adjustments serves to postpone the need to address a problem that is likely to get larger over time. Institutions choose what amount to pay new employees within their respective salary ranges, not automatically fill open positions when incumbents retire, resign, or move on for other reasons, or not renew current employees. It is true that such position eliminations are not strategic in nature and some positions must be refilled in

order to meet accreditation, programmatic, and service needs. But net gains can be made in this manner. In fact, CSCU and its institutions have reduced some staffing this way. Refilling some positions that cannot be left empty for strategic or caseload reasons can also be accomplished by reassigning employees within the institution. At present, however, CT State's ability to make these reassignments is limited by an agreement that CSCU negotiated in 2021 with 12 independent institutions, rather than a single institution as it has existed since July 1, 2023.

As an approach of last resort, employees can be laid off or non-renewed. While such actions will be unpopular, the collective bargaining agreements that cover most employees make provision for such eventualities. The processes covered by these agreements can take up to a year to play out depending on the length of service of the employee, and the grievance process can extend this time. The timeframe and process for terminating employees varies according to the specific employee categories involved and their respective collective bargaining agreements. Notably, non-tenured faculty and employees who have not achieved continuing appointment can either be renewed or non-renewed. Laying off classified staff will typically be based on seniority. Employees categorized under the SUOAF agreements are subject to agreements on an institution-by-institution basis. Management Confidential employees, who are unclassified and serve "at will," do not have collective bargaining rights and can be terminated at any time without recourse, although they too receive notice periods up to one year before their termination goes into effect. Administrative employees have a two-step grievance process that makes the institutional president the ultimate decisionmaker.

Having said this, the experience with layoffs within CSCU has made institutional leaders, who take a pragmatic view of their options, very leery of employing this tool. Once notice is given, it is reasonable to worry about the level of productivity that the affected employee will have. Many of these employees will still contribute to their institution's success during their notice period in an effort to secure alternative system and state of Connecticut employment. Yet leaders also expressed concern that noticed employees may cease to be constructive members of the campus community while they remain employed during their notice period prior to separation. Depending on the role they play on campus, destructive behavior from disgruntled soon-to-be-terminated employees may have a direct effect on institutional functioning and on students and their success. Although there are required steps outlined in applicable bargaining unit contracts to terminate or non-renew employees, campus leaders expressed concerns over the length of time and the potential for legal action as they navigate the process. Leaders expressed concern and cited recent history with terminations that have led to adverse outcomes for the institution and significant payouts to separated employees. These concerns contribute directly to some managers being reluctant to use layoffs or non-renewal as tools in aligning employee numbers with student enrollments.

However, a better alignment of staffing capacity with the needs (both in terms of numbers and of distribution among campuses) is accomplished, it will require the development and implementation of institutional staffing plans and internal controls on hiring. It will also require the creation of conditions that give the institutions more degrees of freedom in the

assignment of personnel to functions and the development of employee work rules. Given the enrollment issues facing all of the CSCU institutions over the past dozen years, the System Office (and Board) should have required the development of such plans and held campus presidents accountable for their implementation.

The situation at CT State is a special case given the evolution to single accreditation that has occurred over the last five years. Many of the issues facing CT State have their roots in the decision made to integrate the 12 independent institutions and its early, troubled implementation. The Board of Regents voted in April 2017 to consolidate the community colleges into a single accredited entity and to consolidate the administrative back-office functions into shared services. Each of these actions was met with significant opposition across the System and even after single accreditation was secured in July 2023, opposition continues to exist. Notwithstanding this challenging history, the System's current leadership team has had and continues to bear responsibility for resolving remaining issues, ensuring that CT State is financially viable, and meeting students' and the state's needs. Further, it is probably unreasonable to seek staffing reductions that bring the number of students per employee to the same level as that of CT State's member institutions collectively in 2012, a point at which enrollments were highest and the institutions would have appeared to operate at much higher levels of efficiency as a consequence (See Figure 18 and staffing level figures in Appendix B). Particularly at community colleges, where enrollments tend to inversely track economic conditions, cutting too deeply risks leaving them in a poor position to respond to enrollment increases that will likely arise whenever the economy sours. Even so, bringing staffing levels to better match enrollment levels is a necessary part of efforts to protect affordability for students and state taxpayers, as well as ensure financial viability for the institutions.

In addition to the misalignment in staffing caused by enrollment declines outpacing staffing declines, CT State's current leadership inherited a set of problems at least partially created by the prior administration's hiring a large number of employees using one-time funding and relying on overly optimistic enrollment projections to provide the revenue necessary to sustain this increased level of employment. CT State is chipping away at reducing this group of staff as they voluntarily move on, although the pace of progress is frustratingly slow. A staffing plan that realistically brings employment levels a.) into alignment with enrollment realities, b.) allows leadership to deal with the necessary geographic placement of personnel, and c.) indicates the time period over which such adjustments can be expected would help put staffing decisions on a stronger, more justifiable foundation and will be an important next step in the launching of this new institution.

In a previous study conducted for CSCU with a narrow focus on issues at WCSU, NCHEMS identified serious issues that resulted in that institution's reserves being completely depleted over a number of years. These issues included: weak system oversight that contributed to a lack of accountability, a failure to use data to drive decision-making, and institutional priorities that were misaligned with the needs of its surrounding region and the students and prospective students it serves. In the immediate aftermath of our reports, WCSU initially committed to implementing major changes and was able to reverse the fiscal losses. More recently, however, it seems there has been a return to problematic practices such as

inattention to strategy, not making hard decisions about staffing levels, reversing decisions regarding cabinet-level organization, and failure to fully embrace a mission refocused on its local region. Consequently, WCSU once again has become dependent on infusions of money from the system to cover its losses. Additionally, in March 2024, WCSU received a Notice of Concern from its accreditor, the New England Commission on Higher Education (NECHE). To date, the infusions from the system have come with no significant strings attached, provisions that could help compel needed changes at WCSU.

Efforts to Consolidate Services

In efforts to leverage the opportunities for achieving operational efficiencies through collaborative action CSCU has sought to take advantage of its authority and scale through initiatives that are often well conceived but poorly executed. As NCHEMS has found in other states, ensuring the successful implementation of an initiative or project that requires new ways of doing business or threatens entrenched interests demands high-level project and change management skills that are uncommon in higher education settings.

Stakeholders brought up several examples of initiatives that held promise but failed to achieve their objectives. These include CSCU's attempt to secure a system-wide bookstore contract that held the promise of saving students money while generating revenues for the system. However, this initiative failed to achieve its goals due to communication failures, which resulted in a contract that stakeholders claimed did not appropriately recognize and accommodate different institutional requirements for their bookstore operations. These communication failures resulted in campus leaders and faculty being confused as to why the negotiated agreement with its potential for substantial savings to students was selected over other options, which compromised the positive reception of the project from the start.

A second example is the aggregation of CT State's and Charter Oak's human resources personnel in the central office, which the institutions deplore as having led to excessively heavy bureaucracy, a failure to identify relevant KPIs to monitor performance and to track and report on them. Campus-level stakeholders were especially likely to express discontent with how the centralization of HR functions left campuses without sufficient local expertise needed to provide necessary services to employees and students. The negative perception about service levels is further exacerbated by the System Office's practice of taking funds off the top of the institutions' appropriations to pay for the services, along with a lack of transparency about how much money is needed for what level of performance. In response to this feedback, the Human Resources function is in the process of being partially re-decentralized.

Not all of these challenges the System faces are wholly under its control, and there has been some progress in efforts to leverage the System to improve the student experience. In an effort to promote seamless student experiences in an era when students have more choices for how they construct their schedules than ever, the System Office is attempting to develop a common general education curriculum, a step being taken by systems elsewhere in the country. At its June 27, 2024, meeting, CSCU's board approved a new general education policy designed to address this problem. Successful implementation of this policy would go a long way toward ensuring that students' credits follow them wherever they go within the

CSCU System. The need for such a common curriculum is real: during our campus interviews students and staff routinely described instances of credits not transferring easily among CSCU institutions, with reports that CT State students were routinely electing to enroll at alternatives rather than attend a CSU. Most states that have undertaken this task have encountered significant resistance from institutions and their faculty, and CSCU is no different. The successful implementation of the recently adopted policy to streamline student pathways will ultimately require a collaborative process backed up with committed support from leadership, funding, and an openness to change that is often rare in higher education, and one that may be particularly fraught for CSCU as it continues to manage the fallout from the CT State consolidation.

There have also been some considerable successes to highlight. Perhaps lost in all the hard feelings surrounding the consolidation of the community colleges, it is a real achievement that CT State students are now able to consult a single course catalogue that affords them unprecedented flexibility in enrolling in the courses they need and building a schedule that fits with their busy lives, especially among those with transportation challenges. But more work needs to be done. This flexibility has allowed students to take many classes online, leading to challenges for meeting minimum section size requirements for in-person classes; these circumstances have become most pronounced at CT State's smaller campuses. There are also issues surrounding the geographic placement of personnel that will allow in-person delivery of both instruction and student services as needed. These are issues that may also be entangled with limits on CT State's ability under the current collective bargaining agreement to require employees to teach or work at other campuses of the newly unified institution, in order to match demand for courses or services with supply.

Structural Issues

The organizational structure contributes to creating and perpetuating these problems. First, CT State has been permitted to become a "system-within-a-system" with roles and functions that are partially duplicated at the CSCU System Office level, instead of becoming a single institution with multiple campuses as originally intended. The vision for the new CT State called for a single president with campus-based lower-level administrators responsible for campus-level management functions. This vision has not been fully implemented and the projected savings from management consolidations have not been fully realized as a consequence.[9] The issue of the roles (and titles) of individuals who provide administrative leadership at the campus level remains unresolved. Settling on a management structure that is appropriate for the new institution and is also cost-effective will be a critical element of the staffing plan mentioned earlier.

Second, there is a lack of clarity about System versus campus roles and the responsibilities and authorities that attach to each. CSCU's System Office has grown in terms of the number of positions and total salaries. In many instances its organization has replicated structures more appropriate to institutions, even though the System Office's role in carrying out functions is substantially different from institutions. This leaves some system-level functions unattended and can hinder implementation of campus-level functions because of uncertainty about decision authority.

For example, it is natural that each institution maintains a provost and a robust academic affairs division that carries out various key functions. These include conducting faculty performance reviews, anticipating and developing new programs, making budget and other prioritization decisions about existing programs, creating course schedules and delivery methodologies, and collaborating with student affairs to ensure the needs of individual students and student groups are met, among other things. By contrast, a system office has no faculty or students and directly offers no programs. The academic affairs function at a system office must support the work of the provosts of the constituent campuses, assess the need for new programs that may not be initiated at the campus level, monitor the continued need for existing programs, and recommend closure in instances where campuses will resist, set related policies, and review and approve program proposals from the campuses. The requirements to carry out these duties do not call for the same personnel and capacity as the corresponding institutional role. Until recently, the CSCU System Office has had a Provost who was expected to carry similar qualifications as an institutional provost, as well as earn a higher salary than their provost counterparts on campus. The System has decided not to fill the vacant Provost position and to rethink the academic leadership function at the system level. This is a step in the right direction. Notwithstanding some exceptions, this habit of recreating an institutional structure within the system office without sufficient attention to the specification of roles inhibits the development of differentiated functions in both settings that make them more complementary and capable of meeting state and institutional needs. More importantly, this has left some critical system functions unattended.

Strategic Use of Resources/Reserves

There is widespread perception among institutional leaders that the increased state appropriations that federal stimulus funding has made possible have not been felt at the institutional level in ways that would help attract more students, create more student success, refine curricula and program offerings to be more relevant, or improve sustainability. Instead, there is a sense that administrative bloat, increasing healthcare costs, the effort to create Shared Services and constraints concerning the work rules in the CBA (negotiated by CSCU for CT State when it was 12 separate institutions) in terms of being able to reassign people to locations where they might be a higher demand causing them to have absorbed this additional funding. This, together with communications breakdowns, the unwinding of some of the Shared Services efforts, and other suspended initiatives, has created a climate of distrust throughout the system.

These perceptions are not wholly without merit. Using a recent survey developed in partnership with the National Association of Higher Education Systems (NASH), NCHEMS surveyed NASH members to find out how systems organized their functions as well as their expenses on system and corresponding institutional functions. This first-of-its-kind survey yielded preliminary results indicating that CSCU appears to be among the more expensive systems for which we have received data to date (Figure 21).[10]

Figure 21. System Office Expenses (Preliminary Results)

	CSCU	Average of Responding Systems
System Office Expenses per System Office FTE employee	$307,928	$204,117
System Office Expenses per Total Student FTEs	$1,389	$941

Note: Expenses include salaries, benefits, overhead, and all other expenses associated with functions carried out at the System Office and, where appropriate, corresponding institutional offices.
Source: NASH/NCHEMS Survey.

However, CSCU has chosen to set aside much of the funding it has received in stimulus money for additions to its reserves. As a result, CSCU's total reserves have increased in the past couple of years (Figure 22). Setting aside money for future uncertainty is appropriate and the BOR has had a reserve policy for many years that outlines the desired amount of money that should be held, for what purpose, and how to access what is available. Yet the amount CSCU has put into savings is being called into question, as it appeals for more state money to address operational budgetary gaps. Given how evident future challenges are, CSCU and the BOR are making an intentional decision to set money aside for the inevitable rainy day rather than looking to invest in changes—especially difficult changes—that have promise to position the system for that future as a more relevant, essential, and effective steward of state resources and tuition funds.

Figure 22. Unrestricted Net Position, FY13-23
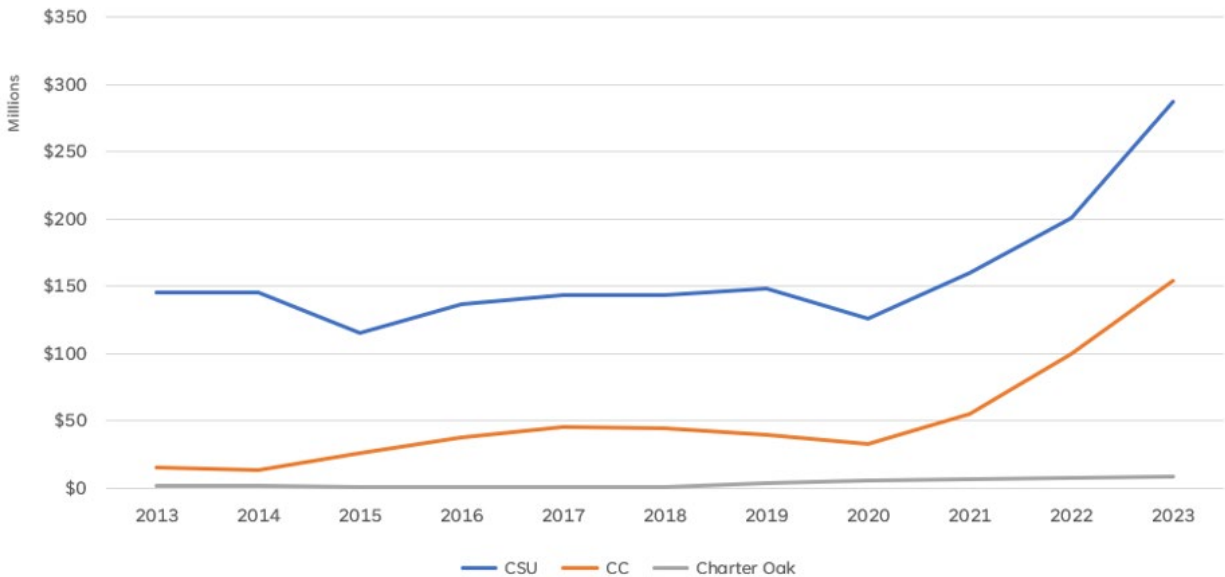
Note: Excludes pension and OPEB; unrestricted funds are not subject to externally imposed restrictions, although CSCU policy permits internal designations to be placed by the BOR or management and constitutes an allocation of current unrestricted funds.
Source: CSCU audited financial statements.

Similarly, the accuracy of the budget estimation process in place at the System Office is being questioned, after CT State indicated that it expects to end FY24 with a surplus of over $72 million, of which roughly $12.9 million represents funds that the System Office unexpectedly returned to CT State. (Worth noting is that CT State controls only 89% of its budget; the rest comprises funds the System Office uses for Shared Services and system services.[11]) These funds will be used to help balance CT State's FY26 and FY27 budgets, and it is incumbent on CSCU and CT State to ensure that structural changes are implemented to ensure CT State is on firmer financial footing.

Moreover, CSCU has struggled to effectively use some of the capital funding it has received. Of the $393 million in funding to address deferred maintenance that has been statutorily authorized since FY15, and of $179 million that was allocated by the bond commission, CSCU has $77 million remaining as of mid-October 2024. Of that amount, CSCU reports that $38 million is budgeted for projects that are soon to be initiated. Additionally, in 2023, the state passed legislation enabling CSCU to sell property and retain the proceeds to further fund deferred maintenance needs.

Board Capacity

Historically, CSCU's volunteer board has proven to be ill-equipped to provide the guidance, oversight, and accountability necessary for a system that must adapt to difficult and unfamiliar conditions by making controversial and unpopular decisions. These challenges require a systemic approach rather than a campus-by-campus one, highlighting the board's limitations navigating such complex adjustments. Given the new realities facing higher education, the demands on governing boards across the nation are intensifying. Connecticut's process for selecting board members, orienting them, training them, and evaluating board performance and functioning needs to yield a cohesive and highly effective board that guides and supports System leadership, and holds them accountable. While the consolidation of the community colleges has consumed the board's attention over many years, the board has nevertheless struggled to navigate several of its responsibilities, among them oversight of the financial conditions of the individual universities and establishing systemwide priorities that drive the System Office's agenda. For example, the financial strength of WCSU deteriorated dramatically, CT State hired large numbers of staff on soft money, the CSCU 2030 plan was not well received, and goals for the system and its individual institutions remain unclear.

Recently, there have been changes to the board's composition and leadership. Their exercise of oversight of the system will need to be more muscular and provide greater clarity and definition to their roles in systemwide governance, as well as the System Office's role in executing system-level leadership, and institutional responsibilities for day-to-day operations. Early indications are that the Board is now taking a more focused approach to the issues facing the system and implementing accountability. As evidence of this and as previously noted, the Board has charged the institutions and the System Office with developing five-year financial sustainability plans and it has also charged two working groups, which include external expertise, to make recommendations for change. One will address how to best leverage Charter Oak and the other will examine how to align CSCU's resources to more capably meet the health care needs of the state.

4. **CSCU's difficult circumstances are also the product of contributing factors that can undercut the kind of bold decision-making that is required.**

While CSCU may have been slow to right its financial circumstances, given the prolonged nature of its enrollment decline, there are real impediments to its ability to respond quickly. Some of the difficulties faced by CSCU in adjusting to demographic and financial conditions are not wholly under its control or are not adequately supported or incentivized by the state. The challenges include unfavorable demographic trends, constraints within collective bargaining agreements that limit management flexibility, and an outdated state funding model disconnected from Connecticut's goals. In particular, while Connecticut is similar to most states in how it funds higher education, this funding model is proving inadequate for meeting states' needs in a changing higher education landscape, as it fails to respond effectively to the pressures created by demographic shifts or incentivize performance and innovation. Compounding these issues is the lack of an independent entity to coordinate postsecondary education policy across the state.

Taking these in turn, the first among these challenging externally imposed conditions are the demographic shifts already described. But the effects of unfavorable demographic conditions are compounded by growing questions among prospective students and their families about the value of higher education. Although underlying downward trends in Connecticut and elsewhere predated the pandemic, its effects are still present. As the nation's institutions emerge from the pandemic to find that while enrollments are slowly coming back, many things that changed suddenly, such as online learning, may be permanent, forcing adjustments in how instruction and student services are delivered and staffed, as well as ensuring that programs are relevant to student and workforce demand.

Additionally, concerns about the return on investment in higher education are partly fueled by rising prices in the sector, and by an economy that has maintained persistently low unemployment rates since the end of the Great Recession. Others are injecting skepticism into the value of a college degree, with several states—including Alaska, Connecticut, Maryland, and Utah, among others—reducing the educational requirements of many state jobs. Finally, the way colleges have increasingly become places where our most extreme viewpoints clash ostentatiously, and where our current culture wars are being waged, is not helping higher education attract students. The ever more strident rhetoric causes families to question how a college education will impact a student's values, as well as raising concerns about campus safety. Connecticut and its institutions are not unique in grappling with a downturn in college-going rates between 2012 and 2022 of 5.6% nationally and 6.1% in Connecticut (Figure 23).

Moreover, as demographic changes wash over higher education, it is likely that the students who enroll will have different needs that require different services. These students include adults who have not set foot in a classroom in many years, first-generation students who are unfamiliar with navigating a complex college or university, students with fewer financial resources, or have other distinctive characteristics. The pandemic also dramatically accelerated the acceptance of online learning in higher education; as educational delivery formats change, so too will the supports that drive student success need to change. There has also been a realization that today's students are more likely to have mental health

needs that were once less common. Some of the services students will need may come with higher price tags if colleges and universities are to help them effectively reach their educational goals. These evolving realities exemplify why it is vital to prioritize and reallocate resources with a culture of continually evaluating how well student needs are being met, investing in what is working, and disinvesting from what isn't.

Figure 23. Change in Percent of High School Graduates Going Directly to College, 2012 vs 2022
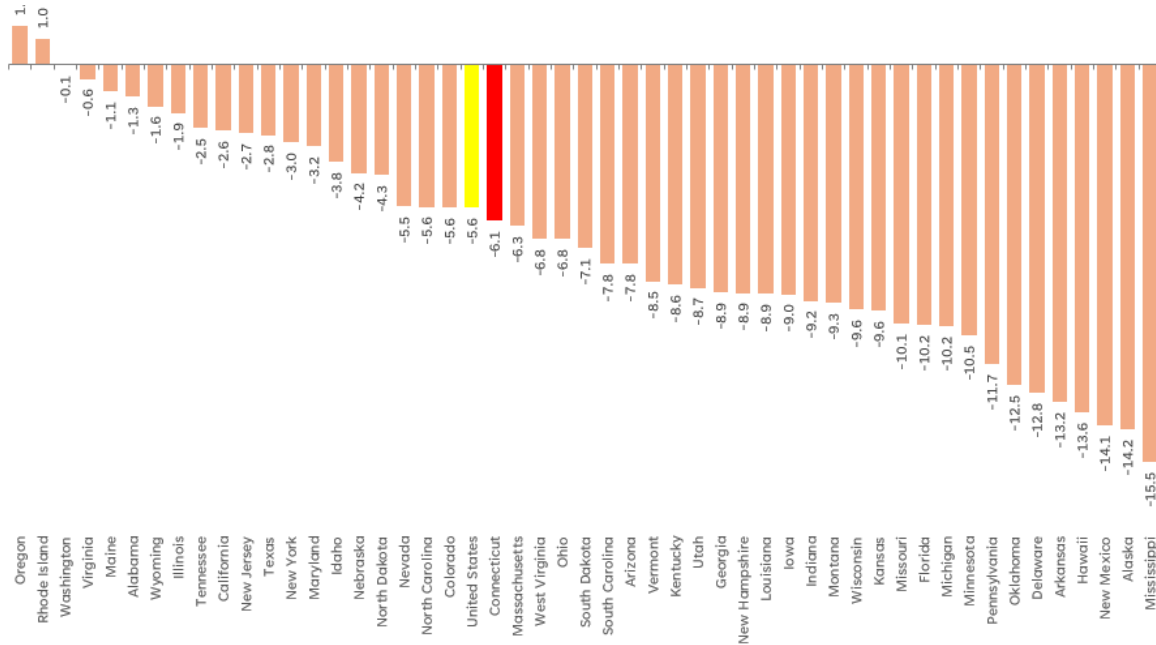
Second are provisions in the collective bargaining agreements that make it difficult to reduce its employee complement in a timely fashion. These limits are further complicated by grievance processes specific to each bargaining unit that need to be followed before any strategic reductions CSCU might make can bear fruit. CSCU negotiates the multi-year agreements in question with the respective collective bargaining units. Although there is nothing that strictly prohibits CSCU and its bargaining units from renegotiating new terms or work rules at any time prior to expiration of a contract, as a practical matter it is difficult for CSCU to make changes that would give it greater flexibility outside of the windows when contract renegotiation occurs. Any changes will be limited to what concessions CSCU can obtain from the unions during a very contentious process.

Furthermore, CSCU does not have any direct control over approximately 20% of full-time employees that are in classified bargaining units at CSCU; these employees are part of a state-wide bargaining unit that negotiates with the OPM Office of Labor Relations. Any agreements that the state makes with these employees is likely to set the conditions for other units' agreement, at least in terms of establishing the "floor" for what other units are willing to accept, though CSCU has nevertheless negotiated more generous terms in the past. The CBA under which CT State currently operates is particularly confining in that it is written

as if CT State were 12 separate institutions rather than the single entity it has become. This means that staffing decisions continue to be made on a campus-by-campus basis, rather than fitted the needs of a CT State as a single institution that should have the ability to match local needs (of students and employers) with capacity (instructors and student services).

The collective bargaining agreements and the way they are negotiated also impact wage and benefit increases. Wage increases and most fringe benefits are negotiated at the state level with a coalition of public sector employee unions (SEBAC, or the State Employee Bargaining Agent Coalition), yielding a framework for compensation and benefits, not by CSCU.[12] While CSCU exercises discretion over job classifications (for employees who are not part of classified bargaining units), salary ranges, starting salaries, step increases, and promotions, the state's role in determining annual increases in wages and benefits limits CSCU's ability to manage its personnel costs and puts the system in the position of living with decisions made by others. In FY24, the state changed the way it provided funds to cover the costs of retirement plans and health care by taking on those costs for retirees while making institutions responsible for their contributions to retirement and health care for current employees. These changes applied to UConn and CSCU and were calculated to be budget-neutral at implementation.

The state has historically provided funding to cover the relative share of costs borne by the state. Institutions are obligated to cover their share of additional costs (of employees in positions not designated as being supported with general funds) largely through increased tuition revenue (or by finding efficiencies or implementing cost containment strategies), which can only come from the same or fewer students paying higher net tuition prices or more students paying the same net prices. CSCU's decision to reduce non-resident tuition rates may also increase the burden on resident students of these (and other) costs insofar as that decision has reduced net tuition revenue for the institutions. Whether it does or not depends on the degree to which non-resident students' decisions to enroll at CSCU are due to these lower costs and the degree to which those that do fill existing space and contribute revenue (of any amount) without creating marginal costs associated with their enrollment. The net effects of this pricing decision cannot be determined without a focused study.

The process used by the State of Connecticut to appropriate money to CSCU, and how the BOR subsequently allocates those funds to individual institutions, is a third challenge. The approach taken by the state provides no incentives or signals to CSCU about state goals that should be pursued using funds appropriated to CSCU and allocated to the institutions. Instead, most state appropriations are provided on a "Base Plus" basis—institutions (including UConn) are appropriated the amount of money they received last year plus (or minus, in recessionary periods) some amount that is largely the product of negotiations between the legislature, the governor's office, and the System Office. Those negotiations for the "Plus" component typically incorporate information about increases in costs that arise from obligations in the collective bargaining agreements, health care expenses, and other known or projected costs.

However, the "Base" part of the funding level is linked to some historical funding level, rather than on an empirical basis for assessing the current needs of the various institutions.

Neither the "Base" nor the "Plus" components are linked by evidence to the demonstrable funding needs of the system or its individual institutions, shifts in demand for services, expectations in cost containment, or more importantly, to state goals. What's more, while Base Plus funding provides a generally predictable amount of funding by institution, it is limited in its ability to incent institutions towards performance improvements, including improved student outcomes or operational efficiency.

This assertion is not meant to suggest that CSCU's institutions are or are not funded at the right levels. This only means that this approach, which is common across the country, is no longer an effective way to determine institutional funding levels due to changes in the environment that exacerbate the impact of funding inequities among institutions that have crept into such models over time. The fact that Connecticut has made more targeted investments in recent years, such as to encourage the adoption of outcome-based funding and to support CT State (e.g., $28.5 million in FY25 for debt-free community college referred to as the MaryAnn Handley Award, also known as the PACT Program, and $6.5 million for Guided Pathways), does not overcome defects in a funding model that provides the bulk of the dollars on the flawed assumption that institutions' prior years' funding levels provide the best foundation for determining the next year's levels.

The BOR's approach to allocating funding to the institutions under its charge is similarly disconnected from the actual needs of its constituent institutions. The allocation method recognizes neither the variation in costs innate to different programs offered by the constituent institutions nor those related to the differing characteristics and educational needs of the students served by these institutions.

Further stretching the operating budget, CSCU annually confronts significant costs in maintaining its physical facilities. Since 2001, the State has authorized $3.3 billion in bond funds and allocated $2.9 billion to support investments in and improvements to CSCU capital infrastructure of which $1.5 billion in authorizations and $1.1 billion in allocations have happened since 2015. The strain on operating expenses is notwithstanding the state's investments in capital funding of approximately $1.1 billion since 2015, which supported the construction of new buildings, renovations to existing facilities, and deferred maintenance funds. Facility costs arise from aging infrastructure and from declining enrollment that has yielded underutilized space. (Facilities and space utilization are discussed in more detail below.) The spread of online courses compounds these challenges, although it mainly reduces demand for traditional classroom space; it has little effect on other spaces. The CSCU system, institutional presidents, and the state share the responsibility for determining how to respond in ways that may free up funds currently being spent to maintain unneeded buildings and buildings that have obsolete designs. These savings can be reinvested in infrastructure that is prioritized and in implementing enhancements that better serve the students of today and tomorrow to provide greater support for instruction and student success. The academic buildings on CSCU's campuses are state assets—the title resides with the state, not CSCU—and CSCU lacks the authority to issue general obligation bonds on its own behalf to fund capital spending. It does, however, have the ability to bond auxiliary buildings via CHEFA, which is funded largely through a fee that students pay, and which is passed to the System Office.

Additionally, CSCU's leadership has not effectively conveyed the priority of projects included in the CSCU annual capital request submission for consideration in the Governor's proposed budget, as well as prioritizing requested items for consideration on the bond commission agenda. CSCU has also not provided the state with a facilities master plan for campus maintenance and improvements. Such a plan (or plans, for each institution) should specify how capital requests are connected to CSCU's goals and its overall strategy. As a consequence, the capital funding that is provided to CSCU comes with little assurance that expenditures are in line with priorities. Meanwhile, the state has no mechanism in place to ensure that any funding provided is utilized for intended purposes. The absence of these features contributes to conditions of mistrust among responsible parties, fails to aggressively address regular and deferred maintenance costs that divert funds from serving students, and reduces the likelihood that state goals are supported in the state's capital planning and budgeting for higher education.

Higher education institutions are indispensable to meeting a state's needs for talent development and the expansion, diffusion, and application of knowledge. Yet despite considerable overlap, institutions' interests are not uniformly consistent with the state's. Because of these divergent priorities, states have evolved governance structures intended to create better alignment. In Connecticut, although the respective boards of CSCU and UConn exists to manage their own resources in service of the state and its students, no single statewide body exists that has sufficient authority and influence to coordinate the state's higher education policy across both systems, its financial aid programs, and its (small but not to be neglected) direct funding to private, nonprofit institutions within its borders. The lack of such a body hampers the state's ability to develop and implement statewide engagement, strategies, and policies to optimize higher education.

The Office of Higher Education (OHE) carries out some operational and regulatory functions similar to coordinating agencies in other states (e.g., Colorado, Virginia, Washington), including management of state financial aid programs, state authorization, and oversight of private, proprietary postsecondary providers. However, no entity in Connecticut carries out the planning, accountability, and funding functions that are core activities of the agencies in these other states. Instead, the Connecticut legislature or some part of the executive branch working under the direction of the governor's office takes on that duty whenever there is a perception of need for planning to occur. However, the planning function is not consistently exercised with implementation steps put in place that are regularly monitored. Nor is it carried out by a body that stands at some political distance from elected officeholders to shield the planning function from political influence and to keep its focus appropriately long-term.

As a consequence, there is no strategic approach to how the State of Connecticut should assign roles and goals to the various parts of the higher education ecosystem in the state. In the absence of such clear goals, there is no way to align state investments in higher education institutions and financial aid with those goals. Further, reliance on the legislature or governor's office for the conduct of functions that are the purview of executive-branch-level higher education agencies in other states means that some of the necessary ongoing functions go unattended. For example, Connecticut does not have a statewide approach to

the approval of new academic programs in public sector institutions. For CSCU, the absence of a statewide process to strategically invest in new programs and services to specified audiences complicates its efforts to develop distinct niches for its institutions and to compete for students with better-branded, and often costlier, alternatives like UConn (and its branches) or Connecticut's well-known private nonprofit institutions.

Since the establishment of OHE in 2011, CSCU has been responsible for approving the creation of new programs or the removal of existing programs at its constituent institutions. The University of Connecticut has similar authorities regarding its constituent campuses. There is no entity, however, charged with ensuring that the programmatic offerings of the two systems are not unnecessarily duplicative and competitive. As CSCU serves a large share of students from low-income backgrounds and underrepresented racial/ethnic populations, and students over the age of 25, this absence of policy leadership risks placing institutions that serve the students most in need of supportive educational environments at a further disadvantage.

Another symptom of this problem is the limited amount of dual enrollment occurring in Connecticut compared with other states. The lack of growth is at least partially a consequence of a failure to provide dedicated permanent funding to adequately support the provision of these opportunities. The majority of the concurrent enrollment is provided by UConn's ECE program which charges $50 per credit fee but waives the fee for any student eligible for free lunch, reduced lunch, or is categorically eligible (e.g. SNAP, TANF, unhoused). This is notwithstanding an investment of $9 million in federal stimulus funds to support further development of dual credit learning opportunities being led by the State Department of Education. Their strategy has been to provide grants to both high schools and institutions of higher education to build capacity, but without a sure plan to sustain that capacity or to ensure that it reaches the populations that stand to benefit the most from these investments.

Institutions in other states, especially community colleges, have used dual enrollment as a major tool to help mitigate the effects of enrollment pressures, while also helping students move forward in their educational journeys in cost-effective ways. But for the CSCU institutions, current policies offer little incentive to make dual enrollment opportunities more widely available; they cannot afford to subsidize their faculty's instruction of dual enrollment students nor their faculty's oversight of courses taught by approved teachers in the high schools, and students from low- and middle-income backgrounds are unlikely to pay full tuition for college courses while they are still in high school. Further details comparing Connecticut's approach to supporting dual enrollment to those in other states are provided later in this report.

Another factor outside CSCU's control is the involvement of legislators in establishing sites or programs. Once established, community college leaders are legitimately reluctant to eliminate these programs or sites even if they are not economically viable. One example of political considerations overcoming concerns about sustainability is the state's purchase of a new building in 2020 to host an advanced manufacturing center for the Tunxis campus of CT State, itself a program announced in just 2018, despite there being a much larger, more established such center at the Asnuntuck campus just over 30 miles away. Subsequently, CT State has faced awkward questions about why it has not appropriately equipped and staffed

the Tunxis center as late as the summer of 2023, even with additional resources from a federal grant. It is noteworthy that the federal grant is itself not a sustainable revenue source.[13]

But in fact, CSCU faces competing demands of politicians to operate within a balanced budget, which requires CSCU to simultaneously reduce spending to better correspond with declining enrollment, while also identifying resources to fully open the Tunxis program. As repeatedly noted by stakeholders at several institutions, Connecticut's limited infrastructure for public transportation makes the distance between the two campuses hard for students to traverse without a vehicle of their own. Even with $2.5 million in additional bonding to support advanced manufacturing, it is unclear whether the Tunxis program is sustainable (or whether it is the best possible use of scarce funding with a similar facility operating nearby at Asnuntuck), Yet the political pressure to run similar programs at both sites imposes additional costs on CT State (and CSCU). NCHEMS is not making a judgment about this particular question, only noting that investments like these deserve careful scrutiny from a process that is as apolitical as it possibly can be.

Observations Concerning Particular Topics

The agreed upon scope of work called for a review of space and dual enrollment. These, along with a few additional issues, were raised by stakeholders and are worthy of more detailed discussion. Besides Connecticut's approach to supporting dual enrollment and the amount of CSCU's physical facilities and space utilization, these topics include CSCU's collection and use of data for decision-making, the importance of policy leadership and coordination, and the approach to funding higher education institutions used by the state to appropriate money for higher education and CSCU's allocation of those resources to its institutions. This section addresses each of these topics in greater depth.

Data Resources and Data Governance

Data available at the CSCU system level are fairly limited to a set of regularly produced reports, for which the institutions send data to the System Office regularly. Outside of those reports, there appears to be only weak System Office coordination among institutions in terms of reporting or data governance. This creates a challenge in conducting system-level research and in extracting system-level insights from the data. It also makes it difficult for the System Office to add value to institutions' raw data in a way that is meaningful for decision-makers at the institutional, system, or state level. This results in the System Office being primarily a consumer of data from the institutions, which the institutions perceive as a drain on their own resources, rather than a helpful partner who can enhance their ability to draw insights from a more complete database and simplify their reporting burden. This has contributed to a poor relationship between some staff at the System Office and the institutions, making collaboration even more difficult.

Our efforts to gather data for this project were typical of similar efforts NCHEMS has undertaken in other states. First, NCHEMS prepared a detailed request for data and sent it to the System Office. Several conversations with the System Office followed in which NCHEMS worked to clarify and, where possible, simplify the request, while ensuring that the data

required to conduct the planned analyses would be provided. No staff from any of the institutions were invited to these conversations. The System Office subsequently completed the portions of the data request that it could on behalf of the institutions and requested that the institutions supply the remaining data being requested. It is unclear to what extent the institutions were consulted by the System Office prior to receiving its guidance on how to respond to the request, nor whether they were invited to review any of the data supplied by the System Office directly to NCHEMS. As is routinely the case in other similar data requests, fulfilling the full data request required the individual institutions to each pull data according to the guidance that they received from the System Office but also having to make their own interpretations based on their own database's specific configurations and contents.

This was burdensome for both the System Office and the individual institutions and resulted in data that were inconsistent or incomplete in many cases. For example, in order to conduct our analysis of facilities space, we requested building and room inventories. We received relatively complete inventories from four institutions, a partial inventory for ECSU, and no data for CT State.

The data we ultimately received on course sections, departments, and enrollments contained different information in a different format for each institution. Although these inconsistencies are not uncommon in NCHEM's experience making similar requests to other states, they make it challenging to answer simple questions such as "Which course sections are in-person vs distance?" and impossible to do more complex analyses, such as identifying cross-listed sections in order to count them only once. It may be that each individual institution can do at least some of these analyses internally—with the possible exception of CT State, which appears to still be working on creating internal data consistency across the entire institution in the wake of its merger—but the system lacks the appropriate structures and relationships that would be needed to conduct them with fidelity for multiple institutions at once or across the system as a whole, as well as for the System Office to be able to simultaneously reduce the burden of data collection on the institutions and provide actionable insights.

The System Office seems to have chosen to solve this problem by seeking direct access to live data from the institutions. But it is unclear whether this is a solution that will be effective or efficient given that each institution uses its database differently, as opposed to creating a regular cycle of "frozen" data extracts that are carefully curated in ways that optimize comparability and compatibility across institutions. It also raises questions as to whether an institution has any awareness as to what data are being extracted by the System Office, to whom the System Office is providing it, and, for what purpose. This may render the institution with an inability to properly respond to regulatory questions about how their data has been released to others and can lead to questions of accuracy and interpretation that are likely to be difficult or time-consuming to answer. This confuses the role and use of live data by institutions to make operational and transactional decisions (e.g., processing financial aid or bursar accounts), as opposed to research and policy-oriented uses that the System Office should be making of the data (e.g., determining which student pathways drive, or hinder, success). These issues of data governance appear to be another case where the system and institutional roles are not differentiated in ways that maximize the value of data for effective use by both the system and the institutions.

CSCU has not provided data to the state's P20 WIN system for reporting since OPM assumed the system's oversight in 2020, other than a limited report for CSCU's own use.[14] Full participation in the existing P20 WIN system, including contributing data, would benefit both CSCU and the State, by providing insights about students' mobility among institutions and into the workforce. Such important information on CSCU students and graduates, which is useful for designing and evaluating state and institutional policies and informing curriculum and other practices, is limited as a result of CSCU's unwillingness to contribute data to P20 WIN.

Along with other state agency partners, CSCU has signed an enterprise-wide agreement ("Enterprise Memorandum of Understanding" or E-MOU) that sets the foundation for P20 WIN by creating the broad governance and oversight needed for legally sharing data among them. Despite a lengthy history of engagement among OPM and P20 WIN agencies, including CSCU, to resolve differences, CSCU has not signed any data-sharing agreements that operate under the E-MOU. All other public and private institutions of higher education in Connecticut have agreed to use the data-sharing agreement template that permits the actual sharing of data with P20 WIN,[15] for which the policies and procedures are regularly reviewed for compliance with state and federal laws and regulations.[16] There is no shortage of examples throughout the country of higher education institutions contributing data to their states' longitudinal data systems and Connecticut's P20 WIN system is the most effective avenue for data sharing to which CSCU should contribute data to measure and report outcomes.[17]

Dual Enrollment

High school students who enroll in colleges and universities through dual enrollment programs may represent an untapped market for Connecticut's public postsecondary education institutions and CSCU in particular. Relative to other states, Connecticut maintains few policies governing dual enrollment. As a result, dual enrollment programs are largely determined by local K-12 governance and UConn. Indeed, UConn describes its Early College Experience (ECE) program as the first dual enrollment program in the nation. UConn remains the primary provider of dual enrollment programs in Connecticut, reaching 17,236 students in 188 high schools and delivering 95,580 credits in 2023-24[18], while CSCU served 3,767 students in 2022-23. CSCU's share equates to approximately 4% of junior and senior high school students. Also notable is the relatively low share enrolled in dual enrollment programs at CT State—only about 36% of those at CSCU, and about 6% statewide. This compares to the nation for which about 60% of DE enrollments are in community colleges. There is, however, legislation directing the state's Department of Education to study dual enrollment, with a report due by January 1, 2026.[19]

A recent study by the Community College Research Center (CCRC) using data from the National Student Clearinghouse provides a wealth of state-by-state data on this topic.[20] Because the authors were tracking not just enrollments but completion of college credentials by dually enrolled students, they used 2015 to define a cohort of participating students. Their findings for Connecticut undercount Connecticut's participation in dual enrollment because the data exclude students enrolled in UConn's ECE program. Still, some quotes and observations from that report make cogent points about the value of dual enrollment:

- "Nationally, in fall 2015, 38% of undergraduates entering postsecondary education were either currently taking high school dual enrollment courses (13%) or had previously taken dual enrollment coursework in high school (25%). For community colleges, current or prior dual enrollment students accounted for the majority of new entrants (60%)."
- "Four in every five dual enrollment students (81%) enrolled at a postsecondary institution in the first year after high school, but this rate was slightly lower among low-income, Hispanic, and male students."
- "Four years after high school, dual enrollment students who enrolled in college had a 2-percentage point (ppt) advantage over non-dual enrollment students (36% vs 34%). Dual enrollees' greater rates of bachelor's degree completion was even stronger among low-income (+8 ppt), Black (+11 ppt), and Hispanic (+6 ppt) students."

These numbers point out clear benefits of students enrolling in dual enrollment programs. Such students are more likely to enroll in college and complete a college credential than high school students who do not enroll in such programs.

Measuring dual enrollment activity in states without clear and unified policy directives is incredibly difficult and relies on institutions to voluntarily report program-level information. Although UConn provides the majority of the dual enrollment activity in Connecticut, it did not report the concurrent enrollment taught by accredited high school teachers that were overseen by its ECE enrollments to IPEDS based on guidance it received from the federal government's contractor.[21] To include UConn's ECE program in the state's total dual enrollment numbers, NCHEMS combined UConn's self-reported enrollments in 2022-23 with data on dual enrollment activity reported in IPEDS. This resulting estimate was 12%, or about average in the volume of dual enrollment provided, compared to other states.

However, the patterns of enrollment in Connecticut differ substantially from the norm. Nationally, 30% of dual enrollment students enroll in community colleges as entering postsecondary students and 51% enroll in four-year institutions. In Connecticut, CCRC reported those numbers to be 21% and 61% respectively; had CCRC been able to incorporate UConn's data, the share enrolling in community colleges would be substantially lower. Nationally, 32% of dual enrollment students come from low-income neighborhoods, 21% from middle-income and 34% from high-income neighborhoods. In Connecticut, CCRC reported those numbers are 22%, 15%, and 53%, respectively. It is difficult to estimate what the impact of incorporating UConn's data into these figures would be. But UConn's own data reports that in 2023-24, 56% of its dually enrolled students were White, 22% were Latino, 9% were Asian, 8% were Black, and 5% identified as belonging to two or more races.[22] Compared to the demographic characteristics of Connecticut's 16-17 year olds in 2023, which were 53% White, 26% Latino, 5% Asian, 12% Black, and 4% two or more races,[23] these data suggest ECE is not fully representative of the population of the state.

Figure 24. Volume of Dual Enrollment Activity by State, 2022-23
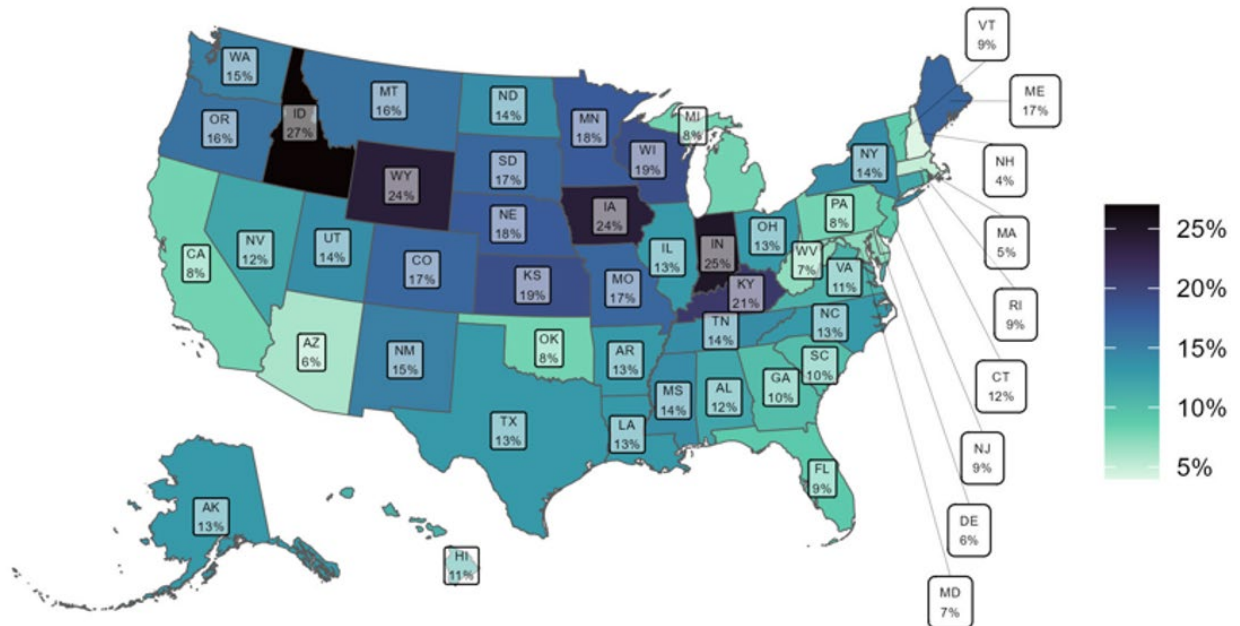
Sources: Fink, J. (2024). Many Students Are Taking Dual Enrollment Courses in High School? New National, State, and College Level Data. Community College Research Center Blog. Retrieved November 5, 2024 from https://ccrc.tc.columbia.edu/easyblog/how-many-students-are-taking-dual-enrollment-courses-in-high-school-new-national-state-and-college-level-data.html; University of Connecticut, Early College Experience Data Dashboard – Ten-Year Trends. Retrieved Nov. 5, 2024 from https://ece.uconn.edu/uconn-early-college-experience-dashboard/.

According to the Education Commission of the States (ECS), there are 13 model dual enrollment policy components, of which Connecticut's statute or state regulations at least partially address just five, though UConn's Early College Experience program and the SDE's Dual Credit Expansion Grant and Dual Credit Grant for Institutions of Higher Education programs raise the number of model components addressed to 10 (See Appendix C).

Of particular note and unlike many other states, Connecticut does not cover college tuition for students enrolled in dual enrollment courses—either directly or through appropriations to school districts that, in turn, pay the tuition to the colleges and universities. Instead, Connecticut has used ARPA funds to invest in creating the infrastructure for dual credit classes, which involve having public and private higher education institutions accredit high school teachers to teach courses under the oversight of the higher education institutions (developing HS/College agreements, seeking accreditation from the National Alliance of Concurrent Enrollment Partnerships (NACEP), etc.). The concurrent courses taught by high school teachers may have no fee or a nominal fee (e.g., $50 per credit fee for UConn's ECE Program) but the UConn per credit fee is waived for students that have free or reduced lunch or are categorically eligible (e.g., SNAP, TANF, homeless). For students who enroll in classes that are taught by institutions of higher education, if they receive a grant from the State Department of Education to foster concurrent enrollment, it is required that fees for these courses also be waived. For students who do not receive free and reduced-price lunch, this

does still leave postsecondary institutions to arrange tuition payments, either by collecting them from students or by discounting the price (essentially paying from their own coffers).

It seems that Connecticut is not taking full advantage of the potential benefits of dual enrollment, especially for students from low-income backgrounds and students of color. Moreover, dual enrollment has helped offset losses in credit enrollment in other states in recent years, especially at community colleges. In fact, the National Student Clearinghouse's most recent analysis of enrollment data shows continued growth in dual enrollment students but also a decline in first-time students overall. To the degree that Connecticut residents are accessing dual enrollment through UConn and not CSCU institutions, CSCU institutions may struggle to adapt strategies other broad-access institutions have taken to shore up their enrollment. In any event, any effort CSCU makes to bolster its dual enrollment programming will need a business model that focuses on student populations not already served by UConn. Finally, it is worth noting that, notwithstanding the benefits of dual enrollment related to increases in college-going and speedier completion, dual enrollment tends to yield lower revenue per student. Depending on policy design and implementation, it also may have lower costs. As a result, enrollment increases from dual enrollment programs are not likely to solve CSCU's financial challenges on its own. However, in many states, dual enrollment programming is part of the mission of public community colleges and thus deserves attention and support from state and system leaders.

Charter Oak, Online Delivery, and Innovation

As a further example, the System Office and Charter Oak have more recently sought to leverage the unique capacities and business model of Charter Oak State College to better serve students. They claim that their efforts have met with considerable resistance, which they assert may have contributed to Charter Oak's inability to grow enrollments. That resistance has taken several forms: first are objections from faculty and other institutional leaders who express concerns with Charter Oak's business model, which is distinct and relatively inexpensive. What makes Charter Oak's business model so unique has to do with the way it "unpacks" the faculty role by employing relatively few full-time faculty to develop courses and programs, or by buying the content from a course publisher, while relying almost exclusively on part-time lecturers to deliver courses, as well as its approach of paying those lecturers based on the number of students who enroll rather than by course. Yet many of the institutions that are similar to Charter Oak, and which are posing a serious threat to both Charter Oak (and other CSCU institutions) in serving non-traditional learners, also employ part-time lecturers heavily to deliver courses. Charter Oak is also distinct from the other CSCU institutions in its heavy concentration on adult learners with some prior college credit and workplace experience. In order to tailor its services to these students, Charter Oak has developed expertise in Prior Learning Assessment (PLA), an expertise that can be leveraged for the benefit of students enrolled in other CSCU institutions.

Second, many faculty within CSCU express misgivings about Charter Oak's quality. But they do so without presenting evidence specifically citing diminished student outcomes to support this contention. There may be legitimate questions about Charter Oak's reliance on part-time

faculty to deliver courses, but in fact, many of its part-time lecturers are also employed as full-time faculty elsewhere within CSCU.

Third, as part of its business model, Charter Oak insists on maintaining intellectual property rights over the programs it develops, which also is typical of similar providers. Meanwhile, the AAUP contract specifies that its members retain intellectual property rights for any distance learning material they create, though any faculty member may voluntarily opt to release those rights. Since Charter Oak often works with AAUP members who are employed at another of the CSCU institutions, there is a perception that this conflict has impeded Charter Oak's ability to develop and offer programs. It may make sense for Charter Oak to follow the path of other online providers and hire its own full-time faculty to develop programs it would then own.

Additionally, there are concerns expressed anytime there is an effort that appears to be directing enrollments to Charter Oak, rather than offering students a choice of options. One such example is the "Go Back to Get Ahead" program, which initially pushed students who had stopped out of a CSCU institution to finish their degree at Charter Oak.[24] When a second iteration of that program was created, the CSUs and CT State successfully lobbied to ensure that students would be eligible no matter where they reenrolled within the system. Finally, stakeholders have expressed concerns that CSCU's System Office has not been forthcoming in communicating and seeking input about how best the other institutions can work with Charter Oak.

In any case, the pandemic has fundamentally changed the dynamic around online education in ways that require CSCU to develop a much clearer value proposition for Charter Oak. Before the pandemic, most of the CSUs only offered a small number of online courses due to a faculty-negotiated cap on the number of online courses that could be offered each year. These caps on online CSU offerings limited competition within CSCU for Charter Oak, though it has still faced substantial competition from other online providers within New England and nationally. Some of these other online providers have grown substantially while Charter Oak has not, even though it is the only CSCU institution with upward trending enrollment, however modest that growth is. With these caps removed in the post-pandemic environment, stakeholders within CSCU have raised questions as to whether a separate online institution is still necessary or if the Charter Oak offerings could be provided by the other accredited institutions within the system.

Yet it remains the case that Charter Oak's distinct and relatively inexpensive business model positions it uniquely within the system. While its typical students may overlap with those who might attend online courses at one of the other institutions, it focuses its efforts on a specific demographic that is just one among many possible populations the other institutions serve and works to meet their needs very directly. There may also be specific programs that Charter Oak can offer more efficiently than others—one example is an RN-to-BSN completion program; these are typically delivered online, and Charter Oak can offer it at a lower price point than the other CSCU institutions can. This is not to say that there should not be another option somewhere within CSCU, just that Charter Oak's program may extend access to that program in ways others cannot. Charter Oak's capacity to do more than deliver online courses and programs—and have its performance judged primarily by

enrollment numbers alone—is not fully tested either. That includes serving as a test bed for innovative delivery such as competency-based education, helping to coordinate prior learning assessment, assessing ways of providing better and more targeted service to adult learners with varying characteristics, etc. What remains to be seen is how creatively the System might employ Charter Oak to help foster and spread new ideas to meet student and employer needs.

Space and Facilities

As described above, declines in student enrollments and growth in online delivery have raised questions about how much space the CSCU system needs to serve its multiple missions, as well as where that space should be and how it should be most productively used. In addressing such questions, it is important to bear in mind the mission of the CSCU, which provides a critical point of access to postsecondary education for students of all kinds—but especially those from underrepresented, low-income, and first-generation backgrounds—from all over the state. Recent research has shown that proximity to a college campus, even in the era of online enrollment, makes a crucial difference in student enrollment and success, particularly among Black, Hispanic, and low-income students.[25] Connecticut is a small state, yet stakeholders routinely cited the lack of widespread public transportation as a significant barrier to college students' attendance; for students, distance remains a factor in attendance decisions. Decisions about campus sites should be mindful of these realities and consider not just the total enrollment of students at a campus, which might be dependent on a relatively smaller local population, but also the density of CSCU campuses within a relatively close geography.

To help develop empirical evidence in response to questions about how much physical space CSCU requires, NCHEMS subcontracted with SmithGroup, an architectural studio that engages in space utilization and campus design services, to conduct analyses of the physical footprint of CSCU institutions and offer observations about the adequacy of the total amount of available space to meet future demands (SmithGroup's report is provided as Appendix D). SmithGroup was hindered in its analyses by the absence of up-to-date facilities inventory and utilization data, especially at ECSU and CT State.

Nevertheless, by comparing available inventory data with data from generally similar institutions, they found that:

> ...the Connecticut institutions have space categories that are above and below the average of the peer institutions. Of those with complete data, CCSU and WCSU are more within range of the total Assignable Square Feet (ASF)/FTE when compared with peers while SCSU is above average with only one institution higher in this category. In addition, when looking at historical enrollment numbers for each of the institutions, there is a significant decline after about 2011 without an apparent reduction in total ASF. These factors combined indicate an overall surplus of space, although the extent of surplus varies.

This finding is consistent with other observations. A facilities study conducted by Scott Blackwell Page for CSCU came to a similar conclusion. If one interprets their designation of

vacant space as excess space given enrollment levels, all CSCU institutions have excess physical capacity. In addition, NCHEMS projected enrollments for each of the CSCU institutions; even the most optimistic projections indicate slight enrollment declines for each of the institutions. Since the institutions managed to accommodate all students enrolled at their maximum levels after the Great Recession, it can be argued that the amount of excess space is proportional to the decrease in enrollments from that high point. More details about the types of space at the CSUs and the condition of the facilities at the CSUs and CT State (CSCU was unable to provide detailed data about space by type for CT State) are provided in Appendix D.

Statewide Policy Leadership

As previously noted, Connecticut lacks a single entity that looks after the needs of the state, its varied regions, and its students—as opposed to its institutions—as its primary mission. Both the CSCU system and UConn together with its branch campuses, and even the private nonprofit institutions in the state, all legitimately profess to serve broad public purposes. But the sum of institutional interests is not equivalent to the state's interest and, in fact, conflicts over how best to allocate resources frequently arise. In the absence of a statewide entity to exercise policy leadership for higher education, the critical responsibilities of developing and monitoring a long-term plan and resolving disputes about how to allocate resources fall to the state legislature or the executive branch, as has happened in Connecticut. Unfortunately, neither is well positioned to carry out the role effectively without steady nonpartisan expertise backed by evidence.

Many states around the nation have recognized this problem and set structures in place to ensure that the public interest remains the uppermost priority for decision-making at the state level. In fact, the need for an effective statewide policy organization has only grown as the climate for effective policymaking in higher education has become increasingly complex and fraught under conditions of demographic decline and diversification, tightened finances, and heightened political tension.

No two states have adopted identical solutions.[26] Twenty-eight states have a single, statewide coordinating board or agency overseeing higher education. These boards coordinate independently governed institutions or a combination of institutions and systems. For example, the State Council for Higher Education in Virginia (SCHEV) coordinates 15 independent public four-year institutions and a statewide community college system composed of 24 institutions. Oregon's Higher Education Coordinating Commission sets policies for seven independently governed four-year institutions, one health sciences institution, and 17 locally governed community colleges. Among states without a coordinating board, eight have a single statewide governing board such as Hawaii, where the system exercises authority over all 10 of the public institutions in the state. The remainder have a combination of governing boards, institutions, or administrative or service agencies, but no single statewide coordinating entity. Connecticut falls into this latter category, with at least two other states that have recently or are considering adopting coordinating boards: Pennsylvania and Wisconsin. Pennsylvania recently created a new State Board of Higher Education to coordinate strategy and policy for the state's numerous public

and private higher education institutions. Wisconsin is weighing significant changes to its governance that include the establishment of a coordinating entity to ensure alignment between the state's technical college system, the Universities of Wisconsin System, and the University of Wisconsin-Madison (should it be separated from the UW System as has also been suggested).

Historically, there have been six functions to be performed by a state-level entity focused on prioritizing the public interest in higher education policy and practice. These include:

1. State-level planning.
2. State finance policy: budgeting, appropriations, and resource allocation.
3. Maintenance of databases and conversion of data into information that guides policymaking.
4. Regulation of higher education institutions or academic programs.
5. Administration of state-level services (for example, state financial aid).
6. Governance of higher education systems and institutions.[27]

Naturally, the sixth of these does not apply to coordinating boards, and some states assign certain other tasks, as a whole or in part, to other parts of state government (especially the third and fifth). Like other states with multiple governing boards but no centralized coordinating agency, Connecticut has no single entity that conducts statewide planning, makes recommendations on state finance policy, or regulates academic programs. Instead, state planning and finance policies are the uncoordinated product of the best efforts of CSCU, UConn, OPM, and the legislature, with additional contributions from the Office of Workforce Strategy.

In regard to the third function, Connecticut has established a single statewide longitudinal data system in the form of the Preschool through 20 Workforce Information Network (P20 WIN). However, because CSCU currently only contributes limited data for its own purposes, it risks creating inconsistent narratives about talent development that are a byproduct of separate analytics from different data sources. Therefore, Connecticut's policymakers and the public are limited in their ability to benefit from accurate data on the reach and effectiveness of Connecticut's dual enrollment programs, as well as in capturing information about students' post-graduate employment outcomes, among other potentially valuable uses.

Finally, Connecticut's Office of Higher Education regulates private nonprofit and proprietary institutions, including carrying out academic program review and approval, which per C.G.S §10-34 these entities were fully exempt from program approval until FY24, then exempt for up to 15 per year thereafter. CSCU and UConn are able to propose and approve new programs without additional state-level oversight. It is worth noting that Connecticut is among the relatively few states that exert authority over program approval among private nonprofit institutions within their borders.

The absence of statewide coordination leaves Connecticut without a means of rationalizing its approach to resource allocation among CSCU, UConn, and private institutions via direct appropriations or through student financial aid. It also lacks a locus for planning that incorporates strategies for the most effective utilization of the assets of the state, especially

with respect to assuring mission differentiation among public institutions. This encourages unproductive competition and program duplication between UConn and CSCU that creates inefficiency in state investment. This reality is not meant to suggest that there should not be overlapping programming among the institutions, especially when the same or similar programs are designed to cater to different student audiences (e.g., students living and learning on campus versus students working full-time and commuting to the nearest institution for evening classes, and many other possibilities) or when programs are tailored to address specific local workforce needs. The lack of a single, independent coordinating body also means that Connecticut cannot benefit from continuity in policymaking. Left to the legislature and the executive branch—and to the shifting politics of both—higher education receives episodic attention and inconsistency in priorities over time.

State Appropriations Policy and Resource Allocation

Like numerous other states, Connecticut made significant new investments in higher education institutions over the last several years, both prior to and during the pandemic when federal stimulus dollars were plentiful. Together, appropriations for higher education rose significantly in total funding and on a per-student basis (Figure 25). It is important to recognize how much additional funding came from the federal government since it is going away: as of FY23, stimulus money accounted for $276 million of total appropriations of $1.33 billion (Figure 26). The state will not be able to devote additional funds of this magnitude to replace the expiring stimulus funding. As discussed earlier, Connecticut relies on a "Base Plus" model for appropriating funds to higher education institutions, which while providing some predictability to institutions and being easy to implement, works better under conditions of rising enrollment demand than in the current and future circumstances facing Connecticut.

Figure 25. Educational Appropriations by Connecticut, 1993-2023
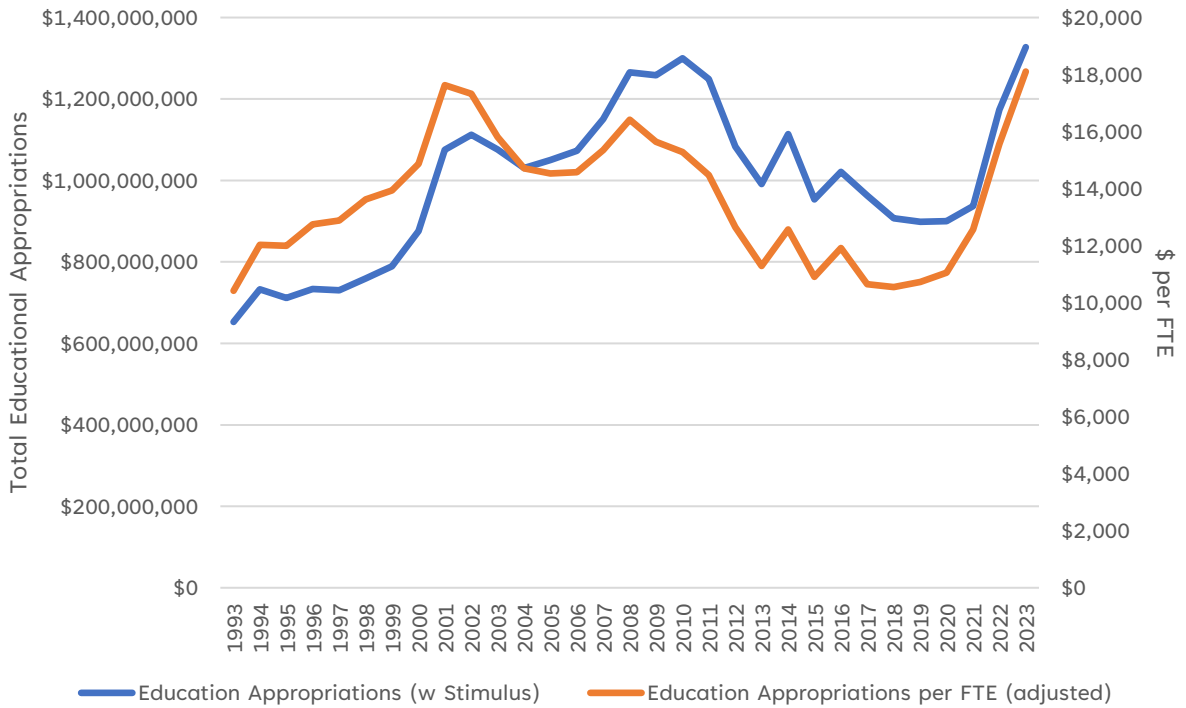
Source: SHEEO SHEF. Data are adjusted for inflation using HECA, enrollment mix, and cost of living.

Figure 26. Educational Appropriations by Connecticut, 2019-2023
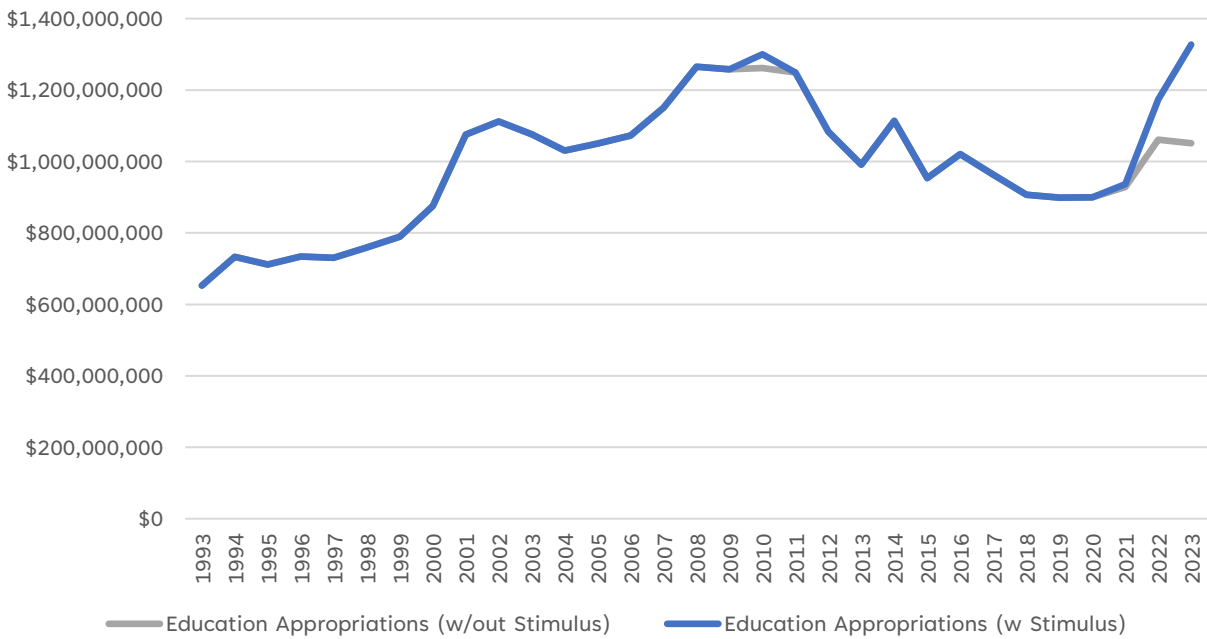
Source: SHEEO SHEF. Data are adjusted for inflation using HECA, enrollment mix, and cost of living.

In periods of declining and shifting demographics, institutions will confront fiscal pressures that may lead them to make decisions that focus on shoring up their financial health rather than meeting the needs of students or the state. A base-plus approach provides no signals to institutions about how their investment of scarce dollars aligns with state goals. This creates problems as a state experiences enrollment declines or budget cuts because it provides no coherent way for making strategic funding decisions in full awareness of the real variation institutions experience in program costs, program efficiency and offerings, and in serving different student populations. Instead, most states make across-the-board cuts that encourage triage rather than strategy. As states like Connecticut attempt to respond to eroding student demand, they will require new approaches to funding models that better target funds to institutions in alignment with state priorities and with some appreciation for institutions' real costs, particularly those that put too great a reliance on enrollment counts will obscure.

Many states continuously review and revise their funding models to better address their evolving needs. During the 2000s and 2010s, there was a virtual parade of states trying to append an outcomes-based funding policy to their existing base-plus approach or to reallocate some funding according to performance. This is a trend that continues. More recently, however, and often following on the heels of similar efforts in K-12 funding policy, many states are considering so-called "adequacy" models for funding higher education institutions. These models are only now emerging, but versions adapted for their respective contexts are under serious consideration in Illinois, Missouri, New Mexico, and Virginia. Texas, which rolled out a new funding model for community colleges in 2023, also incorporates aspects of the overall concept of adequacy alongside new performance measures; this model has received widespread acclaim for being a potential solution to a variety of problems from funding inequity to misalignment of programs to local workforce demands.

Currently, CSCU receives separate block grants from the state to help support operating costs at the CSUs, CT State, and Charter Oak. The System Office takes its funds off the top to fund its own operations, including shared services, from these block grants before allocating resources to the institutions. CSCU maintains no board-approved policies concerning how funds will flow to institutions, but the system operates an allocation model that also uses a base-plus model. The base is set to be the same amount for the CSUs. The plus is based on total FTE enrollment with some adjustments for in-state, international, and out-of-state students (which is tied to the New England Board of Higher Education (NEBHE) rate applied to students from all states, not just New England). The model does not take into account differential costs by program or level or by student characteristics (other than some consideration about whether they are Connecticut residents or not).

In addition, as described previously, CSCU has been building up its reserves (largely with one-time funding) in recent years While accumulating some levels of reserves is a prudent course of action given the likely demographic challenges ahead, but one that has raised concerns given CSCU's requests for more funding to close budget gaps. The board-approved policy regarding fund balances specifies various uses for reserves as well as minimum levels to be maintained by each institution and the System Office.[28] But reserves accumulated in

excess of those levels are available for unspecified uses approved by system and institutional leadership. The policy is also silent concerning the threshold beyond which savings are no longer simply prudent but represent missed opportunities to accelerate toward system or institutional goals. These issues may be as much a communications and transparency challenge as real flaws in the policy as written. It nevertheless remains unclear what latitude an institutional president has to designate funds from an individual institution's own reserves without further approval, and because funding not otherwise designated will be swept into a project fund where all the member institutions must "compete" for disbursements creates a perverse incentive for institutions to operate more efficiently.

Options for Governance and Structural Changes

Before presenting recommendations specific to CSCU, we felt it would be important to lay out options regarding changes to the governance and structure of higher education in Connecticut, alongside tradeoffs (pros and cons) associated with each option. Other recommendations can be more straightforwardly made, but state leaders considering governance and structural change can benefit from seeing all of the major design options so that consideration could be to various possibilities. This section discusses those options for a statewide higher education agency focused on providing statewide policy coordination as well as options for the governance and organization of the CSCU system.

Statewide Higher Education Agency

Although the six functions previously described as being essential for state postsecondary policy leadership will remain important in the future, there are various ways to organize governance to ensure they are carried out effectively. An organizational design will need to address four components that put greater emphasis on collaboration across sectors and throughout state government and on aligning policy with state goals, as follows:

1. Statewide policy leadership (incorporating the state planning function with strengthened links to finance policies).
2. Statewide coordination and implementation of cross-sector initiatives (including providing staff support for planning and finance policy, maintaining databases and using them to guide policymaking, and exercising authority to regulate mission differentiation—including program review and approval).
3. State service agency administration (such as state financial aid programs and licensure of non-state education providers).
4. System and institutional governance.[29]

In keeping with the principle that form should follow function, it behooves Connecticut to identify the functions that currently are not attended to at the state level by an entity with an appropriate level of independence from shifting political conditions. Connecticut can look to the authorizing legislation for Oregon's Higher Education Coordinating Commission for a reasonably comprehensive list of such functions as a guide for determining those that are weakly served in Connecticut. That language is provided in Appendix E. Below is a list of authorities that NCHEMS finds to be largely neglected in Connecticut. Other authorities

exercised by Oregon's HECC are not mentioned below because there appears to be attention being given to them by one or another existing entity in the state. Each of these activities would be carried out with recommendations provided to various stakeholders including but not limited to the governor, legislature, other executive branch agencies such as OPM, and the institutions themselves, as appropriate:

- Conduct statewide planning for postsecondary education, including the creation of state goals and the assignment of responsibility for the achievement of such goals to postsecondary educational providers and state entities.
- Prepare recommendations for a funding model to help guide the distribution of state funds to educational providers for operational purposes that is in alignment with the specified state strategic plan and goals. The development of this funding model should culminate from a process that involves input from the institutions. The resulting methodology should be monitored and regularly evaluated for its continued effectiveness in meeting state and institutional needs.
- Review state financial aid programs and make recommendations about their design, recommend allocations to financial aid from general funds in alignment with state goals, and account for appropriations to educational providers and tuition levels.
- Develop and apply criteria for setting state priorities for capital investment in postsecondary education.
- Require public higher education institutions to transmit data to P20 WIN, the state's longitudinal data system, and use such data to inform policymakers and system and institutional leaders to guide policy and practice.
- Convene stakeholders to aid in the dissemination of promising practices and effective policies in boosting student achievement and the elimination of achievement gaps.
- Coordinate policy and practice with other state agencies whose work touches on talent and economic development, especially the Departments of Education, Labor, Social Services, Economic and Community Development, Veterans Affairs, and Correction, as well as OPM and the Office of Workforce Strategy. Serve as an advisor to entities responsible for professional licensure in order to improve the likelihood that the state's needs for licensed occupations are being met while maintaining appropriately high-quality standards.
- Review, approve, and maintain a set of operational missions for public higher education institutions that can be used for reviewing and approving academic programs. Operational missions are not mission statements, which can be intentionally vague in order to be as broadly inspirational as possible and thereby limiting their utility for informing state policy decisions. Instead, an operational mission more carefully describes the array or programs that an institution offers, the types of students the institution is expected to serve, and any particularly important special characteristics of the institution (e.g., land-grant status). States also need some assurance that a robust process for program review is taking place. Therefore, a state higher education agency should also work with CSCU and UConn to ensure that existing programs are routinely reviewed for their contributions to state goals, satisfaction of students, employer demand, and institutional financial viability. These reviews would likely be conducted by the institutions (or the System) themselves, not

the agency itself, but should include measures of productivity such as enrollment in the major and throughout the institution's curriculum. Low-enrollment programs should be considered for deletion, though such decisions should be made in full view of the extent to which program faculty are delivering significant portions of general education requirements. Even in such cases, institutions should monitor departmental management to ensure that resources are efficiently used.

In designing a structure to address these gaps in higher education policy leadership, NCHEMS offers several options. Each of these options is briefly described with associated pros and cons identified.

Option 1. Preserve the status quo. CSCU and UConn continue to govern their own institutions (and branch campuses), while OHE continues to function as it currently does. These functions include administering state financial aid programs, regulating private degree-granting institutions, career-focused proprietary schools, and out-of-state providers, and serving as the portal agency for reciprocity agreements (namely, the National Council for State Authorization Reciprocity Agreements, "NC-SARA").

This option has the advantage of not requiring any new investments. It also minimizes disruptions in organizational activities. However, maintaining the status quo has serious flaws including the failure to address the fundamental problems associated with the absence of statewide policy leadership previously described.

Option 2. Replace OHE with a new coordinating board. Under this option, OHE would retain its current responsibilities for administering the state's financial aid programs and regulating private and out-of-state institutions, but it would be folded into a new state agency, which will have new authorities currently not exercised in Connecticut related to strategy, planning, and providing counsel to the executive branch and the legislature. Such a body would be a neutral, nonpartisan, and unaffiliated source of higher education expertise for the state, highlighting areas of need to be addressed by institutions or policymakers, offering recommendations for optimizing the benefits of higher education, building capacity through dialogue and convenings, and helping to address common challenges and conflicts,

Ideally, such an agency would be overseen by an independent coordinating board of appointees nominated by the governor and approved by the Senate or some other arrangement that serves to create a measure of independence from policymakers currently in office. There are numerous examples of such governance arrangements across the country, including in Indiana, Illinois, Minnesota, Oregon, Texas, and Virginia; after decades of failing to effectively coordinate higher education policy, Pennsylvania just adopted a similar model. There are, however, examples of states that have coordinating agencies that report more directly to the governor, such as Colorado. Adopting a coordinating body would bring Connecticut into the mainstream of higher education governance as practiced by the majority of states.

Dissolving OHE and replacing it with a new entity offers Connecticut the opportunity to consider alternative governing structures for the coordinating board. Coordinating boards

in most states are composed of members appointed through a process that involves the governor and the legislature—either by specifying certain seats on the board for appointments by the governor and both parties in the legislature. These members serve staggered terms that are designed to ensure overlap with the governor's term to promote greater stability and steadiness in its leadership of higher education policy. It is also typical that membership is required to be geographically distributed—often with membership drawn from each of the state's congressional districts.

Creating a coordinating body would come with additional costs in shutting down OHE and establishing the new entity and in providing on-going support. Additionally, any new body that Connecticut creates that may constrain the autonomy that CSCU and UConn currently enjoy in decision-making (e.g., expansion of new programs and reviews of low-performing programs) is certain to invite resistance from each of them. This may also apply to the private institutions in the state, depending on the specific authorities to be granted to the new coordinating body. Failing to endow the new coordinating body with the necessary authorities to ensure engagement from existing institutions risks creating a cost center for the state that is not fully capable of meeting the state's needs for effective policy leadership. Finally, seeking to separate the coordinating body from the governor's direct oversight may be politically difficult. Other states, such as Colorado and Louisiana, have in recent years made their higher education governance structures more directly accountable to the governor than they previously were. For example, in Colorado, the executive director of the Department of Higher Education is a cabinet member, while the department the executive director leads staffs the Colorado Commission on Higher Education (CCHE). CCHE is comprised of members of the public appointed by the governor and confirmed by the Senate and is focused on the coordination of state higher education policy.

Option 3. Retain OHE as the state student aid administration and licensure agency and create a new, separate higher education planning and budgeting entity. This option leaves OHE intact with the day-to-day operational functions it has been performing, while creating a new entity focused exclusively on policy leadership. By separating these roles, there is less likelihood that the operational tasks of managing administrative duties will compromise attention to policy leadership functions—a circumstance that in coordinating and governing boards in other states requires delicate balancing and one that not all are able to attend to with equal focus. Creating a new entity nevertheless fills Connecticut's existing gap in providing data-based analyses to support decision-making by the executive and legislative branches of government. Like the previous option, this would require additional funding to recruit and retain specialized leadership and staff and to provide ongoing support for a new state agency, as well as developing the governance model the agency would use. One potential additional risk of adopting this option is that the coordination function would be split between OHE and the new entity, since OHE would likely continue to have some policy-making responsibilities and authority regarding student aid programs, as well as its oversight of programs proposed by private institutions (notwithstanding the moratorium that has limited the actual execution of that role[30]).

Option 4. Redefine the roles and responsibilities of OHE to make it into a coordinating agency. This would require legislation to add additional authorities in OHE's enabling legislation, namely planning, budgeting, oversight of institutional missions and programs, and dissemination of data and analysis to support policy development. This option may be more straightforward than those that would require the creation of a new state agency, but OHE would still require additional ongoing funding support to carry out these expanded strategic functions versus its current, more operationally focused responsibilities. At a minimum, OHE would need to add new policy employees to manage the additional responsibility. At least some of these new employees would also need different skills and abilities than those currently employed by OHE to develop policies, program oversight, and strategic planning roles. The expanded functions would also demand much closer and regular interaction in new ways with state, system, and institutional leadership than OHE's current role requires. Executing these additional functions well will also require OHE to adopt an entirely new perspective on its responsibilities, which will affect organizational culture in ways that may be difficult (even impossible) to manage. The strategic focus will require capable agency leadership that can be retained over time. It is likely that the magnitude of these changes will take time to be fully assimilated. Lastly, simply adding the policy leadership functions to OHE's responsibilities keeps OHE under the governor's direct control similar to all executive branch agencies. This assures that its activities are in alignment with the priorities of the state's chief executive but also makes it susceptible to shifting political winds as governors come and go. Since significant change in higher education requires persistent and consistent action over a period of time this level of uncertainty may create a barrier to progress.

System Governance and Organization

Resolving issues concerning the functionality of the CSCU system outlined earlier is partly a matter of leadership, execution, and improving the organizational culture of a relatively young system to develop and respond to changes being made. As the contract calls for a review of organizational structure and identifying alternative structures to enhance the effectiveness and efficient performance of CSCU, NCHEMS has created several options, along with associated tradeoffs. Although they are focused on the structure and organization of CSCU's System Office and its relationship to its member institutions, it is worth noting that the best option must interface with the entity (or lack of an entity) that carries out policy coordination on behalf of the state. A separate set of options for the state-level entity was presented above.

Option 1. Keep the current CSCU and System Office. It is apparent that there is room for improvement in the management of the system, which has been documented by CSCU's own commissioned reports and system leadership has repeatedly expressed the need during its regular conversations with NCHEMS to improve the system's ability for successful implementations on a quicker timeline to meet the challenges outlined in this report. In addition, CSCU stakeholders also expressed concerns that the cost of running the System Office is creating an unfavorable impact on the campuses. The keeping of a system office assumes that the status quo would be significantly changed.

Yet there is a strong argument to be made in defense of maintaining a system office better deployed to implement strategic changes designed to accelerate progress toward state and student goals as described elsewhere in this report, including eliminating duplication, driving operational efficiencies statewide, delivering relevant programs and services, and boosting student success. This would also necessitate addressing stakeholder concerns about the allocation of decision authority and resources, shared services and related project management, communication, and financial and performance accountability.

A major change to the structure is no guarantee that the replacement will perform better, but it will create disruption on a significant scale and come at a time when the system is still working through the lingering effects of a trying consolidation of the formerly independent community colleges into CT State. Avoiding disruption is not by itself a significant reason to avoid taking bold action if the conditions warrant. But preserving the governance structure that calls for a system office at least avoids all the costs and turmoil associated with making a substantial change in governance. Emerging conditions related to heightened competition for a shrinking pool of potential students, constrained finances, and faltering public opinion about the payoffs to higher education will exert increasing pressure on higher education institutions regardless of how they are organized. Experts on higher education governance argue that a system structure maximizes the alignment of authority for the smooth coordination of multiple institutions' efforts in service to state needs and, through standardization, helps support efficient operations.[31]

Systems also have the potential to create more straightforward pathways for students from entry to completion and to develop and use data and information in ways that drive student success initiatives while also targeting programming to meet localized workforce needs. Higher education systems have had varied success in delivering on these merits, and the short history of CSCU has been particularly fraught in this regard. The need for finding solutions that resolve these types of issues is likely to be most acute in states facing the most negative demographic projections and where the failure to collaboratively deliver programs to isolated communities risks the viability of institutions in those places and deprives the region of a critical educational and economic asset.

Option 2. Eliminate the System Office, leaving six individually accredited institutions. This option would dissolve the CSCU system and let each of the institutions stand on its own individual accreditation, akin to how UConn operates. Doing so would eliminate friction between the system and its constituent campuses, eliminate the duplicative layer of management that currently exists between the System Office and CT State's central administration (as continues to evolve) the costs associated with operating the System Office. Each institution would need its own separate governing board, and it is possible individual institutional governance might energize a small number of key individuals to commit to helping the institution closest to their own individual interests or values, either through service on the governing board or by supporting the institution financially. To the extent that the System Office has added unnecessary bureaucracy to processes or procedures, eliminating the system might free up institutional leadership teams to focus more intensely on the needs of their students.

There are serious drawbacks to this approach, however. There would be modest costs of operating their own separate governing boards, along with the costs of moving services performed or contracts overseen by the System Office to the institutions. These costs might be offset by savings from shuttering the System Office. Each institution would use that portion of its appropriation currently funding the System Office to create and maintain capacity for the functions now being performed for them by the system. The CSUs would be less affected by the need to add capacity in the absence of a System Office. They already perform nearly all of the necessary functions themselves, though there are some—such as governmental affairs and legal services—that they would have to reestablish. CT State and Charter Oak would be more significantly impacted, as they would also need to recreate the capacity to carry out functions that are currently being managed through the System Office's Shared Services initiative. The amount of their respective appropriation each institution would be able to retain varies but, for example, CT State would be able to retain the amount that is currently taken off the top of its appropriation, which is approximately 12%.

Notwithstanding the incomplete (because it did not include the CSUs, though there were efforts to plan for their eventual involvement) and poorly implemented rollout of shared services, the elimination of the system also likely spells the end of attempts to generate scale economies through the centralization of administrative services. It also will have similar consequences on collaborative program development and delivery, since in the absence of a system it is unclear what entity might be able to exercise the authority to direct institutions to collaborate in ways that preserve access to programs for prospective students throughout the state. These kinds of collaborations—both for administrative services and academic program delivery—are likely to be essential for states facing stiff demographic headwinds that nevertheless expect to offer a broad set of relevant programs efficiently, even for individuals in the less well-populated locations within their borders. Without a system or ample incentive funding, only a shared vision among multiple presidents (backed up by their separate governing boards) would lead to this kind of collaboration across institutional boundaries. While there are examples of collaborative activity in pockets throughout the nation, it is rare and often as fleeting as presidential tenures. Hope for such an outcome is not a systematic solution to ensuring that collaboration occurs.

It is also unclear whether or how the two institutions that have been running operating deficits—CT State and WCSU—would be able to bring their budgets into balance in a way that ensures their sustainability. It might be argued that the consolidated entity shields those two institutions from the natural consequences of their financial decisions, that facing the reality of their financial picture on their own might force speedier action to do so, and that the other institutions in better financial shape are negatively affected in the meantime. However, those natural consequences, if they lead to the closure or deteriorating effectiveness of those two institutions, are unlikely to be in the best interest of Connecticut students and the state. Most importantly, determining how to untangle the financial conditions currently existing among the CSCU member institutions would inevitably become a dense political thicket.

Moreover, freeing the institutions to act on their own would intensify competition for students and may exacerbate program duplication—Even if a statewide coordinating agency

is created to manage this competition over students and programs is created, it will face the full impact of the tension inherent in making these choices. The presence of the System Office mitigates these conflicts in meaningful ways, as exemplified in Maryland, Texas, and other states where coordinating boards sit atop systems and where the system office resolves many, if not most, of the issues related to program duplication.

The option to have six institutions would also place an additional burden for allocating resources amongst the institutions on the legislature, unless the legislature empowers the coordinating agency previously described to allocate funding to institutions. It is unusual among states that the legislature does this without a system or a coordinating agency to at least make recommendations. This would eliminate an important buffer that opens the legislature up to special interest lobbying by all campuses. In sum, the newfound independence of the individual institutions would inevitably complicate efforts to ensure how all the varied groups and interests can be harmonized in alignment with state goals.

As a consequence, this option requires the creation of a suitably empowered coordinating board and raises the stakes for getting its powers, structure, and governance right, lest any compromises made in the process of establishing a coordinating body leave Connecticut with even less effective coordination than it currently has. Further, eliminating the system either extends the mission of a coordinating body to manage additional tasks that are especially hard to carry out without the authority direct governance provides—namely shared services, promoting collaborative programming among different institutions, and ensuring seamless transfer for students—or enhances the likelihood that these tasks will not be done. In effect, eliminating the CSCU system attempts to address some of its issues by concluding that the challenges CSCU is trying to address are not worth solving. Such a conclusion would be out of step with the nature of the challenges higher education institutions are facing in the coming years, most especially those in New England where demographic conditions are among the bleakest in the nation.

Option 3. Eliminate the System Office but delegate one of its member institutions to carry out system-wide functions. There are some who might propose that the system-level functions could be managed effectively enough by one of the existing institutions in the system, thereby potentially saving the state money and even possibly seeing better results from having system-level functions executed by those who are closer to the day-to-day realities of institutional leadership, faculty management, and student services. No doubt there is effective institutional leadership within CSCU. Yet, such an arrangement would inevitably confuse the state's priorities with those of the institution charged to direct system-level tasks. It would also struggle to recognize that any function performed at the institutional level has very different tasks to execute and expectations to meet at the system level, eroding confidence among other stakeholders in the state that their specific needs (and those of the campuses in their town) are being given appropriate attention, create confusion about how functions managed at a campus are supposed to balance the needs of other campuses and elevate concern at the home campus that its own issues are not being addressed. The University of Hawaii System offers a rich example of how joint system-level and institutional-level leadership has all of these effects.

Option 4. Reestablish a structure akin to the one in place in 2010 that included a CSU System, and Charter Oak and CT State as two separate institutions. Given that the community colleges are now a single institution with multiple campuses, the resulting arrangement would continue to have the CSUs governed by a system while CT State would become independent and governed by its own board. A shift in this direction would allow for more targeted oversight of both the community college (and its varied campuses) and the four-year institutions, ensuring that policies are designed in ways that pertain specifically to the different types of institutions now collectively governed by CSCU.

This option would create savings due to the elimination of the System Office, however, a portion of these savings would need to be reallocated to support the need for three separate boards and administrative structures. The creation of these organizations would increase competition for funding and legislative attention, though it may allow for increased focus on the particular needs of the CSUs and Charter Oak. It would also complicate the development of solutions for articulation and transfer from CT State to the CSUs, due to the lack of common oversight that currently exists (the same kind of problem concerning barriers to collaboration described above). That being said, CSCU is currently unraveling some of the shared services that they have not been able to successfully implement, such as human resources, by sending oversight back to CT State's central administration. This decision makes sense in light of the reality that none of the CSUs were meaningfully subject to shared services, making the "shared" part of it something of a misnomer. The strategy was for the CSUs to phase into shared services after CT State was successfully implemented. Since the endeavor to implement shared services for CT State was fraught with issues, the strategy to add the CSUs was abandoned. Moreover, CSCU's attempts to streamline articulation and transfer among its constituent institutions have borne limited fruit so far. Over the summer, CSCU's board of regents approved a new general education policy that in time may yield more evidence of success in smoothing student pathways among institutions. This policy was the product of difficult and delicate negotiations; whether any such policy could have been ushered over the finish line at all without common governance between the community college and the CSUs is uncertain.

Option 5. Organize the back-office functions of CSCU under a separate services corporation. Under this option, CSCU would create a new organization with a mission of providing administrative services to CSCU institutions on a quasi-voluntary basis. This option could be implemented in conjunction with other organizational structures. The idea would be that the promise of greater efficiency advertised for CSCU's shared services is still a viable one—that centralizing some activities helps CSCU institutions achieve greater scale than each of them can on its own. CSCU's current implementation of shared services is flawed for two main reasons: first, because the services are not really shared—only CT State and Charter Oak participate, and Charter Oak is very much the junior partner in terms of size—CT State's leadership feels a sharp disconnect between its own accountability to stakeholders and its ability to manage the services itself. This is a major reason some of the functions are being decentralized. The second flaw is that the costs of the services are swept off the top of CT State's portion of CSCU's block grant. This arrangement severs the link between performance and customer satisfaction in the delivery of services. In other words, CT State has no ability to affect the quality or the pricing of the services it receives from the system, beyond

pleading with System Office leadership, nor does it have a clear view into the costs relative to the benefits of those services.

Reorganizing shared services into a separate entity has the potential to solve several of the problems. It borrows from examples of similar efforts among private institutions, particularly small ones that recognize their ability to pay separately for expensive back-office costs and still remain sustainable is limited. These various organizations, such as the Green Mountain Higher Education Consortium (composed of three Vermont institutions), the Colleges of the Fenway (five colleges in Boston), and the Claremont colleges (seven institutions in Southern California) demonstrate the viability of this approach. Public colleges have so far been much less likely to affiliate in this way for two reasons: the first is that their public subsidies have shielded them from having to take on the often extremely hard work of conforming policies, practices, and cultures among multiple institutions sufficiently to make these arrangements operational and the second is that public higher education systems already aggregate various services on behalf of their institutions in this way. Though relatively rare, there are examples of consortia of independently governed public institutions working together in a similar manner, such as the Collaborative for Higher Education Shared Services (CHESS) in New Mexico, which consists of six community colleges in the state. Public institutions in Virginia also participate in the Virginia Higher Education Procurement Consortium.

Creating a separate entity to manage shared services in this way has several advantages. First, it would make clear the costs and benefits associated with system-supplied functions rather than the lack of transparency that comes with the system performing those functions on behalf of institutions. Creating conditions in which shared services are purchased from the services corporation on a contractual basis would help ensure that shared services meet customer needs cost-effectively. Provisions in the enabling agreement allowing institutions to discontinue their participation in specific services or in the consortium itself would introduce a controlled market where the incentives would privilege transparency, efficiency, and demonstrably strong performance. (Such provisions should ensure that a decision by any institution to discontinue participation has consequences of its own, at least roughly equivalent to the impact on institutions that continue receiving services.)

A separate organization would be led by project and change management professionals with the requisite experience managing complicated implementations, skills that are not widespread in nonprofit higher education. The entity should be overseen by a board comprised of all participating campus presidents/chief executives as well as a representative of the System. This board would be responsible for establishing priorities and operating procedures and evaluating the performance of the entity's leader. This would likely reduce concerns from institutional presidents that they have no meaningful say in the way shared services are designed and delivered by a system led by the same individual who evaluates their own performance. This structure should help ensure that the design of the services effectively keeps the essential direct student (or employee) supports at the campus level while centralizing the elements of the function where standardization and specialization are best located. Such a design would also release the System Office to focus its resources on policymaking—improving credit mobility, student success and time-to-degree, resource allocation, and program development and review—instead of on managing day-to-day

operational matters. In concept, it would also be possible for other postsecondary institutions in Connecticut to "buy" services from this organization on similar terms as CSCU, depending on the rules under which it operates.

To be sure, there are significant challenges associated with establishing and maintaining such an organizational structure. Among these is the real difficulty of establishing the entity in the first place. As described above, there are few obvious models from which to borrow. Likely creating the entity would require mandates coupled with multiple years of strategic investments to get it off the ground. This would require both urgency and patience on the part of system and institutional leadership, the legislature, and the executive branch. Even after such an entity is established, there remains the risk that institutions might seek to buy services from an alternative provider offering a lower price or opt out of the consortium, either of which could threaten the sustainability of the enterprise. Furthermore, this option offers a solution to only one of the numerous issues that must be resolved if CSCU is to become a truly effective system.

Option 6. Incorporate UConn into a statewide system or consider if any parts of the CSCU entity could be leveraged by UConn to meet unmet demand. By integrating public higher education governance under a single board, this option would sharply reduce or eliminate the need for a separate coordinating entity. Single system governance would provide the best chance for ensuring credit mobility among all the public institutions in the state. It would be able to take advantage of the added scale and of some of the sophisticated capacity present in the UConn administrative lattice. However, there are serious flaws: legitimate concerns that the interests of the less prestigious institutions would be sacrificed to the priorities of UConn, as well as concerns from UConn that such a structure would be a distraction from its own priorities, particularly around research and public service (especially its land-grant mission) that are not as significant in the CSCU system. Additionally, in a practical sense, any such proposal is likely to draw furious resistance from UConn. While it is hard to imagine that incorporating UConn into a single statewide system could be a serious option, in the interests of comprehensiveness, it is included here.

Recommendations

This section presents NCHEMS' recommendations to Connecticut, beginning with those focused on the CSCU system. The effectiveness of the CSCU System, its institutions, and these recommendations—if adopted—partly depends on the broader policy context within the state. Therefore, NCHEMS provides recommendations to the state, aimed at creating the conditions for CSCU's success and thereby better achieving its own goals.

These recommendations focus on roles, responsibilities, the allocations of authority, and design features that adhere to certain principles, namely:

- The needs of students and the state take priority; institutions and the System Office are critical means to meeting those needs but are not ends unto themselves.
- The state has an obligation to ensure that residents in all geographic parts of the state are adequately served by its higher education enterprise. This has implications for

funding, sustainability, access, dispersion of programs, attention to regional variation, and educational delivery.

- The state is also obligated to maximize the availability of educational opportunities for students from all backgrounds—adults, underrepresented minorities, single parents, low-income students, and first-generation students.

- Form must follow function. It is vital that decisions about structure and organization be made in full view of the functions that must be performed to achieve the state's goals.

- Significant changes in higher education governance will take time for full implementation to occur. During the evolution from the current to the final state, planners must prioritize a series of steps, exercise care and intentionality in change management and project management, and continuously evaluate progress and adjust accordingly. A carefully phased transition period should also involve stakeholder input as well.

- Connecticut's unique context is crucial. In the development of these recommendations, consideration was given to the specific contextual features of Connecticut, but Connecticut will still need to do the difficult work of developing solutions that fit its specific needs. While much can be learned from the experience of other states, there are no shortcuts to developing policies tailored to the state's unique needs. In other words, simply borrowing another state's policy design or governance model will not produce the desired results. Further, there are few industry standards that can be drawn upon to provide guidance for many of the key questions that must be addressed.

Recommendations on Structure and Governance

1. Based on years of experience in the area of higher education organizational restructuring, NCHEMS strongly recommends retaining the CSCU System (System Option 1 from above) with the proviso that shared services could be organized under a separate entity (System Option 5 from above). The problems of the System can be addressed within the current governance structure and doing so would avoid the costs and turmoil associated with selecting any of the other options. As there are many states throughout the nation that operate systems structured similarly to CSCU, there is nothing inherently wrong with the System structure, although we make recommendations for how it can and should operate more effectively below.

   This recommendation should not be viewed as simply maintenance of the status quo. There is a clear need for the system to respond more effectively to the challenges it and its institutions are facing related to enrollment in ways that preserve access to affordable higher education throughout the state, in part by bringing the benefits of scale and coordination among its member institutions to improve the stewardship of taxpayer funds and student tuition payments and by collaborating across the enterprise to improve student outcomes and meet workforce needs. A major assumption of this recommendation is that the System will evolve to deliver complementary services that augment institutional decision-making, expand their reach to new populations of prospective students, address the talent development needs of employers, and drive operational efficiency. The System has new board leadership that has shown signs that it

recognizes weaknesses in accountability that have plagued the system in recent years. This new leadership should be given the chance to address the problems identified and to make the current structure-function effectively, but it must act with purpose, urgency, and stewardship.

2. The state should create a single entity to conduct statewide coordination of higher education. From among the options presented earlier in this report, we recommend that a Coordinating Board be established and that the current OHE be incorporated into the new agency as a unit having essentially the same functions as it now performs (State Policy Coordination Option 2 from above). This arrangement mirrors a recommendation NCHEMS made in 2015 in support of a strategic plan for higher education in Connecticut that was adopted by the Planning Commission for Higher Education,[32] but never implemented. It is all the more relevant and critical now in view of the challenges facing CSCU that are documented in this report and given the conditions higher education will confront in the future. The establishment of a statewide coordinating body keeps policymaking and data analyses for all of postsecondary education (including the private sector) within a single entity. It also limits disruptions in OHE operations and allows creating the capacity needed by the Coordinating Board from scratch—not trying to twist existing capacity into an entity that can meet new and broader set of expectations for policy leadership. This is a model that has proven effective in other states, Oregon and Tennessee, for example. Notwithstanding the need for such a body, its creation and investment with appropriate authorities should be the product of a carefully planned transition process, but not one so drawn out that it serves to postpone indefinitely the establishment of a single coordinating agency.

Recommendations for the CSCU System

1. Put WCSU on a firm financial footing. In FY12, WCSU's reserves of about $25 million were slightly greater than SCSU's and more than double ECSU's. Over the next eight years, WCSU's reserves rapidly eroded until by FY21 its reserves balance was negative. The failure to arrest this steady decline is a sign of obvious weakness in oversight and accountability. That WCSU continues to operate from a deficit position has negative effects on the rest of the institutions in the system, both directly, in terms of funds that are being diverted to shore up WCSU's budget, and reputationally. The inability of the System Office and the Board to act in a manner that ensured the adoption and implementation of solutions to WCSU's financial challenges during its lengthy decline, and to safeguard its accreditation, has raised concerns about the effectiveness of the system itself.

This can no longer be tolerated. Like its sister CSUs, WCSU plays a critical role as a point of access to affordable postsecondary education for students in its service area. Its role in serving the broader needs of the Danbury and surrounding communities is equally important.

To be sure, righting WCSU's financial fortunes will not be easy. And, in keeping with other observations and recommendations in this report, it will be critical that effective communication and outreach to local stakeholders occurs in developing and implementing solutions. Yet NCHEMS itself provided a blueprint in its reports in January 2022 and December 2022 that can serve as a starting point for discussion, particularly with regard to the necessity for WCSU to more effectively conduct outreach to and work with its diversifying local community and students.

Any progress in helping WCSU develop and implement action plans and in holding WCSU accountable for carrying out the actions will increase the likelihood of a more sustainable future, and will go a long way in demonstrating the ability of the System Office and the Board to exercise bold and essential leadership. A vital first step in making that progress will be to put forward a satisfactory plan to address NECHE's concerns set forth in its Notice of Concern. CSCU asserts that it spent the last several months undertaking a careful study of the problems at WCSU and reports that it is on the cusp of issuing a plan to tackle its long-standing problems. It also has an opportunity in the recruitment of a new president for WCSU, if it prioritizes the selection of a seasoned leader adept at change and financial management. Still, any failure to demonstrate tangible improvements within a reasonable timeline will likely confirm the concerns of stakeholders that the System is not fully capable of performing its fundamental oversight role.

The financial conditions at CT State are also in need of urgent improvement. But WCSU is singled out here due to the concerns expressed by its accreditor and because CT State has been involved in multi-year contentious consolidation that has created unique complications and uncertainties.

2. Clarify the complementary roles and responsibilities of System and the institutions. It became clear during the project that there is a lack of clarity regarding the roles of the System vis-à-vis those appropriate for the constituent institutions. This has led to duplication of effort in some cases and lack of attention to important functions in others. This role confusion has been further exacerbated by communications patterns that have not served the System or the institutions well. The smooth functioning of the System requires that roles and responsibilities be clearly delineated and understood by all parties. A critical support in this regard is an effective communication strategy that creates a virtuous feedback loop ensuring that decision-making at the System level benefits from the front-line experience of institutional actors. To that end, we suggest that the roles of the System include:
    a. Provide policy leadership to the System. This includes engaging with other state entities (the governor, the legislature, other executive branch agencies, and UConn) to create a statewide plan for addressing talent and economic development, ensuring that a strategic plan for the System in alignment with

state priorities is in place, and widely communicating the goals established through those processes to all stakeholders, both inside and outside the System.

b. Create and implement a resource allocation model that serves to ensure the maintenance of institutional assets, provides the constituent institutions with the resources required to pursue their missions at the scale appropriate to address student and workforce demand, and encourages the pursuit of state and System goals. It should also be designed to ensure the calibration of the level of System Office staff and other resources based on the performance of system-supplied services. That suggests, for example, that there should be a healthy feedback mechanism by which institutions (or others, as appropriate), as "customers" of a service, are able to meaningfully affect change in the service provided, potentially including by opting out of a particular service.

c. Establish a process for prioritizing additions, maintenance, and deletions to System capacity. This includes capital construction, distance education capacity, new programs, etc. In FY23 legislation was passed at CSCU's request that provided CSCU with the excess proceeds from the sale to be utilized for deferred maintenance and capital needs.

d. Approve institutional missions—ensuring that each institution has an operational mission that clarifies the student bodies to be served, programs and services offered, and any special features or special competencies of the institution. In the process, the System should ensure that the collective educational assets of the System meet the needs of the state and its citizens and that services are provided efficiently.

e. Monitor demand for postsecondary education services among potential student populations and employers for relevant programs, and create expectations that the institutions will be appropriately responsive to those demands. It is evident that the CSCU institutions can no longer rely on a robust pipeline of traditional-age students. They must adapt their practices and policies to meet the needs of new student demographics, including adult learners, incumbent workers, new immigrants, etc. Though the institutions are working to adjust, the System Office has an obligation—imposed by its mission and by its fiduciary responsibilities—to ensure that institutional leaders have the flexibility and support to make change where it may be difficult or unpopular, including phasing out low-enrolled and low-demand programs to increase efficiency and improve affordability for students and the state. Likewise, CSCU should leverage its scale and broad engagement with the state to ensure that programs that meet current and future student and workforce needs are being addressed, including the creation of new programs or otherwise adding capacity that will meet demonstrated workforce demand; in some instances, it will be important for the System Office to be more directive in allocating resources and responsibility for certain programs based on attributes like location and existing complementary programs.

f. Assist institutional leaders in ways that are necessary to the success of their institutions. This is a critical but sometimes underappreciated role for systems to play: adding value to the work of institutions by serving as a conduit for effective practices and actionable insights to reach institutional leaders at multiple levels and inform their decision-making and actions. This can take various forms, including:

    i. Compile and communicate data and information needed for institutional decision-making—data about such topics as workforce supply and demand, regional demographics, student mobility within and beyond the System, and other management needs. The System needs to become seen as much of a provider of data to institutions to facilitate data-informed decision-making as it currently is perceived to be a requestor and recipient. In the process, CSCU can establish more regularized routines for managing data requests to the institutions, organizing data products that arise from data requests, and building standardized analytical tools in concert with institutional researchers.

    As part of this, there should be clearly articulated data governance principles that establish a clear separation between how the System will use institutional data and how institutions do so. In particular, it is important to recognize that the data needs for the day-to-day operations of an institution that depend on access to transactional and live data, and the higher-order analytical needs of the System to address questions of policy and system-level performance, are not the same. Part of the effort to differentiate the roles of the System and the institutions should focus on determining the best ways to manage access and use of system-wide data resources and to maintain written policies and effective tracking that provide guidance and keep records about what data are being provided to whom.

    ii. Convene institutional leaders to share information about effective practices and to orchestrate shared learning. Also, use these convenings and other communication vehicles to gather input about system initiatives

    iii. Provide training to leaders throughout the system—at the presidential and cabinet level, but also in facilitating that training to department managers and others in supervisory roles—regarding the degrees of freedom available within the various collective bargaining agreements and the procedural steps to be followed in personnel actions.

    iv. Provide any training needed to ensure that budget guidelines are understood and followed. Further, these guidelines should create incentives for institutions properly managing their budgets and ensure that well-managed institutions are not being punished.

v. Support and help to coordinate fundraising activities by maintaining a database of alumni and other potential donors. The system's role here is not to lead these activities, but rather to bring the benefits of scale to data analysis.

vi. Require institutions to maintain a database of space inventory and usage and a campus facility master plan and provide necessary support to ensure these tasks are managed in a standardized manner.

g. Develop and promulgate systemwide policies and associated processes, including:

i. Changes to institutional missions.

ii. Approval of institutional strategic plans and timelines.

iii. Program development and approval—the existing policy on academic program review is appropriately detailed but could be supplemented by engagement from the System Office to proactively address workforce needs that are not being fully satisfied in the state. It will be vital if changes are made that they are made with an eye towards making the process more efficient. Additionally, the policy should create a requirement that institutions explore collaborative/joint offerings before a full application for a new program is submitted. It will be vital that changes made to these processes are designed in part to make the process more efficient.

iv. Regular review of existing programs to ensure they meet system standards for demand, productivity, and relevance. These expectations must be sensitive to the fact that programs are nested in departments and that even programs that appear to be under-enrolled may be important ingredients for a department that produces significant instructional activity at the lower-division level. Further, institutions should be encouraged to evaluate the number of academic departments to look for opportunities to consolidate or otherwise leverage resources more effectively. Yet the current BOR policies are unclear about the requirements on the System Office to ensure that program reviews routinely occur. Although a recent initiative by the System Office to conduct productivity reviews of academic programs reportedly did not fare well, it is an appropriate responsibility for the academic affairs function at the System Office to support decision-making about programs at constituent institutions. This is particularly true when a system has seen significant enrollment declines—program offerings may need to be streamlined or tuned to better meet the needs of new audiences if they are to be sustained.

v. Budget development and review. This includes requirements that institutions balance their budgets and provide periodic reports to the System Office and Board indicating adherence to their budgets. Appropriate reports should be made available as soon as possible and

ideally not later than 30 days after the census dates for the fall and spring semesters. Approval should be required for any budget variations in excess of 10% (or other amount established by Board policy). This effort should include mechanisms that track the accuracy of projections of each of the institutions and the System Office against the actual results in ways that not only represent the effective use of management systems but also boost CSCU's credibility with the state.

    vi. Personnel policies including adherence to collective bargaining agreements and the management prerogatives allowed by those agreements as well as topics not covered by the agreements.

    vii. Allowable uses of one-time funding. There should be clear policies about the use of non-recurring funding and its use in seeding and growing strategic investments but excluding its use to support regular and recurring operational spending.

    viii. Requirements for accountability reporting including trend data on outcomes.

h. Provide services on behalf of the constituent institutions, where the nature of such services is particularly amenable to centralization. These include government relations, legal affairs, auditing, as well as others that are deemed appropriate. To the extent that services are provided, there should be agreed upon service-level agreements, key performance indicators, specificity about the costs to be charged to each institution, and clear provisions allowing institutions to opt out of such services tied to performance thresholds, steps to be taken to opt out, and related timelines.

The role of institutions should be to:
a. Instruct students, conduct research and perform public service.
b. Carry out Board and System policies.
c. Manage the personnel resources of the institution—hire faculty and staff and assign them to functions in ways that efficiently and effectively carry out the mission of the institution.
d. Provide programming and services consistent with the mission of the institution and needed to ensure the successful pursuit of that mission.
e. Furnish data and information to the System Office as necessary to ensure accountability for both finance and performance.
f. Create and implement a strategic plan for the institution that reflects the pursuit of both institutional and System priorities.
g. Engage with peers across the system and the System Office to provide input to major initiatives and policy development before their implementation.
h. Cultivate and maintain close relationships with regional stakeholders.
i. Lead fundraising and alumni relations activities.

As CSCU considers how best to create better role differentiation and clarity, we urge the System to consider that it must be an inclusive process involving institutional leaders; a better way of working cannot simply be created by fiat. The System should organize a task force with appropriate subgroups to tackle those functional areas where responsibility for effective performance is shared (e.g., academic policymaking, institutional research/effectiveness, and decision support).

3. Require that each institution and the System Office develop a staffing plan that indicates how the institution will achieve staffing levels that allow meeting the institutional mission while staying within the constraints of a balanced budget that is based on realistic projections of enrollment demand. The staffing plan should incorporate an approach for tracking filled and vacant positions in a manner that does not constrain the institution's ability to flexibly and nimbly respond to changing demand or other conditions. It should also document assumptions in the budget that relate to staffing. Given the fact that the preponderance of institutional costs is in personnel expenditures, this analysis is intended to bring staffing and other costs into greater alignment with enrollment levels. Such plans should be regularly monitored by the System and adjusted as needed multiple times per year along with data related to the level of filled positions and status of vacant positions. Elements of the staffing plan should specify:
    a. The level of expenditures on personnel costs that will ensure that the institutional budgets can be balanced, along with a projection of the gap that results under the current pace of spending.
    b. Anticipated plans to reduce spending in programmatic areas, including the closure, modification, or consolidation of programs resulting from a robust program review process as described above, or to create new capacity as necessary to meet documented student or employer needs. In the latter case, the plan should indicate assumptions for corresponding revenue and a specific timeline with milestones. Changes should indicate the impact on various personnel categories, including layoffs that may be necessary or appropriate, and confirmation of compliance with applicable accreditation requirements.[33]

4. Reorganize the System Office to better align its structure with the functions to be performed.
    a. Evaluate the functions being carried out by the System Office to determine if employees have the appropriate skill sets for the functions they are performing. Consider commissioning an independent desk audit for this purpose. The results should yield a plan for ensuring that the System Office is focused on performing the right functions as effectively as possible, as well as whether and which services may need to be revised or eliminated. This plan should address any appropriate adjustments in staffing levels, including whether all aspects of the functions that are appropriate for the System to carry out have too many (or too few) employees assigned to their execution. Although CSCU conducted a salary survey more than five years ago, it should nevertheless consider conducting

another independent assessment of compensation, including using data from the State Higher Education Executive Officers (SHEEO) survey of its members, as this data source very closely matches the nature of work that at least the executive level leaders within CSCU's System Office do.

b. Charge the Office of the Vice Chancellor for Academic Planning and Policy with ensuring that the collective educational assets of the system are aligned with the needs of the state and that those assets are utilized in ways that meet the needs of students and employers in all parts of the state. This office should take a more proactive role in identifying state and regional workforce gaps and leading a process that determines how the System—and individual institutions within the System—can best respond to those needs. This office should also develop policies governing the approval of new programs and the periodic evaluation of existing programs. Concerning review of existing programs, this office should propose policy for Board adoption that includes criteria for identifying programs that should be considered for revision or closure. These criteria might include the numbers of degrees awarded, the importance to workforce demands, and the role of the offering department in providing courses required for other degree programs. The office should also work to help guide management decisions by institutional leaders related to the organization and delivery of programs in ways that promote:

   i. Innovation in effective delivery to currently underserved populations.
   ii. Joint delivery of academic programs by multiple institutions.
   iii. The consolidation of academic departments, as appropriate, in order to reduce the overhead related to department management.
   iv. An appropriate mix of lower-division, upper-division, and graduate courses among departments that carry a large load of general education courses but have relatively few majors.
   v. Identification of low-demand and high-demand programs for institutions to evaluate with their respective stakeholders.

c. Create a separate "Services Corporation" to manage the shared services functions of the System. This would create a clearer line of demarcation between the policymaking and operational roles of the System and add to transparency about the actual size of the (policymaking part of) the System Office. This organization should be:

   i. Led by individuals who have demonstrated expertise in project management, likely from external sources.
   ii. Governed by an oversight board comprised of representatives of the System Office and the Presidents of all constituent institutions that is charged with establishing priorities and ensuring communication to all relevant stakeholders.
   iii. Given a realistic opportunity to demonstrate value as rapidly as possible, through deliberate planning that avoids taking on too many services too

quickly, a temporary mandate for institutions to participate and an infusion of strategic investment funds to promote and incentivize engagement by the institutions and to build necessary infrastructure in the form of a qualified team and necessary documentation.

This entity could be organized as either a totally separate unit within the Chancellor's Office or as an entity with standing similar to that of one of the institutions in the system. In either event, it must be separately identifiable in ways that allow for Board oversight and accountability.

5. Pay particular attention to the development and implementation of personnel policies with an eye toward:
   a. Maintaining maximum flexibility in the deployment of human resources, both geographically and across functions.
   b. Ensuring that CT State can function as a single institution.
   c. Ensuring that individuals hired in leadership positions on the campuses understand that they are part of the leadership team of the System as well as institutional leaders and that they will be evaluated accordingly.

6. Prioritize efforts by the HR and legal units toward in-depth training and on-going assistance to campus decisionmakers on matters related to managing personnel within the constraints of the collective bargaining agreements. The objective should be to establish a culture of understanding how to accomplish a desired end within the structure of the CBA and eliminate the culture of citing the CBA as a routine excuse for management not taking actions that are, in fact, spelled out in the CBA. This is not to dismiss the history of grievances and other challenges to management decisions that have delayed or derailed efforts to make strategic changes in the deployment of personnel, and even to take action for cause. Reticence in this regard (as illustrated by statements that layoffs are off the table and evidence that dismissals are rare in the extreme) contributes to financial strain at a time when enrollment has weakened and as the System faces the expiration of stimulus funding, while also hindering the System's efforts to strategically realign itself. To be effective, all parties in the system must be able to follow the provisions set forth in the CBA, including proper documentation of personnel issues. It is no longer satisfactory for institutions to relocate problematic employees to different jobs.
   The need for institutional leaders to gain expertise and capacity in managing personnel issues gains urgency because of the likelihood that institutions will need to streamline their program offerings to prioritize programs that meet the needs of students and address regional workforce needs.

7. Implement a more sophisticated model for allocating the block grant from the legislature to the CSUs. This model should reflect mission (programmatic and audience) differentiation, provide incentives aligned to state and systemwide goals and priorities, and embed accountability for system-provided services in its structure. NCHEMS has

developed a conceptual framework for such a model, which is also applicable to the state in making determinations about state higher education appropriations. This model is described in Appendix F.

8. Revise the Board policy on reserves, especially the use of the Project Fund monies, with the goals of improving transparency around the purposes of the reserves and how they are being used, and actually use them to proactively address mounting sustainability concerns through strategic investments in transformation and to more directly meet the needs of students. This revision should include:

    a. More careful specification for how the reserves are to be divided for the purposes that follow. These are typical "buckets" used to specify the nature of reserves[34]:

      i. Funds that are already obligated for an existing contract or other encumbrance, including funds restricted by a donor for specific uses.

      ii. Funds that are not yet obligated but being accumulated for a planned purpose, typically an expense that requires savings over multiple budget cycles. This also may include funds restricted by a donor.

      iii. Actual reserves that are not otherwise obligated or planned but being kept in case of emergency. These might be better labeled as Contingency Reserves.

      iv. Discretionary reserves. This represents the "Project Fund" in current policy (which may be better titled as "Strategic Investment Fund").

    b. Provisions that would allow the System Office to be much more proactive in directing these funds for use in supporting Board-approved projects/initiatives that achieve key objectives. These could include such things as investing in innovations, such as the development of new program offerings at the institutions, the creation of a statewide prior learning assessment (PLA) capacity, the limited adoption of principles and practices for competency-based education, accelerated degree pathways, and so on.

    c. Making sure that the constituent institutions will make the changes necessary to achieve balanced budgets and fiscal sustainability. This should not simply involve transfers of funds for the purpose of covering shortfalls. Rather, these should be investments in changes embodied in a campus plan, which is reviewed and approved by the system and the Regents, for balancing budgets and building reserves to the prescribed levels within an agreed-upon timeframe. To further ensure that funds designated for this purpose achieve the desired result, it may be appropriate to release them when agreed-upon milestones are completed.

    d. Create provisions under which institutions that are performing well financially are not penalized by having the entirety of any excess reserves they generate subject to redistribution to other less well-performing institutions through the Project Fund. It may be unavoidable in cases where one or more CSCU institution is in severe financial crisis, but these provisions should trigger the

exertion of greater levels of accountability as well as tracking which institutions are serving as "donors" to those campuses.

e. When Project Fund amounts exceed a threshold established in Board policy, the policy should specify that additional funds could be used to maintain affordability to students, especially through strategic one-time or multi-year investments in improved student outcomes, adjustments in staffing to bring expenses into greater alignment with enrollment, and new well-designed interventions and programs. The main difference here would be to create the expectation that students needs are addressed as a priority over the accumulation of that portion of the System's reserves, which are not obligated, planned, or set aside for emergency use, beyond a reasonable level. (This can be a complicated determination but could be triggered when the student share of "adequate" funding exceeds the levels determined in state policy. This will require that the state adopt an "adequacy model" for calculating the level of funding the System should have for its constituent institutions as well as a policy specifying the shares to be borne by students and the state, respectively.)

9. Provide campuses and the System Office with clear guidance for the preparation of annual budgets. This guidance should utilize a strategic budgeting framework that asks institutions to identify projected revenues and budgeted expenditures in four major categories: Assets, Consumables, Contingency, and New Initiatives. The framework is depicted in Figure 27 and described in more detail in the January 2022 report NCHEMS prepared on WCSU for CSCU. Populate the framework beginning with reasonable estimates for revenue from the various sources on which the institution relies. Next, enter expenses in a sequence that starts with those not under the institution's control (e.g., utilities), those that are required to maintain the institution's assets, and reasonable estimates for contingency funding and for strategic investments in change or improvement are protected. Any remaining gap is the target for budget adjustments. This framework should work in close harmony with the staffing plan previously described. In creating such a strategic budget, the System can provide specifications for the:

a. Rate of inflation to be used in calculating line-item amounts for purchased goods and services with as much specificity as possible (i.e., potentially different rates for different items—energy, lab supplies, etc.).

b. Size of the contingency fund to be built into the budgets.

c. Algorithms to be used for calculating the level of funding to be included in the budget for maintenance of assets, especially buildings and equipment/technology, but also professional development and curriculum revision.

d. Application of tuition and fee waivers.

e. Limits on the substitution of part-time (or contracted) employees for full-time employees. This topic should also be addressed in campus staffing plans.

Figure 27. Strategic Budgeting Framework

	Quality	Quantity	Utilization	Costs		Revenues	
				Unit Cost	Total Cost	Total Revenue	Revenue Sources

Assets
   Personnel
   Facilities
   Equipment
   Collections
   Students
   Finances
   Program
							Student Fees
							State Budget Appropriations
							Govt. Grants
							Private Gifts
							Endowment
							Sales & Services
							Other Revenues
							Reserves

Consumables
   Services
   Supplies
   Utilities							

Contingency							
New Initiatives							
Total						=	

In addition, the Board should Implement mechanisms that track the accuracy of financial projections for each institution and the System Office with the actual result. Inaccurate projections, as when CT State projected a deficit for FY24 that necessitated board approval of a reduction plan, yet ended the year with a $72M surplus—even if the differences resulted from unanticipated improvements in enrollment, the unexpected return of $12 million by the System Office, and other reasons—raises questions about the credibility of the System. This is especially pertinent when those projected deficits are used as justification for legislative requests for additional funding to balance budgets

10. Take the lead in establishing policies and procedures that smooth students' paths to credentials, make college more affordable, and more effectively prepare them for the workforce.

11. Work with each institution to develop a list of Key Performance Indicators (KPIs) that are tailored to the missions, approved strategic plans, and expectations for that institution. Implicit in the designation of KPIs is agreement on metrics that will be used to assess performance on each indicator. To support the oversight function of the Board and to make System performance more transparent to the public, prepare an annual report and create a dashboard showing trends in institutional performance on each of these indicators. Furthermore, CSCU should contribute data to P20 WIN to support the state's ability to evaluate progress, conduct planning, assure accountability, and identify opportunities for state-wide improvements, and to use the data internally (by the System Office and the institutions) to inform decisions. In addition, the System Office should

annually complete the IPEDS survey (reporting its own finance and staffing data) so that 100% of the costs for the entire system are included in IPEDS and key comparative data will be available to inform System-level decision-making.

Additionally, we recommend that the System Office maintain a more complete central data repository, coordinate data governance amongst the institutions, and provide value back to the institutions in the form of research, dashboards, reports, and comparison data.

12. Develop a formal process for onboarding new Board members and arrange for ongoing education of all Board members. It is particularly important that Board training makes clear the role of governing a system, not just acting as the Board for a collection of independent institutions. The Board has taken early steps to ensure this occurs through an engagement with AGB to train voting members, and this emphasis should continue. Training should be expanded to include all board members including ex-officio members.

13. Develop a clear list of items that require action by the Board. To do this effectively, the Board will need sufficient time to review all such matters as they come forward for approval, which suggests the Board should develop (in partnership with the Chancellor) a schedule for submitting these items. At a minimum, this list should include:
    a. Approval of system policies.
    b. Approval of institution and System budgets.
    c. Approval of the annual budget request to the legislature.
    d. Approval of capital budget requests.
    e. Approval of the operating mission statements of institutions.
    f. Approval of System and campus strategic plans.
    g. Approval of changes to institutional missions and the addition of new academic programs.
    h. Hiring campus leaders.

14. Develop a clear plan for the future of Charter Oak. Independent of this recommendation, NCHEMS is aware that the new board chair has requested a report outlining strategies for more effectively leveraging the unique capabilities of Charter Oak. NCHEMS recommends that, at a minimum, a plan of this nature should include:
    a. A schedule for the development of new academic programs to be delivered by Charter Oak.
    b. A strategy for using Project Fund or other monies to pay for this development activity.
    c. A strategy for collaborative development of these programs that draw on the capacities of other CSCU institutions. A part of this strategy must be ensuring that Charter Oak maintains intellectual property rights to program content, as this is a critical element of Charter Oak's business model. Such assertions of intellectual property rights are common among providers with a similar purpose and mission.

d. Specification of the role to be played by Charter Oak in the system's approach to Prior Learning Assessment.

e. Provisions that make Charter Oak's unique capabilities in instructional technology and outreach to new audiences more widely available for use in collaboration with the other institutions in the system. To the degree that this provision can be advanced through creative financial incentives, the plan should determine the nature of those incentives.

Recommendations for the State of Connecticut

1. Develop a set of statewide goals/priorities for higher education that are agreed to by both executive and legislative branches of state government. During its 2023 session, the Connecticut legislature passed a resolution calling for a Strategic Planning Commission.[35] To date, that Commission has not yet been seated, funding to support the commission was swept by the legislature, and its work has not commenced. It remains the logical vehicle to accomplish this task.

2. Create more systematic and transparent approaches to funding the state's public institutions of higher education, including UConn, and its student financial aid programs. This is another recommendation that previously appeared in the 2015 Planning Commission for Higher Education's statewide strategic plan,[36] which was not implemented. Yet the lack of a coherent finance policy continues to be a missed opportunity to ensure institutional efforts are aligned to state priorities. NCHEMS offers a framework for how to do this in Appendix F (this is the same framework CSCU should consider for allocating funds to its institutions). This approach aims to provide operating funds to institutions that conceptually:

   a. Recognizes the fixed costs associated with sustaining different types of institutions (recognizing the different fixed costs for research universities, comprehensive universities, and community colleges) and the variable costs associated with offering different programs and serving different types of students. This model can be augmented by adding features that reward institutions for contributing to the achievement of state and System goals.

   b. Recognizes the state's responsibility for maintaining the assets to which it holds title, specifically the academic facilities on college campuses. (This is not meant to imply that the state has not made efforts to address deferred maintenance; rather it is a sad reality that part of the reason that deferred maintenance has become a major nationwide problem at nearly all public colleges and universities stems from how states have typically left it to institutions to manage their plants, once built. This element simply encourages the adoption of a funding model that includes a provision that institutional appropriations are explicitly based in part on the necessary operating costs of maintaining state-owned buildings.)

    c.   Develops a well-defined and widely communicated and understood metric for "affordability to students" and annually prepare a report that provides data on this metric for each public institution.

3. The State should adhere to a consistent message about the willingness to provide funds to higher education. CSCU's efforts to appeal for more funding from the legislature in recent years has yielded additional resources that have helped CSCU close funding gaps.at the same time CSCU has experienced unprecedented reserves growth and in spite of declining enrollment and questions about funding sustainability in light of unfavorable future demographic conditions. This habit has emboldened stakeholders to believe that, in the end, the state will come up with additional funding. The legislature might consider appropriating funding provisions that ensure that any additional funds facilitate investments in system-wide institutional transformation, not for closing gaps that arise from institutions within the system that have not demonstrated disciplined budgeting practices. Although leaders throughout the system expressed relief at receiving new funding during the last legislative session, many also admitted that the state's willingness to come up with new funds made it difficult to build a compelling case that changes are necessary to keep the system and its institutions solvent.

4. Recommendations regarding funding for capital construction
    a.   Implement a two-year moratorium on new construction projects that add square footage to CSCU's overall inventory.
    b.   During this moratorium, require that CSCU prepare space inventories and utilization studies as needed and prepare campus facilities master plans that are in alignment with strategic goals. These plans should address all facility needs, including those of deferred maintenance, capital renewal and renovation for programmatic needs and suitability, along with details concerning the types of excess space or capacity.
    c.   Implement a rubric that prioritizes either the renovation or liquidation of existing assets. Many higher education institutions and systems and state legislatures use a rubric to objectively score capital project proposals. These rubrics are used to encourage alignment with strategic goals and the need to address liabilities. In general, states develop rubrics by identifying important categories and then scoring them based on a set of weights. Both the categories and weights vary among states that implement capital investment rubrics, and forward-looking states regularly review and update their rubrics. In 2019, Oregon adapted its rubric after commissioning a statewide capital planning study.[37] Its rubric, which serves as a useful model for Connecticut, as Oregon faces many similar challenges, can be found in the form of the docket item for the Finance and Achievement Subcommittee of Oregon's Higher Education Coordinating Commission in Appendix G, along with the rubric that it replaced and the reasoning behind the change. Wisconsin applies a rubric with four priorities, as follows:

i. Facility standards and compliance: Codes and compliance cannot be resolved through standard design and operating practice.

ii. Academic program and enrollment growth: Five-year trends show use beyond system standards or evidence the enrollment exceeds original building capacity.

iii. Revenue-based initiatives: Space shortages involving residence hall beds, dining capacity, parking, or other student-supported and engagement space or community-based initiatives.

iv. Effective use of capital and operating resources: Existing facilities are insufficient, dysfunctional, and no longer cost-effective to operate and maintain.[38]

A possible rubric for CSCU, with NCHEMS' suggestions for weights (out of a total of 100 points) that give priority to making more effective use of existing space over new construction, given enrollment realities and demographic projections, might include the following:

i. Pass-fail: All capital funding requests for new construction and wholesale renovation should be required to incorporate a coherent and reasonable plan for setting aside 2.5-3% per year of replacement value in maintenance costs. Those proposals that do not have such a component should be eliminated from further consideration.

ii. Pass-fail: A requirement that each institution has a complete space inventory and campus plan—this would incentivize institutions to make sure they are maintaining an accurate facilities database and a master plan. The system would need to provide significant support to the institutions to make sure all institutions are able to meet this criterion as soon as possible.

iii. Alignment with statewide and CSCU Strategic Goals—10-20 points. Applying this weight by OPM would rely on the statewide goals, while CSCU would focus on both its own goals and the states. Actually, using this factor requires both the state and the System to have updated plans.

iv. Cost savings achieved through reduction or elimination of deferred maintenance and/or operating costs—20-30 points. Institutions would be able to earn points through the demolition of obsolete buildings (demolition should constitute a valid request for funding), replacement of aging infrastructure that improves efficiency, renovations that serve to avoid addition of new space by remodeling existing space, addition of new energy-efficient equipment, and similar upgrades. Points should be partially awarded based on money to be saved relative to the size of the building. Buildings for which additional costs for eliminating environmental toxins should receive bonus points so that the extra costs of mitigation are not a barrier to approval.

v. Fire and Life Safety/Code Compliance—20-30 points. More points should be awarded for those projects that must be completed in order to remain in compliance of local, state, or federal law or regulations. Often but not always, these changes are phased in, allowing CSCU to incorporate necessary projects into a multi-year plan.

vi. Space Utilization/Needs—10-15 points. This category captures new construction and renovations that become necessary due to new programs, updated curricula or equipment needs, or to grow as needed.

vii. Impact on Student Outcomes/Student Success—10-15 points. This category addresses renovations and new construction that will help drive improvements in student outcomes. Examples include renovating an old classroom building that has mid-century learning technology (fixed desks, a blackboard) to incorporate more flexible, technology-integrated learning spaces. It also addresses co-curricular and academic support spaces where students can gather, build community, and study.

viii. Impact on Growth and/or Revenue—5-10 points. This category addresses investments that can be reasonably expected to yield additional revenue, through student recruitment, public/private partnerships, or other business opportunities. Given CSCU's existing space and Connecticut's demographics, this category receives less weight, and revenue projections should be judged closely. Opportunities to partner, including with the community, should come with reasonable expectations of shared funding. This includes new facilities to be supported by a donor.

5. Establish a requirement for annual training of public college and university Board members. This can be accomplished by holding a joint meeting of the boards for purposes of training in board roles and responsibilities and discussion of expectations regarding institutions' contributions to the achievement of state goals. Breakout sessions can be devoted to assessing the performance of the respective boards over the past year. Since non-ex officio Board members are appointed by the Governor with confirmation by the Senate, this meeting also provides an opportunity to involve these key policymakers in a discussion about progress toward state goals and needs for legislative action needed in the next session to remove barriers to the achievement of those goals.

6. When assessing the commitment of staffing and resources to the CSCU System Office, the state should consider that the system may need to be smaller or larger, or that resources may need to be reallocated, to bring efficiencies of scale to the management and operations of the institutions. However, it is vital that the recommendations noted earlier in this report are implemented, yielding an efficient value-driven organization.

7. Conduct a systematic "audit" of state legislation, policies, regulations, and procedures to identify any of these that create barriers to the accomplishment of state goals. On the

basis of the information gathered in the audit process, take necessary steps to remove those barriers; this may include revisions to legislation and accompanying regulations or changes to state administrative procedures. As is often the case when such audits are performed, some of the barriers are found in Board policy. Such an audit can also create a menu for Board actions.

8. Develop a state policy that ensures the availability of dual enrollment to reach, and lower barriers to participation, for all students. Given the need to increase the enrollments of low-income and minority students in CT colleges and universities, especially in the CSCU institutions, it is recommended that the state of Connecticut take steps to strengthen its dual enrollment programs in ways that increase both the numbers and diversity of high school students enrolled in such programs. These steps might include:
   a. Making an explicit state-level commitment to such programs and ensuring that all high schools promote student involvement in such programs.
   b. Eliminating barriers to CSCU institutions enrolling dual enrollment students. The barriers are primarily financial; special focus on helping low-income students access dual enrollment programs is needed. There are multiple ways in which this can be accomplished. The two that have been frequently adopted in other states are:
      i. Direct payment to institutions for the full tuition of each high school student enrolled in dual enrollment courses taught by the institution. It is typical that limits be established, generally six or nine SCH per semester.
      ii. Direct payment to the institutions to compensate for the number of courses that are taught by high school teachers but accredited and overseen by institutions of higher education.
      iii. Payments, through the State Department of Education, are made to school districts which, in turn, pay the institutions for the tuition charges incurred by their students.

In either case, neither the institution nor the students face financial barriers to their participation in the program. If the state does not have the resources to fully fund the dual enrollment program under these conditions, there are options available that include:

   a. Pegging the tuition levels that the state will pay to community college tuition levels.
   b. Means-testing awards to students—paying tuition only for students from low- and middle-income families.

As part of its efforts to build a more robust dual enrollment policy, the state should come up with a common understanding of the cost of the level of effort to oversee and accredit the programs delivered by high school professors.

Conclusion

The CSCU institutions are critical to the future of the State of Connecticut. Their capacity to fulfill their vital missions and address the needs of the population, employers, and communities will depend on their ability to adapt. This includes rethinking how they deliver education, what they offer, whom they serve, and how they can do so in a way that remains affordable for both students and state taxpayers. These requirements will necessitate changes, not all of which will be easy or without controversy. A System Office with an engaged Board is crucial to ensuring that the institutions are able to function effectively and efficiently. It achieves this by bringing the benefits of scale to the work of the institutions, providing guidance and resources the individual institutions would not otherwise have, encouraging and rewarding innovation and the spread of effective practices, and creating effective accountability mechanisms that stretch in both directions—from the System Office to the institutions and back again.

For this to work, state leaders will need to ensure that the policy environment provides fertile ground for the success of the System, not just by serving as a source of funding, but also by ensuring that there are well-coordinated policies related to higher education that serve to maximize the intended effect of the state's investments. It will take commitment and persistent focus over several years from state policymakers, leaders of the CSCU System, and its constituent institutions to make the changes outlined above, which are necessary to ensure that these critical state assets meet their obligations in the most cost-effective way possible.

Appendix A. Peer Analyses

As part of this diagnostic report, NCHEMS assembled peer groups for each of the CSCU institutions. These groups were used as benchmarks that provide indications of how well CSCU institutions are performing relative to other institutions that share many common characteristics. In conducting peer analyses, it is essential to recognize that no two institutions are identical. Each has its own distinct history, boasts distinct features, faces distinct conditions, and possesses values that it expresses in distinct ways. These truths also mean that the selection of a suitable peer group will inevitably require subjective judgment.

Acknowledging these realities in no way diminishes the utility of peer analyses, however. Increasingly, institutions require high-quality comparative data in order to be competitive, to assess how well they are carrying out their mission, to demonstrate their value, and to ensure they remain vital parts of their communities and states. Peer analyses are increasingly an expectation of the accreditors and states and, as much as it can serve as an external assessment of performance, it is also a valuable tool in sparking internal dialogue about strategic direction, identifying resources that can be helpful in problem-solving and improvement (in the form of peer institutions that have superior results), and supporting internal accountability efforts.

Moreover, the selection of peers, at least as practiced by NCHEMS, begins with a rigorous quantitative approach that aims at describing how the institution exists currently — not what it aspires to become. Selecting aspirational peers has value for institutional planning as well, but our focus for this project is strictly on how each CSCU institution is performing currently. A fuller description of our selection process is provided below, after which the peers for each of the six institutions are listed, but what is essential to understand here is that we only match on variables that characterize the business model of the institution—what programs does it offer, at what levels, to how many and what kinds of students, and what other aspects of institutional mission must be recognized. We explicitly avoid using the dependent variables—those we will use to measure performance—in selecting institutions. That means we do not match on variables related to institutional finances or student outcomes.

Selecting peers for the CSUs and Charter Oak is relatively straightforward in terms of process—for some institutions, there are relatively fewer similar institutions in the nation than for others, but our methods for selecting them require no notable alterations, apart from one. Although the CSUs are themselves relatively similar institutions, there are sufficient differences to not automatically include all of them in the peer groups for each. However, we were specifically asked to include the other three CSUs during our project for WCSU, and we maintained that practice here. To account for CT State's recent consolidation, we identified peer institutions with similar multi-campus structures and, where necessary (including for CT State) aggregated individual institutional data to a total.

Overview of NCHEMS' Peer Selection Methodology

NCHEMS' Comparison Group Selection Service (CGSS) is designed to aid institutions in selecting a group of institutions that are similar in mission to be used in comparative data analyses. CGSS has been in use at NCHEMS since 1982 and has been used by hundreds of institutions.

CGSS consists of two primary components. The first is a large database containing indicator variables on each of more than 7,000 higher education institutions. This database is constructed from data files derived from the various surveys that make up the Integrated Postsecondary Education Data System (IPEDS) survey system administered by the National Center for Education Statistics (NCES, a part of the U.S. Department of Education in Washington, D.C.). The indicator database contains variables covering institutional characteristics, faculty, finance, degrees awarded, academic programs, enrollments, research and other expenditures, and other miscellaneous data.

The second component of the CGSS is a set of algorithms designed to condense the 7,000+ institutions in the indicator database down to a usable list of potential peers for the target institution. These algorithms use a set of selected criteria to determine which institutions appear on the possible comparison institution list and their associated relative rankings within the list. Depending on the selection criteria described below, this list can run to hundreds of institutions, with each institution assigned a ranking based on the criteria used.

In order to avoid selecting peers on the basis of the key variables of interest such as funding levels or student outcomes, NCHEMS only relies on data that describe institutions' relative similarities on the basis of mission, size, program array (by level and field), student body characteristics, faculty characteristics, geographic location, and other special characteristics like an institution's status as a minority-serving institution. Only after finalizing a set of peers does NCHEMS pull data on other key characteristics like funding and student outcomes.

Part I: Selection Criteria

The selection criteria work as a filtering mechanism to eliminate characteristically dissimilar institutions from the institution comparison list. An institution that does not satisfy any one of the selection criteria is excluded from further consideration as a comparison institution. Typical selection criteria included sector (public), the Basic Carnegie Classification (the Carnegie group an institution belongs to, generally Doctorate, Master's, Bachelor's, or Associate's), whether an institution is Land Grant or not, and whether it has a medical school or not. Institutions not meeting the specified criteria selected for each institution were eliminated from consideration as potential peers.

Part II: Weighting Criteria

Once the universe of possible comparison institutions has been reduced by the selection criteria specified in Part I, the Weighting Criteria can be used to rank the remaining institutions from most similar to most dissimilar with respect to the weighting criteria (variables) selected.

There are two ways that the Weighting Criteria affect the rankings of possible comparison institutions. The first way is through the specification of a range for each variable. The range for each weighting variable is set according to the target institution value. An institution that falls within the set range of values is not affected by that variable in terms of its order/placement on the comparison institution listing. An institution whose value for a particular variable falls outside of the range specified will accumulate "distance points" and will be moved lower in the listing than an institution that falls within the range.

The second way that weighting variables have an effect is through the level of importance assigned to them, which determines the number of distance points assigned to an institution for being outside the range of values for a given weighting variable. Those that fall outside of the range on a variable that has been assigned "Very Important" will receive 100 distance points and those that fall outside the range on a variable that has been assigned "Important" will receive 50 distance points. Institutions that fall within the specified range receive 0 distance points. Since institutions are ranked in ascending order by the number of distance points they accumulate, institutions with a higher accumulation of points across the weighting variables selected will be viewed as less similar than the target institution and appear lower on the list.

In addition to this nearest-neighbor approach to selecting peers, NCHEMS also runs a Hierarchical Cluster Analysis that yields proximity scores that help triangulate the appropriateness of each set of potential peers. This process led NCHEMS to determine that a given institution not previously selected was a better match than originally assessed or that an institution previously selected as a peer was not as good a choice as an alternative. In those rare cases, peer groupings were adjusted accordingly to fine-tune the final set of peers selected.

The weighting criteria most often include fall and annual enrollment characteristics (FTE, time-status of students), distribution of awards conferred by award level, number of programs offered by award level, program array and associated distribution of awards, total research expenditures and research expenditures relative to instruction expenditures, endowment per FTE, and percent of undergraduates receiving Pell assistance.

Part III: Additional Adjustments

At this point, NCHEMS has a list of candidates to be selected as peers for the target institution, ordered by their distance scores. But the mechanics of creating that ordering may have overlooked important characteristics that make each candidate institution either a stronger or weaker match for the target institution, necessitating a further review to make additional adjustments to the list of peers. Institutions can be excluded due to known special characteristics not available/included in the selection criteria or for whom critical criteria fall farther outside the target than is acceptable (an institution may have a low distance score but fail on one or two critical criteria which would be grounds for exclusion from the final list of peers). Among the characteristics receiving special additional consideration include student body characteristics like race/ethnicity, location—both in terms of setting (urban/suburban/rural) and state (in part to ensure a reasonable diversity of environmental characteristics like state funding policies, NCHEMS tends to avoid selecting more than two institutions from the same state), Carnegie classifications schema, and other special characteristics such as HBCUs.[39]

Once the list is final with observed distance and proximity scores, a set of institutions most-like the target institution can be selected and used for comparative data analyses. Generally, 10-20 institutions are selected depending on the distribution of distance scores and how well institutions match critical criteria.

Peer Lists

Central Connecticut State University	
Eastern Connecticut State University	CT
Eastern Washington University	WA
Kean University	NJ
Murray State University	KY
Purdue University Fort Wayne	IN
Southeast Missouri State University	MO
Southeastern Louisiana University	LA
Southern Connecticut State University	CT
University of Tennessee–Martin	TN
University of Central Oklahoma	OK
University of Colorado–Colorado Springs	CO
University of Houston–Clear Lake	TX
Western Carolina University	NC
Western Connecticut State University	CT
Western Illinois University	IL

Eastern Connecticut State University	
California State University–Humboldt	CA
California State University–Monterey Bay	CA
Central Connecticut State University	CT
Indiana University–Southeast	IN
Lander University	SC
Shepherd University	WV
Sonoma State University	CA
Southern Connecticut State University	CT
SUNY New Paltz	NY
SUNY Old Westbury	NY
Truman State University	MO
University of Wisconsin–River Falls	WI
Western Connecticut State University	CT
Western Oregon University	OR
Westfield State University	MA

Southern Connecticut State University	
Auburn University at Montgomery	AL
Central Connecticut State University	CT
East Stroudsburg University of Pennsylvania	PA
Eastern Connecticut State University	CT
Eastern Michigan University	MI
Radford University	VA
Ramapo College of New Jersey	NJ
Salisbury University	MD
Stephen F. Austin State University	TX
SUNY Brockport	NY
University of Central Arkansas	AR
University of South Carolina–Upstate	SC
Western Connecticut State University	CT
William Patterson University of New Jersey	NJ

Western Connecticut State University	
Central Connecticut State University	CT
East Stroudsburg University of Pennsylvania	PA
Eastern Connecticut State University	CT
Georgia College & State University	GA
Lander University	SC
Longwood University	VA
Millersville University of Pennsylvania	PA
Minnesota State University–Moorhead	MN
Plymouth State University	NH
Ramapo College of New Jersey	NJ
Salem State University	MA
Salisbury University	MD
Shepherd University	WV
Southern Connecticut State University	CT
SUNY New Paltz	NY
SUNY Brockport	NY
SUNY Plattsburgh	NY
University of Wisconsin–Stevens Point	WI

NCHEMS

Charter Oak State College	
University of Florida–Online	FL
University of Hawaii–West Oahu	HI
University of Arkansas–Grantham	AR
Great Basin College	NV
Granite State University	NH
Thomas Edison State University	NJ
Colorado State University Global	CO
University of Wisconsin–Milwaukee Flex	WI

Connecticut State Community College	
Tarrant County College District	TX
Virginia Community College System	VA
Kentucky Community and Technical College System	KY
University of Hawaii	HI
Colorado Community College System	CO
Dallas College	TX
Tennessee Board of Regents	TN
Ivy Tech Community College	IN
Technical College System of Georgia	GA
Louisiana Community and Technical College System	LA
Community College of Vermont	VT
Lone Star College System	TX
Massachusetts Community Colleges	MA
Community College System of New Hampshire	NH

Appendix B. Additional Data Exhibits

NCHEMS has prepared the following graphs for each CSCU institution. Other than the first of these, the remainder are in comparison to each institution's peers. The graphs cover the following topics.

1. Undergraduate Student Origins by Connecticut Town
2. Enrollment Trends
3. Expenditure Trends
4. Expenses by Category
5. Staffing Trends
6. Student Outcomes
7. Retention Rates
8. Graduation Rates
9. Productivity
10. Class/Section Sizes
11. Industry and Occupation Projections

Undergraduate Student Origins by Connecticut Town[40]

Figure 28. Central Connecticut State University Undergraduate Student Origins
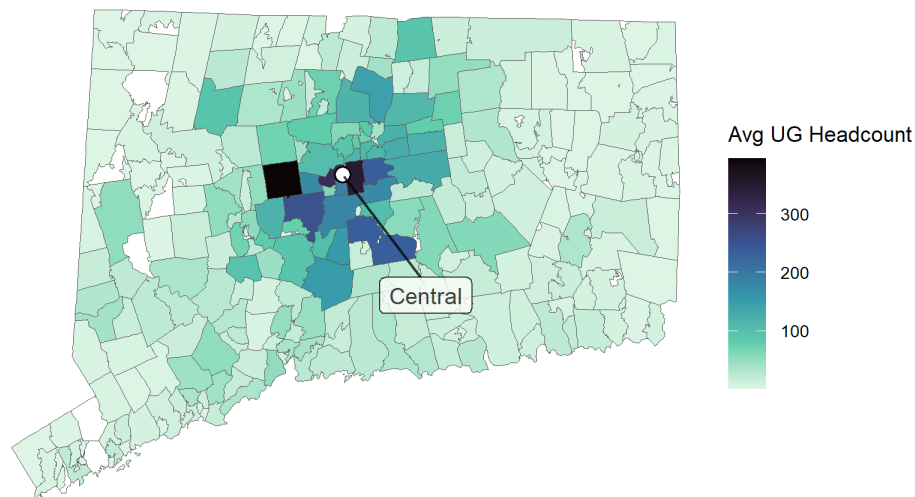
Source: CSCU System Office. Based on undergraduate enrollment (excluding dual high school students) by zip code from 2018-19 through 2022-23. Out-of-state zip codes are included if they provide at least 0.5% of undergraduates and fall within the largest locations that provide 70% of the institution's undergraduates.

Figure 29. Eastern Connecticut State University Undergraduate Student Origins
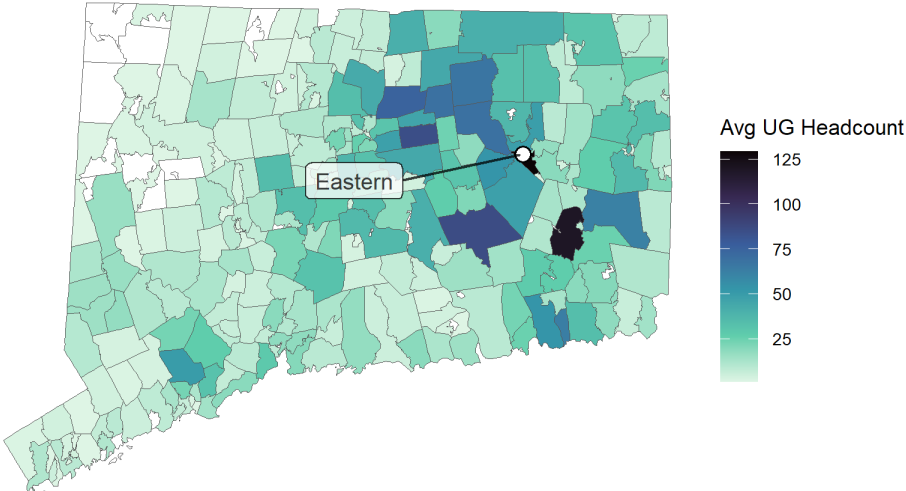
Source: CSCU System Office. Based on undergraduate enrollment (excluding dual high school students) by zip code from 2018-19 through 2022-23. Out-of-state zip codes are included if they provide at least 0.5% of undergraduates and fall within the largest locations that provide 70% of the institution's undergraduates.

Figure 30. Southern Connecticut State University Undergraduate Student Origins
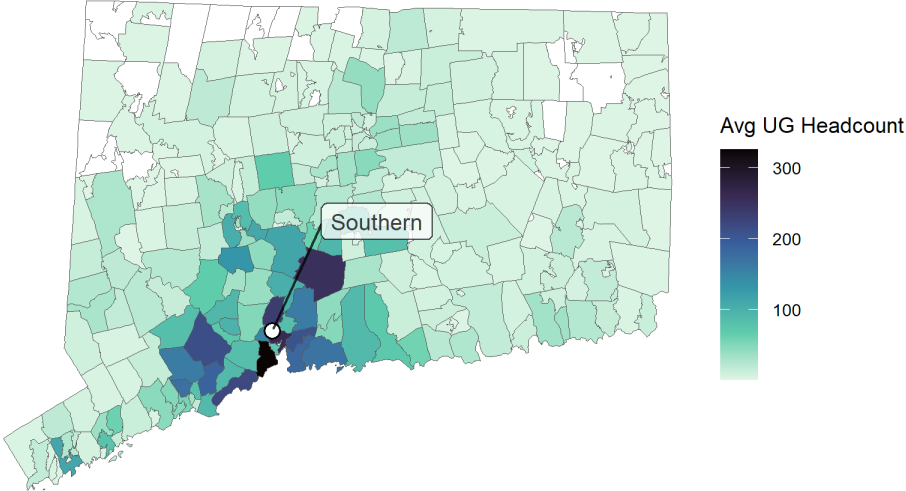
Source: CSCU System Office. Based on undergraduate enrollment (excluding dual high school students) by zip code from 2018-19 through 2022-23. Out-of-state zip codes are included if they provide at least 0.5% of undergraduates and fall within the largest locations that provide 70% of the institution's undergraduates.

Figure 31. Western Connecticut State University Undergraduate Student Origins
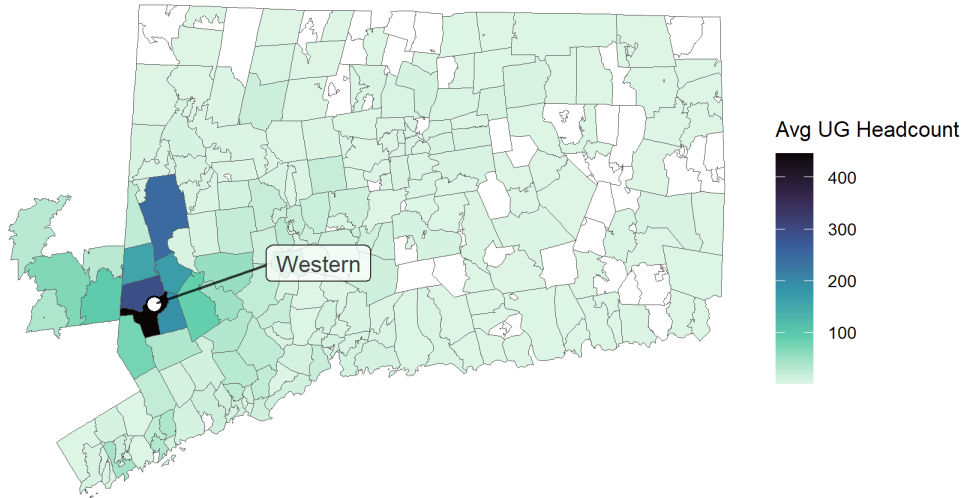
Figure 32. Charter Oak State College Undergraduate Student Origins
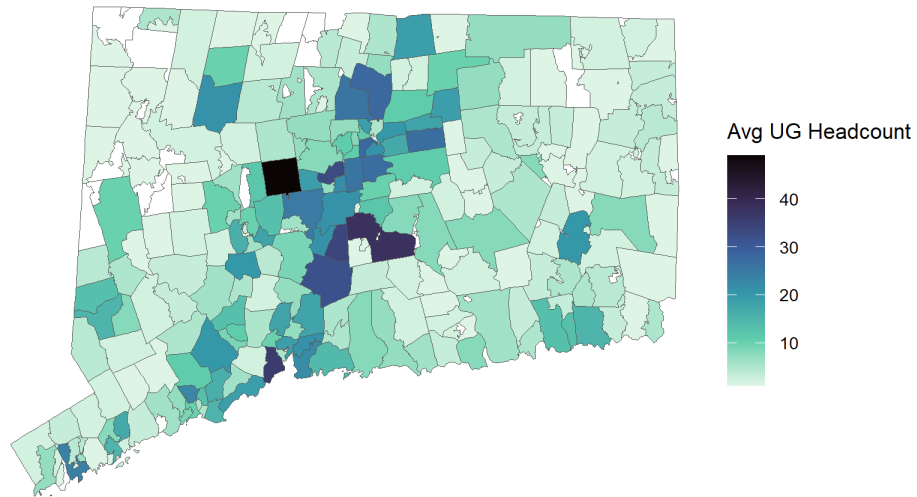
Figure 33. CT State Undergraduate Student Origins
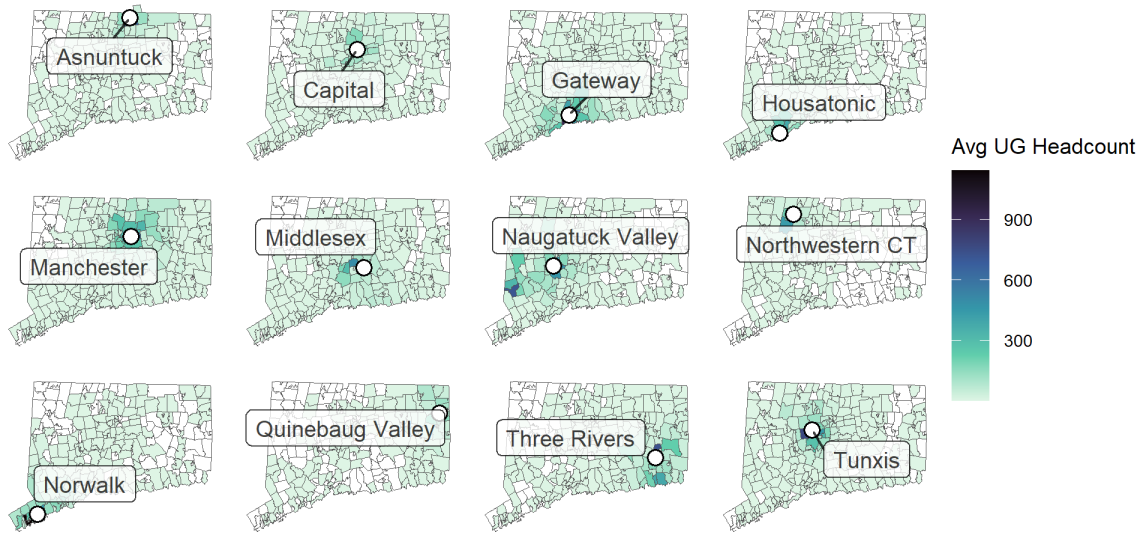
Enrollment Trends[41]

Figure 34. Total Annual FTE, Central Connecticut State University and Peer Median, Over Time
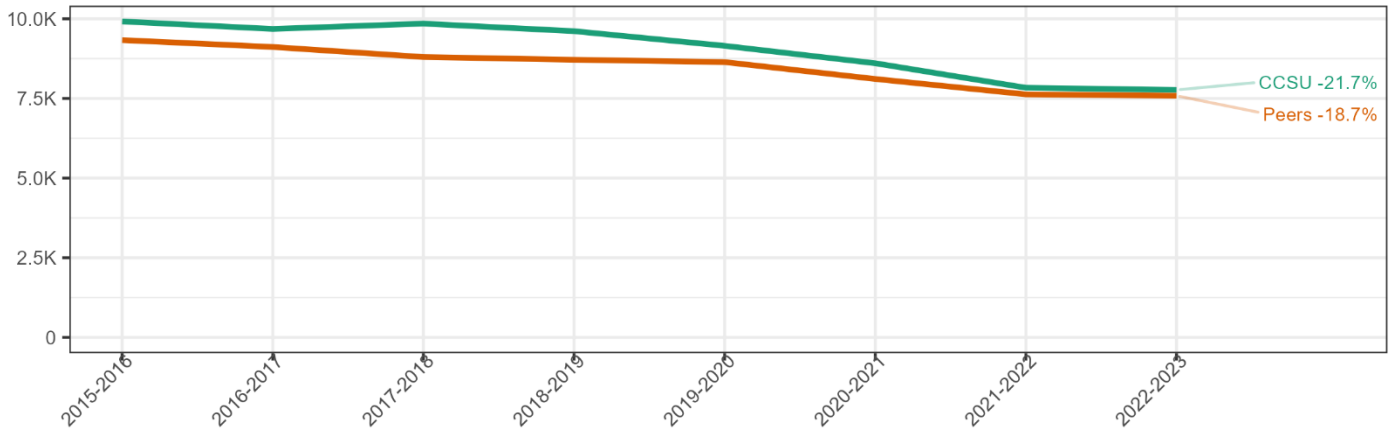
Sources: NCES IPEDS 12-Month Enrollment Survey, files efiaYYYY, 2016-2022 final release files; 2023 provisional release.

Figure 35. Total Annual FTE, Eastern Connecticut State University and Peer Median, Over Time
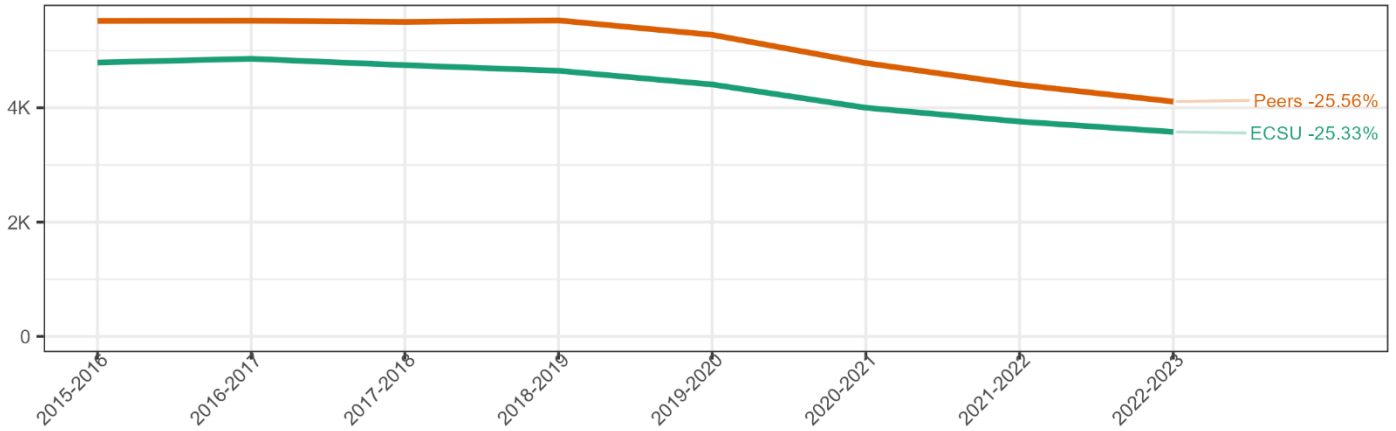
Peers -25.56%
ECSU -25.33%

Figure 36. Total Annual FTE, Southern Connecticut State University and Peer Median, Over Time
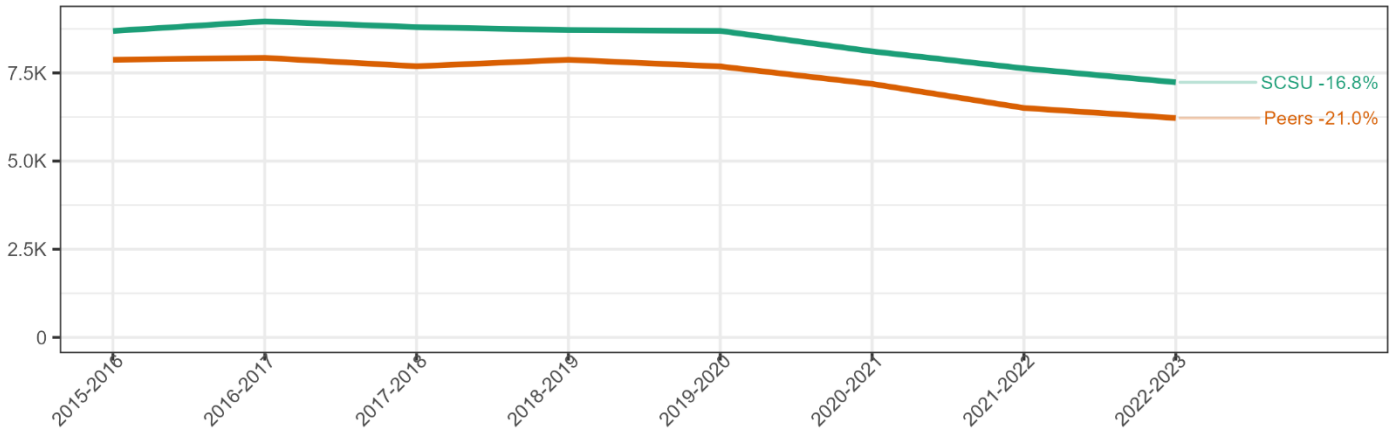
SCSU -16.8%
Peers -21.0%

Figure 37. Total Annual FTE, Western Connecticut State University and Peer Median, Over Time
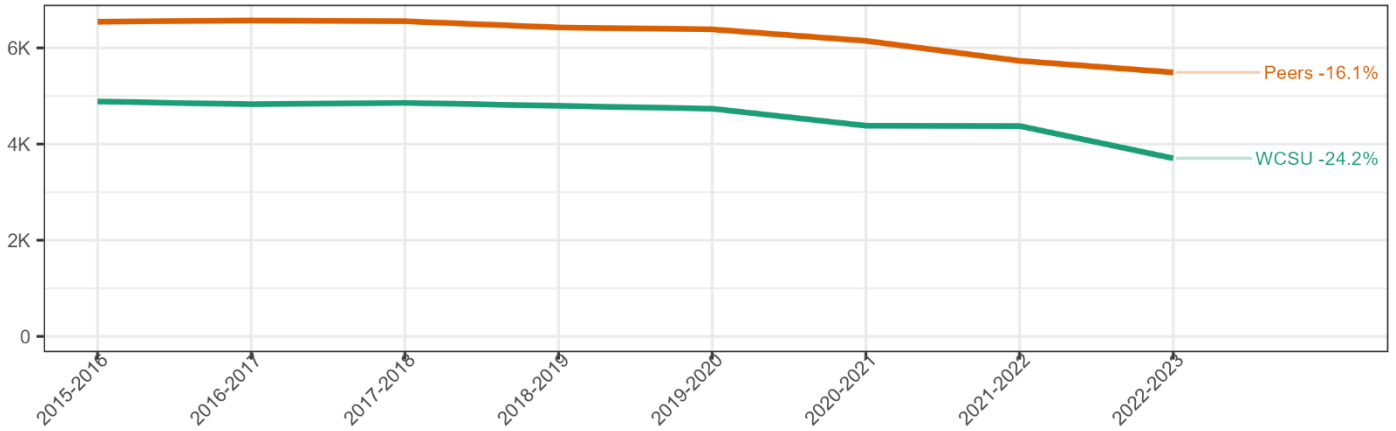
Peers -16.1%

WCSU -24.2%

Sources: NCES IPEDS 12-Month Enrollment Survey, files efiaYYYY, 2016-2022 final release files; 2023 provisional release.

Figure 38. Total Annual FTE, Charter Oak and Peer Median, Over Time
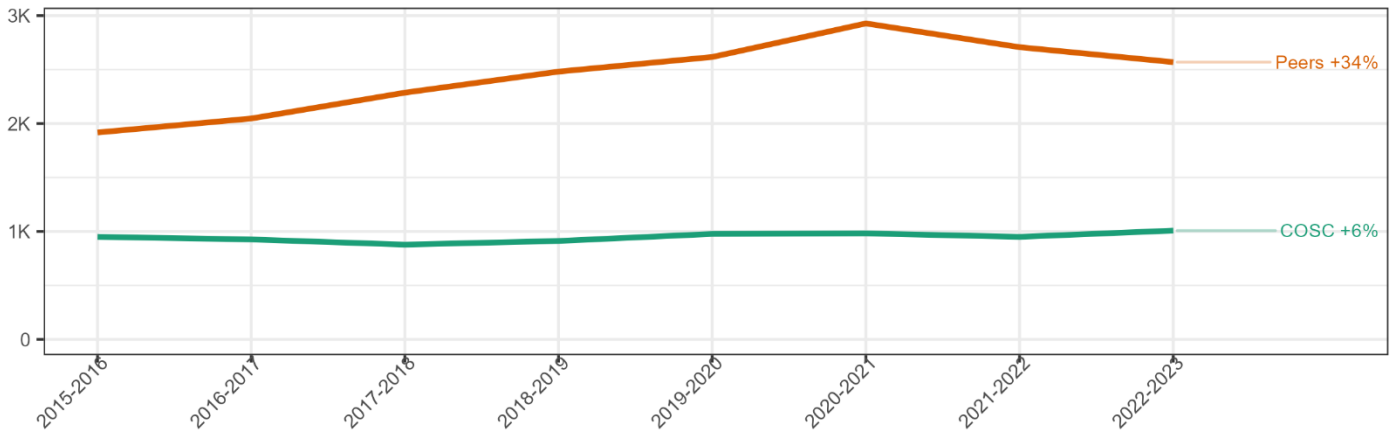
Peers +34%

COSC +6%

Sources: NCES IPEDS 12-Month Enrollment Survey, files efiaYYYY, 2016-2022 final release files; 2023 provisional release.

Figure 39. Total Annual FTE, CT State and Peer Median, Over Time
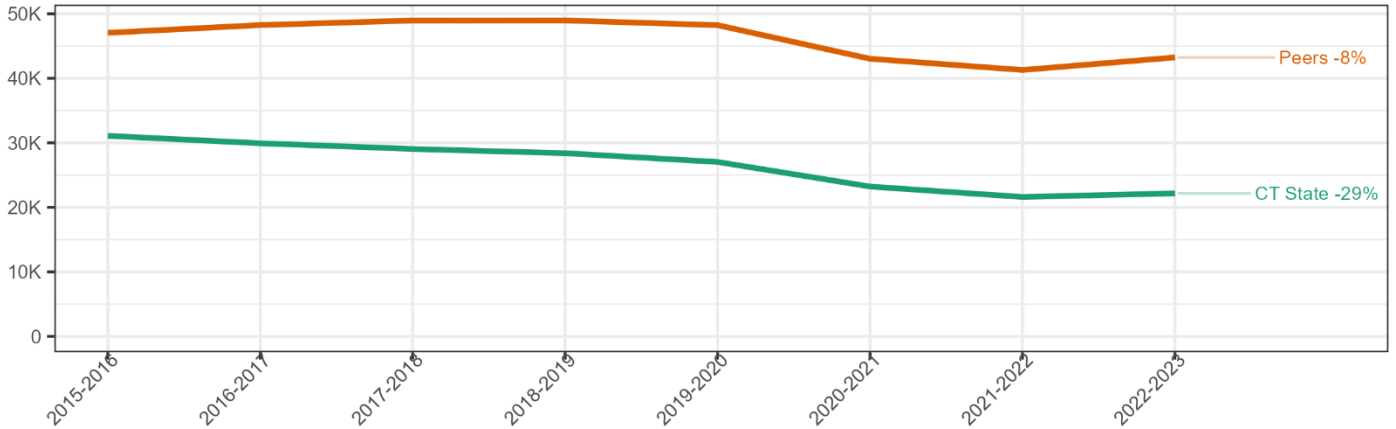
Peers -8%

CT State -29%

Enrollment Projections

As part of this project, NCHEMS created enrollment projections for each of the CSCU institutions. These projections relied on data about where each institution currently attracts its students (from the maps provided above) and population projections from those areas inasmuch as they are available from various sources. These projections are not generally widely dissimilar from those prepared for a study commissioned by CSCU to assess their space needs, which is not surprising given that the methodologies have much in common. Differences do exist by institution, which can be attributed to the fact that CSCU's commissioned researcher conducted a more careful study for WCSU and because he used data for fall enrollments only. NCHEMS' use of full-year data likely accounts for the variation in projections for CT State.

Figure 40. Central Connecticut State University Enrollment Projections

Total Headcount · "Low" FTEs · "High" FTEs · "Medium" FTEs
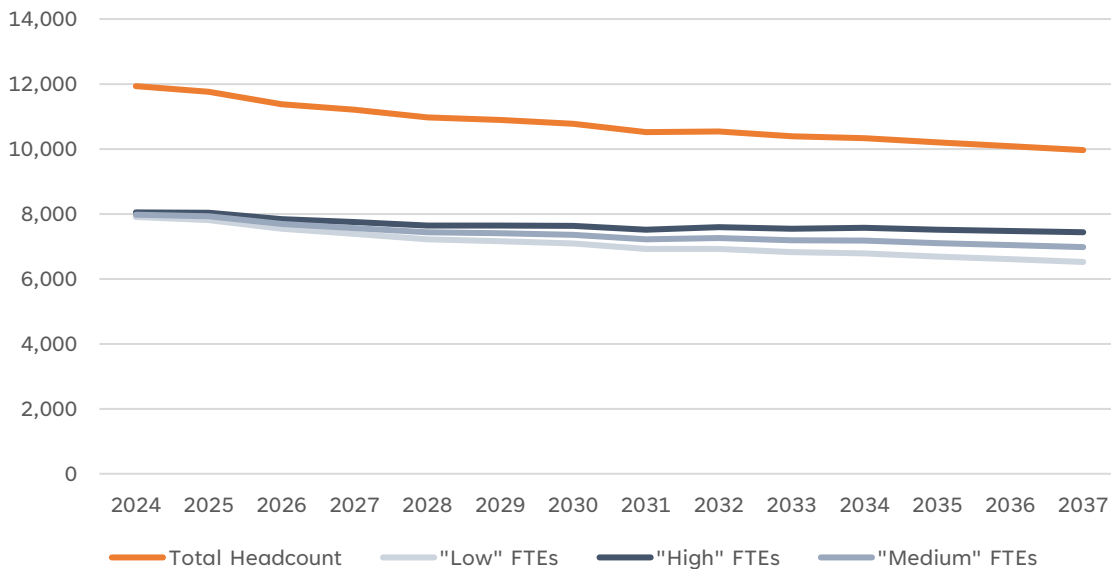
Figure 41. Eastern Connecticut State University Enrollment Projections

Total Headcount   "Low" FTEs   "Medium" FTEs   "High" FTEs
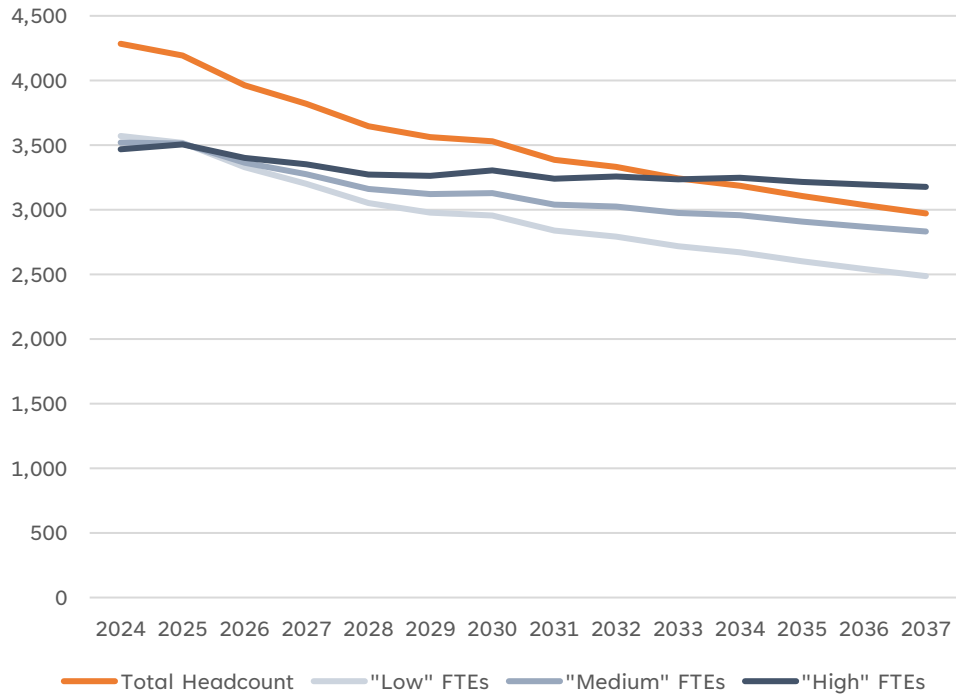
Figure 42. Southern Connecticut State University Enrollment Projections

Total Headcount   "Low" FTEs   "Medium" FTEs   "High" FTEs
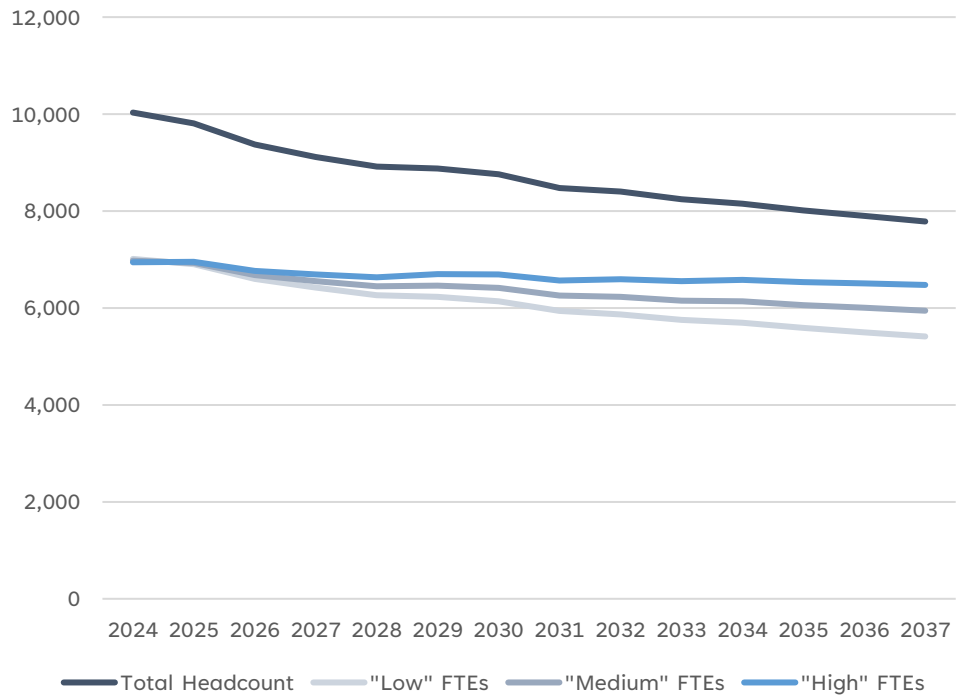
Figure 43. Western Connecticut State University Enrollment Projections
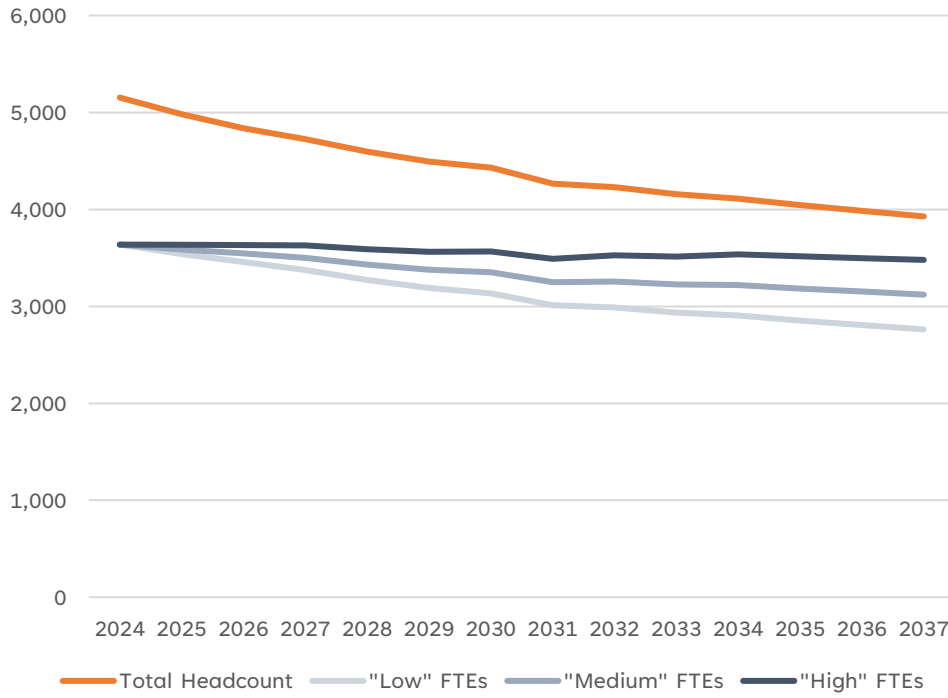
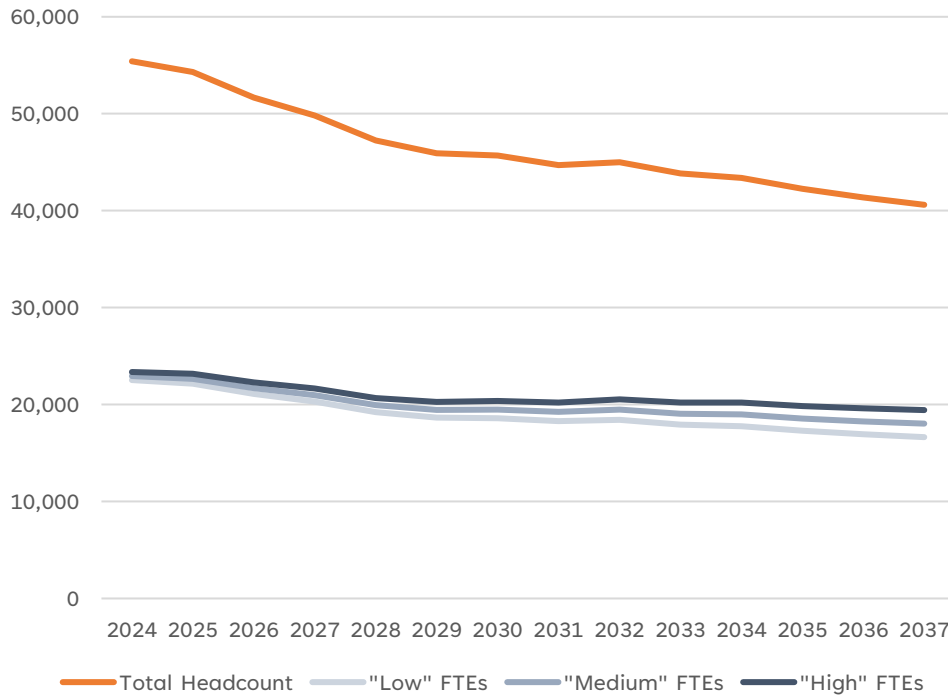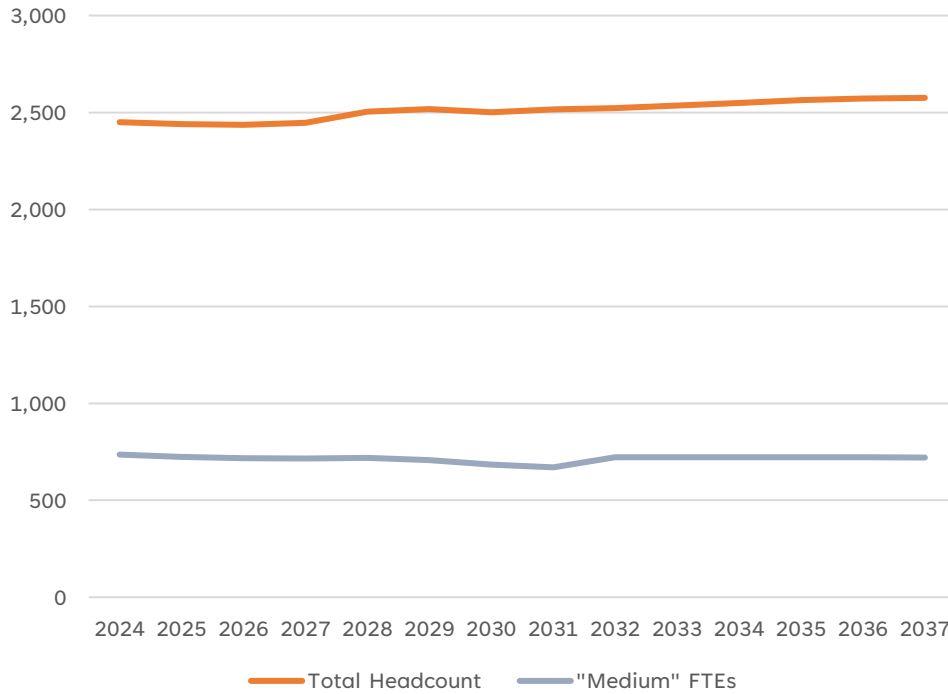**Figure 44. Connecticut State Community College Enrollment Projections**

Figure 45. Charter Oak State College Enrollment Projections

Published Tuition and Cost of Attendance

For resident (i.e. in-state) students, each of the CSCU institutions charges higher tuition and fees and estimates a higher overall cost of attendance than its peers, on average. When it comes to nonresidents, several of the CSCU institutions charge lower tuition and fee rates than do their peers, and several charge higher rates. These rates represent each institution's "sticker price" and do not include scholarships or financial aid, or the Mary Ann Handley Award at CT State (formerly known as the PACT program).

The total cost of attendance is estimated by each institution and includes tuition, fees, books, supplies, room and board (on-campus rates for CSUs; off-campus not with family rates for CT State and Charter Oak), and "other" expenses.

Figure 46. Published Tuition, Fees, and Cost of Attendance, CSCU Institutions vs Peers, 2023-24
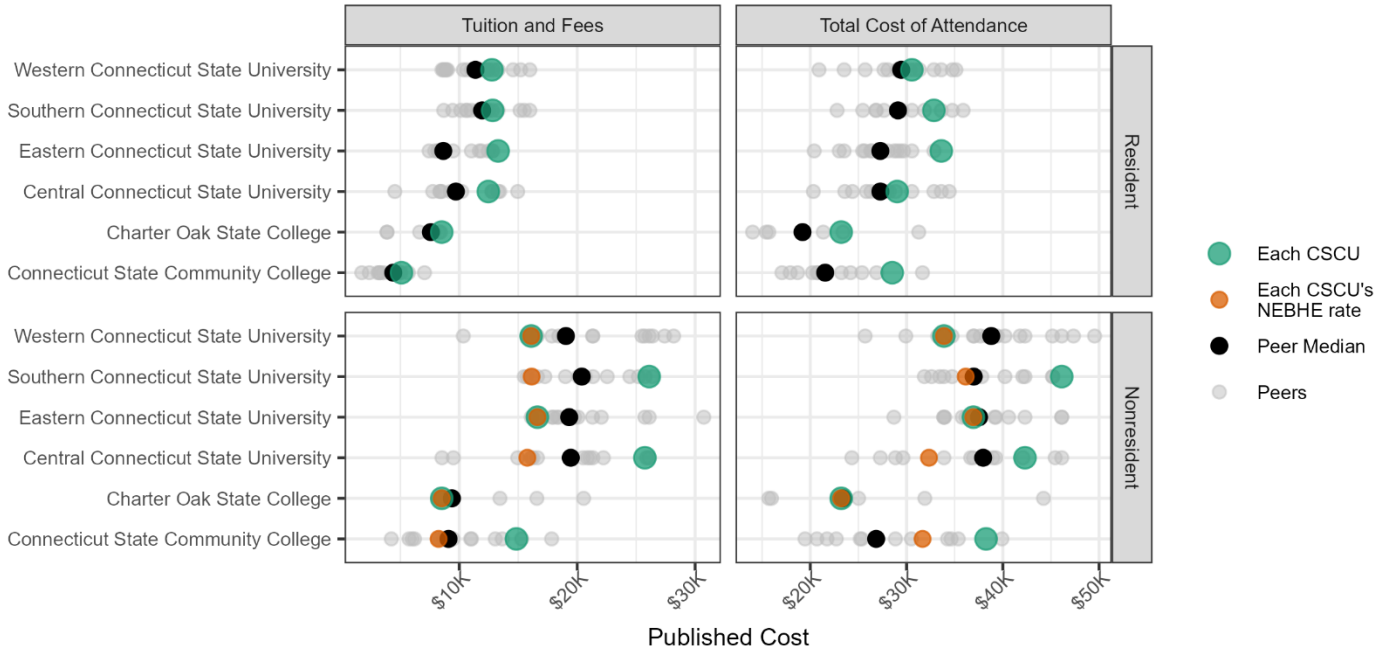
Source: NCES IPEDS institutional characteristics survey ic2023_ay provisional release file. Resident Tuition and Fees reflect either in-district or in-state rates, whichever is lower. Cost of attendance for CSUs and their peers is based on living on campus; for CT State, Charter Oak and their peers it is based on living off-campus, not with family. NEBHE rates are approximate; they are not published in IPEDS. Charter Oak Peer University of Wisconsin-Milwaukee Flex is not included.

Net Price

Net price is the average amount students pay based on subtracting aid from the total cost of attendance. Aid includes grants and scholarships from federal, state, local, and institutional sources. Net price is only calculated for full-time, first-time-in-college, degree/certificate-seeking undergraduates receiving federal Title IV aid. As a result, it is a better measure of actual costs to students attending institutions that are more likely to enroll full-time students; data for CT State are available only for those students enrolling in at least 12 SCHs, leaving out a large proportion of its enrollment, including many who receiving Connecticut's last-dollar, free-tuition grant program. For public institutions, it is only based on students paying in-state tuition. For all public and private nonprofit institutions in Connecticut, the graphs below show the net price for all students that meet these criteria, as well as by student income band. Please note that institutions with fewer than 10 students who meet these criteria for a given income band are excluded; in all graphs, this excludes Charter Oak.

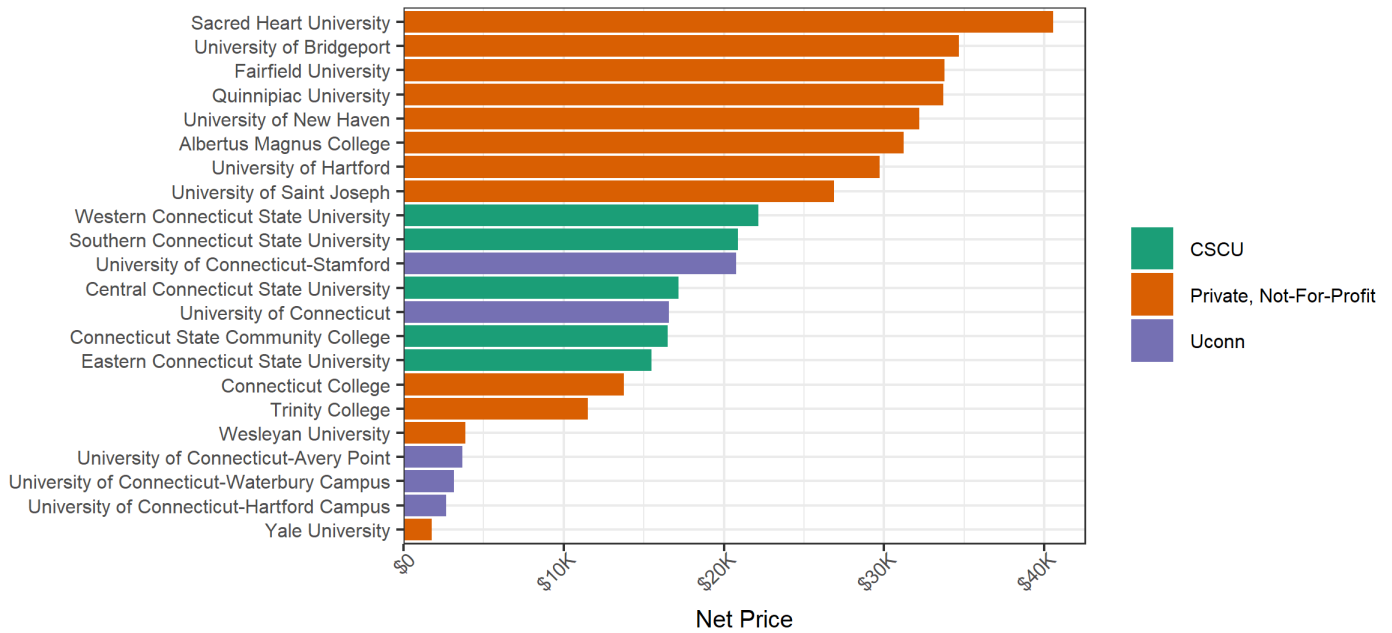## Figure 47. Net Price across Connecticut Institutions, 2021-22 (All Student Income Levels)
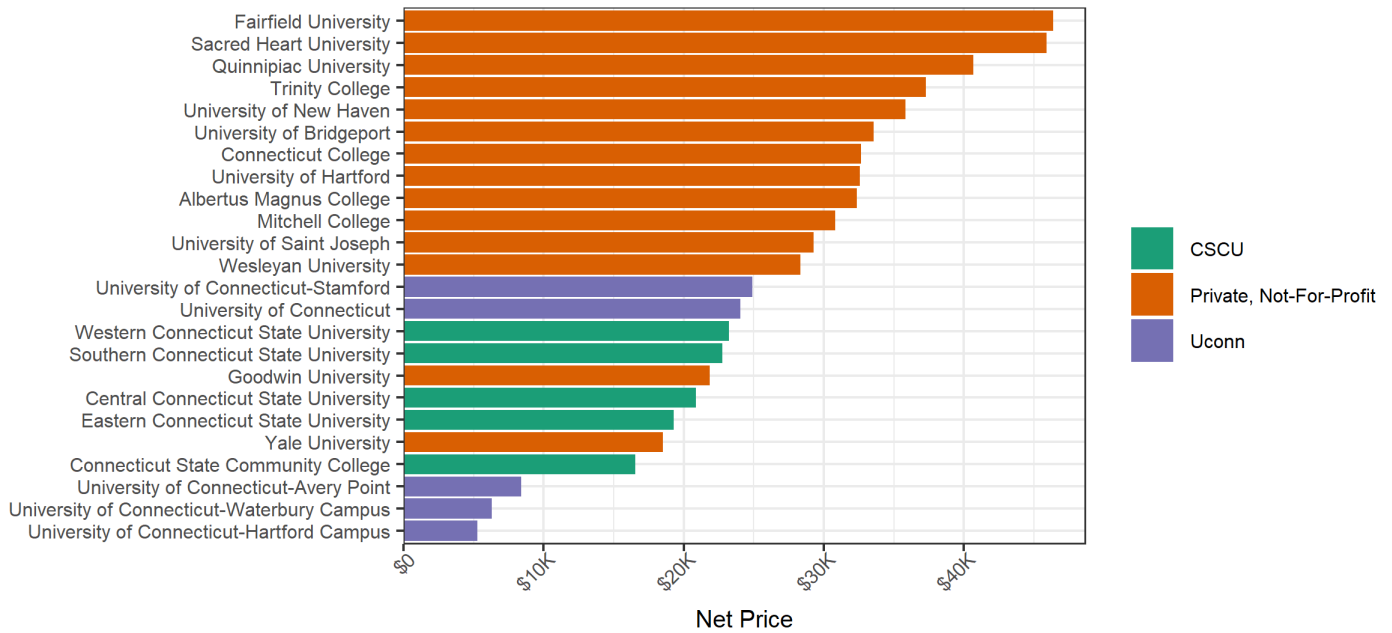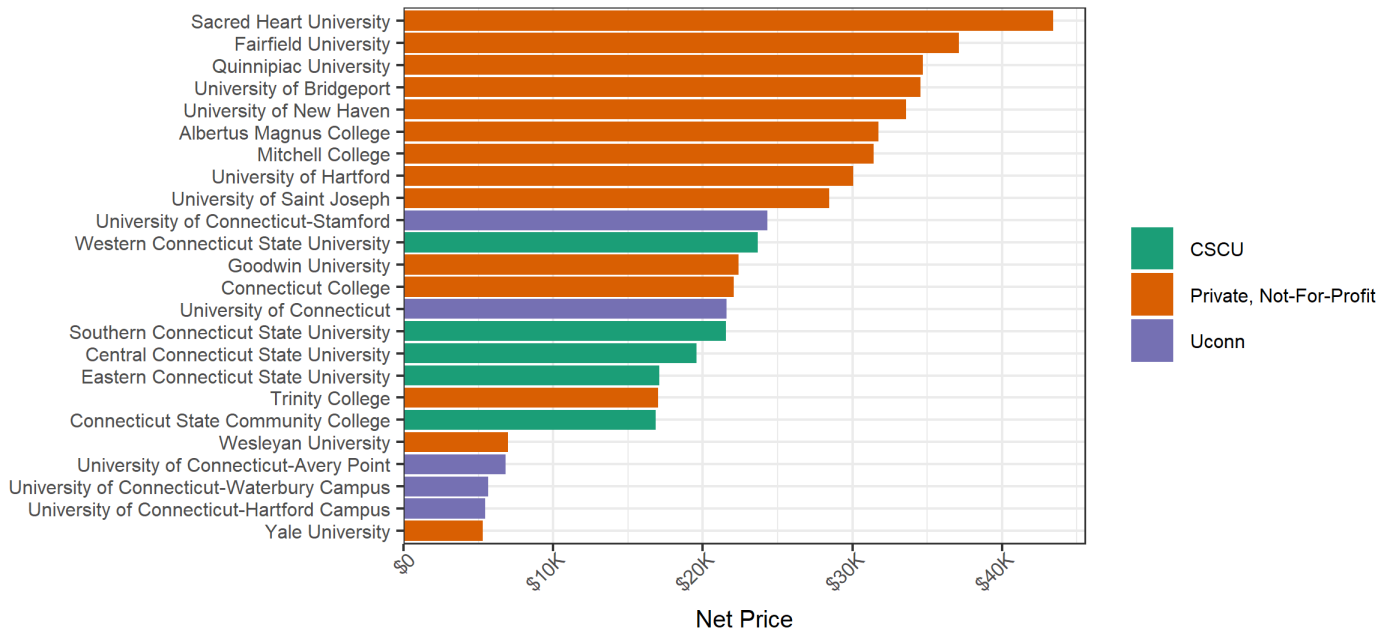

Source: NCES IPEDS ic2021_ay final release and sfa2122 provisional release files. Net price is cost of attendance minus aid. Cost of attendance for universities is based on living on campus; for CT State and Charter Oak it is based on living off-campus, not with family. Aid includes grant and scholarship aid from federal, state, local, or institutional sources awarded to full-time, first-time degree/certificate-seeking undergraduates receiving federal Title IV aid. For public institutions, it is only based on students paying in-state tuition. Institutions with fewer than 10 students who meet these criteria are excluded.

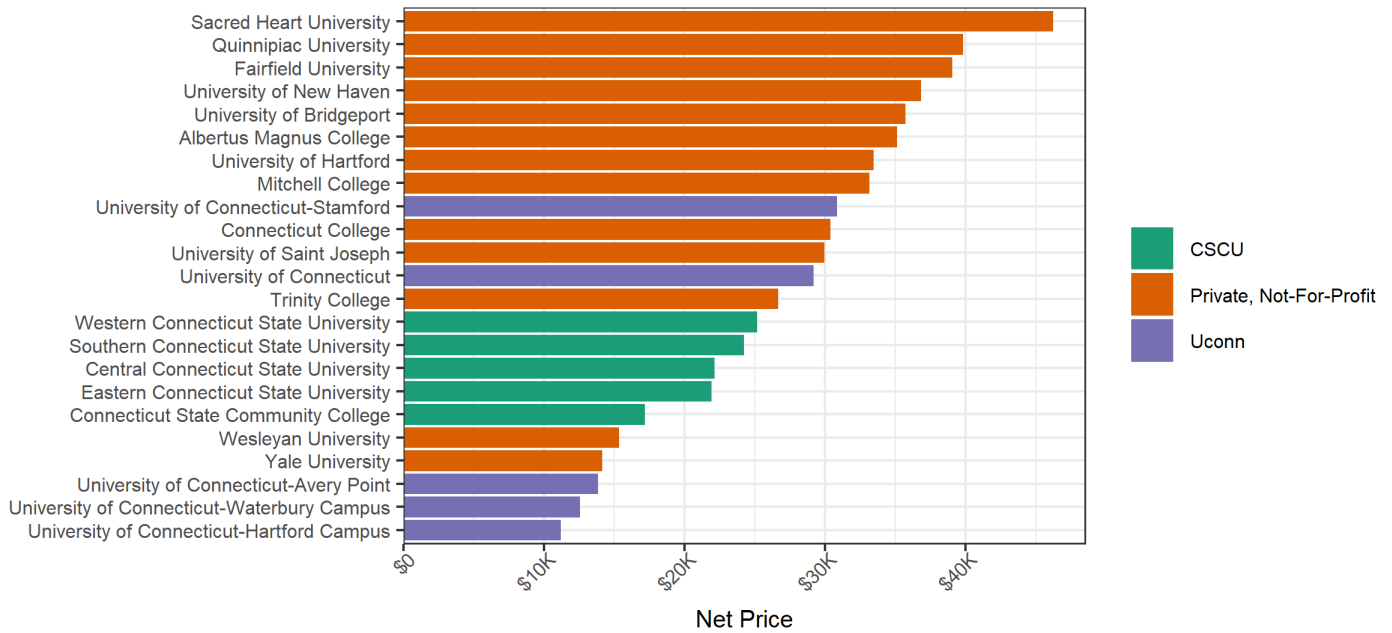## Figure 48. Net Price across Connecticut Institutions, 2021-22, Student Income $0 - $30,000
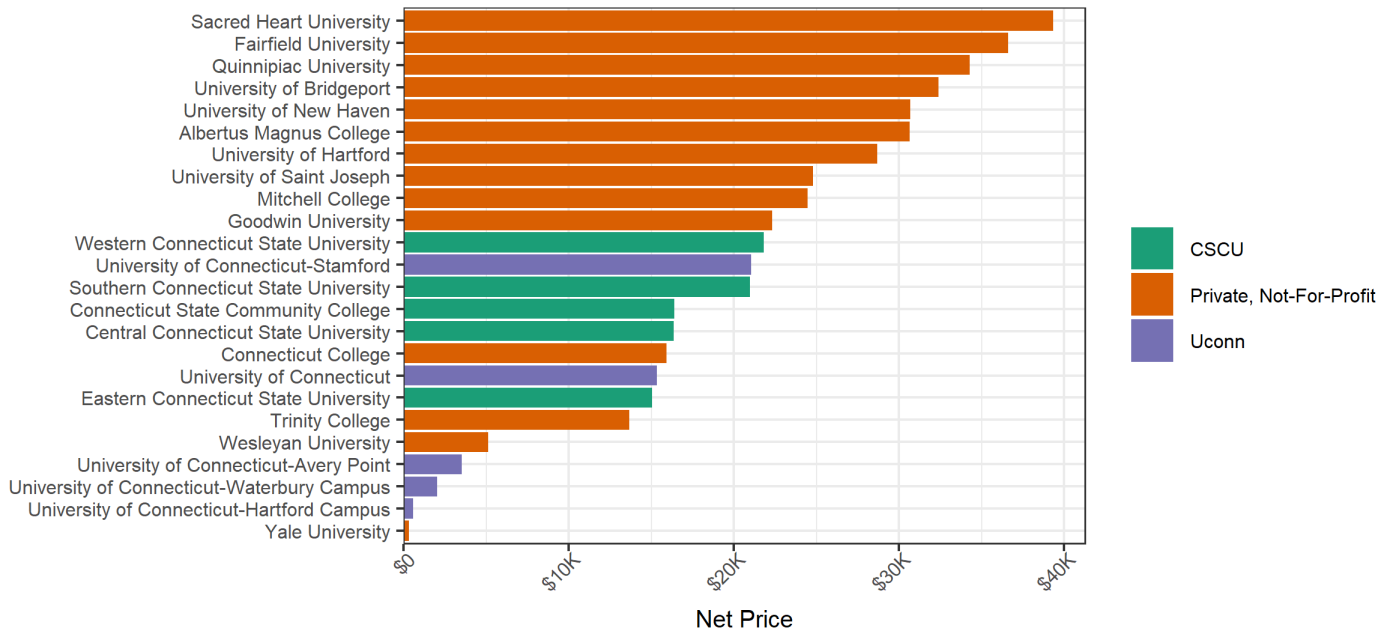
Source: NCES IPEDS ic2021_ay final release and sfa2122 provisional release files. Net price is cost of attendance minus aid. Cost of attendance for universities is based on living on campus; for CT State and Charter Oak it is based on living off-campus, not with family. Aid includes grant and scholarship aid from federal, state, local, or institutional sources awarded to full-time, first-time degree/certificate-seeking undergraduates receiving federal Title IV aid. For public institutions, it is only based on students paying in-state tuition. Institutions with fewer than 10 students who meet these criteria are excluded.

Figure 49. Net Price across Connecticut Institutions, 2021-22, Student Income $30,001 - $48,000

Figure 50. Net Price across Connecticut Institutions, 2021-22, Student Income $48,001 - $75,000

Figure 51. Net Price across Connecticut Institutions, 2021-22, Student Income $75,001 - $110,000
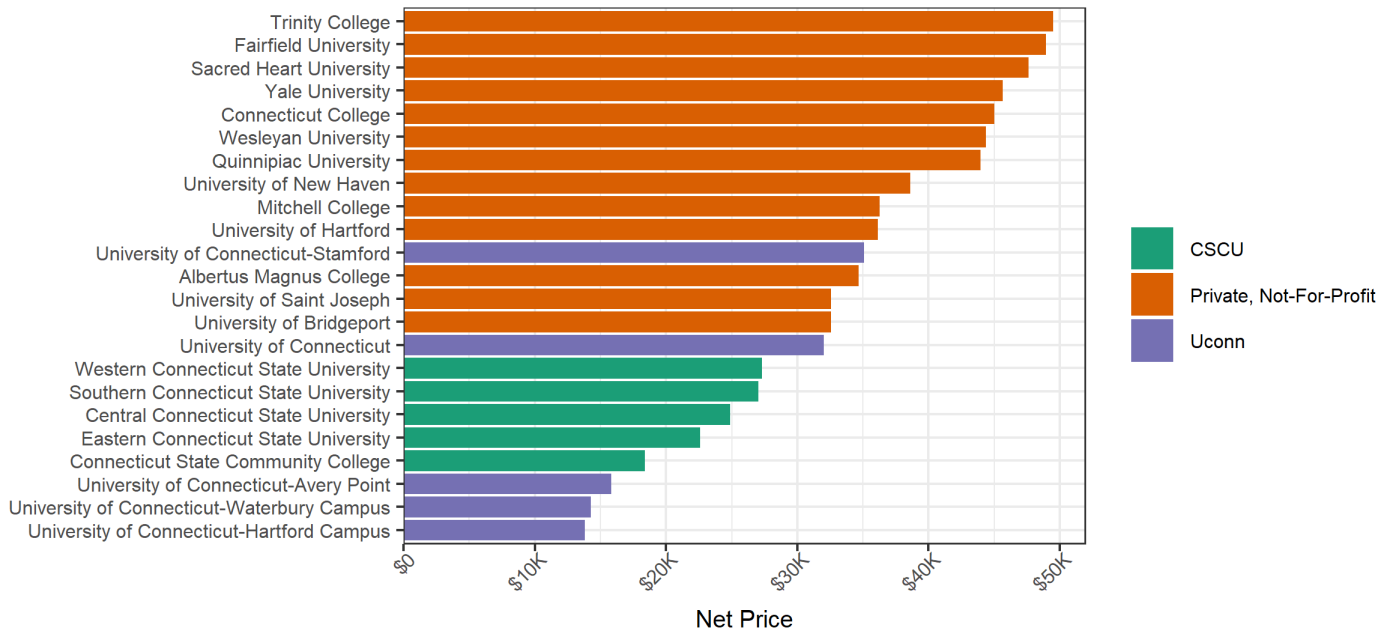

Source: NCES IPEDS ic2021_ay final release and sfa2122 provisional release files. Net price is cost of attendance minus aid. Cost of attendance for universities is based on living on campus; for CT State and Charter Oak it is based on living off-campus, not with family. Aid includes grant and scholarship aid from federal, state, local, or institutional sources awarded to full-time, first-time degree/certificate-seeking undergraduates receiving federal Title IV aid. For public institutions, it is only based on students paying in-state tuition. Institutions with fewer than 10 students who meet these criteria are excluded.

Figure 52. Net Price across Connecticut Institutions, 2021-22, Student Income $110,001 or more

Source: NCES IPEDS ic2021_ay final release and sfa2122 provisional release files. Net price is cost of attendance minus aid. Cost of attendance for universities is based on living on campus; for CT State and Charter Oak it is based on living off-campus, not with family. Aid includes grant and scholarship aid from federal, state, local, or institutional sources awarded to full-time, first-time degree/certificate-seeking undergraduates receiving federal Title IV aid. For public institutions, it is only based on students paying in-state tuition. Institutions with fewer than 10 students who meet these criteria are excluded.

Trends in Total Expenses

Total expenses include salaries, benefits, operations and maintenance of the physical plant, other expenses, and depreciation[42]

Figure 53. Total (Inflation-Adjusted) Expenses Per Student FTE Over Time, Each CSCU Compared to the Median of its Peers
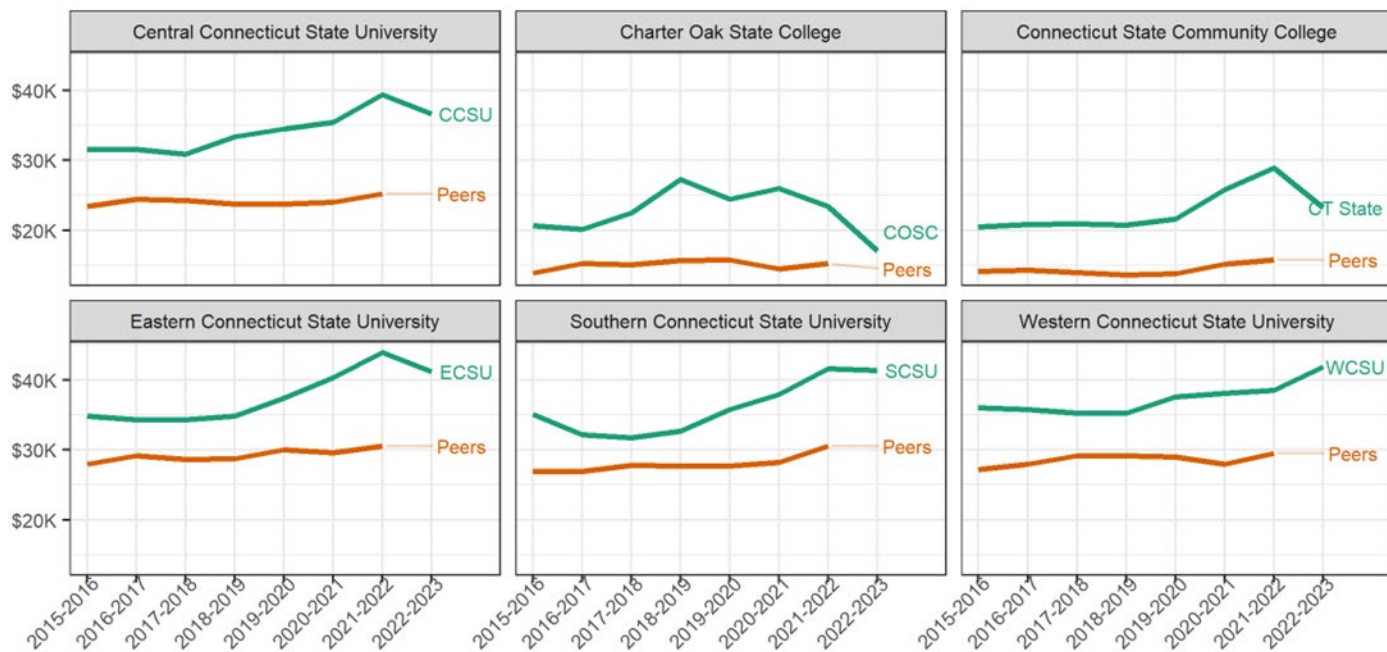
Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Notes: Inflation-adjusted to 2023 dollars using HECA.

Figure 54. CSCU Total (Inflation-Adjusted) Expenses Per Student FTE Over Time, By Functional Category
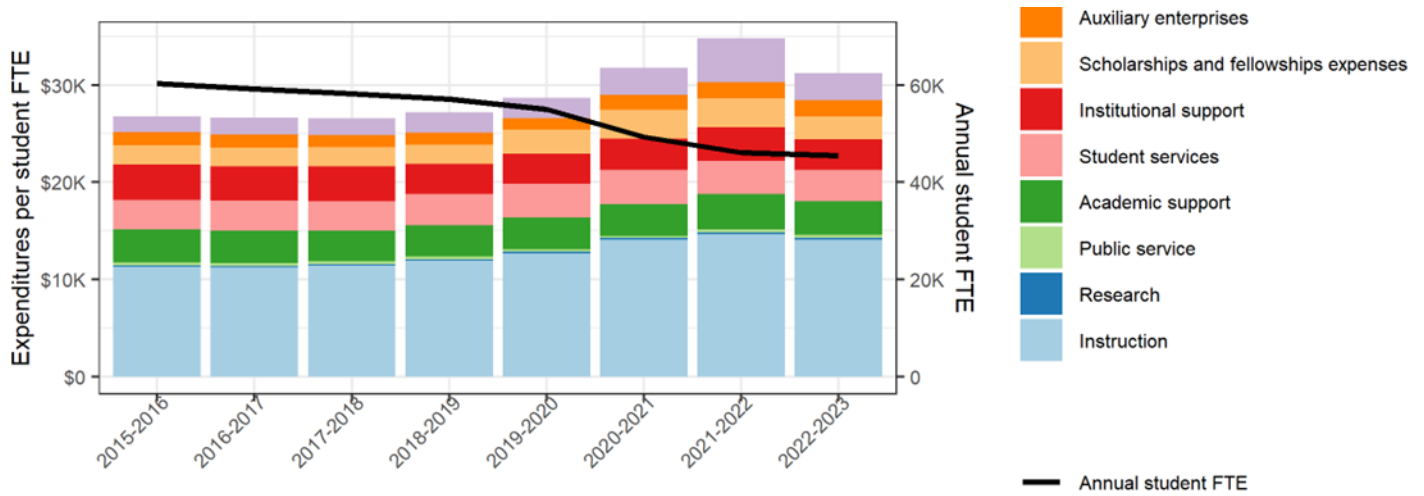
Figure 55. CSCU Total (Inflation-Adjusted) Expenses Per Student FTE Over Time, By Natural Category

Figure 56. Change in CSCU (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 57. Change in Central Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category
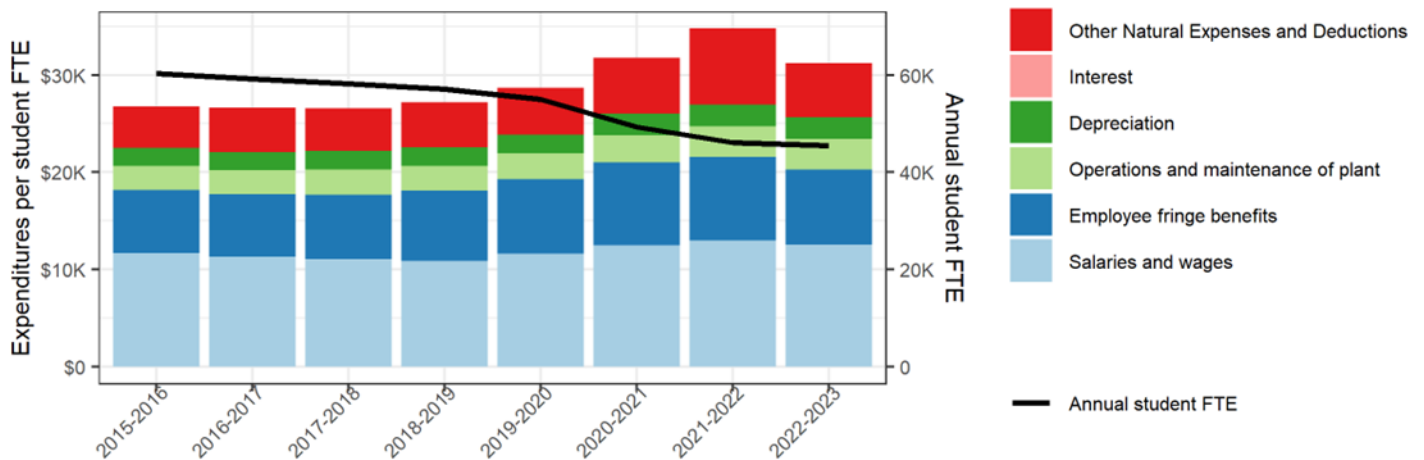

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 58. Change in Eastern Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category
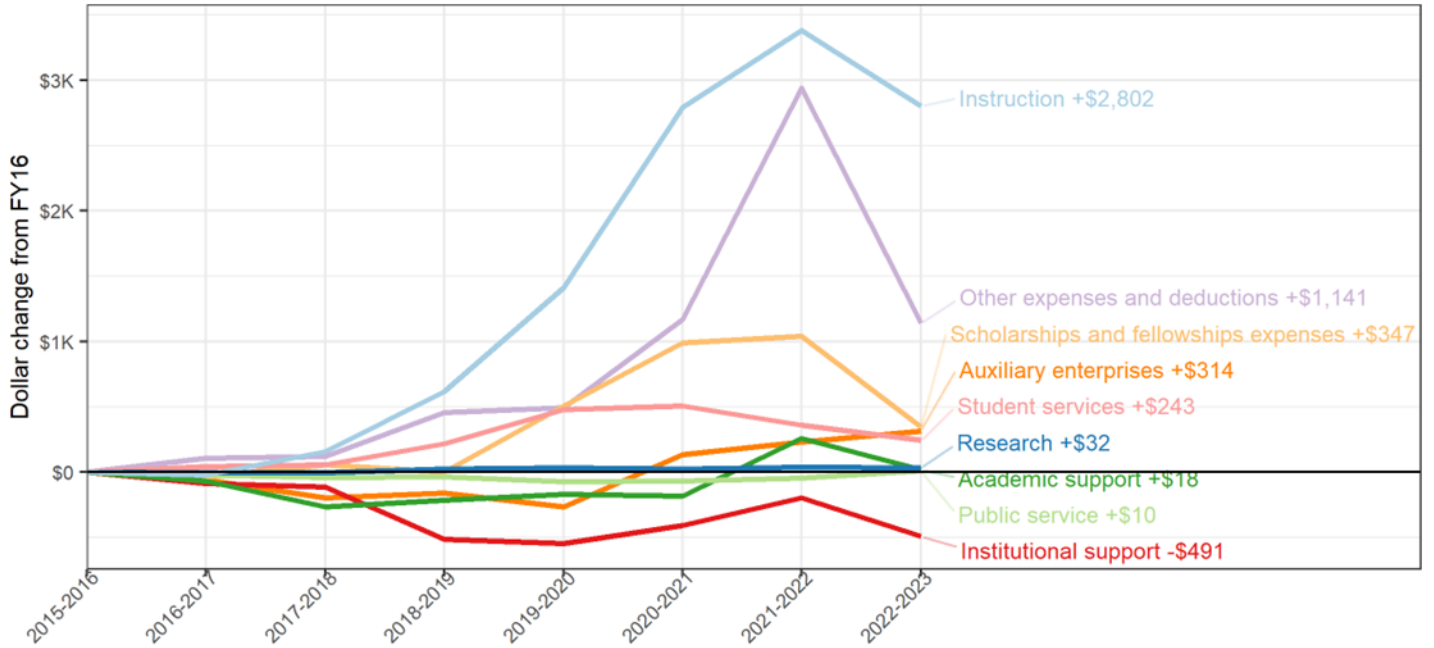

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 59. Change in Southern Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category
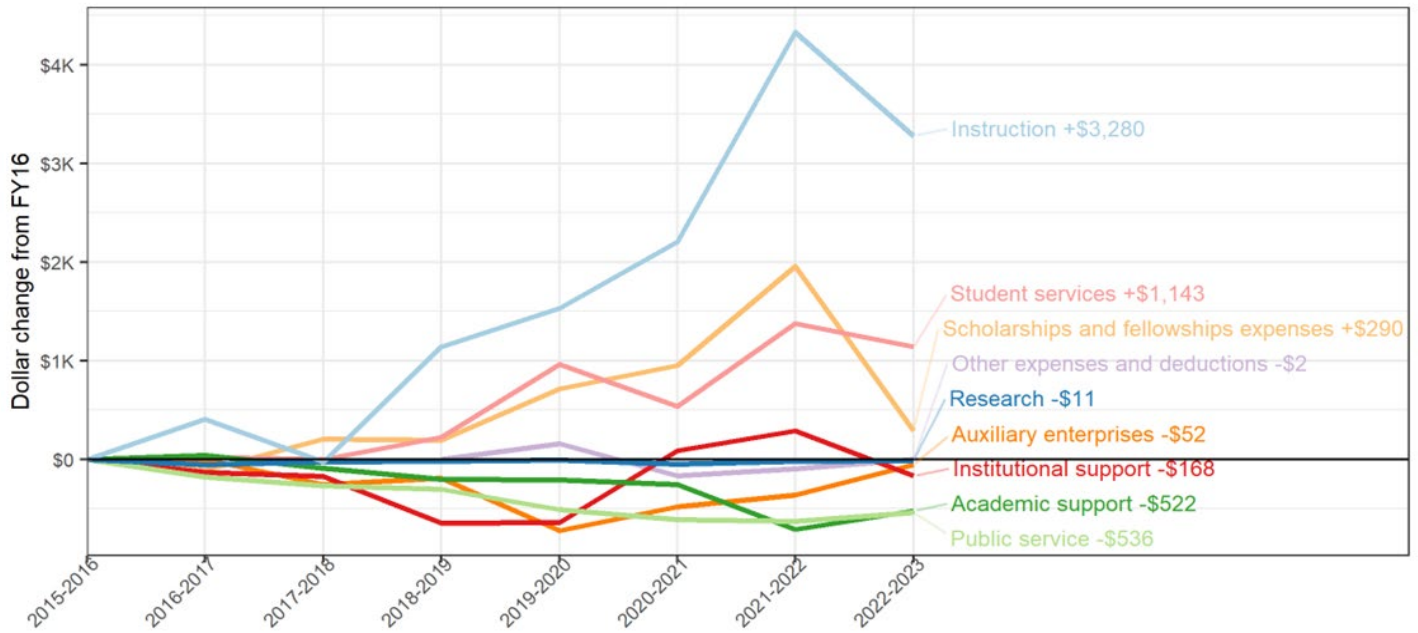

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

NCHEMS

Figure 60. Change in Western Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category

Figure 61. Change in Charter Oak State College (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category

Figure 62. Change in Connecticut State Community College (Inflation-Adjusted) Expenses Per FTE Over Time, By Functional Category
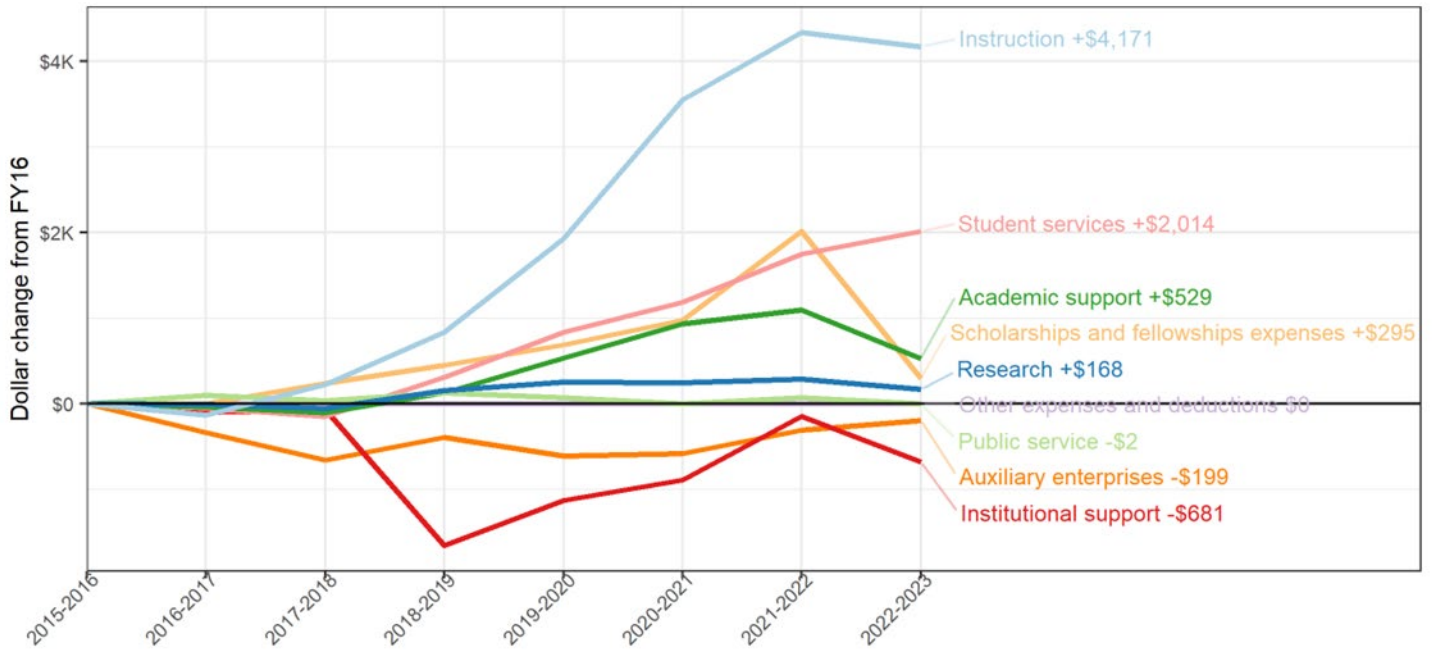

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

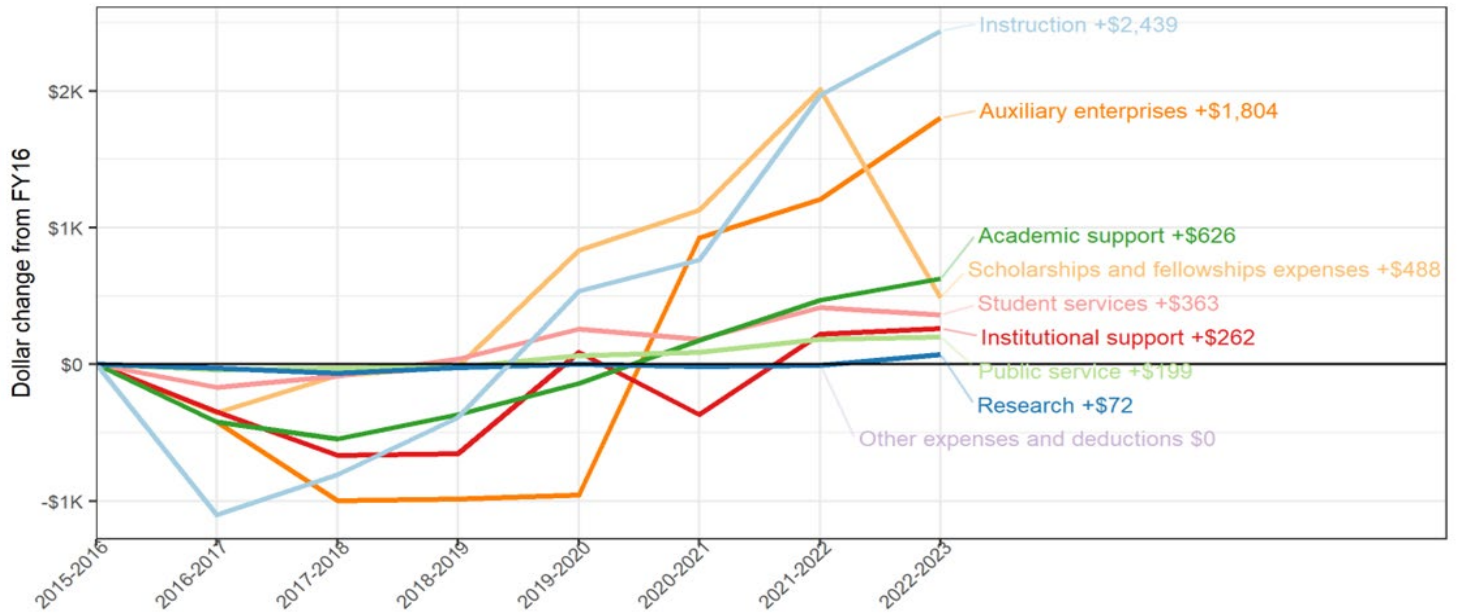**Figure 63. Change in CSCU (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category**

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 64. Change in Central Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Other Natural Expenses and Deductions +$1,936
Employee fringe benefits +$1,559
Salaries and wages +$823
Operations and maintenance of plant +$425
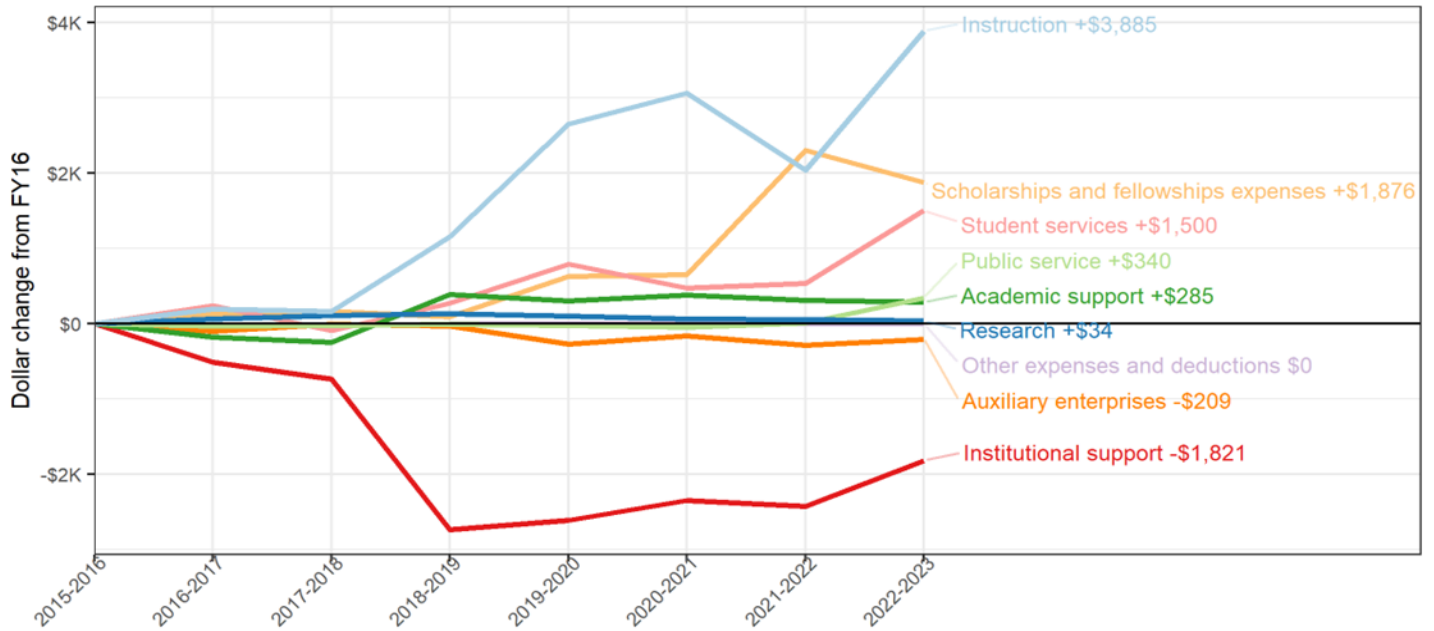Depreciation +$319
Interest +$19

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 65. Change in Eastern Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Operations and maintenance of plant +$3,052
Employee fringe benefits +$2,279
Salaries and wages +$1,560
Depreciation +$1,179
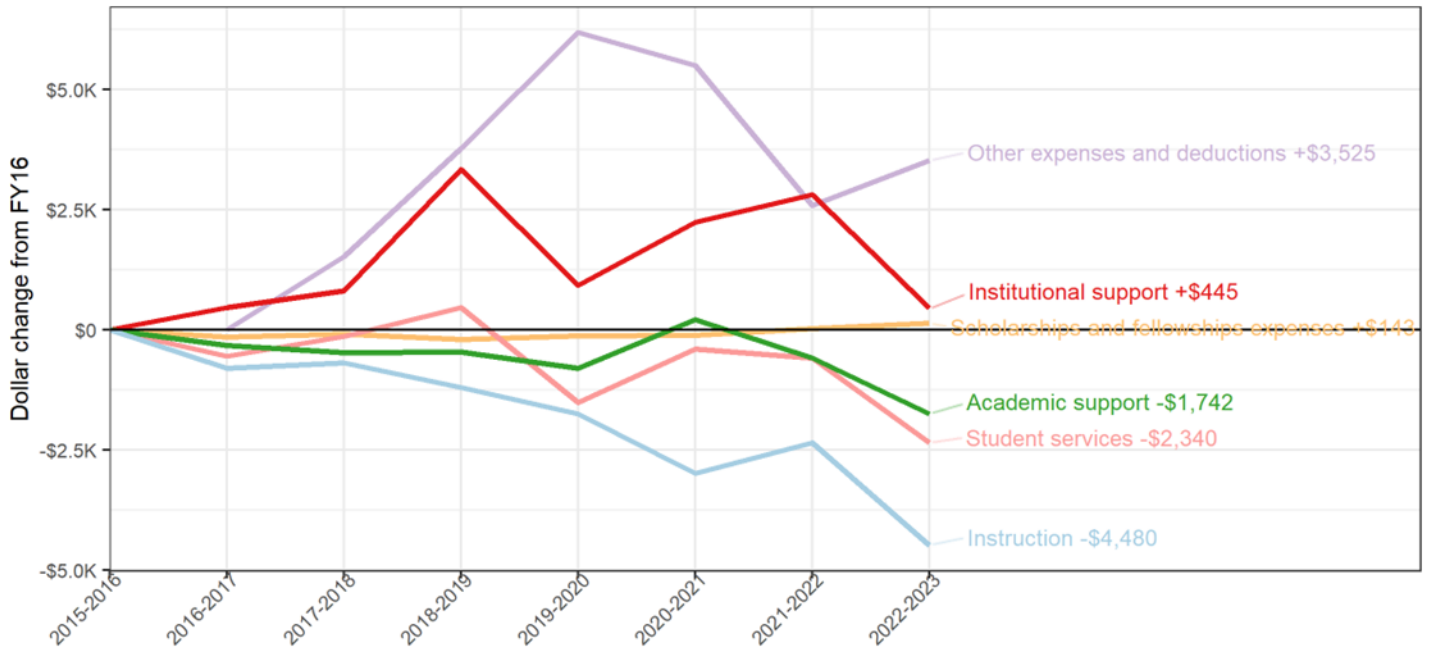Other Natural Expenses and Deductions -$1,773

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 66. Change in Southern Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Other Natural Expenses and Deductions +$2,654
Employee fringe benefits +$1,368
Salaries and wages +$1,190
Operations and maintenance of plant +$871
Depreciation +$146
Interest +$21

Figure 67. Change in Western Connecticut State University (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Employee fringe benefits +$2,404
Other Natural Expenses and Deductions +$1,521
Salaries and wages +$1,395
Depreciation +$414
Operations and maintenance of plant +$159

Figure 68. Change in Charter Oak State College (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Operations and maintenance of plant +$141
Depreciation -$321
Other Natural Expenses and Deductions -$432
Salaries and wages -$1,013
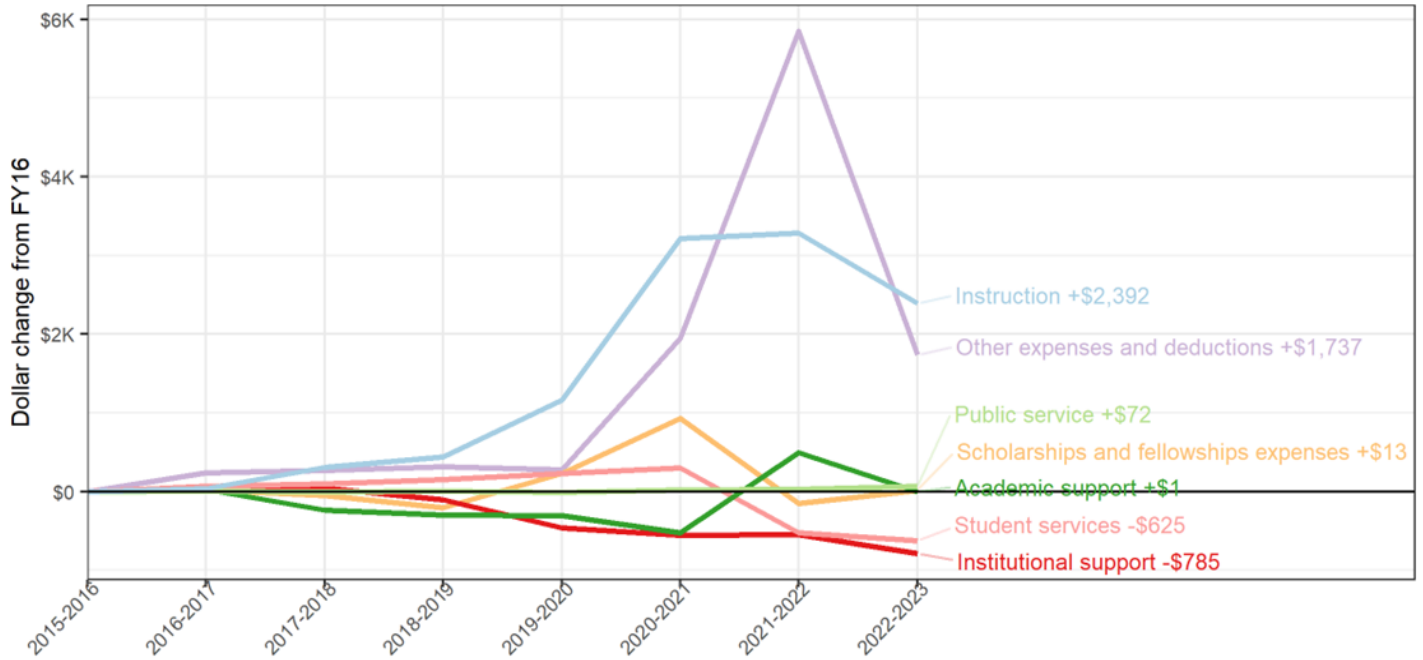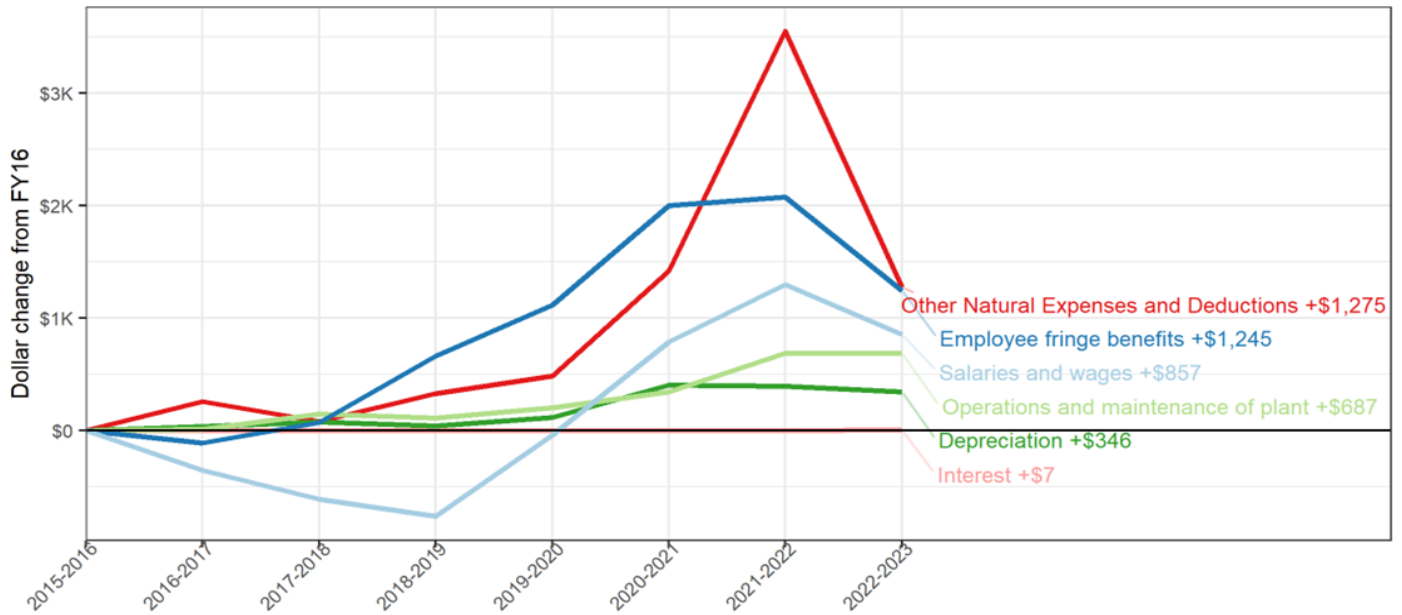Employee fringe benefits -$1,977

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Figure 69. Change in Connecticut State Community College (Inflation-Adjusted) Expenses Per FTE Over Time, By Natural Category

Other Natural Expenses and Deductions +$955
Employee fringe benefits +$770
Operations and maintenance of plant +$428
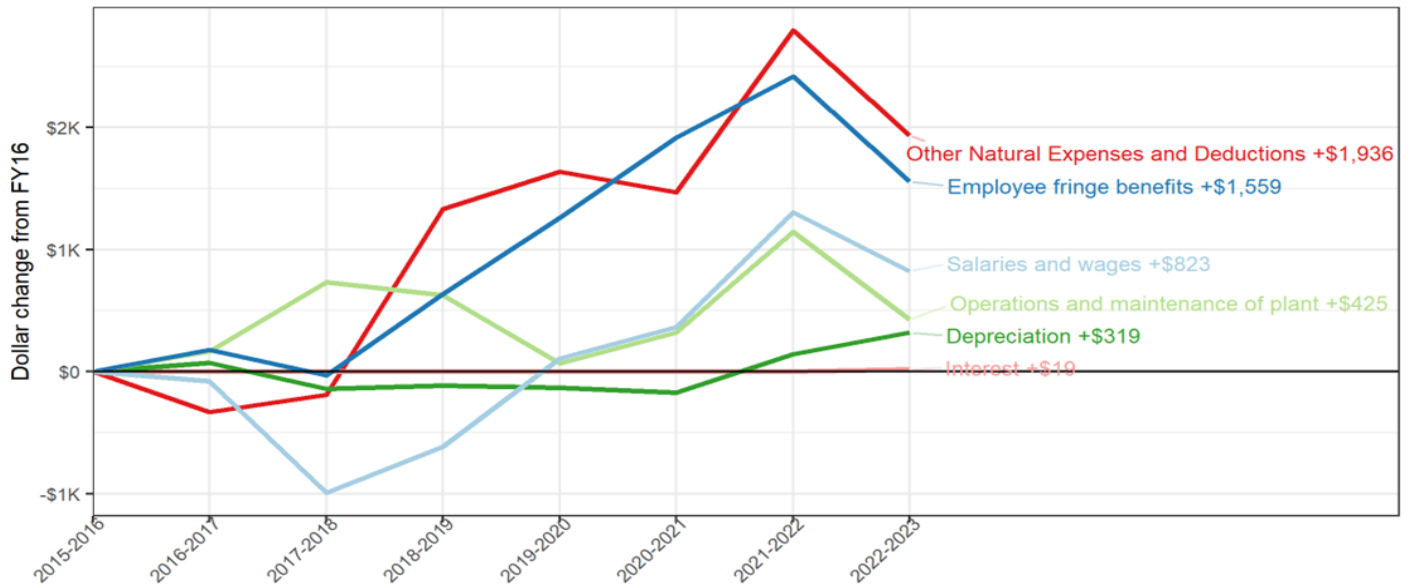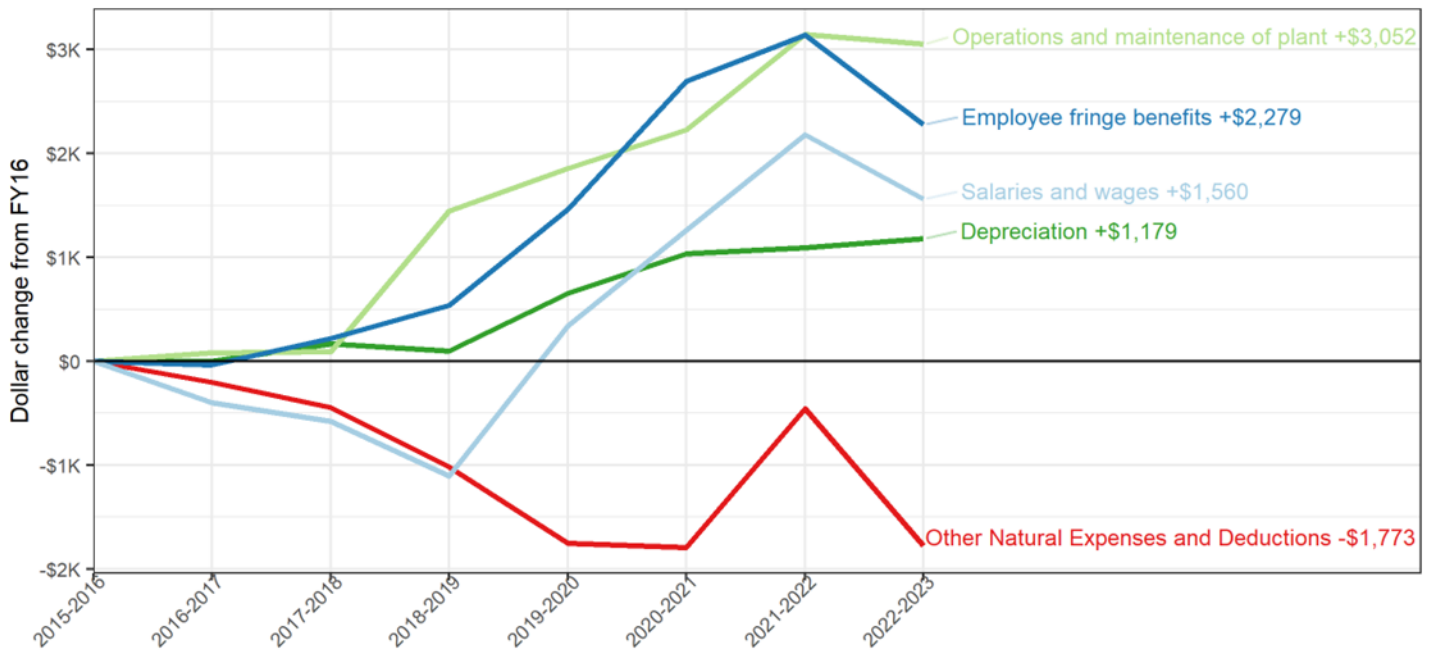Salaries and wages +$410
Depreciation +$242

Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office. Note: Inflation-adjusted to 2023 dollars using HECA.

Expenses by Functional Classification

Figure 70. FY22 Expenses Per Student FTE by Functional Category, Central Connecticut State University Compared to Peer Median
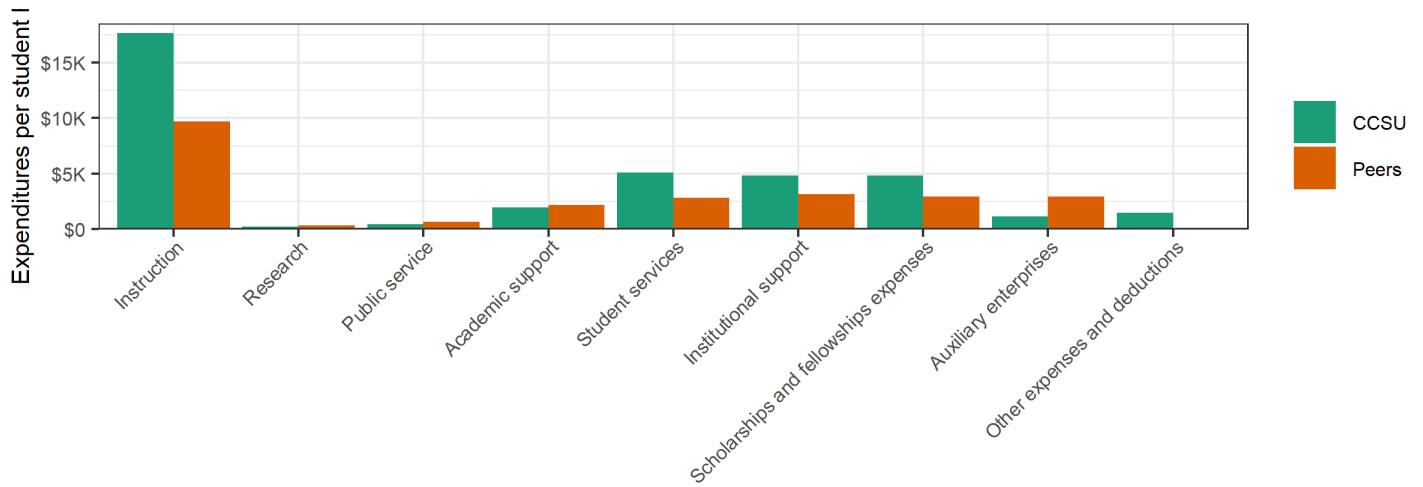
Figure 71. FY22 Expenses Per Student FTE by Functional Category, Eastern Connecticut State University Compared to Peer Median
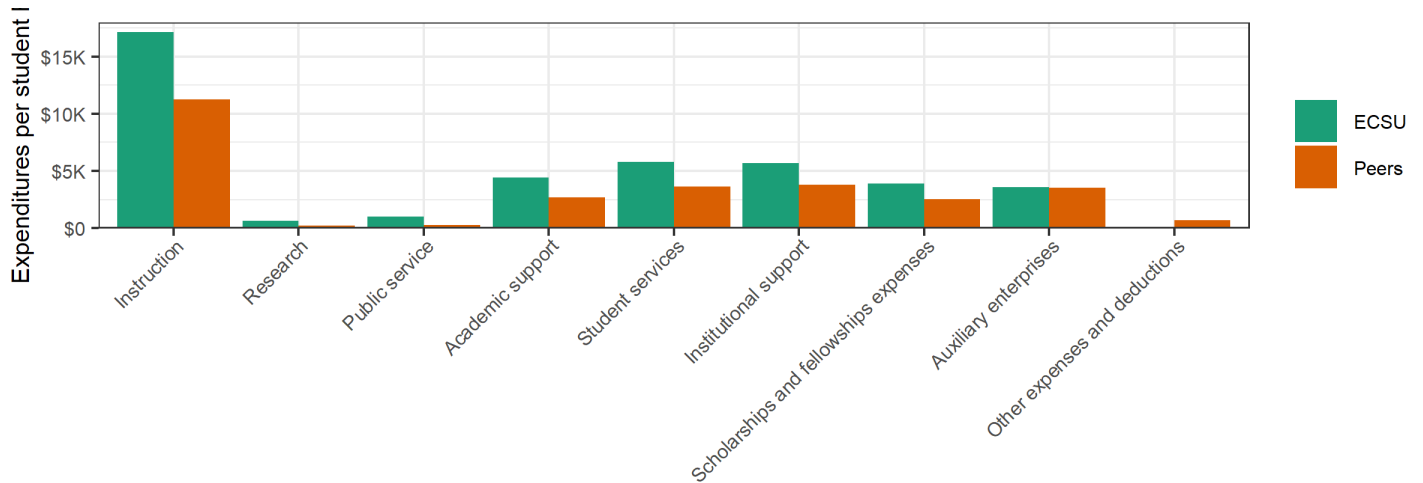
Figure 72. FY22 Expenses Per Student FTE by Functional Category, Southern Connecticut State University Compared to Peer Median
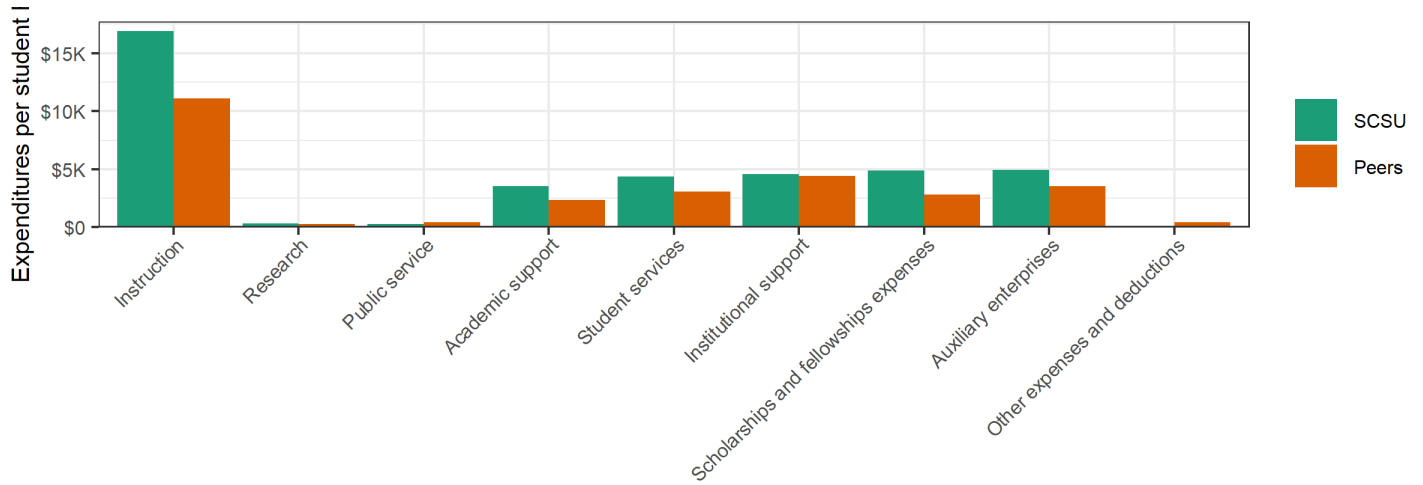
Figure 73. FY22 Expenses Per Student FTE by Functional Category, Western Connecticut State University Compared to Peer Median
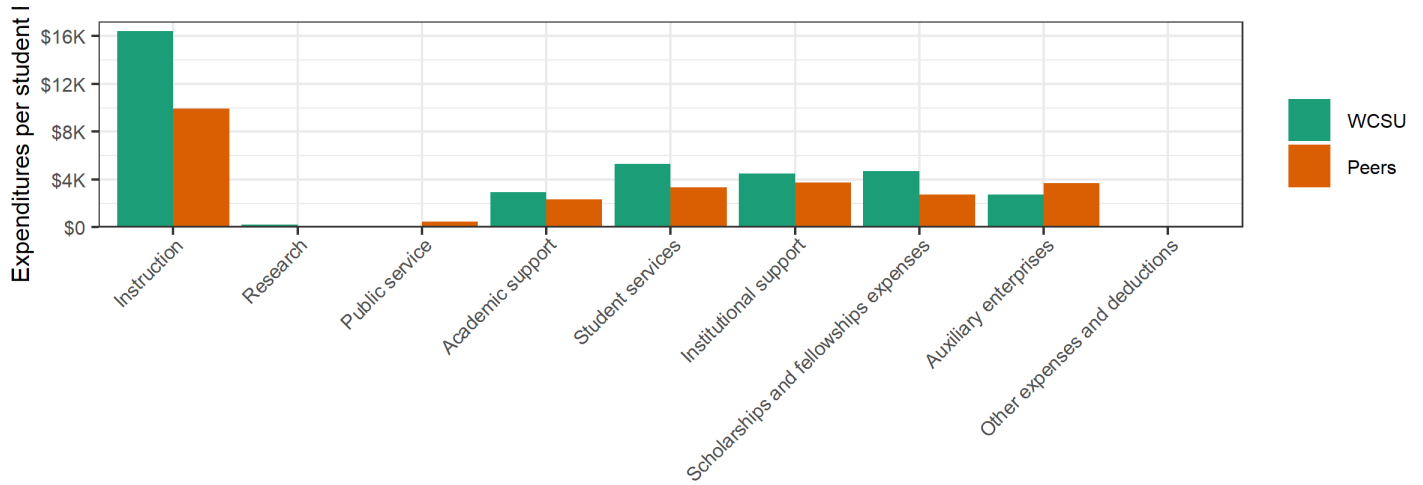
Figure 74. FY22 Expenses Per Student FTE by Functional Category, Charter Oak State College Compared to Peer Median
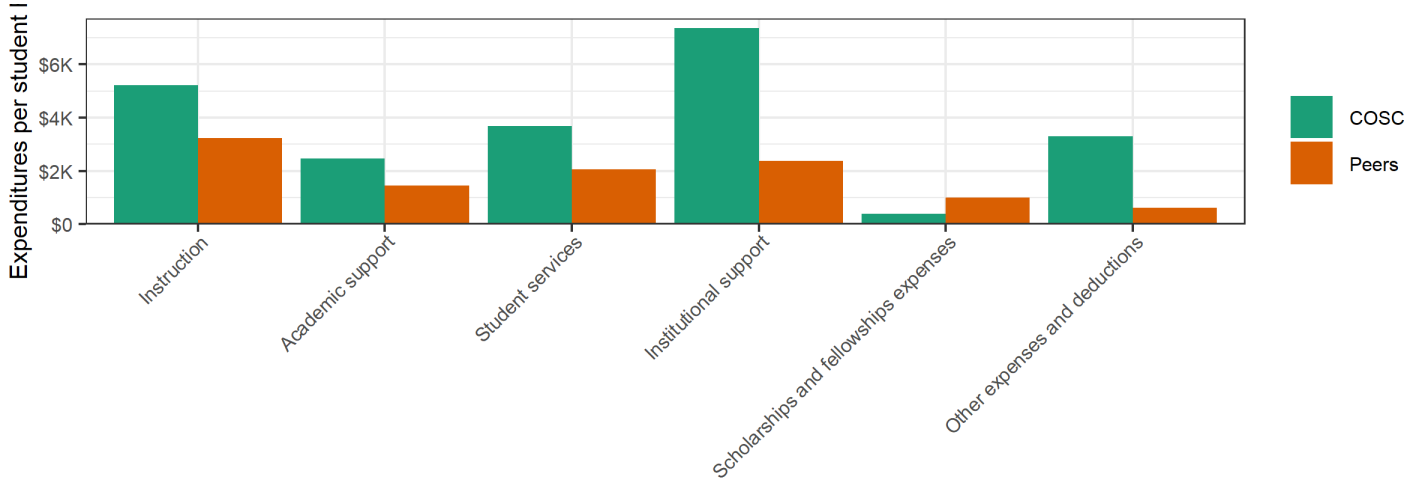
Figure 75. FY22 Expenses Per Student FTE by Functional Category, Connecticut State Community College Compared to Peer Median
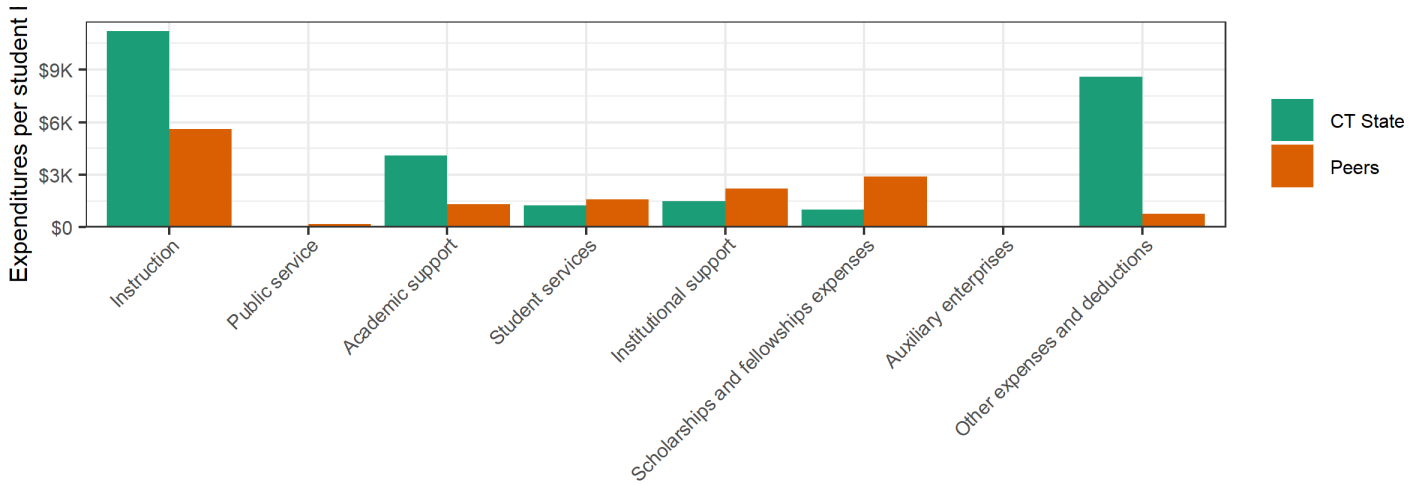
Expenses by Natural Classification

Figure 76. FY22 Expenses Per Student FTE by Natural Category, Central Connecticut State University Compared to Peer Median
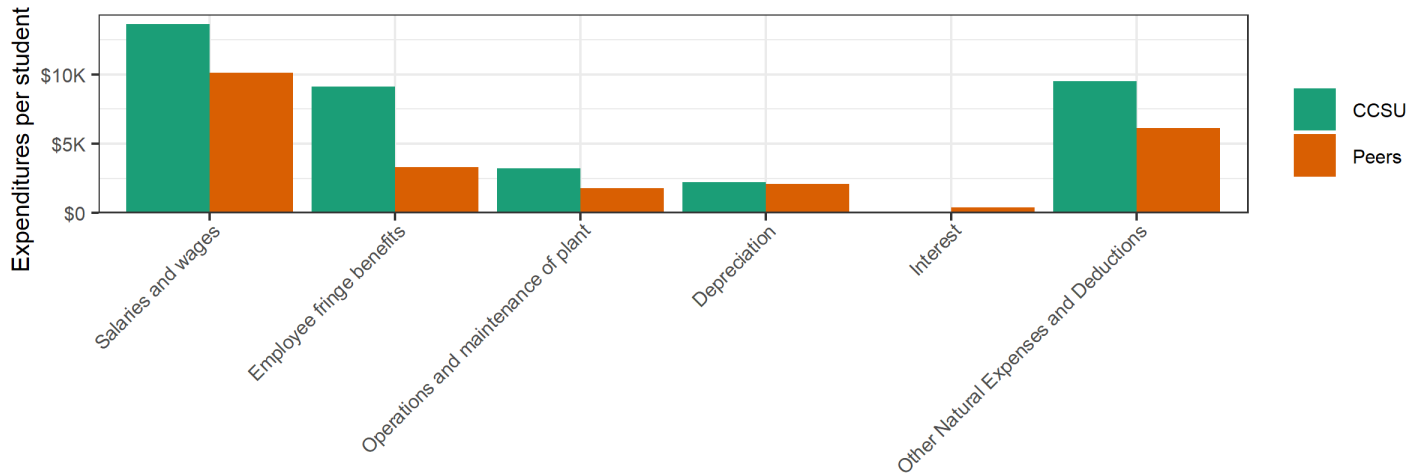
Figure 77. FY22 Expenses Per Student FTE by Natural Category, Eastern Connecticut State University Compared to Peer Median
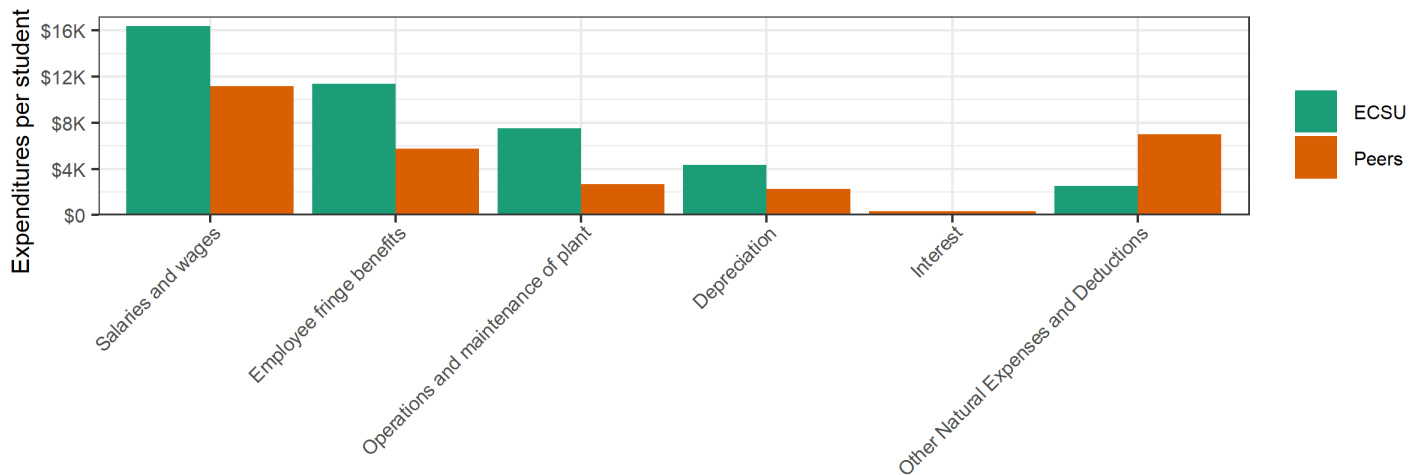
Figure 78. FY22 Expenses Per Student FTE by Natural Category, Southern Connecticut State University Compared to Peer Median
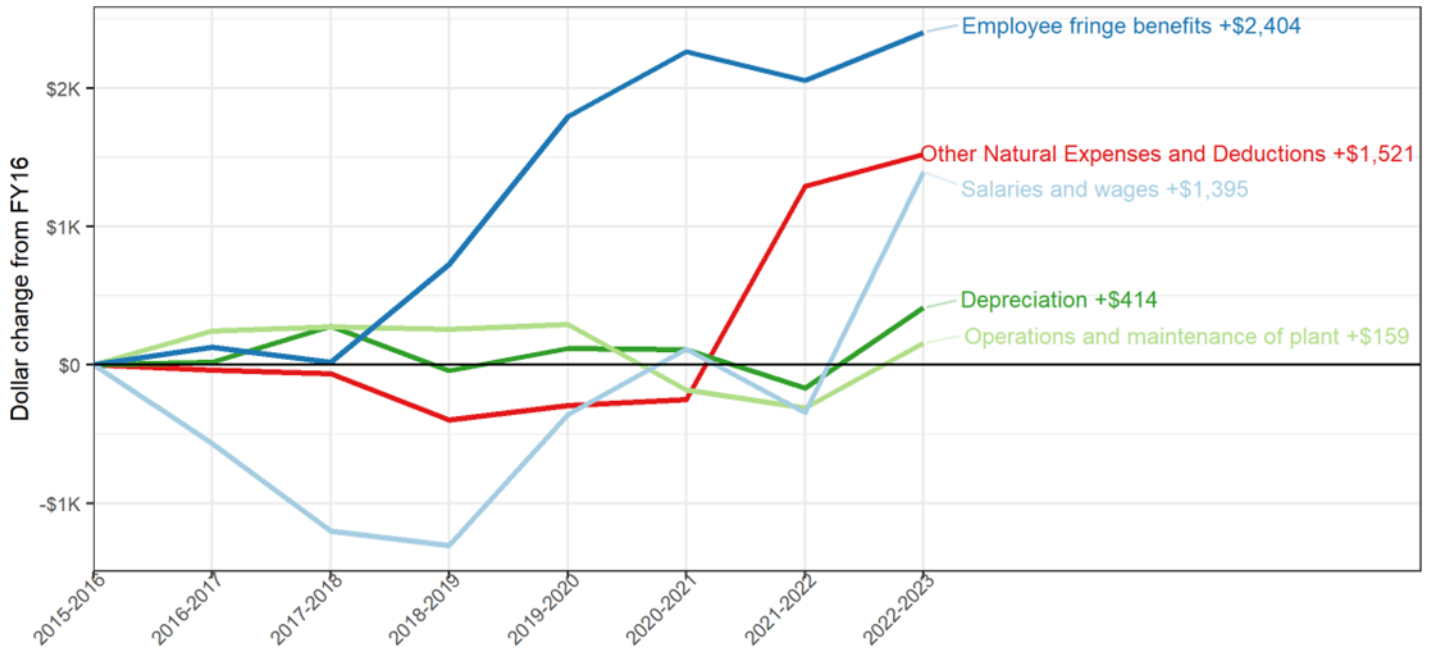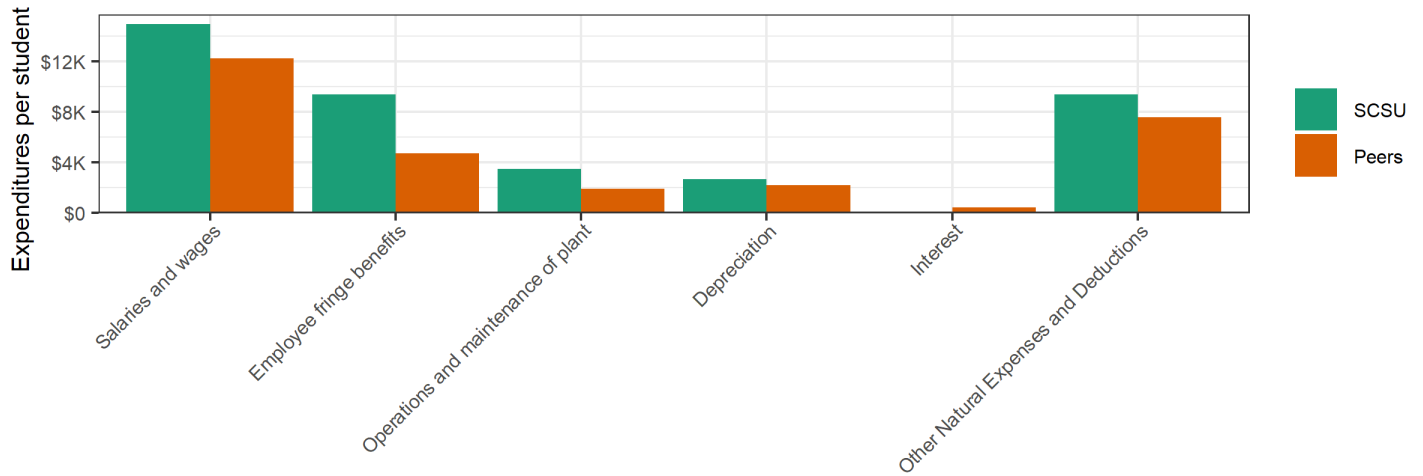
Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office.

Figure 79. FY22 Expenses Per Student FTE by Natural Category, Western Connecticut State University Compared to Peer Median
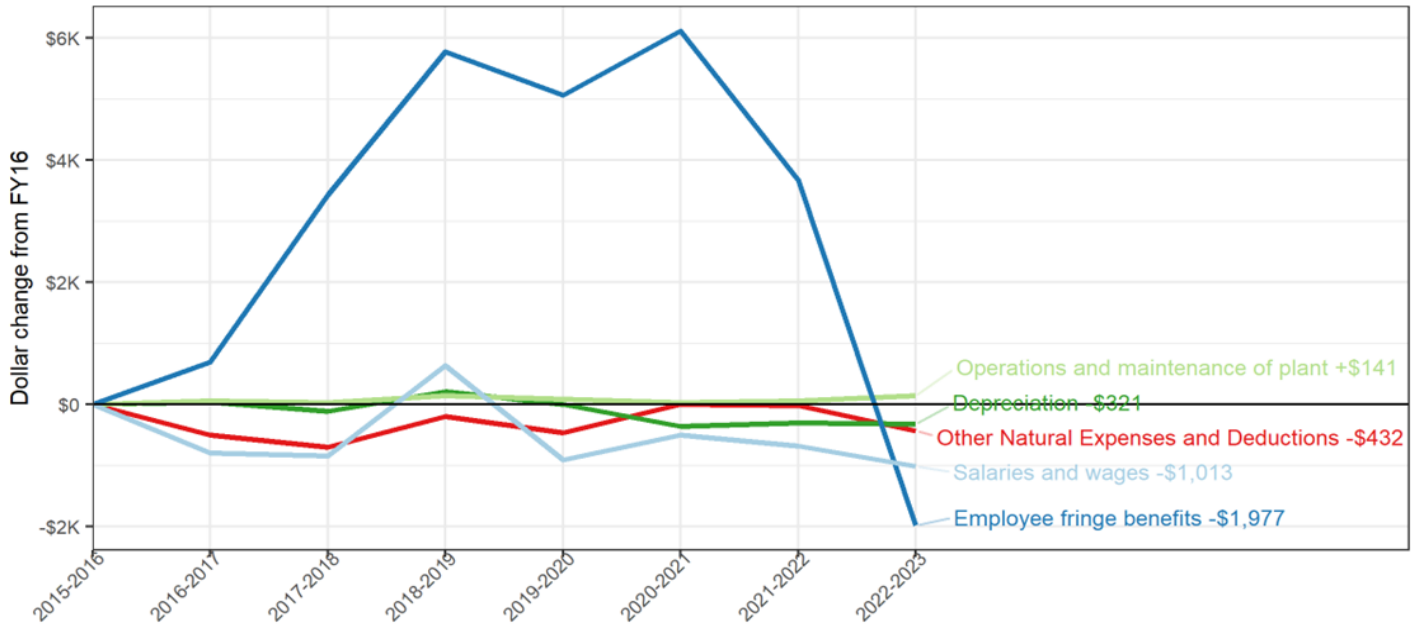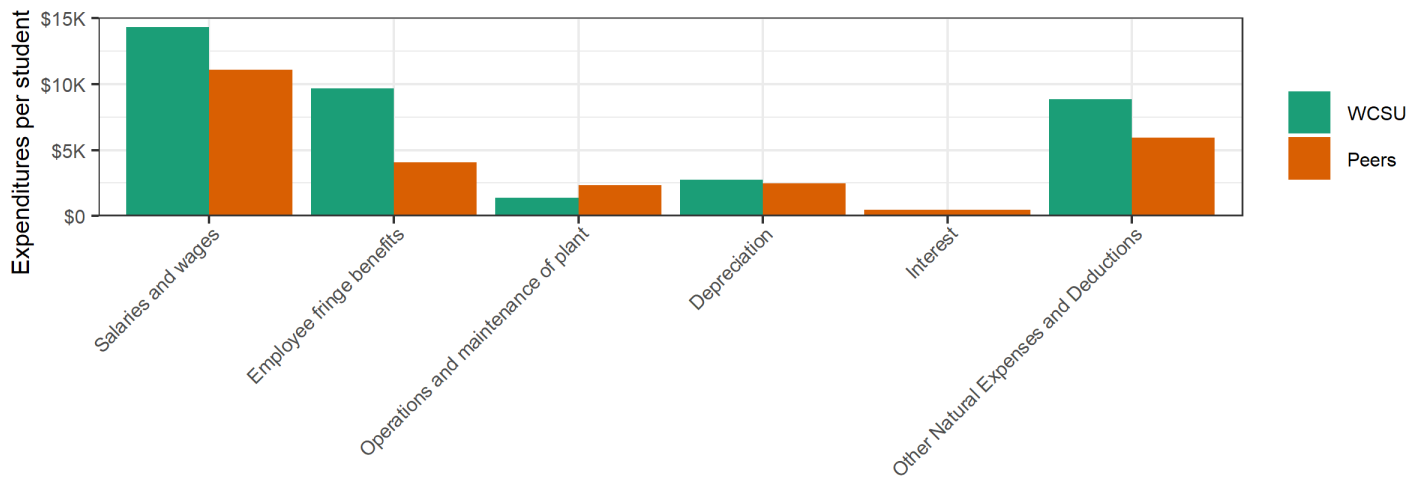
Sources: NCES IPEDS finance survey fYYYY_f1a and 12-Month Enrollment Survey, files efiaYYYY, 2016-2021 final release files; 2022 provisional release. FY23 IPEDS submissions provided by CSCU system office.

**Figure 80. FY22 Expenses Per Student FTE by Natural Category,
Charter Oak State College Compared to Peer Median**
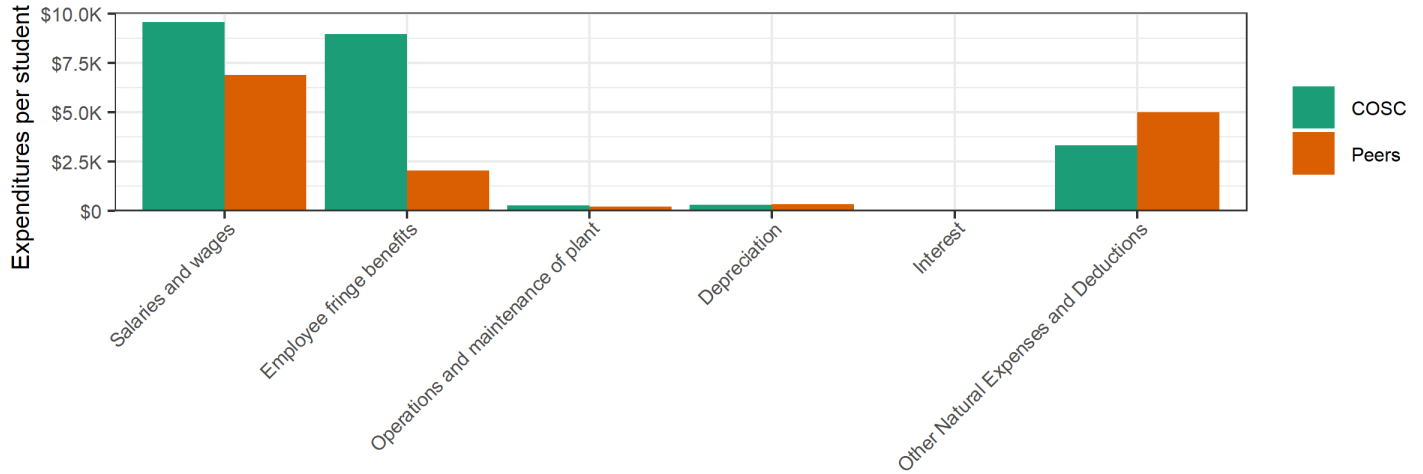
**Figure 81. FY22 Expenses Per Student FTE by Natural Category,
Connecticut State Community College Compared to Peer Median**
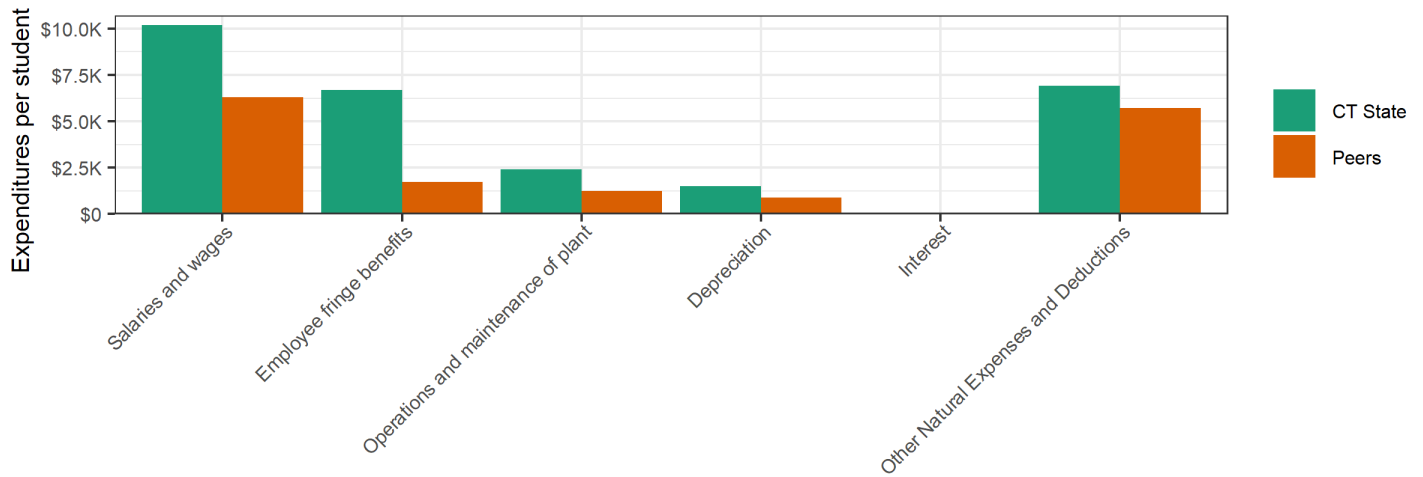
Staffing Trends

Figure 82. Central Connecticut State University Employee FTE by Type and Student FTE Over Time
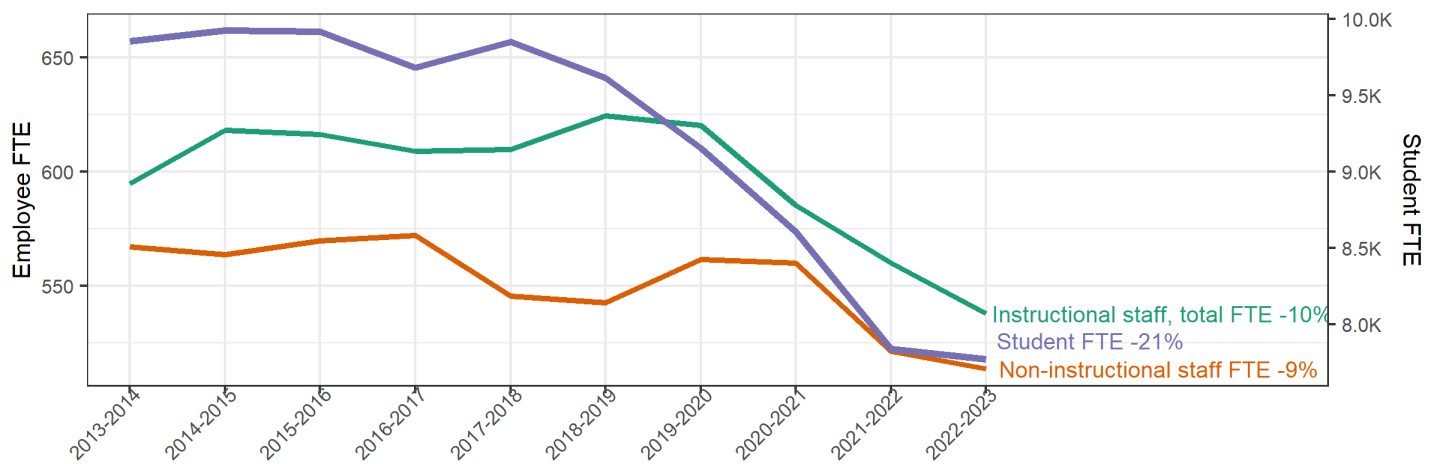
Instructional staff, total FTE -10%
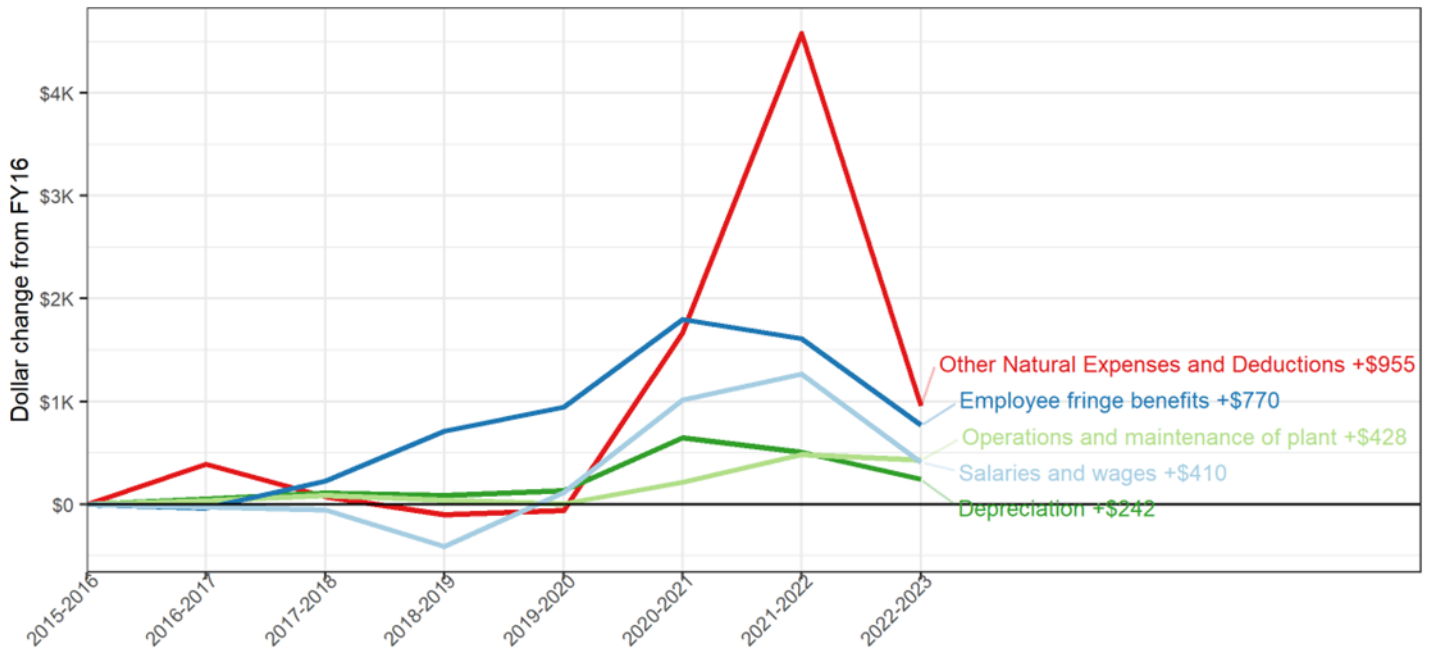Student FTE -21%
Non-instructional staff FTE -9%

Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 83. Employee FTE per 100 Student FTE Over Time, Central Connecticut State University and Peers
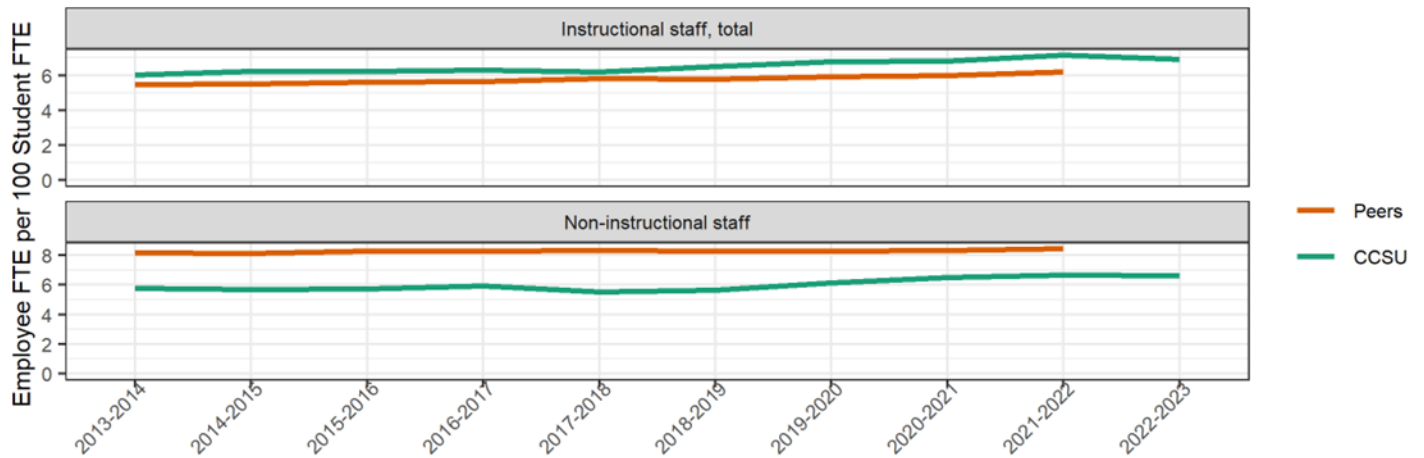
Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 84. Eastern Connecticut State University Employee FTE by Type and Student FTE Over Time
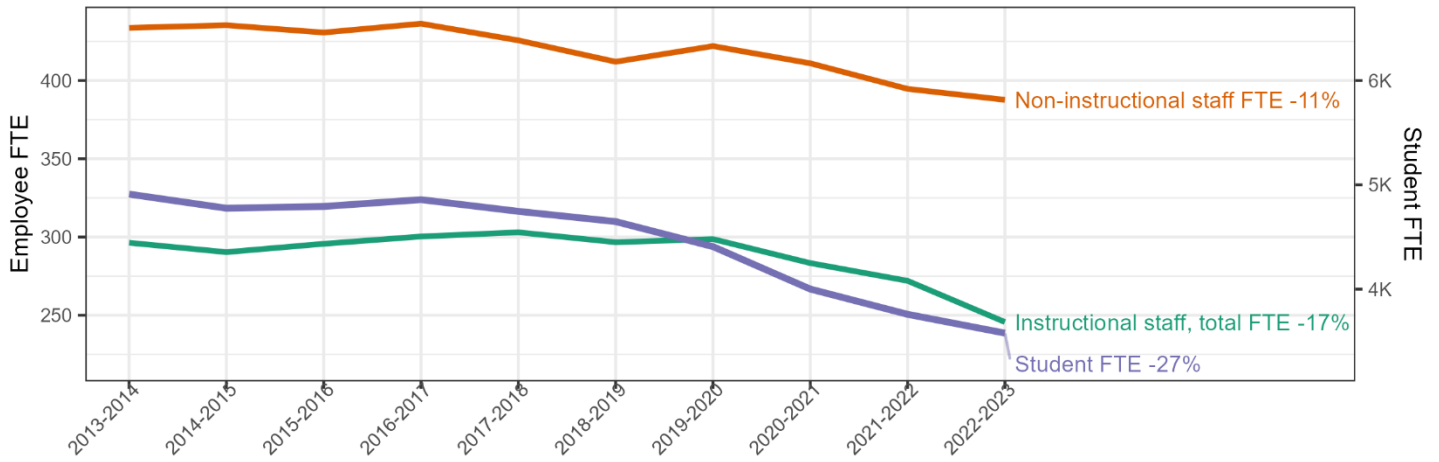
Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 85. Employee FTE per 100 Student FTE Over Time, Eastern Connecticut State University and Peers
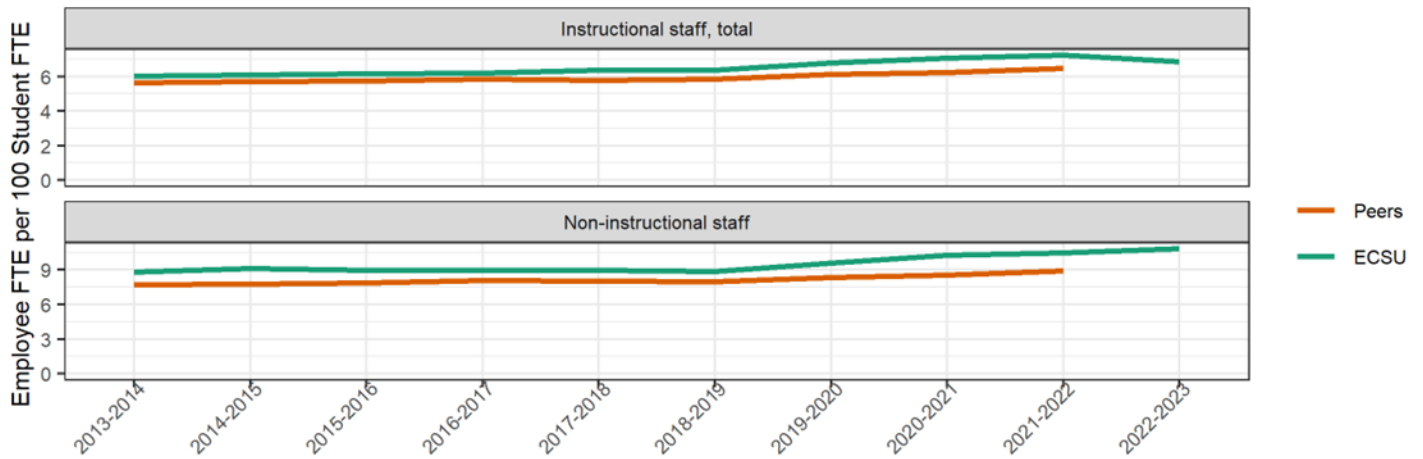
Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 86. Southern Connecticut State University Employee FTE by Type and Student FTE Over Time
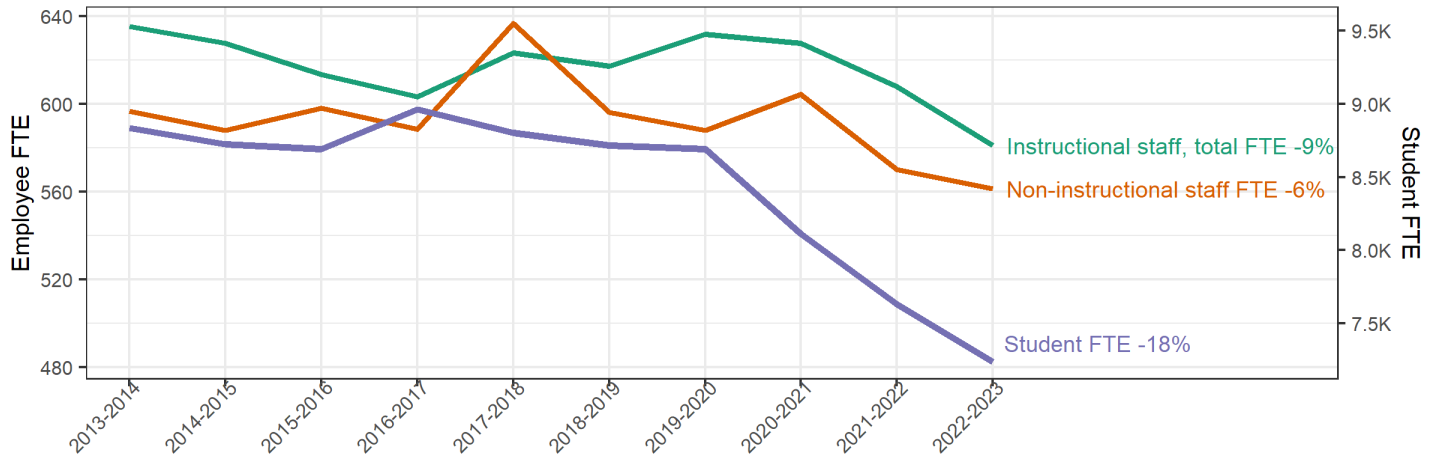
Instructional staff, total FTE -9%
Non-instructional staff FTE -6%
Student FTE -18%

Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

**Figure 87. Employee FTE per 100 Student FTE Over Time, Southern Connecticut State University and Peers**
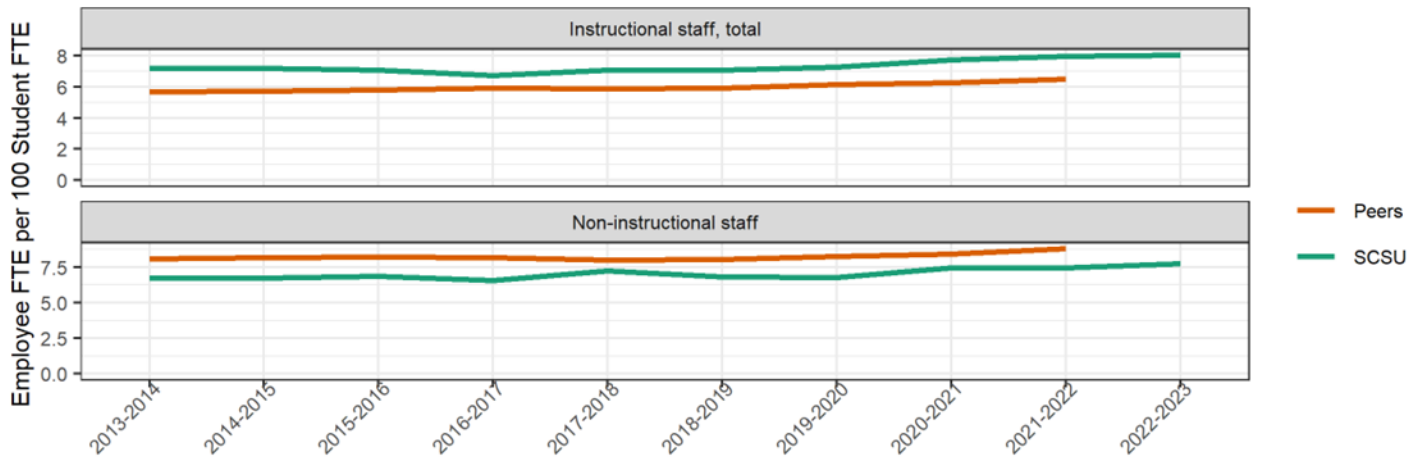
Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 88. Western Connecticut State University Employee FTE by Type and Student FTE Over Time
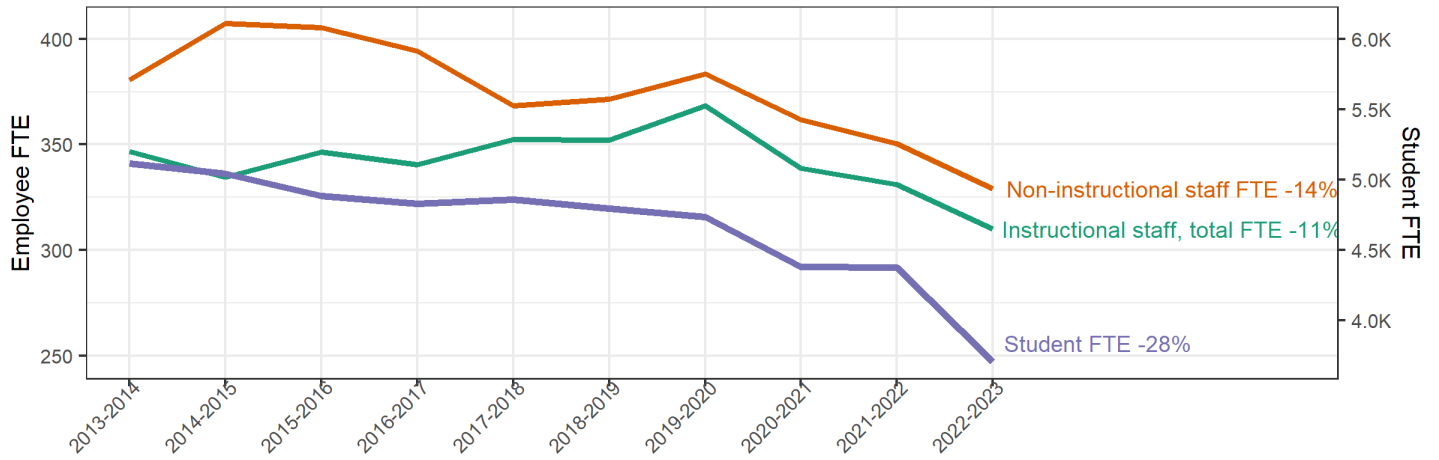
Non-instructional staff FTE -14%

Instructional staff, total FTE -11%

Student FTE -28%

Figure 89. Employee FTE per 100 Student FTE Over Time, Western Connecticut State University and Peers
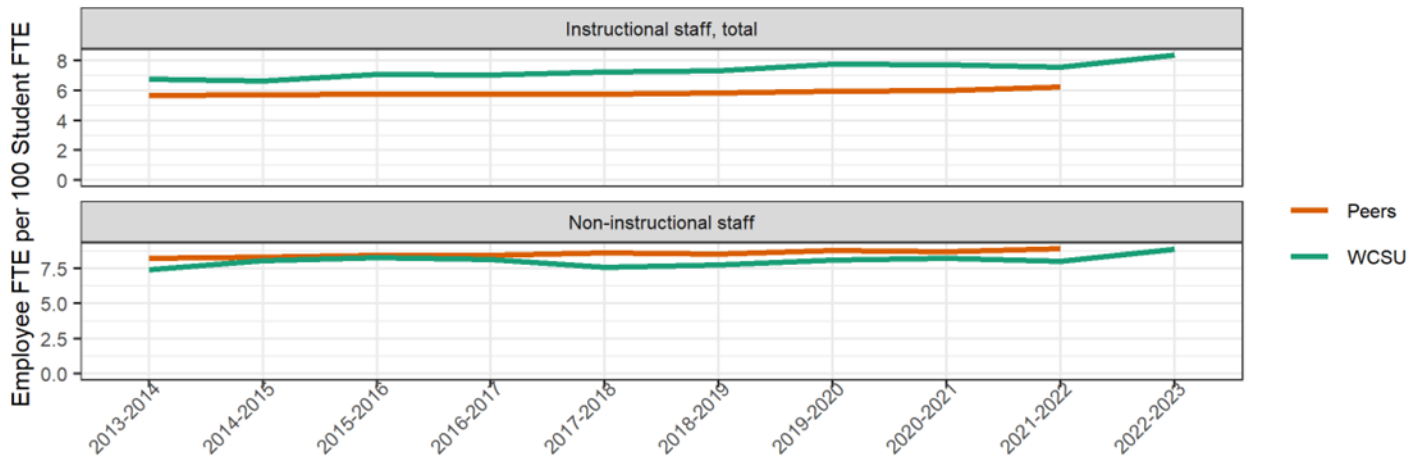
Figure 90. Charter Oak State College Employee FTE by Type and Student FTE Over Time
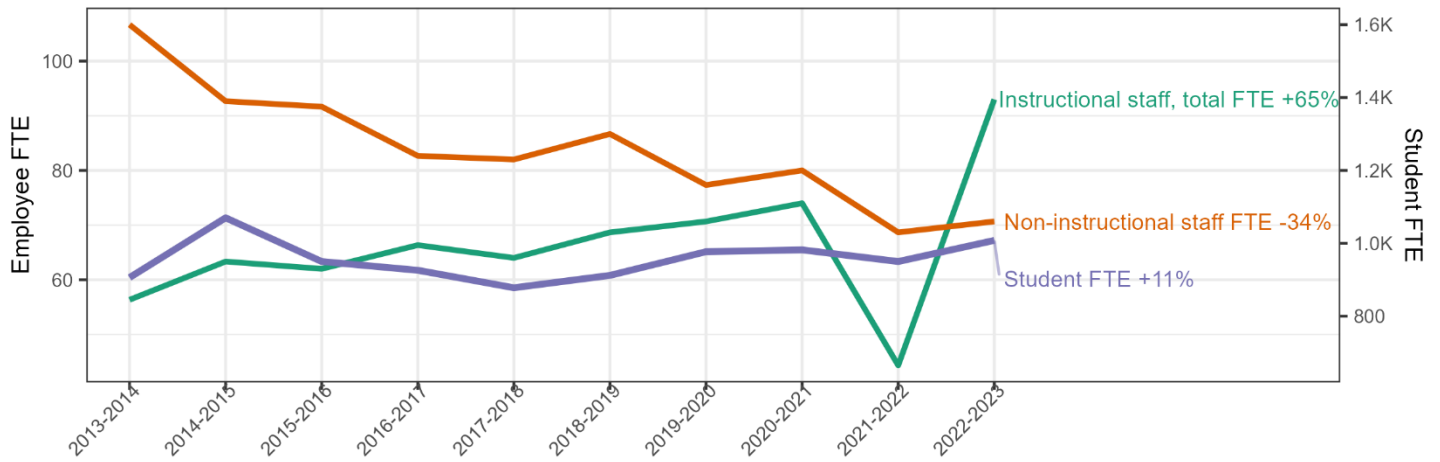
Note: 2021-2022 was first year that Charter Oak relied on shared HR services through the CSCU System Office. They revised the query used to count "employees on the institution's payroll as of November 1, 2021." Charter Oak employs largely part-time employees who may or may not be on the payroll on November 1. The more stringent query undercounts the number of employees who work for the College intermittently throughout the year.

Figure 91. Employee FTE per 100 Student FTE Over Time, Charter Oak State College and Peers
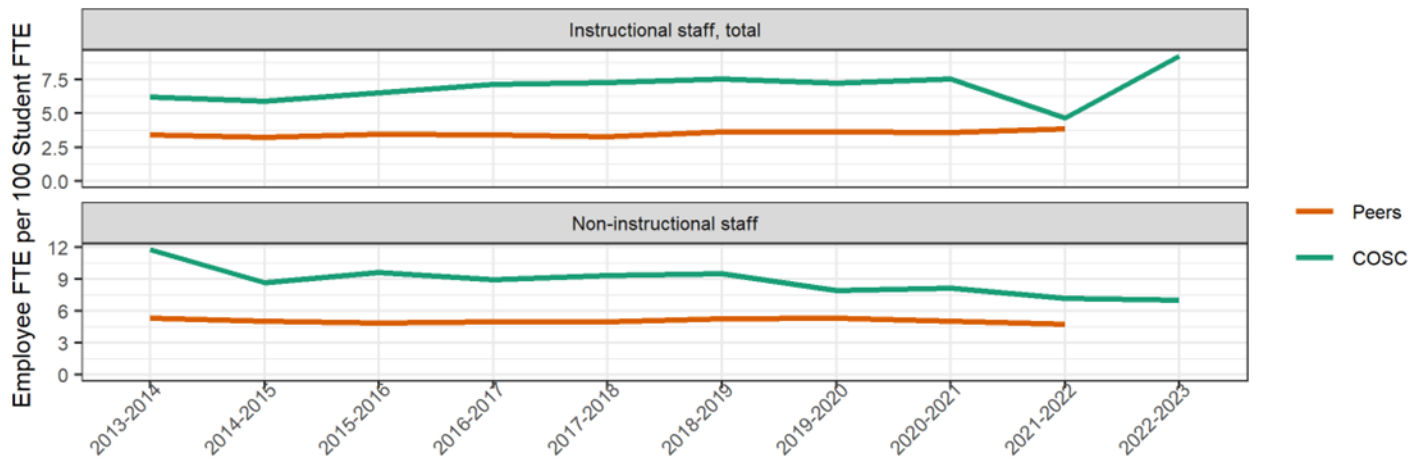
Figure 92. Connecticut State Community College Employee FTE by Type and Student FTE Over Time
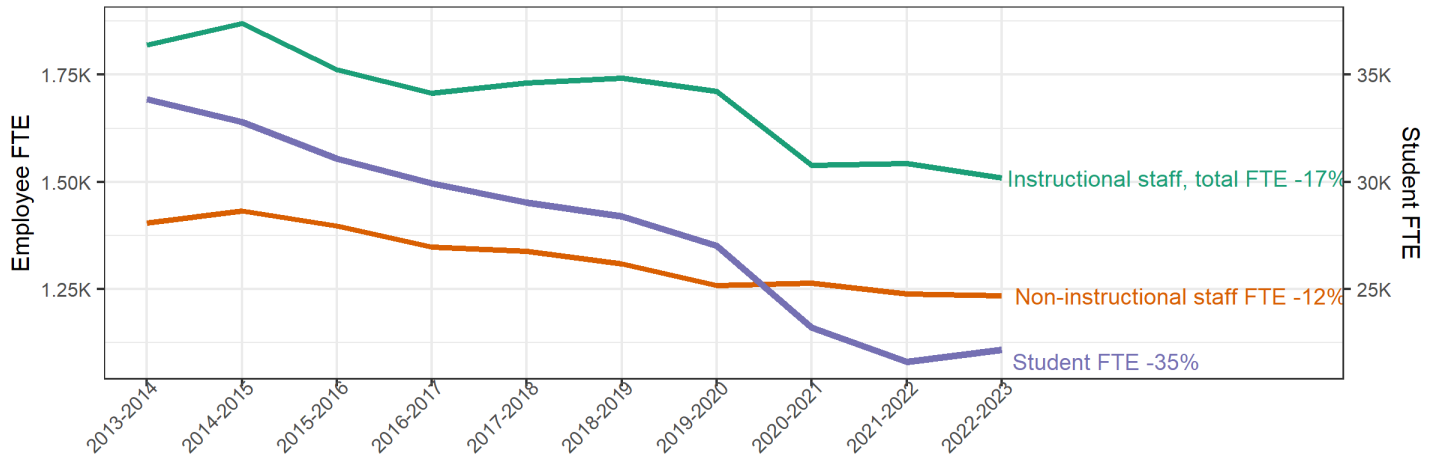
Instructional staff, total FTE -17%

Non-instructional staff FTE -12%

Student FTE -35%

Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Figure 93. Employee FTE per 100 Student FTE Over Time, Connecticut State Community College and Peers
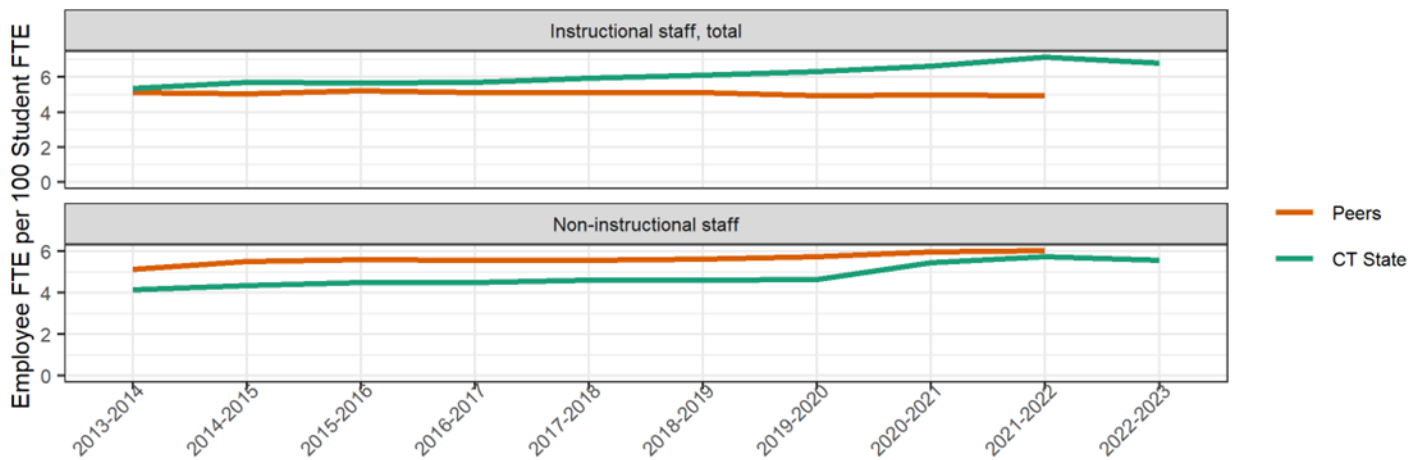
Sources: NCES IPEDS HR survey eapYYYY and 12-Month Enrollment Survey, files efiaYYYY, 2013-2021 final release files; 2022 provisional release. Note: Employee FTE is calculated as FT employees + 1/3 PT employees.

Program Density

Program density refers to the number of programs offered relative to the number of students an institution enrolls. It can be one indicator of the extent to which an institution's program array is of a breadth that its enrollment size can sustainably support. As institutions' enrollment shrinks, an institution may have to stop offering some academic programs, including majors, minors, or concentrations, to reduce the overhead expenditures of managing a program and the costs of

specific courses that tend to enroll only majors, in order to maintain financial health. As with many indicators, this one sacrifices considerable complexity for simplicity: an institution offering two programs that are largely similar is likely not generating costs at the same rate as an institution offering two largely dissimilar programs. Important considerations about the extent to which programs are organized into the same department(s), use the same faculty, are related to the general education core, or have strong enrollments are important factors that are not captured in this measure.

The CSCU institutions each offer reasonably similar numbers of programs per 100 student FTE, with the exception of Charter Oak, which offers many more programs per student FTE. This is likely due to Charter Oak's small enrollment size and its different model.

Figure 94. CSCU Programs Offered per 100 Student FTE
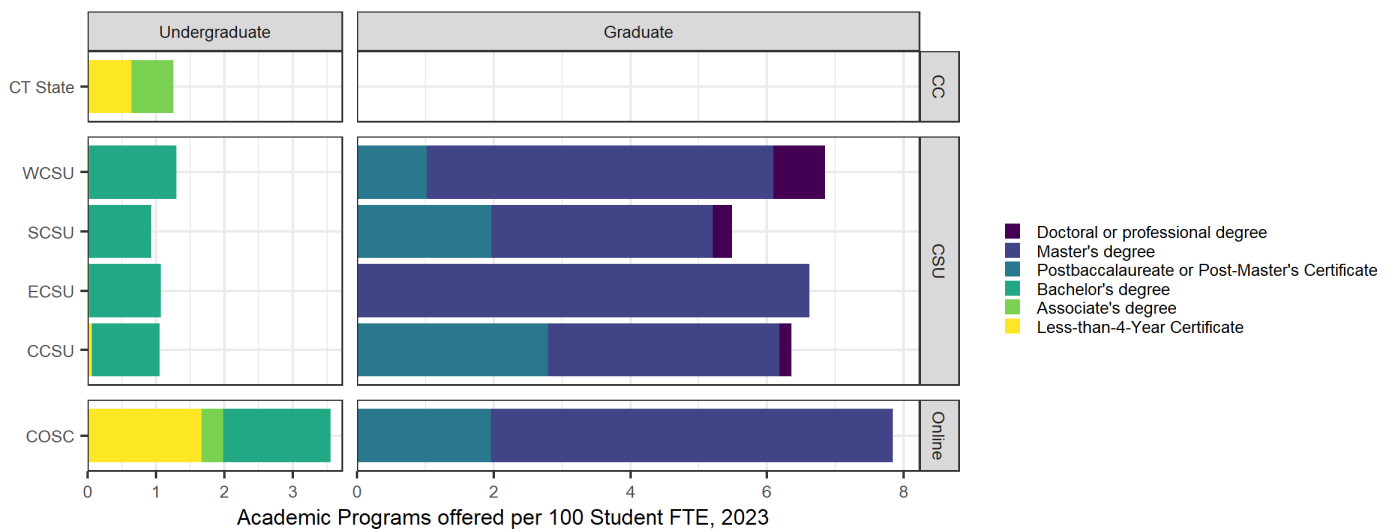
Source: IPEDS completions survey (c2023dep) and IPEDS 12-month enrollment survey (efia2023) provisional release files. Programs are defined by 6-digit CIP code.

Relative to their peers, the CSCU institutions—again with the exception of Charter Oak, which is explained below—also offer relatively similar numbers of programs per 100 students FTE at both undergraduate and graduate levels. In cases where the numbers differ from their peers, the differences are generally at the certificate level, which is not likely to have a large impact on institutional finances. One visible difference, however, is that Eastern and Western both offer more master's degree programs per graduate FTE than do their peer institutions.

Figure 95. Academic Program Offerings per 100 Student FTE, Connecticut State Community College and Peers
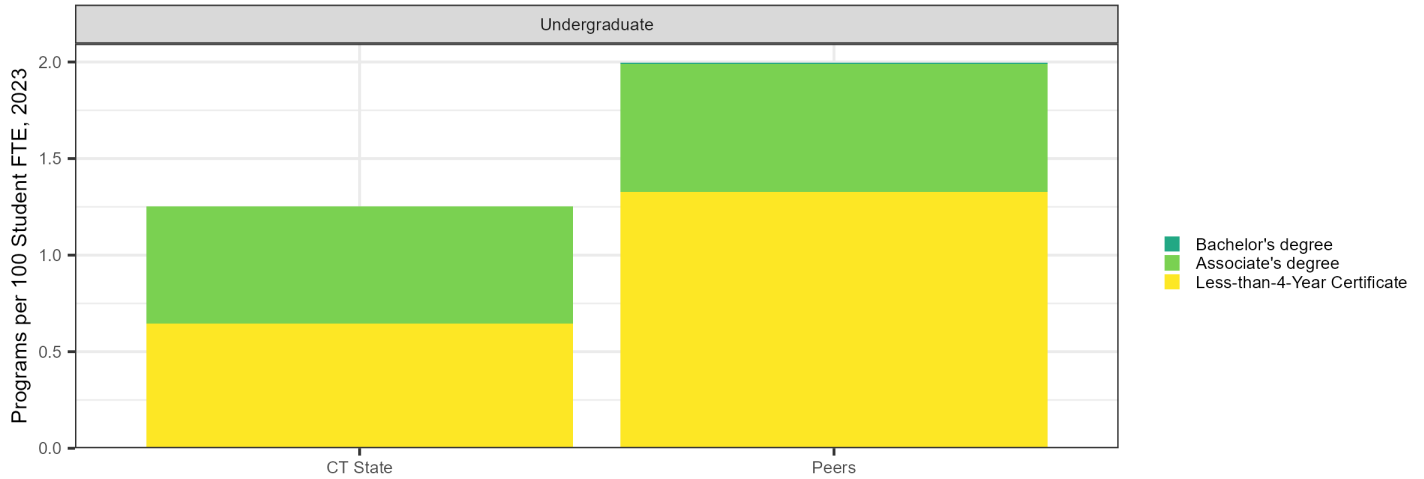
Source: IPEDS completions survey (c2023dep) and IPEDS 12-month enrollment survey (efia2023) provisional release files. Programs are defined by 6-digit CIP code.
Note: Undergraduate and Graduate graphs are on separate scales.

Figure 96. Academic Program Offerings per 100 Student FTE, Central Connecticut State University and Peers, 2023
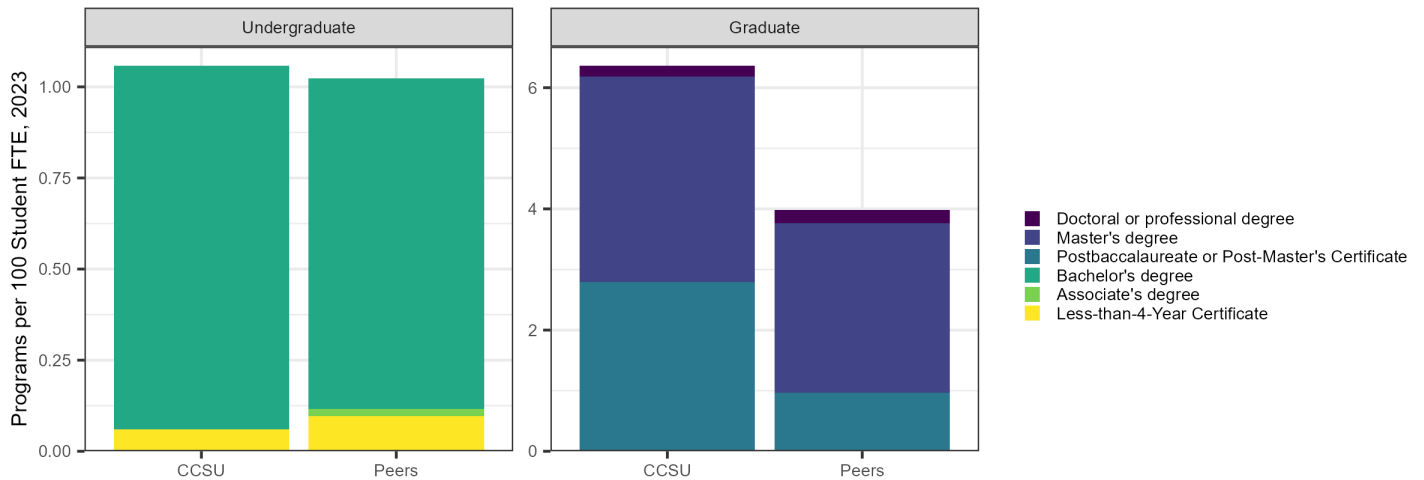
Source: IPEDS completions survey (c2023dep) and IPEDS 12-month enrollment survey (efia2023) provisional release files. Programs are defined by 6-digit CIP code.
Note: Undergraduate and Graduate graphs are on separate scales.

Figure 97. Academic Program Offerings per 100 Student FTE, Eastern Connecticut State University and Peers, 2023
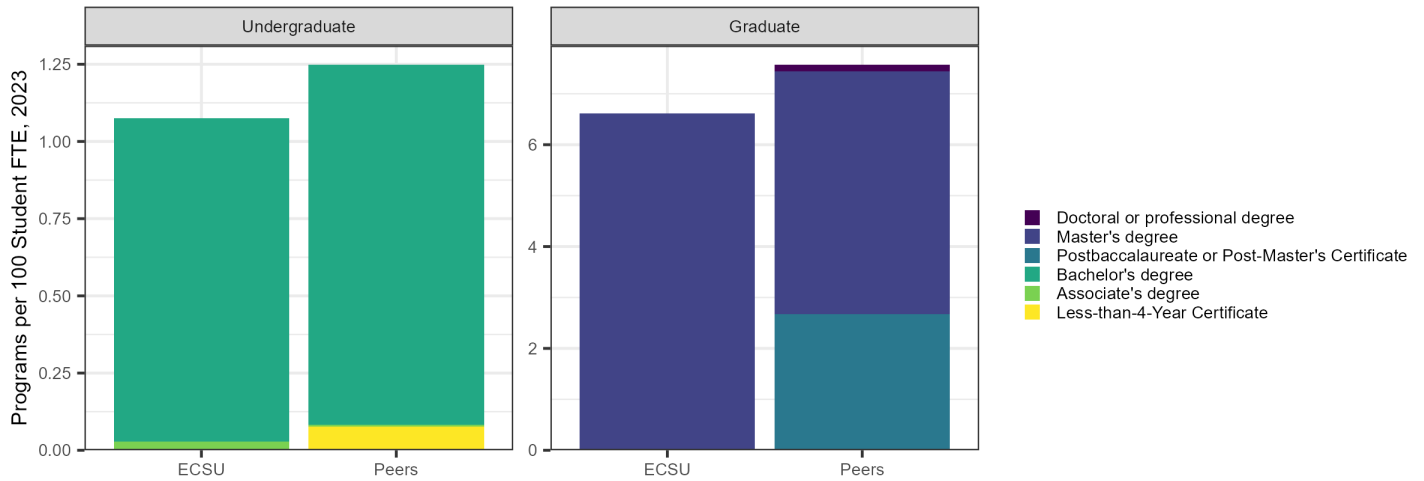
Source: IPEDS completions survey (c2023dep) and IPEDS 12-month enrollment survey (efia2023) provisional release files. Programs are defined by 6-digit CIP code.
Note: Undergraduate and Graduate graphs are on separate scales.

Figure 98. Academic Program Offerings per 100 Student FTE, Southern Connecticut State University and Peers, 2023
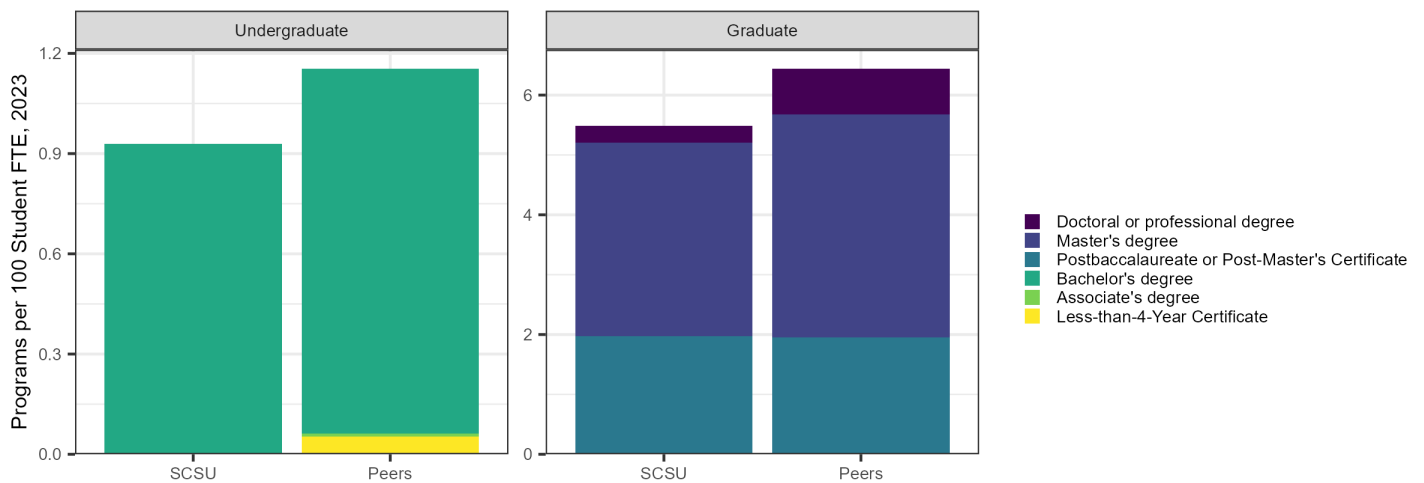
Source: IPEDS completions survey (c2023dep) and IPEDS 12-month enrollment survey (efia2023) provisional release files. Programs are defined by 6-digit CIP code.
Note: Undergraduate and Graduate graphs are on separate scales.

Figure 99. Academic Program Offerings per 100 Student FTE, Western Connecticut State University and Peers, 2023
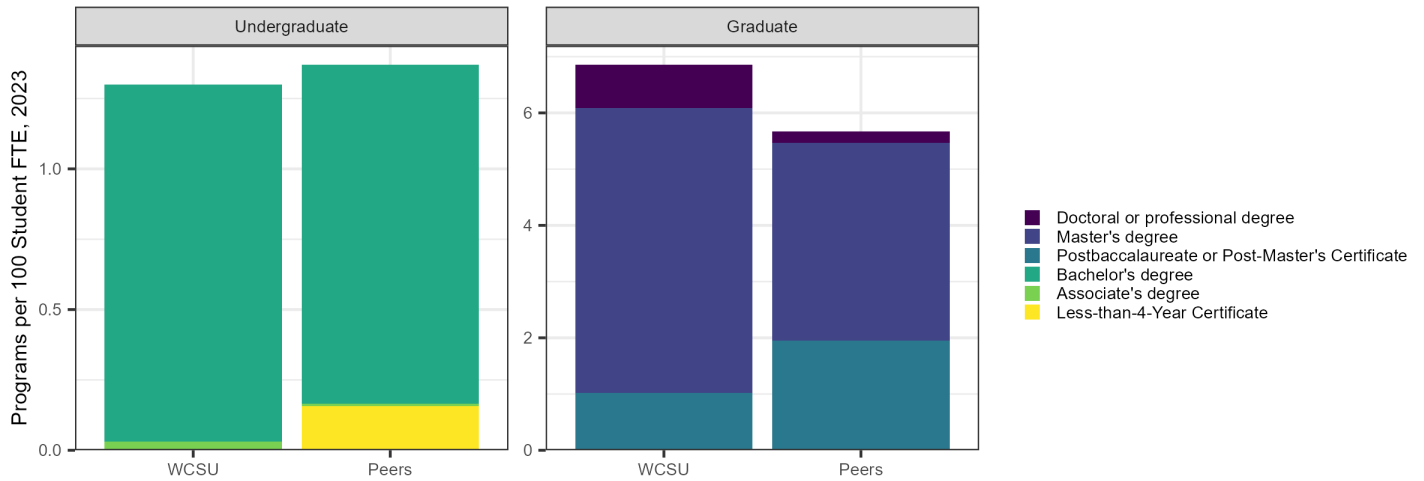
Charter Oak offers double the number of programs per FTE as its peers. It is also a much smaller institution than nearly all its peers, which is a likely cause of the difference.

Figure 100. Academic Program Offerings per 100 Student FTE, Charter Oak State College and Peers, 2023
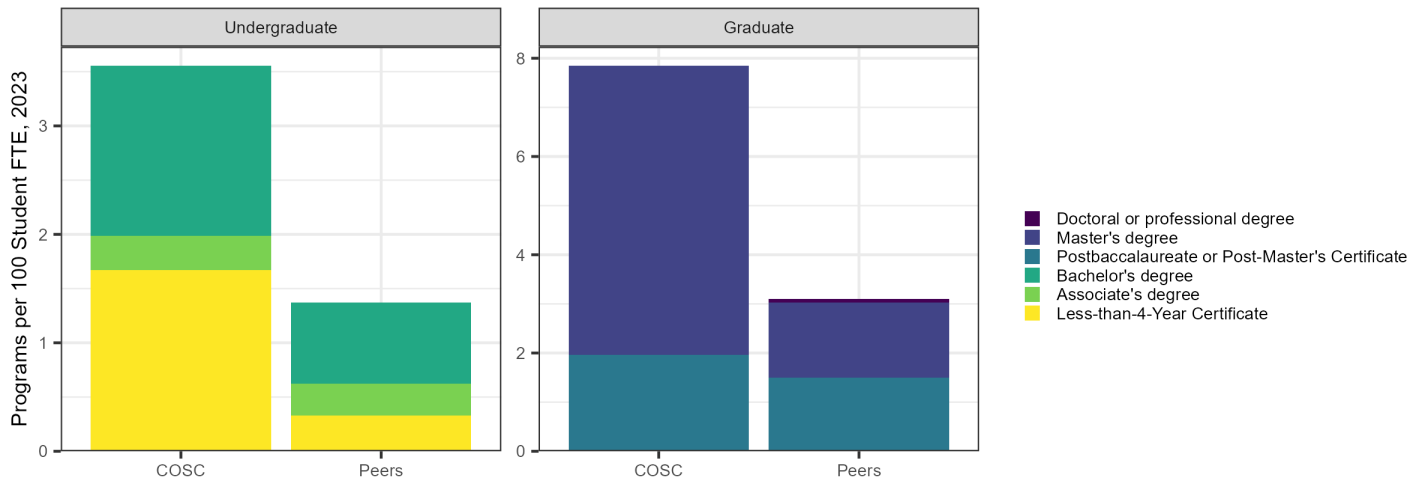
Student Outcomes

Figure 101. Central Connecticut State University Eight-Year Student Outcomes by Cohort Type, 2021-22 (Fall 2014 Cohort)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
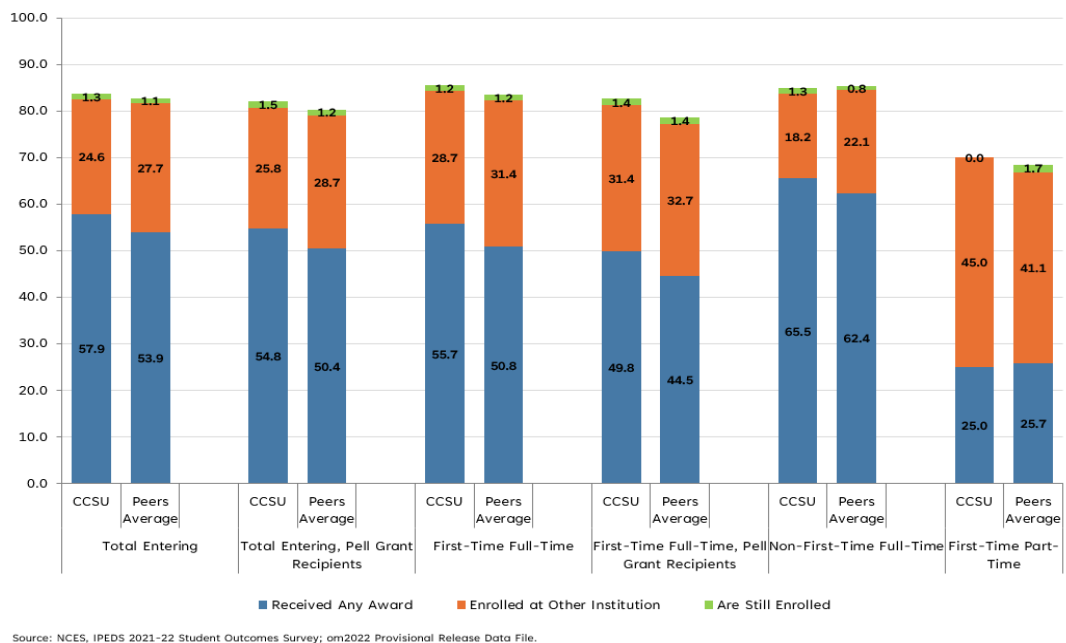
Figure 102. Charter Oak State College Eight-Year Student Outcomes by Cohort Type, 2021-22 (Fall 2014 Cohort)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
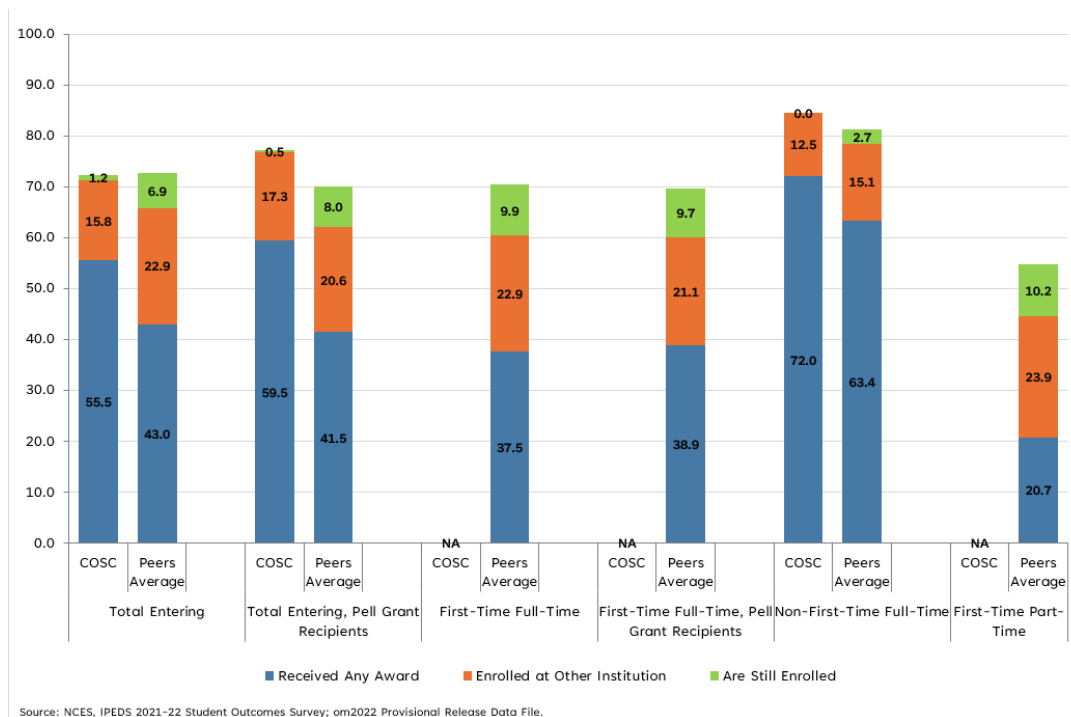
Figure 103. Connecticut State Community College Eight-Year Student Outcomes by Cohort Type, 2021-22 (Fall 2014 Cohort)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
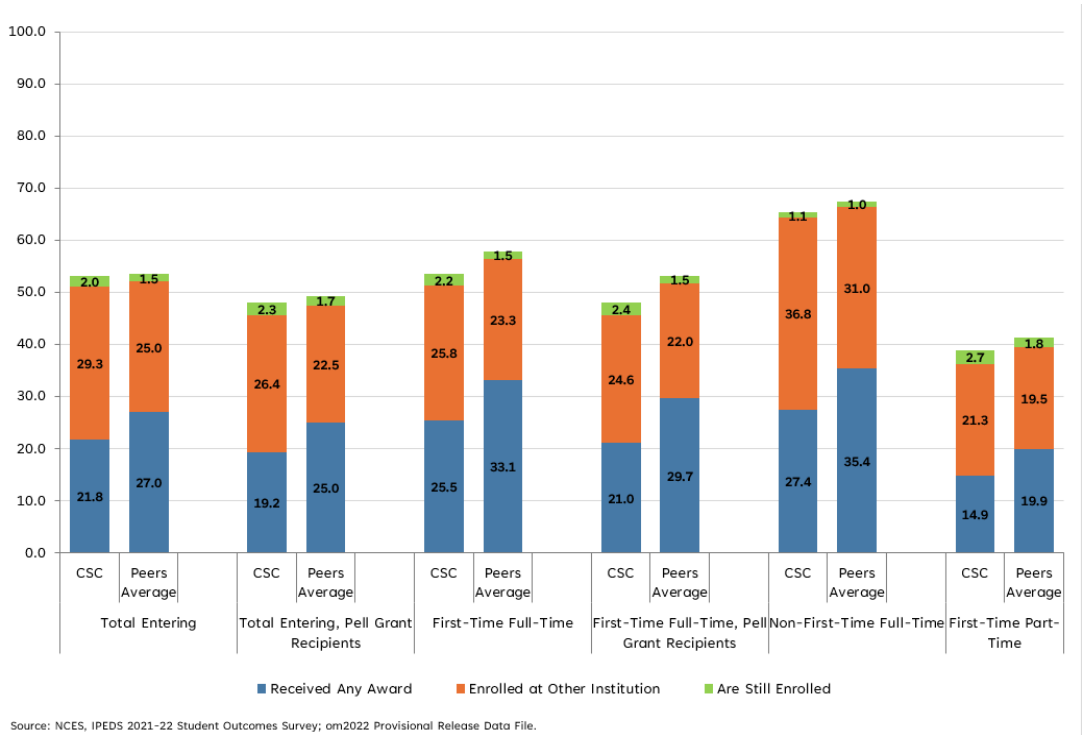
Figure 104. Southern Connecticut State University Eight-Year Student Outcomes by Cohort Type, 2021-22 (Fall 2014 Cohort)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
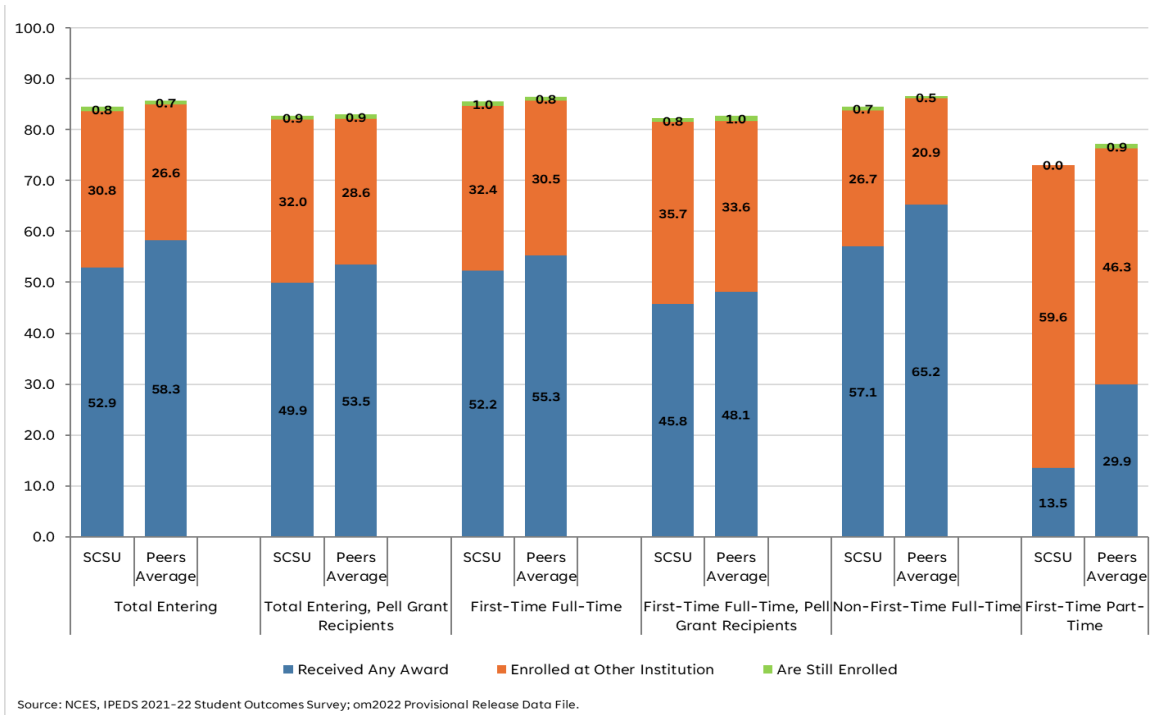
Figure 105. Eastern Connecticut State University Eight-Year Student Outcomes by Cohort, 2021-22 (Fall 2014 Cohort)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
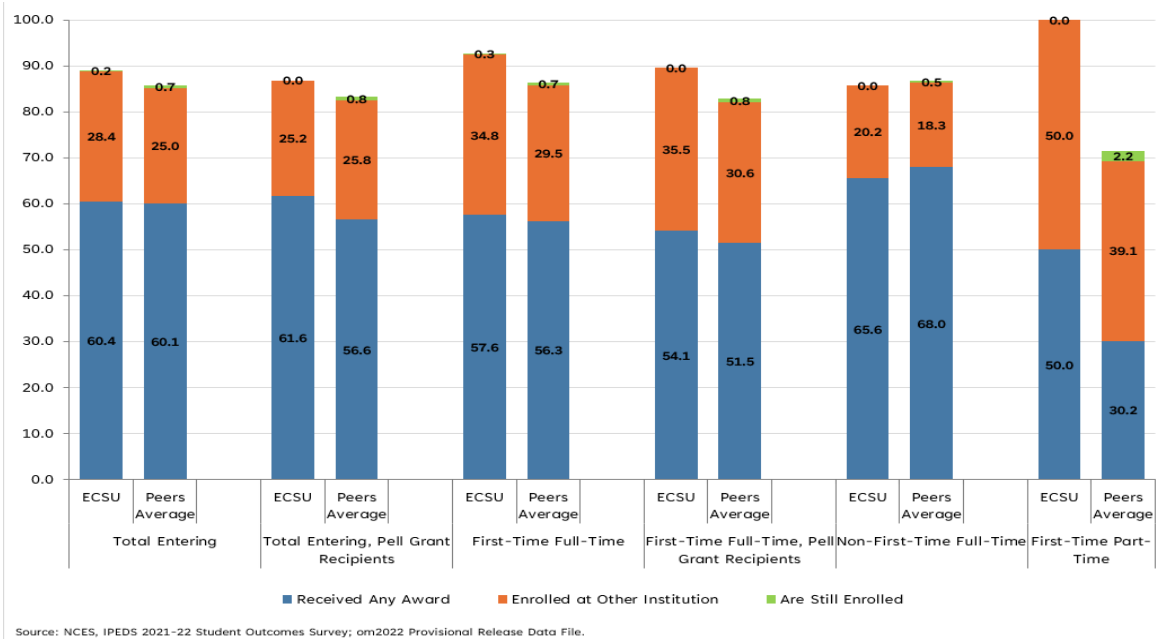
Figure 106. Western Connecticut State University Eight-Year Student Outcomes by Cohort Type, 2021-22 (Fall 2014)

Source: NCES, IPEDS 2021-22 Student Outcomes Survey; om2022 Provisional Release Data File.
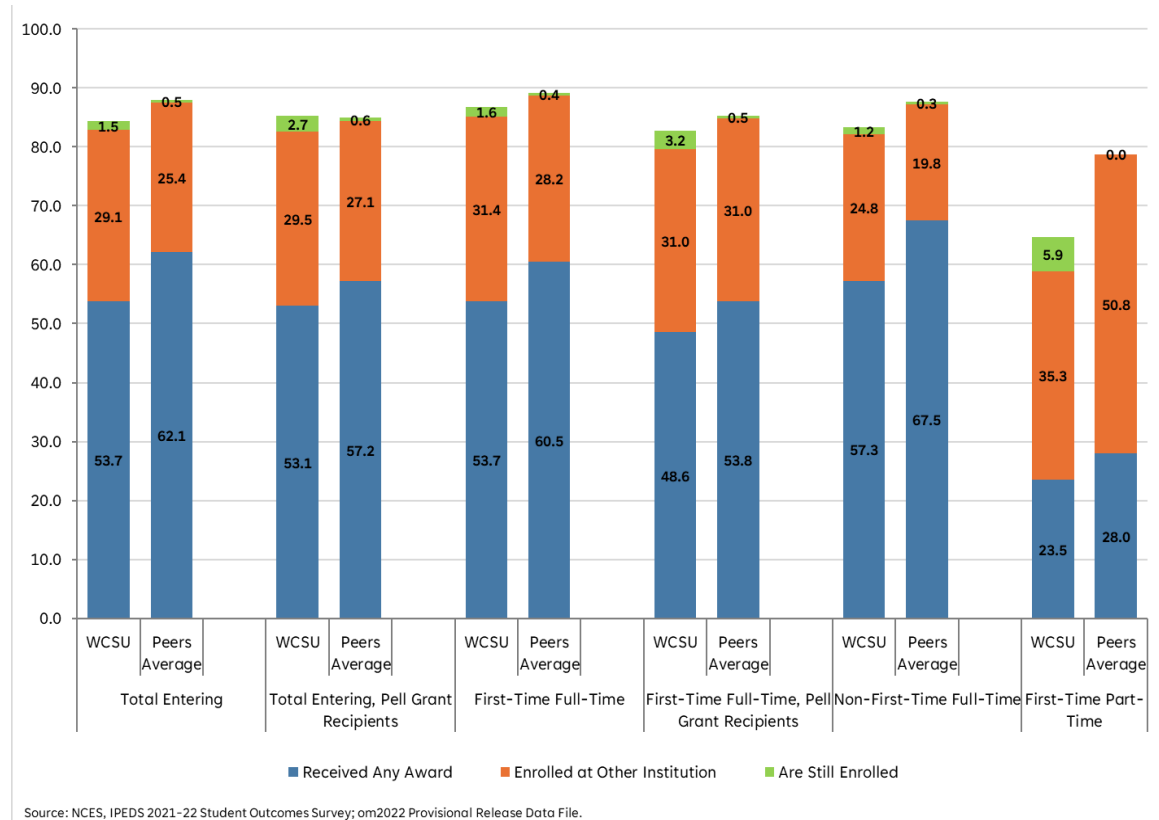
Retention Rates

In the following dot charts, the bright red dots indicate where amongst its corresponding peer group the named CSCU institution sits. The yellow dot shows where the peer average is and the other dots (of whatever color) show each of the peer institutions.

Figure 107. First-to-Second-Year Total Retention Rates, Fall 2022 (Fall 2021 Cohort)
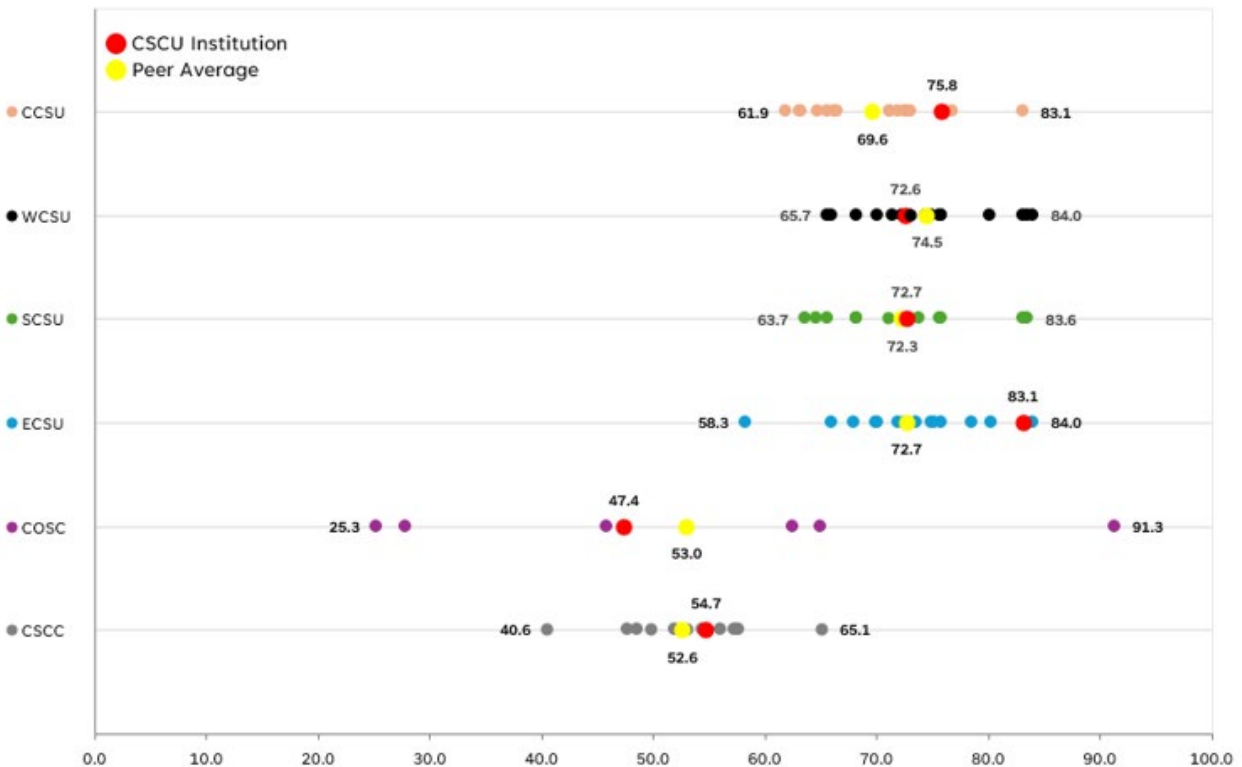
Source: NCES, IPEDS Fall 2022 Enrollment Survey; ef2022d Provisional Release Data File.

Graduation Rates

In the following dot charts, the bright red dots indicate where amongst its corresponding peer group the named CSCU institution sits. The yellow dot shows where the peer average is and the other dots (of whatever color) show each of the peer institutions.

Figure 108. Four-Year Baccalaureate Graduation Rates, 2021-22
(Fall 2016 Bachelor's-Seeking Cohort)
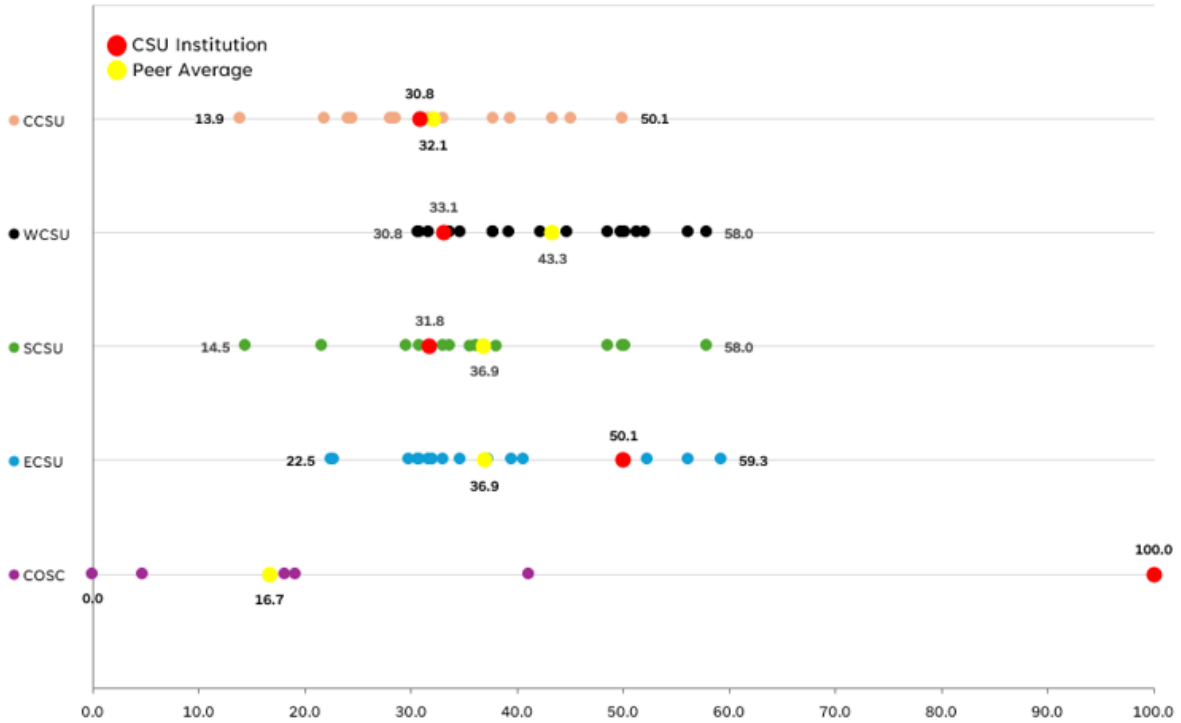
Source: NCES, IPEDS 2021-22 Graduation Rate Survey; gr2022 Provisional Release Data File.

Figure 109. Six-Year Baccalaureate Graduation Rates, 2021-22
(Fall 2016 Bachelor's-Seeking Cohort)
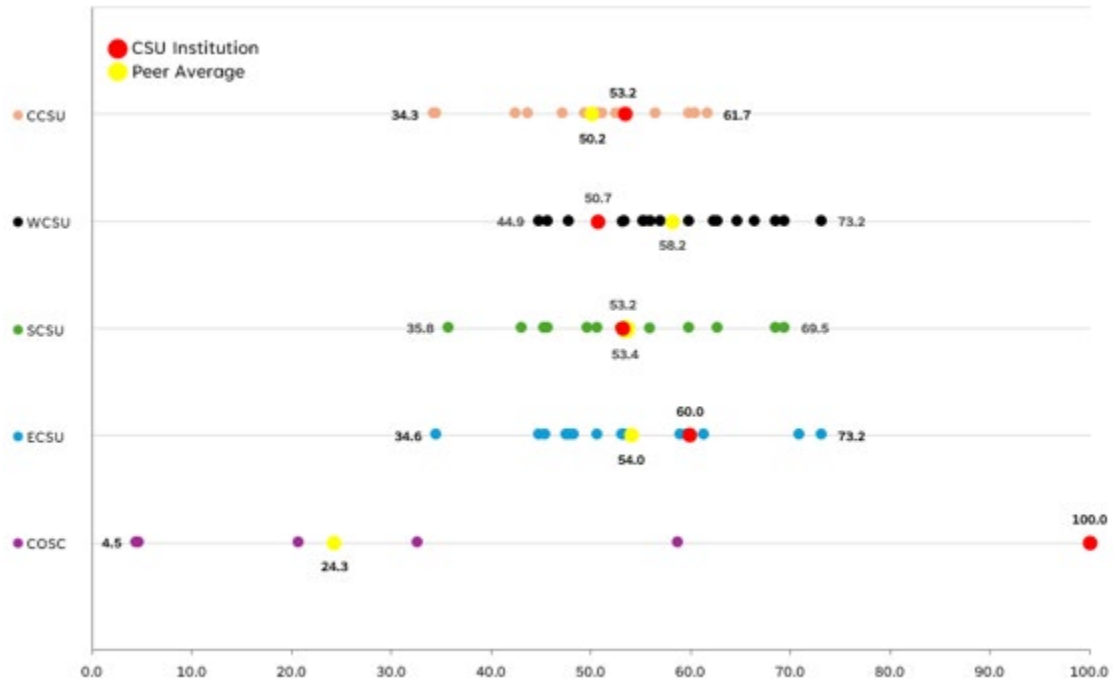
Source: NCES, IPEDS 2021-22 Graduation Rate Survey; gr2022 Provisional Release Data File.

Figure 110. Total Graduation Rates, 2021-22 (Fall 2016 Four-Year Degree/Certificate-Seeking Cohort, Fall 2019 Two-Year Degree/Certificate-Seeking Cohort)

Source: NCES, IPEDS 2021-22 Graduation Rate Survey; gr2022 Provisional Release Data File.

Productivity

In the following dot charts, the bright red dots indicate where amongst its corresponding peer group the named CSCU institution sits. The yellow dot shows where the peer average is and the other dots (of whatever color) show each of the peer institutions.

Figure 111. Total Degree and Certificate Production per 100 FTEs, 2021-22
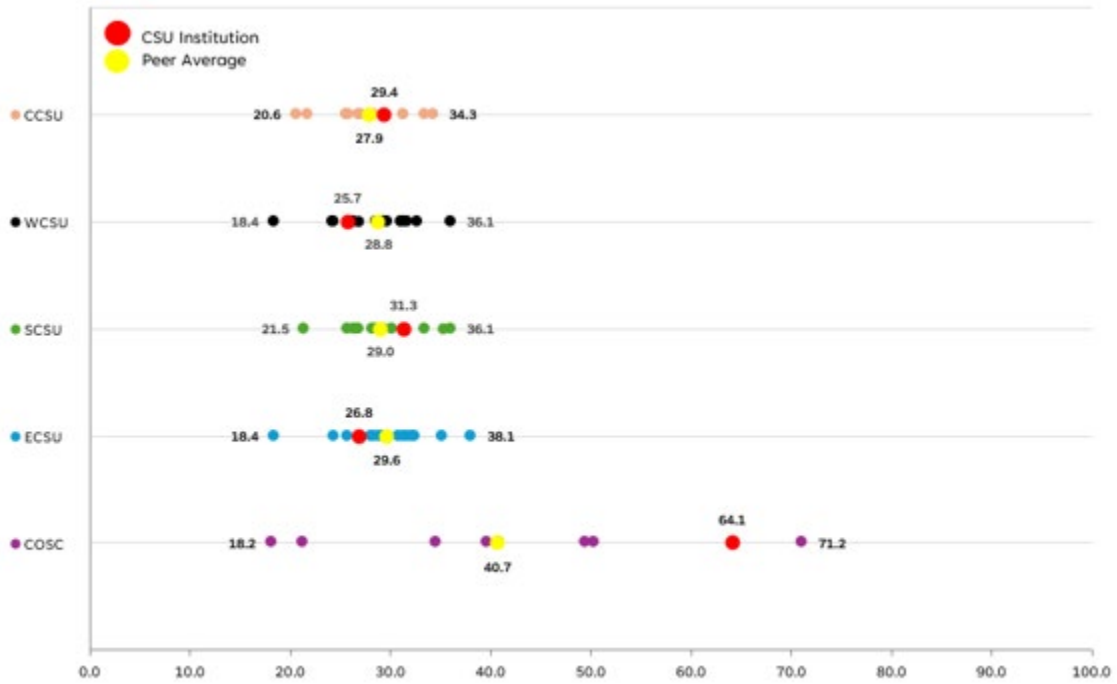
Source: NCES, IPEDS 2021-22 Enrollment and Completions Surveys; efia2022 and c2022_a Provisional Release Data Files.

Figure 112. Undergraduate Degree and Certificate Production per 100 Undergraduate FTEs, 2021-22
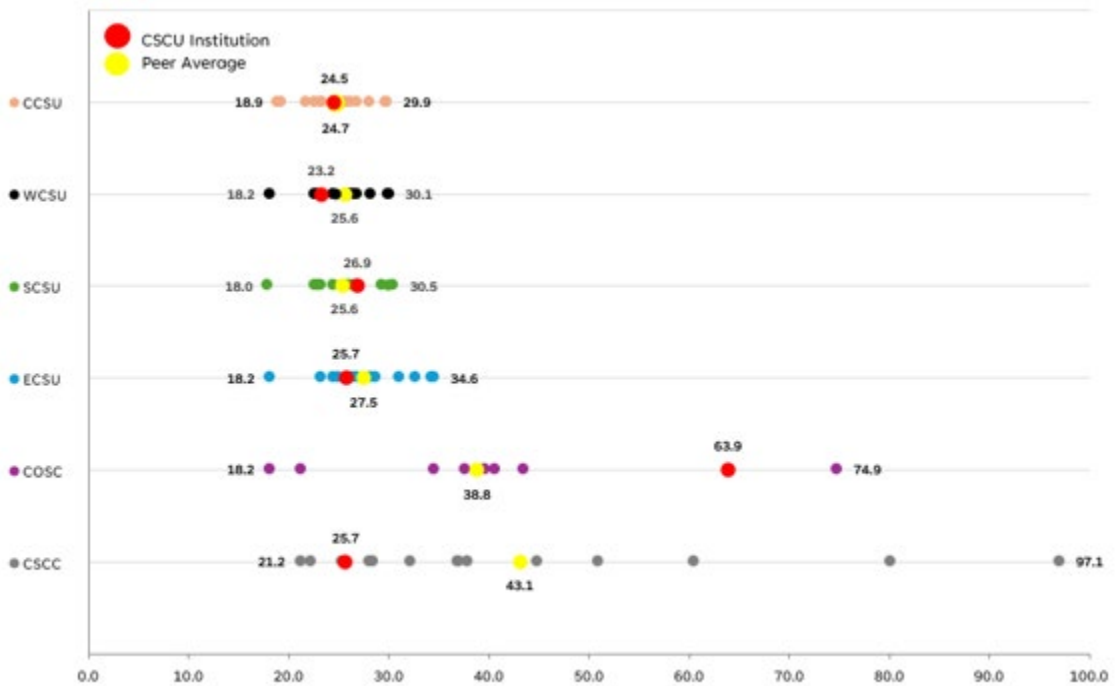
Source: NCES, IPEDS 2021-22 Enrollment and Completions Surveys; efia2022 and c2022_a Provisional Release Data Files.

Figure 113. Central Connecticut State University and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time
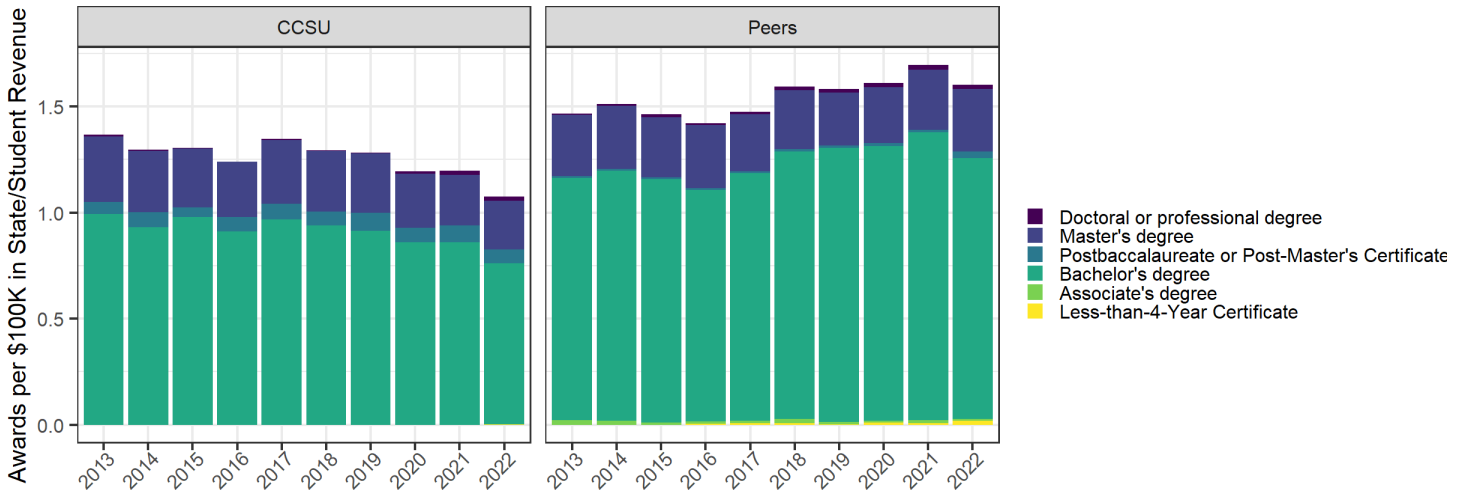
Figure 114. Eastern Connecticut State University and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time
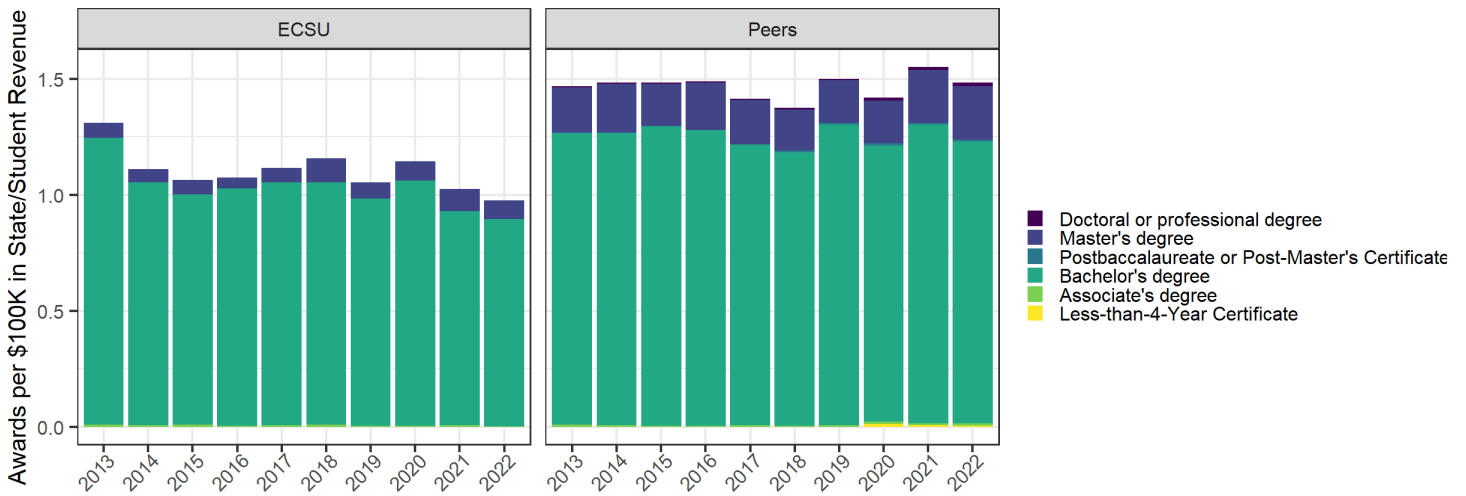
Figure 115. Southern Connecticut State University and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time
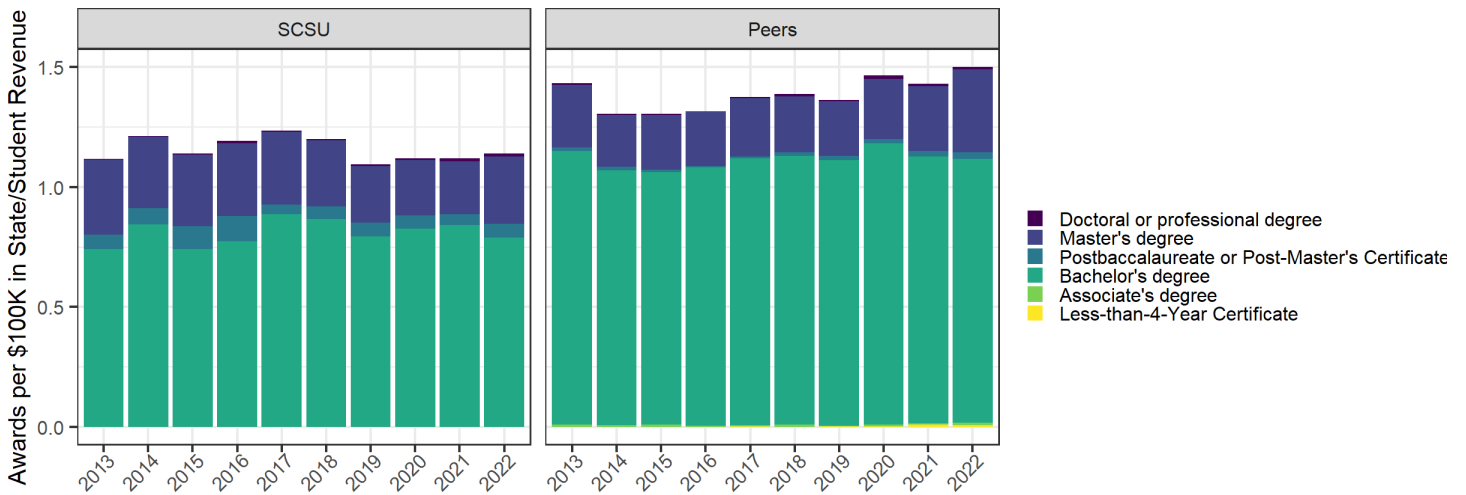
Figure 116. Western Connecticut State University and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time
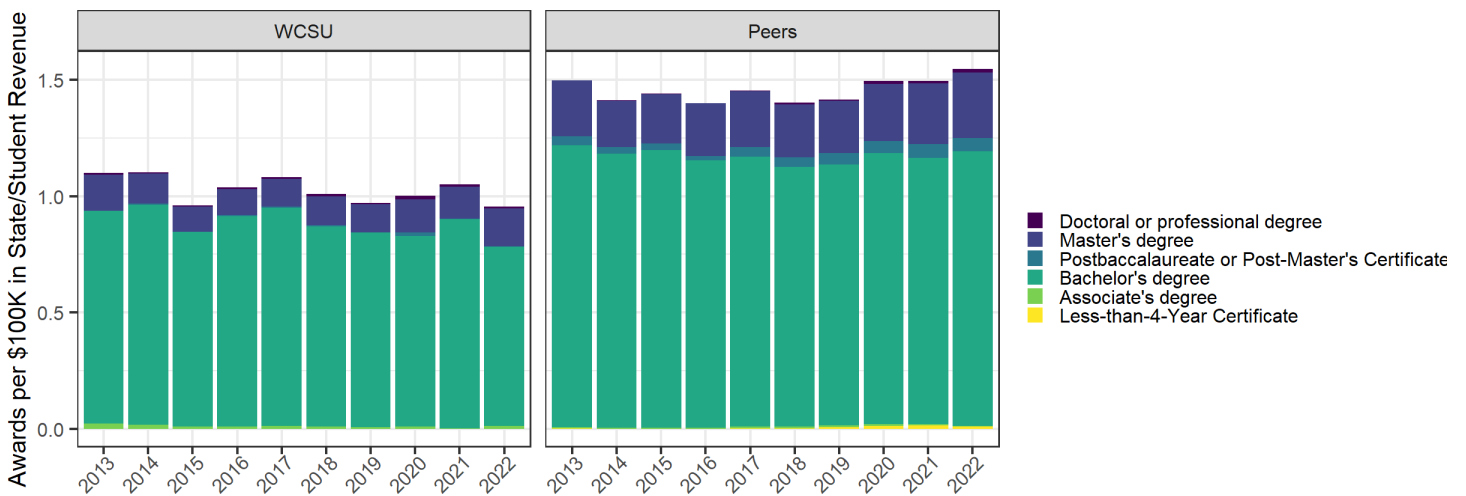
Figure 117. Charter Oak State College and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time

Legend:
- Doctoral or professional degree
- Master's degree
- Postbaccalaureate or Post-Master's Certificate
- Bachelor's degree
- Associate's degree
- Less-than-4-Year Certificate
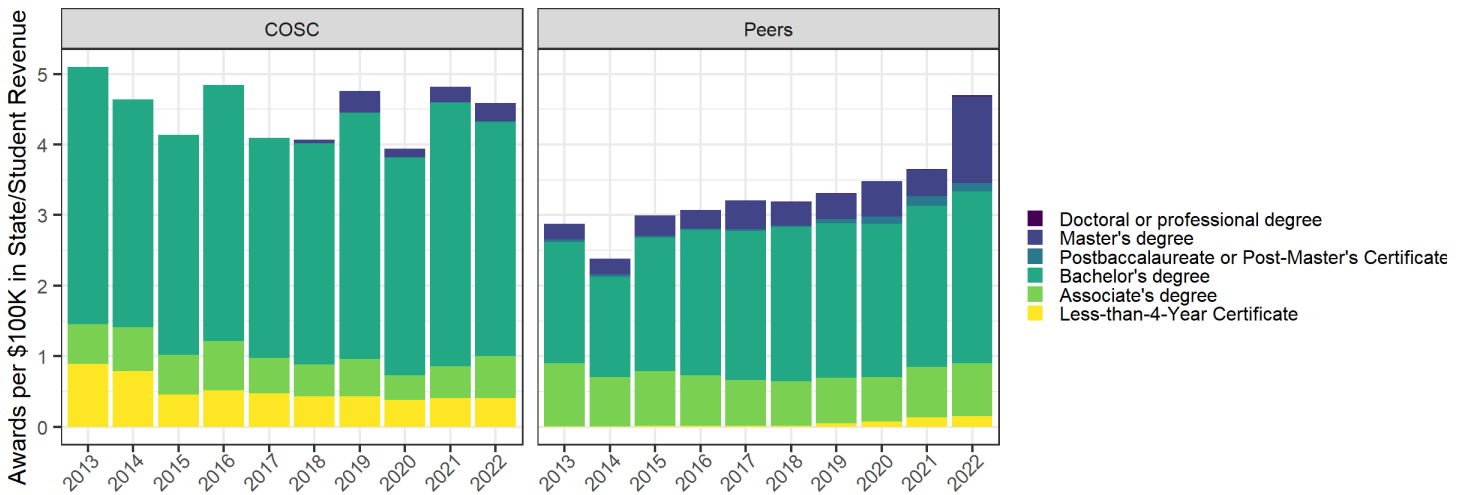
Source: NCES IPEDS Completions and Finance Surveys, files cYYYY_a and fYYYY_f1a. 2017-2021 final release files; 2022 provisional release
Notes: Students who received multiple awards will be duplicated. Inflation-adjusted to 2023 dollars using HECA.

Figure 118. Connecticut State Community College and Peers Awards Conferred per $100,000 in State/Student Revenue, Over Time

Legend:
- Doctoral or professional degree
- Master's degree
- Postbaccalaureate or Post-Master's Certificate
- Bachelor's degree
- Associate's degree
- Less-than-4-Year Certificate
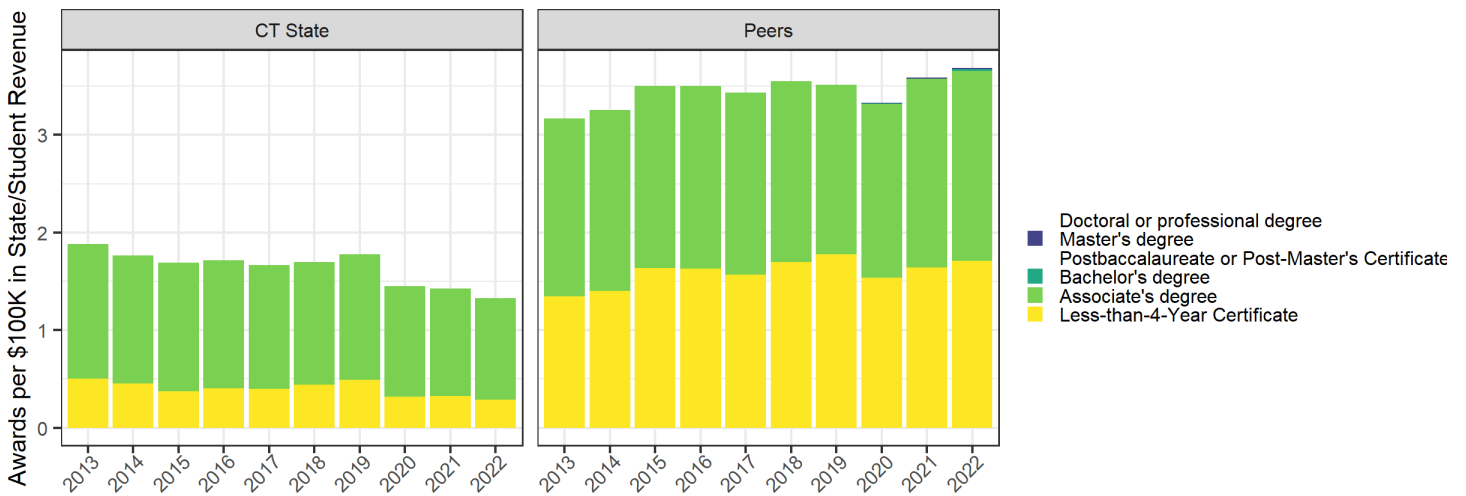
Source: NCES IPEDS Completions and Finance Surveys, files cYYYY_a and fYYYY_f1a. 2017-2021 final release files; 2022 provisional release
Notes: Students who received multiple awards will be duplicated. Inflation-adjusted to 2023 dollars using HECA.

Class/Section Sizes

The number and percentage of sections running with relatively few students varies significantly across institutions and departments. There are often legitimate reasons, such as pedagogy, equipment/space limitations, or program accreditation requirements, for keeping class sizes small in some disciplines. It will be important that management have practices in place to ensure that class sizes are routinely analyzed, that low-enrolled sections unable to claim one or more of these legitimate reasons are not offered and that these policies are appropriately enforced. Please note that Charter Oak faculty pay rates are based on section size, so low section sizes do not have the same financial impact at Charter Oak as the other CSCU institutions.

Figure 119. CSCU Undergraduate Section Size by Institution, 2022-23
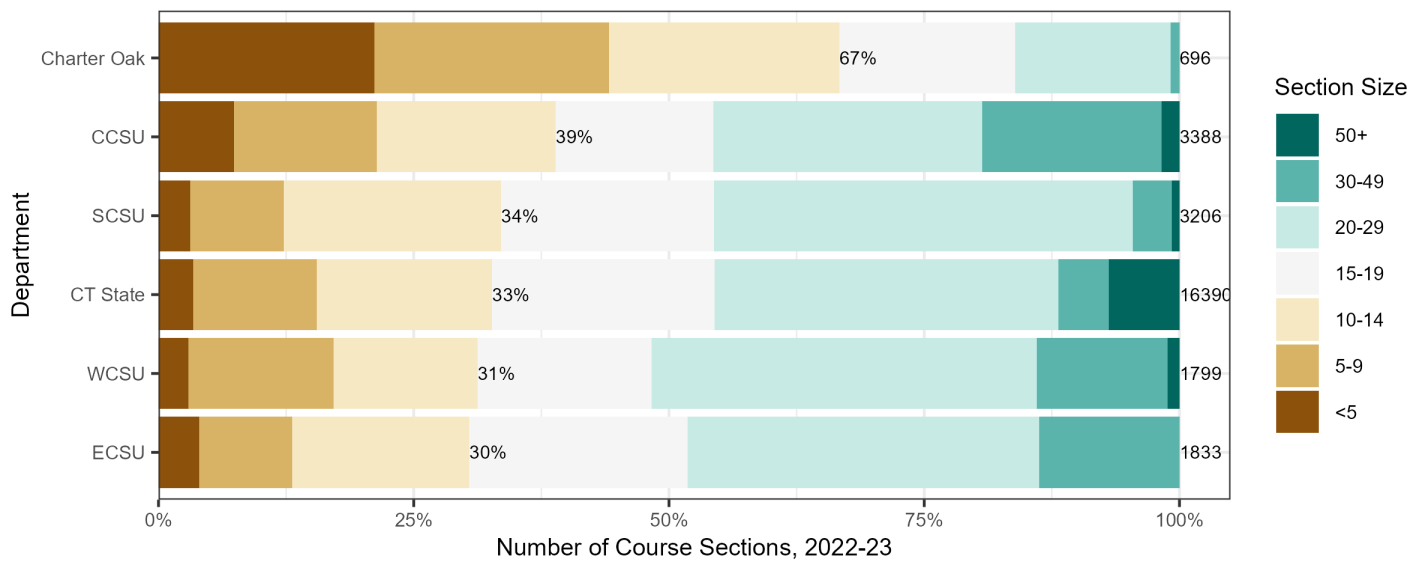
Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Each graph below represents the distribution of sections by size within each department in each CSCU institution. Data are based on the 2022-23 academic year. Departments are institutionally defined.

Figure 120. Central Connecticut State University Undergraduate Section Size by Department, 2022-23

Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Figure 121. Eastern Connecticut State University Undergraduate Section Size by Department, 2022-23

Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Figure 122. Southern Connecticut State University Undergraduate Section Size by Department, 2022-23

Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Figure 123. Western Connecticut State University Undergraduate Section Size by Department, 2022-23

Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Figure 124. Charter Oak State College Undergraduate Section Size by Department, 2022-23
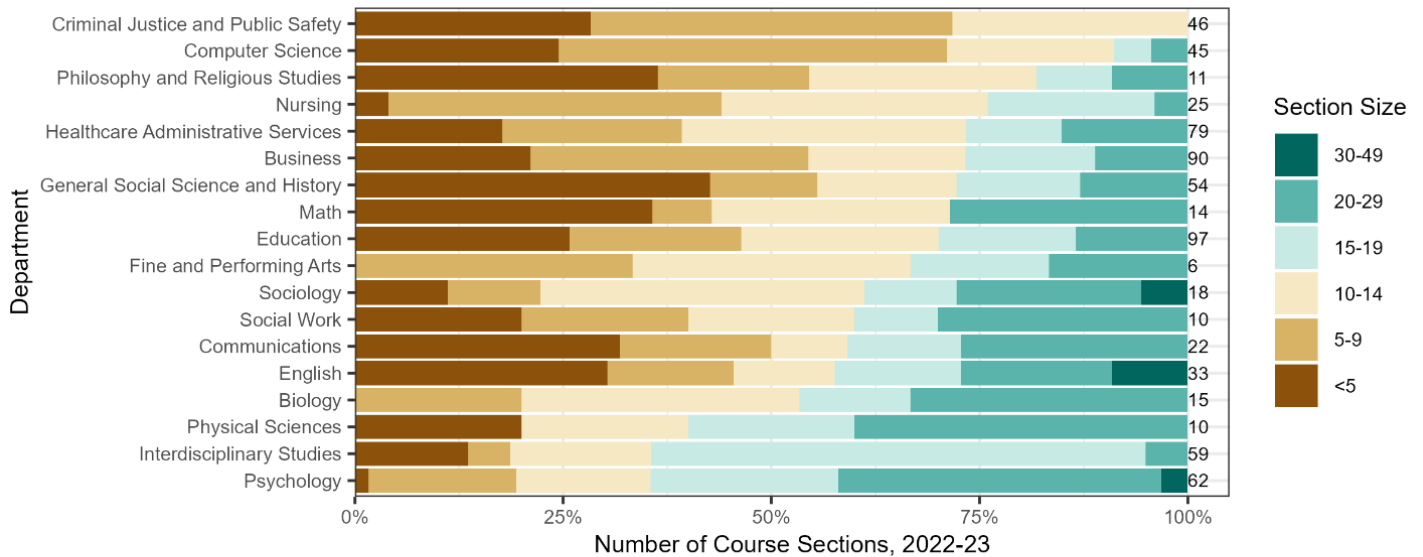
Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

Figure 125. CT State CC Undergraduate Section Size by Department, 2022-23
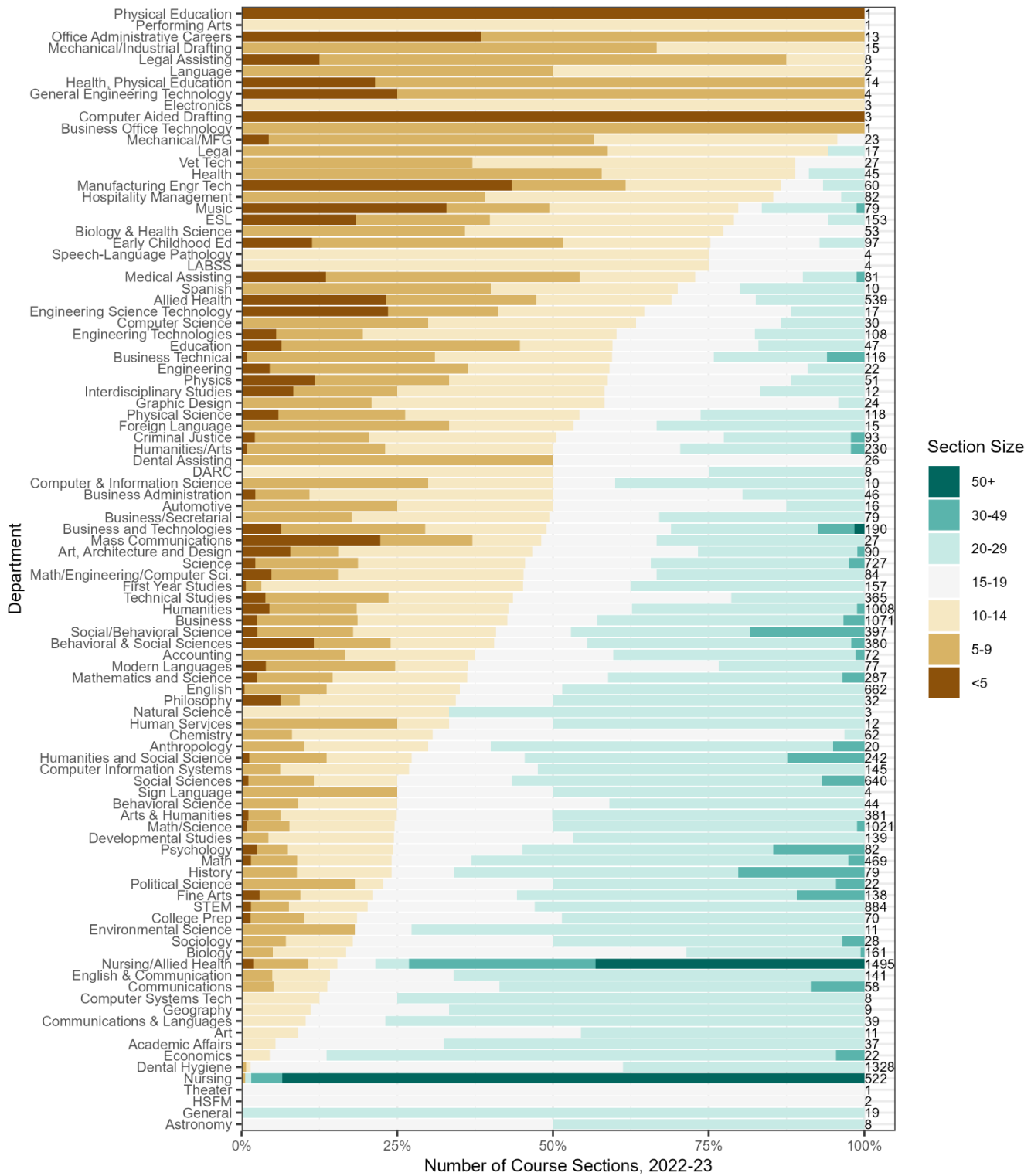
Source: Institutions via CSCU System Office. Notes: Excludes Schedule Types in which more than 10% of the sections have only one student; this removes independent studies, internships, private lessons, and other special course types. Includes both online and in-person offerings, but excludes courses offered at high schools. Cross-listings are not accounted for due to lack of data availability. Departments are sorted by the percent of sections with fewer than 15 students. Numbers to the right indicate total number of sections taught by the department.

The course-department crosswalk provided by CT State included 115 separate departments. Presumably, these are artifacts of the 12 formerly independent institutions. If the institution has not cleaned its departmental codes for more recent academic years, we advise them to do so.

Industry and Occupation Projections

Figure 126 Largest Industries by Number of Jobs, 2030 Projections

Northwest
- Health Care and Social Assistance
- Retail Trade
- Manufacturing
- Educational Services
- Accommodation and Food Services
- Self Employed and Unpaid Family Workers, All Jobs
- Professional, Scientific, and Technical Services

North Central
- Health Care and Social Assistance
- Manufacturing
- Finance and Insurance
- Retail Trade
- Educational Services
- Self Employed and Unpaid Family Workers, All Jobs
- Professional, Scientific, and Technical Services

Eastern
- Health Care and Social Assistance
- Manufacturing
- Educational Services
- Accommodation and Food Services
- Retail Trade
- Self Employed and Unpaid Family Workers, All Jobs
- Government

Southwest
- Health Care and Social Assistance
- Retail Trade
- Educational Services
- Finance and Insurance
- Professional, Scientific, and Technical Services
- Accommodation and Food Services
- Self Employed and Unpaid Family Workers, All Jobs

South Central
- Health Care and Social Assistance
- Educational Services
- Retail Trade
- Manufacturing
- Accommodation and Food Services
- Self Employed and Unpaid Family Workers, All Jobs
- Transportation and Warehousing

Figure 127. Largest Occupations That Require at Least an Associate's Degree, Based on Projected Average Annual Openings From 2020 to 2030

North Central
• General and Operations Managers
• Software Developers and Software Quality Assurance Analysts and Testers
• Financial Managers
• Registered Nurses
• Accountants and Auditors
• Management Analysts
• Computer and Information Systems Managers

Northwest
• General and Operations Managers
• Registered Nurses
• Software Developers and Software Quality Assurance Analysts and Testers
• Elementary School Teachers, Except Special Education
• Secondary School Teachers, Except Special and Career/Technical Education
• Accountants and Auditors
• Financial Managers

Eastern
• Teaching Assistants, Postsecondary
• Software Developers and Software Quality Assurance Analysts and Testers
• General and Operations Managers
• Registered Nurses
• Electronics Engineers, Except Computer
• Marine Engineers and Naval Architects
• Elementary School Teachers, Except Special Education

Southwest
• General and Operations Managers
• Financial Managers
• Accountants and Auditors
• Software Developers and Software Quality Assurance Analysts and Testers
• Market Research Analysts and Marketing Specialists
• Registered Nurses
• Personal Financial Advisors

South Central
• General and Operations Managers
• Registered Nurses
• Accountants and Auditors
• Software Developers and Software Quality Assurance Analysts and Testers
• Management Analysts
• Medical and Health Services Managers
• Secondary School Teachers, Except Special and Career/Technical Education

Figure 128. Jobs in Connecticut by Typical Entry-Level of Education, 2020 and 2030 (projected)

Source: Connecticut Department of Labor Note: 2030 jobs are projections.

Figure 129. Top Connecticut Occupations That Require at Least an Associate's Degree

Connecticut projected average annual openings 2020-2030 / CSCU Average Awards 2021 - 2023

Sources: CT Dept of Labor, IPEDS. Notes: Includes the top 10 occupations in Connecticut, ranked by average annual openings, that typically require at least an associate degree. Awards include each occupation's typical entry level of education plus one level below and one level above. Programs and occupations are linked using the BLS-NCES SOC-CIP Crosswalk. This may result in some awards being counted more than once if they are linked to multiple occupations. Occupation colors represent the typical entry level of education.

Intent to Enroll

As part of this work, NCHEMS mined data available from [CollegeAPP](#) to provide some estimates of the population's expressed interest in enrolling in postsecondary education. CollegeAPP data are based on voter records at the individual level to which the company appends data about individuals' expressed preferences for enrolling in college that are based on a predictive model driven by surveys. The underlying methods were developed and tested for political campaigns. These data have been used by colleges to develop marketing and outreach campaigns, but generally are not (yet) used to inform policy. NCHEMS use of the data is intended to provide a broad overview of the degree to which these data suggest Connecticut residents are willing to consider enrolling in college, and what kind of college—two-year, four-year, or online—they are likeliest to prefer. For the figures below, we have filtered the database on 18–44-year-olds with a score of 50 or greater on CollegeAPP's intent-to-enroll measures, relative to the number of individuals with less than a bachelor's degree (or associate's degree when asking about intent to enroll in a community college). That gives us an estimation of the accessible market for each of Connecticut's towns.

These data generally suggest that there is a considerable amount of interest in college among individuals throughout the state. But the most concentrated interest tends not to be in southwest Connecticut. Instead, some of the towns with lower educational attainment rates appear to be home to individuals expressing more interest in possibly enrolling in college. Further, there seems to be greater interest among students above the age of 24.

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Figure 130. Intent to Enroll in College (2 and 4-year) – Score of 50+ - 18-44
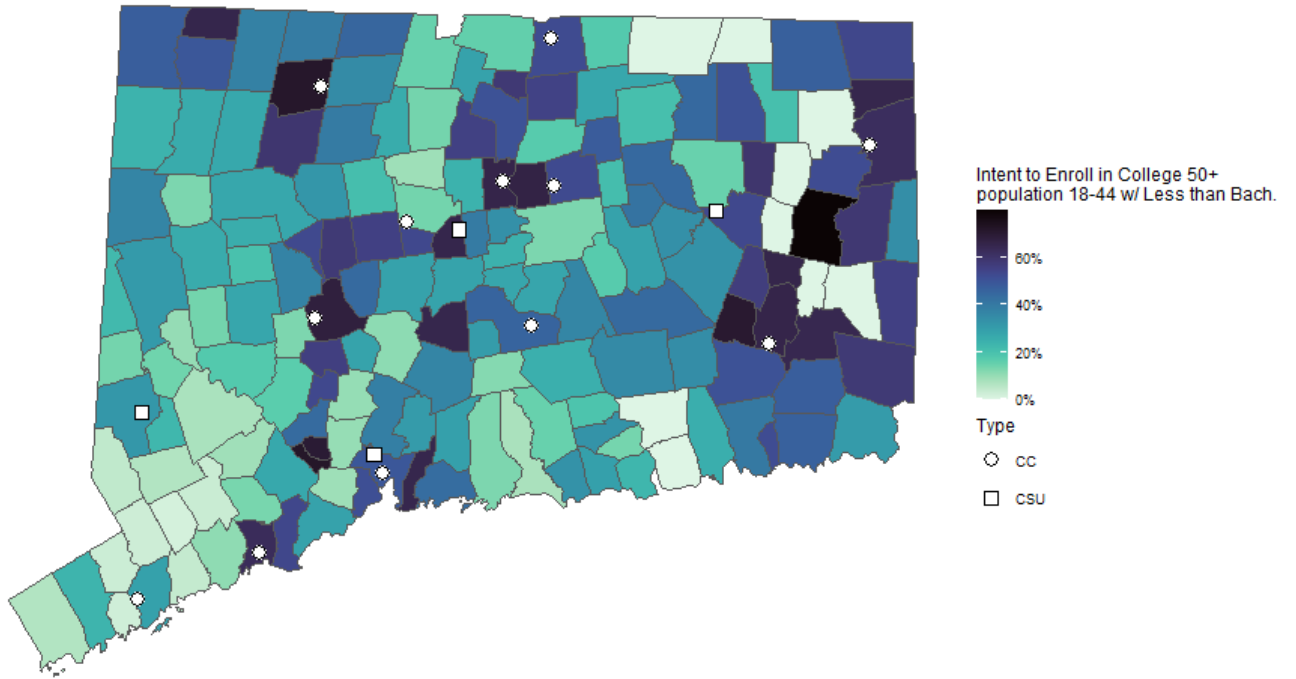
Intent to Enroll in College 50+
population 18-44 w/ Less than Bach.

60%
40%
20%
0%

Type
○ CC
□ CSU

Source: U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates;
Table B15001. Note: Represents the estimated percentage of the population age
18-44

Figure 131. Intent to Enroll in College – Score of 50+ - 18-24
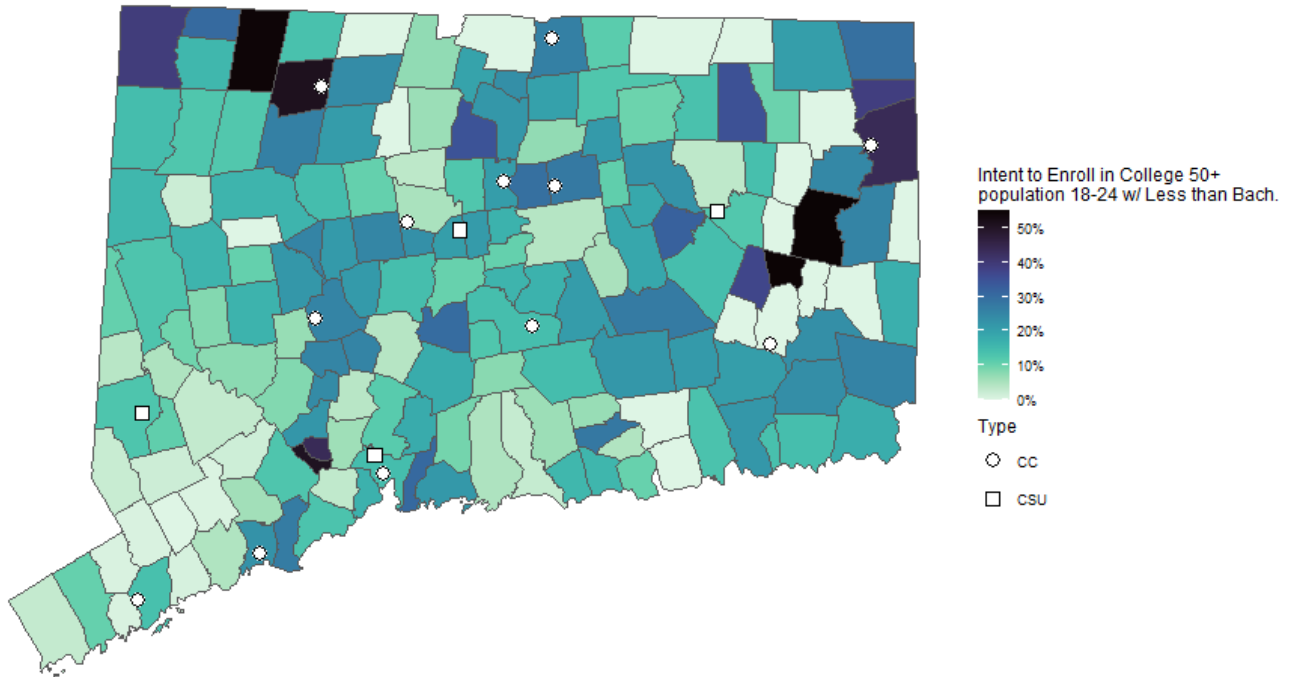
Intent to Enroll in College 50+
population 18-24 w/ Less than Bach.

50%
40%
30%
20%
10%
0%

Type
○ CC
□ CSU

Source: U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates;
Table B15001. Note: Represents the estimated percentage of the population age
18-24

Figure 132. Intent to Enroll in College – Score of 50+ - 25-44
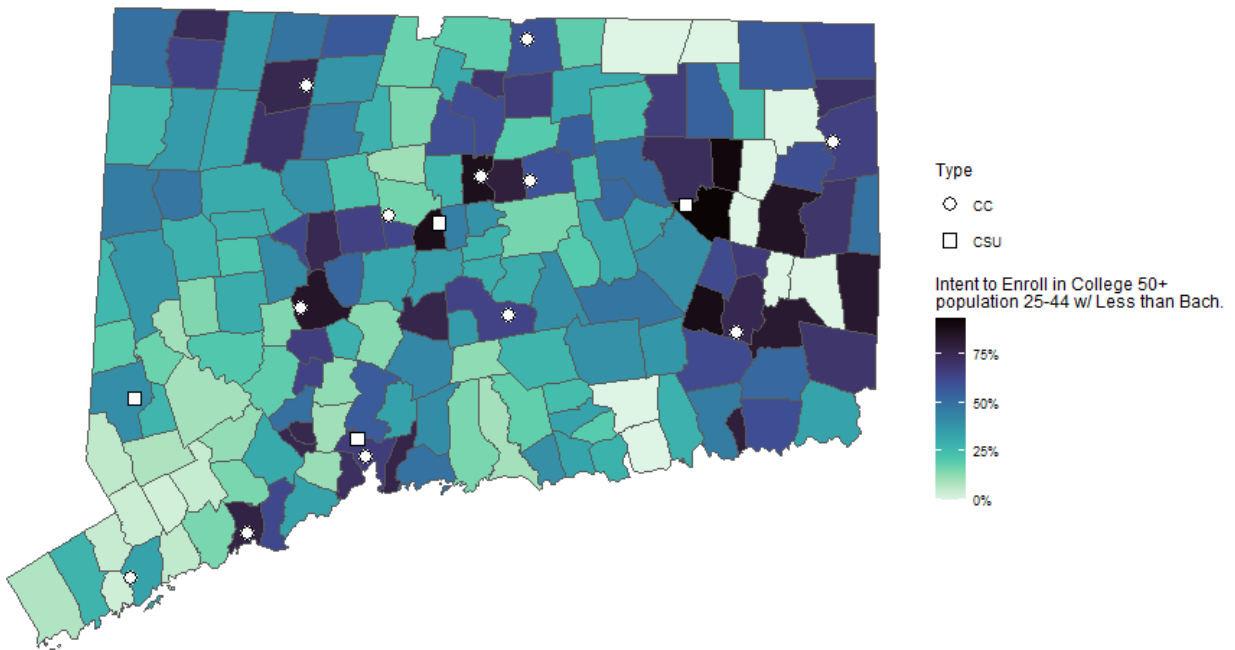
Type
○ CC
□ CSU

Intent to Enroll in College 50+
population 25-44 w/ Less than Bach.

75%
50%
25%
0%

Source: U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates;
Table B15001. Note: Represents the estimated percentage of the population age
25-44

Figure 133. Community College – Score 50+ - 18-44

Intent to Enroll in CC 50+
population 18-44 w/ Less than Assoc.

80%
60%
40%
20%
0%

Type
○ CC
□ CSU

Figure 134. University – Score 50+ - 18-44

Intent to Enroll in Univ 50+
population 18-44 w/ Less than Bach.

60%
40%
20%
0%

Type
○ CC
□ CSU

Figure 135. Intent to Enroll Online - Score 50+ - 18-44
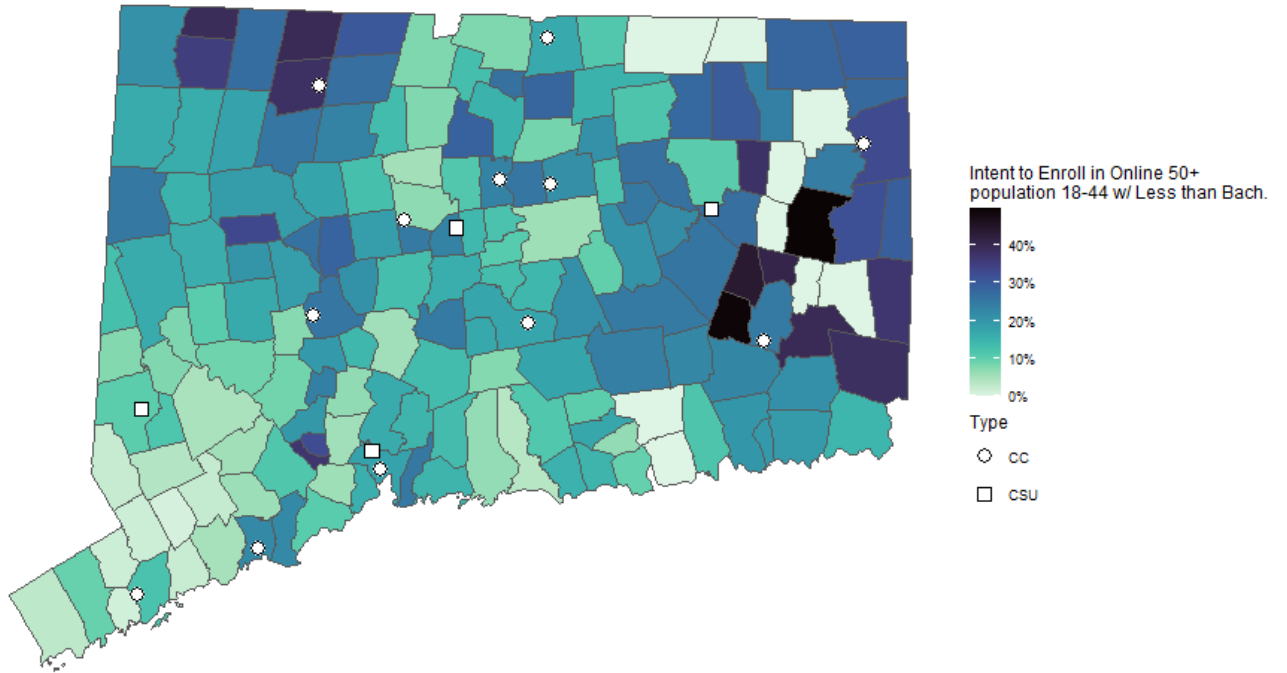
Intent to Enroll in Online 50+
population 18-44 w/ Less than Bach.

40%
30%
20%
10%
0%

Type
○ CC
□ CSU

Source: U.S. Census Bureau, 2022 American Community Survey Five-Year Estimates;
Table B15001. Note: Represents the estimated percentage of the population age
18-44

Appendix C. Dual Enrollment Policy

This appendix was written and is based on research by Jennifer Zinth expressly for this project.

Terminology and Overview of Key Programs

In keeping with Connecticut policy and practice, "dual credit" is used in this brief as an umbrella term for college courses delivered to high school students, regardless of course location, modality, or instructor type (e.g., approved high school instructor or faculty member). "Concurrent enrollment" refers specifically to courses delivered at a high school, while "dual enrollment" refers to courses taken on a college campus.

Similar to the dual credit policy landscape in neighboring Massachusetts and New York (and formerly in other New England states), Connecticut's approach to administering dual credit programming is predominantly local control, governed minimally by state policy and rather by local agreements between school districts and postsecondary institutions. This overview briefly summarizes the state and system-level policies and funding sources that provide structure and support for most dual credit offerings across the state. Further details on policies and procedures are in the table following the section below.

Statute, Regulations, Legislation and Legislative Appropriations

Unlike most other states, Connecticut's statute and regulations set few parameters for dual credit agreements between K-12 and postsecondary partners. And in contrast to a growing number of states nationally, Connecticut policy does not establish a model to provide state funds to dual credit partnerships or delineate whether school districts, students, postsecondary institutions, or a combination thereof are required to cover some or all of students' dual enrollment tuition costs. The "CSDE Grants and Guidance" section below describes two relatively new grant programs that disburse federal funds to K-12 and postsecondary dual credit partners.

No Connecticut regulations govern dual credit offerings.

Public Act 24-78 (2024 S.B. 14), section 4, directs the Connecticut State Department of Education (CSDE) to conduct a feasibility study on developing and administering a statewide program to support public high school students'—and particularly students from low-income backgrounds—participation in advanced courses or programs, including dual credit and dual enrollment. The report must be submitted to the legislature by January 1, 2026.

The University of Connecticut's Early College Experience (ECE)

UConn's Early College Experience (ECE), the state's largest dual credit provider, is in almost every Connecticut high school, according to a 2022 state report. UConn touts its ECE program, founded in 1955, as the oldest dual enrollment program in the nation. Governed by program Policies and Procedures, program data indicate that in the 2023-24 academic year UConn ECE partnered with 188 high schools, serving over 17,236 students attempting 95,580 UConn credits.[43]

UConn ECE courses are not offered through an early college model as most states define it, in which students starting as early as grade 9 begin sequential coursework in a small learning environment, concurrently earning their high school diploma and as much as 60 college credits (or an industry-recognized credential) in four to five years. Rather, UConn ECE courses are stand-alone courses delivered through a concurrent enrollment approach, in which coursework is taught by approved high school instructors at partner high schools.

UConn also offers dual enrollment, in which students complete college coursework on one of the five UConn campuses. UConn Dual Enrollment policies and practices differ from those governing UConn ECE. Because UConn Dual Enrollment students comprise a relatively small percentage of all high schoolers pursuing UConn coursework, UConn Dual Enrollment policies and practices are not covered in this brief.

CSDE Grants and Guidance

CSDE is awarding/has awarded federal funds to applicant school districts and postsecondary institutions through two grant programs intended to bolster dual enrollment access and quality:

- **Dual Credit Expansion Grant Program**: The program has awarded applicant local education agencies (LEAs) $3.8 million in federal funds from the American Rescue Act of 2021 (ARPA) and ARP Elementary and Secondary School Emergency Relief (ESSER). The RFP for this one-time grant opportunity was released in April 2023; awardees must expend grant funds during the 2023-24 and 2024-25 school years on approved start-up costs to create and broaden dual credit course opportunities. The goal is that by 2025-26, awardee LEAs will increase by 10% the percentage of students earning three or more college credits before high school graduation, and "see a corresponding decrease in disproportionality among student groups." (RFP)
- **Dual Credit Grant for Institutions of Higher Education**: Later in 2024, the Connecticut State Department of Education will award an anticipated $4.9 million in ARPA funds to 15 public and private IHEs to broaden dual credit course availability and participation, and support institutions in becoming accredited by the National Alliance of Concurrent Enrollment Partnerships (NACEP). As part of a pre-application process, interested IHEs were required to submit a set of assurances that outlined allowable uses of grant funds. Institutions must agree to provide "no-cost enrollment" for low-income dual credit students for the 2024-25, 2025-26, and 2026-27 academic years.

CSDE, a NACEP member organization, is additionally encouraging all dual credit programs in the state to achieve NACEP accreditation.[44] To support programs in implementing best practices and earning NACEP accreditation, CSDE has entered into a three-year contract with NACEP to host a variety of professional development activities for Connecticut dual credit professionals in school districts and IHEs through November 2026. These activities include two two-day, in-person Dual Credit Quality Institutes, the first of which was scheduled for August 2024.

Connecticut Policy & Program Alignment with 13 Model Policy Components

In 2014, Education Commission of the States published a report outlining 13 dual enrollment model policy components, based on an analysis of state dual enrollment policies nationally. In

conducting 50-state policy scans in 2006-08 and 2013 and reviewing academic research, it was evident that states that had implemented more of these policy elements had greater dual enrollment participation, including among underserved student populations, than states that had adopted fewer of these policies.

The table below indicates alignment between the 13 model policy components and Connecticut's four aforementioned dual enrollment policy and funding approaches.

Table 1. Connecticut Dual Enrollment Policies' Alignment with Model Policy Components

Statute, Regs, Legislative Appropriation	UConn ECE Policies and Procedures, 2022-23	Dual Credit Expansion Grant Program	Dual Credit Grant for Institutions of Higher Education
Access			
1: All eligible students are able to participate			
Partial The academic plan created for each student must be designed to enroll such student in one or more advanced courses or programs and allow such student to earn college credit or result in career readiness. C.G.S.A. § 10-221x(b)	Program silent	**Partial** Awardee LEAs may use grant funds to "Create new dual credit course articulations in partnership with one or more Connecticut IHEs" RFP, IV(A) "Eligible Grant Activities"	Program silent
2: Student eligibility requirements are based on the demonstration of ability to access college-level content			
Partial Each local and regional board of education must adopt a challenging curriculum policy that includes criteria for identifying students in grades 8 and 9 who may be eligible to enroll in an advanced course or program as defined in C.G.S.A. § 10-221w. Local and regional boards of education must adopt eligibility criteria for student enrollment in an advanced course or program, including dual credit and dual enrollment. Eligibility criteria must provide for multiple measures and not based exclusively on a student's prior academic performance. Criteria based on a student's prior academic performance must rely on evidence-based indicators. C.G.S.A. § 10-221w	**Partial** The 2022-23 Policies and Procedures state: "Although each high school may have criteria specific to their student population, all UConn ECE partners must utilize the Student Eligibility Guidelines found on the UConn ECE website during the student selection process. Students must have fulfilled the prerequisites required by the UConn department for a particular UConn course before enrollment occurs."	Program silent	Program silent
3: Caps on the maximum number of courses students may complete are not overly restrictive			
Policy silent	Program silent	Program silent	Program silent

4: Students earn both secondary and postsecondary credit for successful completion of approved postsecondary courses			
Partial A local or regional board of education "may" grant a student credit toward high school graduation requirements for a dual enrollment course. C.G.S.A. § 10-221a (d), (f), (g), (w)	**Yes** ECE students receive high school credit as well as UConn credit on their UConn Non-Degree transcript.[45] 2023-24 Policy and Procedures	Program silent	Program silent
5: All students and parents are annually provided with program information			
Policy silent	**Partial** While 2022-23 Policies and Procedures do not specify that *all* parents and students be notified of program opportunities, the Policies and Procedures *do* require "Program information [to be] made available to parents and students before the registration process."	**Partial** Awardee LEAs may use grant funds to "Develop strategies to inform students and their families of the benefits of earning college credit during high school." RFP, IV(A) "Eligible Grant Activities"	Program silent
6: Counseling is made available to students and parents before and during program participation			
Policy silent	**Yes** Per 2023-24 policies and guidelines, each UConn ECE site must maintain a Site Representative to serve as the primary point of contact for students and parents. The Site Representative is "the liaison between the high school and the UConn ECE Program Office. The Site Representative provides program information and guidance to Students, parents, and faculty."	See answer to Q5	Program silent
Finance			
7. Responsibility for tuition payments does not fall to parents			
Policy silent	**Partial** See "Dual Enrollment Funding Policies and Mechanisms in Connecticut and Hawaii"	**No** Grant funds may not be used for student fees, including tuition	**Yes, for low-income students** Awardee IHEs must "provide no-cost enrollment for high school students from low-income families" IHE Grant Conditions
8: Districts and postsecondary institutions are fully funded or reimbursed for participating students			
Policy silent	Program silent	Program silent	Program silent
Ensuring Course Quality			

9: Courses meet the same level of rigor as the course taught to traditional students at the partner postsecondary institution

Policy silent	**Yes** UConn ECE is NACEP-accredited, and as such, meets NACEP accreditation standards under Curriculum, which require that college courses delivered at high schools by high school teachers reflect the content and rigor of the on-campus offering.	**Yes** Grant funds may be used to "Provide curriculum development stipends for teachers and college faculty to modify high school course content to align with college expectations so that successful completion of the course will result in students earning college credit" RFP, IV(A) "Eligible Grant Activities"	**Yes** Grant funds may be used to "[Implement] procedures to review concurrent enrollment programs in high schools to ensure that they are of the same quality and rigor as courses offered on-campus at the college" and "[Pay] staff to participate in NACEP offerings and for pursuing NACEP accreditation" (IHE Grant Conditions). NACEP accreditation standards under Curriculum are intended to ensure that college courses delivered at high schools by high school teachers mirror the content and rigor of the on-campus offering.

10: Instructors meet the same expectations as instructors of similar postsecondary courses, and receive appropriate support and evaluation

Partial[46] Adjunct professor permit available for nontenured, part-time instructors at public & private IHEs teaching DE part-time at a public HS C.G.S.A. § 10-145z	**Yes** As a NACEP-accredited program, UConn ECE meets NACEP accreditation standard F1, which requires that high school instructors teaching college courses the minimum qualifications as on-campus instructors.	**Yes** Grant funds may be used to "Provide financial support for current teachers who need additional coursework in order to qualify as instructors for concurrent enrollment courses" RFP, IV(A) "Eligible Grant Activities"	**Yes** Grant awardees agree to "pursue NACEP accreditation at the latest in the 2026-27 year." IHE Grant Conditions. NACEP accreditation standard F1 requires that high school instructors teaching college courses meet the minimum qualifications as on-campus instructors.

11: Districts and institutions publicly report on student participation and outcomes

Yes Connecticut's Next Generation Accountability System, Indicator 6, reports for each district and high school the percentage of students in grades 11 and 12 meeting any of several college and career readiness measures, including earning 3 or more dual credits.	**Yes** Through the Next Generation Accountability System	**Yes** Applicants must "participate in any data collection that is required by the state or federal government for the use of this funding; and … provide an annual progress report, in such format provided by the CSDE" RFP, VI	**Partial** While not a public reporting requirement, awardee IHEs must "commit to increasing its enrollments for students from low-income families by 50% or at least by 100 students, whichever is larger." Awardee IHEs must also "annually provide CSDE with clean and complete data on dual credit course participation and completion, based on CSDE specifications for all dual credit students." IHE Grant Conditions

12: Programs undergo evaluation based on available data

Policy silent	Yes UConn ECE is [NACEP-accredited](). NACEP Accreditation Standards require ongoing program evaluation. [After an initial 5-year accreditation period](), programs must pursue re-accreditation, valid for 7 years.	See answer above	See above
Transferability of Credit			
13: Postsecondary institutions accept dual enrollment credit as transfer credit, provided measures of quality are ensured			
Policy silent	Partial The [2022-23 Policy and Procedures Guide]() states: "UConn credits offered through UConn ECE transfer to other institutions 87% of the time." ECE offers a [transfer webpage]() geared to students and parents, and a [transfer database]() to help students and families gauge the likelihood that a given ECE credit will transfer to another institution nationally.	Program silent	Program silent

Dual Credit Funding Policies

State policy is silent on who pays for dual credit tuition, textbooks, non-tuition fees, and transportation, and on the amount of dual credit tuition that institutions may charge.

The Connecticut State Department of Education (CSDE) is disbursing federal funds through two grant programs—one each for local education agencies (LEAs) and institutions of higher education (IHEs). The goal of both grant programs is to broaden dual credit access and participation, particularly among underrepresented student populations.

- [Dual Credit Expansion Grant Program](): Leveraging the American Rescue Act of 2021 (ARPA) and ARP Elementary and Secondary School Emergency Relief (ESSER) funds, CSDE has issued one-time awards to applicant LEAs to support approved activities in the 2023-24 and 2024-25 school years. Approved activities are intended to broaden access to and participation in dual and concurrent enrollment. The program RFP states that the goal of the program is for grantees to achieve "a 10 percentage point increase in the percentage of students earning three or more college credits prior to graduation and to see a corresponding decrease in disproportionality among student groups." While purchases of "Specialized equipment or materials for concurrent enrollment courses" are an allowable use of grant funds, payment of student tuition and fees is not.

- [Dual Credit Grant for Institutions of Higher Education](#): Using American Rescue Plan Act (ARPA) funds, grantee public and private institutions (to be announced later in 2024) may use award dollars to "[provide] transportation for high school students to visit college campuses as part of an ongoing dual or concurrent enrollment course."

Under the UConn Early College Experience (ECE) program:

- Students who do not qualify for a fee waiver pay [$50 per credit](#). Students are not charged for textbooks, fees, or other participation expenses. Partner high schools are expected to provide textbooks and any other materials necessary to ensure comparability with the on-campus offering.[47]
- Through a Third Party Payee option, school districts may elect to cover UConn ECE course expenses for students not eligible for other cost waivers. Several districts selected this option in the 2023-2024 school year.[48]

Transportation for UConn ECE students to and from campus is not a concern given that ECE applies a concurrent enrollment model, in which courses are delivered by high school teachers at the high school.

State statute and regulations are silent in relation to addressing low-income students' ability to access dual enrollment opportunities. In practice, many IHEs waive dual credit tuition for low-income students.[49]

The public and private institutions to be awarded funds later in 2024 under the Dual Credit Grant for Institutions of Higher Education must agree to "provide no-cost enrollment for high school students from low-income families" for the 2024-25 through the 2026-27 academic years.

The UConn Early College Experience (ECE) program's [2024-25 Program Fee Waiver Policy](#), the [2023-24 ECE Policies & Procedures Guide,](#) and the ECE program fees [webpage](#) state:

- Students eligible for free- and reduced-price lunch, free milk, or "categorically eligible" (e.g., participation in SNAP, TANF, homeless, etc.) are eligible for a full program fee waiver.
- Students experiencing hardship (e.g., death of a parent, sudden loss of parent employment, etc.) who do not meet the criteria for the aforementioned student cost waiver may request a hardship waiver.
- A high school can obtain a whole-school program fee waiver if at least 75% of its student population is free-/reduced-price lunch eligible, OR the school is eligible to receive schoolwide Title I services, and at least 50% of the previous year's students qualified for ECE waivers. In 2023-24, some 45 of the 188 ECE partner schools received a whole-school program fee waiver.[50]

Appendix D. Facilities and Space Utilization Analysis, Findings, and Recommendations

This appendix was written and is based on research by SmithGroup's Campus Strategy and Analytics Studio expressly for this project.

As part of a project between the National Center for Higher Education Management Systems (NCHEMS) and Connecticut OPM, SmithGroup was asked to evaluate existing space for the institutions included in the Connecticut State Colleges and Universities (CSCU) system. This included the review of publicly available data related to space utilization at the CSCU institutions and analysis of existing space inventory data from the institutions or System Office and coordinate with NCHEMS regarding enrollment projections, online course delivery, and workforce and population changes to conduct a very high-level evaluation of space capacity. This information would then be used to complete the following tasks:

a. The extent to which the overall amount of academic space available on each campus is adequate for the current student population. As part of this determination, an assessment of the current inventory of major space types (classroom, laboratories, offices) compared to the calculated need for such space will be made.

b. How CSCU's space utilization compares to other states or institutions utilizing accessible data in the Contractor or subcontractor's own databases or can easily acquire such data from publicly available sources.

c. The size of the student population that could be accommodated by the current physical plant of each campus.

d. The anticipated necessary scale of physical campus space given the ten-year enrollment projections. Is the current space adequate to accommodate projected enrollment numbers?

e. Develop a method for OPM to use in evaluating campus requests for additional facilities or renovation of existing facilities.

SmithGroup started this process with a data request to receive the following information:
- Facilities Inventories – Updated in early 2024
- Comprehensive Course Listings – fall 2017 through fall 2023. Fall 2022 term used for analysis.
- Campus building data including replacement costs.

For the six institutions included in the CSCU System, partial information was received as listed below:
- Central Connecticut State University (CCSU): received course and facilities inventory. Fall 2022 was used with the latest enrollment summary.
- Connecticut State Community College: this college is a combination of the twelve (12) formerly independent community colleges; received course information but no facilities inventory from CSCU. A spreadsheet with total building square footage was also provided by OPM.

- Eastern Connecticut State University (ECSU): received course data and a partial facilities inventory (did not include offices) Fall 2022 was used with the latest enrollment summary.
- Southern Connecticut State University (SCSU): received course and facilities inventory. Fall 2022 was used with the latest enrollment summary.
- Western Connecticut State University (WCSU): received course and facilities inventory. Fall 2022 was used with the latest enrollment summary.
- A spreadsheet with building age/adjusted build and gross square footage information for all institutions was provided.
- Charter Oak State College (this college is fully online and therefore excluded from the space analysis).

A complete and accurate existing space and utilization analysis could not be completed for all institutions due to incomplete datasets received. Therefore, the consultant proposed performing a high-level benchmarking exercise for each of the Connecticut institutions included in this project that would compare overall space of peer institutions with existing space of the Connecticut institutions. SmithGroup received a list of peer institutions from NCHEMS and added additional institutions to create comparisons using a range of total enrollment and total ASF that was comparable to each Connecticut institution. The data was obtained from SmithGroup's extensive in-house comparative database along with information available through the Integrated Postsecondary Education Data System (IPEDS). The tables below show the results of that benchmarking exercise, including the year associated with the data in SmithGroup's database for each peer institution.

Central Connecticut State University (CCSU)

Compared Institutions	Total ASF	Student FTE	Total ASF/FTE	Classrooms (100s)	Tch Labs (210s)	Open Labs (220s)	Rsch Labs (250s)	Offices (300s)	Library (400s)	Special (500s)	General (600s)	Support (700s)	Healthcare (800s)
Dixie State University 2019	755,209	7,172	105.30	13.82	16.92	0.27	0.01	25.72	8.74	15.39	19.33	5.01	0.09
Humboldt State University 2018	1,140,764	7,532	151.46	6.09	29.61	0.00	0.00	30.65	12.64	40.85	18.54	13.07	0.00
Sonoma State University 2020	872,476	7,429	117.44	11.24	5.83	7.75	1.97	29.74	15.53	15.20	21.53	8.65	0.00
Southern Utah University 2019	1,120,191	7,822	143.21	10.55	23.88	0.00	0.00	27.54	8.12	28.02	34.71	10.36	0.03
University of Colorado Colorado Springs 2021	967,628	8,505	113.77	10.21	12.50	3.28	6.20	31.44	10.93	8.21	24.77	4.11	2.12
University of Houston-Clear Lake 2020	603,676	5,622	107.38	11.56	11.25	17.30	3.94	39.38	16.74	2.47	1.82	2.92	0.00
University of Louisiana at Monroe 2019	1,440,226	7,273	198.02	21.03	27.82	0.00	0.00	43.61	13.77	45.84	25.41	20.07	0.47
University of South Dakota 2019	1,254,939	7,344	170.88	13.68	17.23	0.00	10.67	38.58	12.25	43.99	27.33	6.70	0.45
University of Wisconsin-Stout • Main Campus 2023	1,059,615	5,851	181.10	16.73	32.22	12.16	1.98	38.15	12.32	25.27	34.34	7.55	0.39
West Texas A & M University 2020	964,972	7,341	131.45	16.46	10.47	6.95	7.99	29.75	11.09	25.14	11.49	12.08	0.03
Western Carolina 2018	1,340,917	10,660	125.79	9.31	18.00	0.00	0.00	30.99	12.23	19.70	29.34	5.92	0.30
Totals Compared	11,520,613	82,551		1,034,184	1,530,062	306,833	238,227	2,712,890	997,822	2,032,801	1,914,275	722,169	31,350
Averages (without 0s) Compared	1,047,328	7,505	139.56	12.53	18.53	3.72	2.89	32.86	12.09	24.62	23.19	8.75	0.38
Avg/Averages (without 0s) Compared				12.79	18.70	7.95	4.68	33.23	12.21	12.21	22.60	8.77	0.48
Target Institution													
Central CT State University • Main Campus 2023	1,037,944	7,319	141.81	15.83	23.65	0.27	1.29	40.20	10.51	14.17	25.36	10.21	0.33
ASF +/- Peer Averages	-9,384	-186	2.26	3.31	5.12	-3.44	-1.60	7.33	-1.58	-10.46	2.17	1.46	-0.05
Percentage of ASF +/- Peer Averages	-1%	-2%	2%	26%	28%	-93%	-55%	22%	-13%	-42%	9%	17%	-14%

CCSU is within the average for classrooms, when compared with peers, at the high end in teaching labs and offices and at the low end for open labs. The total ASF/FTE of CCSU is above the average but falls within the range of the peers, although there is wide variation between the total ASF of the institutions.

Connecticut State Community College

Compared Institutions	Total ASF	Student FTE	Total ASF/FTE	Classrooms (100s)	Tch Labs (210s)	Open Labs (220s)	Rsch Labs (250s)	Offices (300s)	Library (400s)	Special (500s)	General (600s)	Support (700s)	Healthcare (800s)
Baton Rouge Community College 2019	421,743	5,213	80.90	26.87	41.82	0.00	0.00	2.50	0.07	0.00	1.29	8.36	0.00
Blue Ridge 2018	341,432	1,034	330.21	95.58	98.78	0.00	0.00	48.49	17.63	10.37	47.60	11.76	0.00
Bossier Parish Community College 2019	302,376	4,200	71.99	22.46	19.27	0.00	0.00	15.53	2.48	5.91	4.41	1.93	0.00
Cleveland 2018	210,775	998	211.20	45.86	66.66	0.00	0.00	43.22	15.96	15.13	16.12	8.08	0.16
Community College of Aurora • Centretech 2016	82,601	1,368	60.38	15.88	2.83	2.13	0.00	25.00	2.38	0.08	9.91	2.17	0.00
Community College of Denver 2009	143,446	2,576	55.69	3.68	11.22	7.89	0.00	21.18	0.07	1.81	9.54	0.30	0.00
Delgado Community College 2019	830,306	8,567	96.92	17.25	30.48	0.00	0.00	20.34	4.99	2.69	9.55	11.53	0.08
Louisiana Delta Community College 2019	98,746	1,614	61.18	21.93	10.56	0.00	0.00	16.02	3.97	0.04	5.73	2.93	0.00
Manchester Community College 2010	282,304	4,600	61.37	9.89	14.38	2.30	0.00	14.59	6.00	2.79	9.27	2.15	0.00
Middlesex Community College 2013	82,155	1,447	56.78	7.89	9.12	2.89	0.00	14.35	7.87	0.75	9.69	4.21	0.00
Nunez Community College 2019	167,390	1,354	123.63	32.76	31.88	0.00	0.00	26.86	11.88	2.62	11.13	5.77	0.72
Piedmont 2018	132,962	626	212.40	57.38	56.71	0.00	0.00	43.49	14.21	0.00	19.57	21.04	0.00
River Parishes Community College 2019	176,929	1,111	159.25	50.32	65.26	0.00	0.00	27.10	4.27	3.54	6.43	2.34	0.00
South Louisiana Community College 2019	194,168	3,346	58.03	12.12	23.47	0.00	0.00	8.60	1.88	0.02	6.79	5.16	0.00
Southwest Tennessee Community College • Union Avenue 2013	259,544	2,088	124.30	14.11	22.35	6.31	0.00	35.72	12.93	13.02	12.88	6.98	0.00
Southwest Virginia Community College 2015	180,369	1,638	110.12	15.31	25.78	5.03	0.00	30.20	7.50	11.25	10.14	4.89	0.00
SOWELA Technical Community College 2019	417,700	2,477	168.63	29.74	80.11	0.00	0.00	23.93	4.46	0.00	15.94	14.44	0.00
Springfield Technical Community College • Main Campus 2017	499,216	3,620	137.90	22.75	36.66	11.49	0.00	35.42	3.79	8.29	8.68	10.82	0.00
Totals Compared	4,824,162	47,877		1,037,617	1,507,621	101,022	0	982,297	236,593	175,642	447,995	333,576	1,799
Averages (without 0s) Compared	268,009	2,660	100.76	21.67	31.49	2.11	0.00	20.52	4.94	3.67	9.36	6.97	0.04
Avg/Averages (without 0s) Compared				27.88	35.96	5.44	#Num!	25.14	6.80	6.80	11.93	6.94	0.32

Target Institution

Note that Connecticut State Community College information is not included (the "target institution") since detailed facilities data were not received. Therefore, a detailed comparison of the space categories with peer institutions is not possible. This table is included for reference purposes of peer institution values. To provide a very high-level comparison of CSCC to the peer institutions, a total ASF/FTE calculation was completed using data from a client-provided spreadsheet using the total ASF (data column of "non-useable square feet") per building of the community college campuses across Connecticut. Upon removal of labeled parking garages, a total of 2,551,579 ASF was calculated. Using 2023 FTE of 20,986, CT State has 122 ASF/FTE. This is significantly above the peer average of 101 ASF/FTE. It should, however, be noted that the dates of the institutional data range from 2009 to 2019, a time period throughout which community colleges nationally experienced substantial enrollment declines. Given those declines, and assuming little or no change in facility space, it's probably reasonable to extrapolate that peer institutions' ASF/FTE would be higher than these data indicate. And the older the data, the more it is likely to underestimate what that institution's ASF/FTE would be today.

Eastern Connecticut State University (ECSU)

Compared Institutions	Total ASF	Student FTE	Total ASF/FTE	Classrooms (100s)	Tch Labs (210s)	Open Labs (220s)	Rsch Labs (250s)	Offices (300s)	Library (400s)	Special (500s)	General (600s)	Support (700s)	Healthcare (800s)
Black Hills State University 2019	410,092	2,520	162.73	18.83	15.08	0.00	4.68	38.04	13.55	42.96	19.88	9.15	0.57
Channel Islands 2022	486,529	4,768	102.04	10.20	12.36	2.29	2.90	35.60	14.77	12.05	6.72	5.15	0.00
College of Southern Nevada • West Charleston Campus 2015	424,151	6,183	68.60	14.02	15.50	4.48	0.00	21.04	3.40	0.69	6.74	1.88	0.85
Dakota State University 2019	222,235	2,063	107.72	13.22	10.10	0.00	0.00	24.61	9.84	17.06	27.55	5.23	0.12
Fort Hays State • Main Campus 2019	977,071	4,036	242.09	13.34	20.31	10.05	5.41	52.79	17.95	60.99	45.51	15.08	0.66
Lander University 2019	397,144	3,097	128.24	12.45	21.41	0.00	0.00	24.88	13.62	28.69	22.15	5.04	0.00
Northern State University 2019	427,659	1,817	235.37	34.05	14.23	0.00	1.29	45.88	5.44	70.50	41.68	22.20	0.10
Savannah State University 2010	456,091	2,555	178.51	32.54	21.67	2.64	0.29	46.31	11.71	34.27	21.30	5.43	2.36
Southern Oregon University • Main Campus 2018	436,537	3,180	137.28	23.92	7.78	12.90	1.46	42.51	22.21	6.43	10.36	9.58	0.13
Western Oregon University • Main Campus 2018	562,351	4,368	128.74	13.34	13.53	4.21	0.91	28.38	10.37	17.22	26.20	14.19	0.39
Totals Compared	4,799,860	34,587		581,761	526,897	145,341	59,129	1,197,354	416,248	851,543	710,494	293,183	17,910
Averages (without 0s) Compared	479,986	3,459	138.78	16.82	15.23	4.20	1.71	34.62	12.03	24.62	20.54	8.48	0.52
Avg/Averages (without 0s) Compared				18.59	15.20	6.10	2.42	36.00	12.29	12.29	22.81	9.29	0.65
Target Institution													
* Eastern CT State University • Main Campus 2023	220,447	3,534	62.37	9.71	18.10	4.10	0.00	0.12	0.00	13.83	16.43	0.08	0.00
ASF +/- Peer Averages	-259,539	76	-76.40	-7.11	2.86	-0.10	-1.71	-34.50	-12.03	-10.79	-4.11	-8.40	-0.52
Percentage of ASF +/- Peer Averages	-54%	2%	-55%	-42%	19%	-2%	-100%	-100%	-100%	-44%	-20%	-99%	-100%

There was not a full facilities inventory available for ECSU; therefore, the comparison values above are difficult to accurately interpret. With the limited data noted, ECSU appears to be on the low end of the range for peers for classrooms and open labs and on the high end for teaching labs.

NCHEMS

Southern Connecticut State University (SCSU)

Compared Institutions	Total ASF	Student FTE	Total ASF/FTE	Classrooms (100s)	Tch Labs (210s)	Open Labs (220s)	Rsch Labs (250s)	Offices (300s)	Library (400s)	Special (500s)	General (600s)	Support (700s)	Healthcare (800s)
Monterey Bay 2022	665,084	6,012	110.63	13.87	3.57	7.06	1.43	36.35	11.14	17.55	9.97	9.68	0.00
East Stroudsburg University 2015	613,179	6,345	96.64	11.33	10.44	0.51	3.72	20.97	11.22	29.79	5.20	2.90	0.56
Eastern Michigan University 2017	1,209,436	16,754	72.19	11.27	8.35	5.78	2.46	25.35	7.16	2.31	7.98	1.53	0.00
Nicholls State University 2019	760,592	5,653	134.55	16.64	23.71	0.00	0.00	23.59	16.51	32.80	18.16	2.52	0.62
Sonoma 2022	872,885	5,849	149.24	14.28	7.40	9.84	2.51	37.84	19.72	19.31	27.34	10.99	0.00
Stephen F Austin State University 2020	986,103	9,313	105.88	13.52	11.09	9.95	5.09	31.65	14.87	5.44	7.23	6.98	0.07
Texas Southern University 2020	743,574	6,137	121.16	18.70	11.49	7.71	6.07	45.86	15.91	1.64	4.98	8.81	0.00
UNC Pembroke 2018	654,127	6,354	102.95	13.98	9.30	0.00	0.00	30.20	6.51	13.91	20.15	8.11	0.79
University of South Carolina-Upstate 2019	539,906	5,235	103.13	12.61	12.25	0.00	0.00	27.83	6.28	17.72	15.66	10.58	0.20
Totals Compared	7,044,886	67,652		917,217	701,927	339,977	172,751	2,044,867	777,173	873,555	797,032	406,603	13,784
Averages (without 0s) Compared	782,765	7,517	104.13	13.56	10.38	5.03	2.55	30.23	11.49	12.91	11.78	6.01	0.20
Avg/Averages (without 0s) Compared				14.02	10.84	6.81	3.55	31.07	12.15	12.15	12.96	6.90	0.45
Target Institution													
Southern CT State University • Main Campus 2023	887,185	6,230	142.40	12.60	19.06	5.91	2.50	43.54	17.58	13.50	24.16	3.39	0.17
ASF +/- Peer Averages	104,420	-1,287	38.27	-0.96	8.68	0.89	-0.05	13.31	6.09	0.59	12.38	-2.62	-0.03
Percentage of ASF +/- Peer Averages	13%	-17%	37%	-7%	84%	18%	-2%	44%	53%	5%	105%	-44%	-14%

SCSU is above average. although not the highest, when compared with peers, for the majority of space categories, and has nearly the highest total ASF/FTE. Its calculated 142.4 ASF/FTE is significantly above the peer average of 104.13.

Western Connecticut State University (WCSU)

Compared Institutions	Total ASF	Student FTE	Total ASF/FTE	Classrooms (100s)	Tch Labs (210s)	Open Labs (220s)	Rsch Labs (250s)	Offices (300s)	Library (400s)	Special (500s)	General (600s)	Support (700s)	Healthcare (800s)
Black Hills State University 2019	410,092	2,520	162.73	18.83	15.08	0.00	4.68	38.04	13.55	42.96	19.88	9.15	0.57
College of Southern Nevada 2015	439,912	3,745	117.47	14.96	33.43	8.24	0.00	25.93	3.73	4.44	19.49	7.23	0.00
East Stroudsburg University • Main Campus 2023	757,197	4,832	156.70	14.14	11.58	3.35	5.44	34.99	14.23	23.62	43.20	5.10	1.05
Lander University 2019	397,144	3,097	128.24	12.45	21.41	0.00	0.00	24.88	13.62	28.69	22.15	5.04	0.00
Longwood University 2013	733,431	4,794	152.99	13.31	11.74	3.22	2.40	38.89	9.36	7.72	47.37	18.85	0.13
Northern State University 2019	427,659	1,817	235.37	34.05	14.23	0.00	1.29	45.88	5.44	70.50	41.68	22.20	0.10
Southern Oregon University • Main Campus 2018	436,537	3,180	137.28	23.92	7.78	12.90	1.46	42.51	22.21	6.43	10.36	9.58	0.13
University of Wisconsin-Parkside 2013	716,577	3,677	194.88	16.19	23.14	3.47	3.63	34.46	21.97	34.00	35.49	22.32	0.21
Totals Compared	4,318,549	27,662		471,635	477,455	116,244	69,915	970,797	365,216	638,403	866,715	333,637	8,532
Averages (without 0s) Compared	539,819	3,458	156.12	17.05	17.26	4.20	2.53	35.09	13.20	23.08	31.33	12.06	0.31
Avg/Averages (without 0s) Compared				18.48	17.30	6.24	3.15	35.70	13.01	13.01	29.95	12.43	0.37
Target Institution													
Western CT State University • Main Campus 2023	680,280	3,432	198.24	12.87	22.19	4.01	2.17	48.18	16.13	23.55	49.95	18.57	0.62
ASF +/- Peer Averages	140,461	-26	42.12	-4.18	4.93	-0.20	-0.36	13.08	2.93	0.48	18.62	6.51	0.31
Percentage of ASF +/- Peer Averages	26%	-1%	27%	-25%	29%	-5%	-14%	37%	22%	2%	59%	54%	102%

WCSU is above average in multiple space categories, within range for open labs, and at the low end of the peers for classrooms. The total ASF/FTE is significantly above the average but is within the range of peers.

Findings

As noted above, there is difficulty in making accurate peer comparisons for ECSU and CT State due to incomplete data. Additionally, factors such as urban or rural settings or different programmatic focus of the institutions chosen can hinder a true comparison of space.

Connecticut institutions have space categories that are above and below the average of the peer institutions. Of those with complete data, CCSU and WCSU are more within range of the total ASF/FTE when compared with peers while SCSU is above average with only one institution higher in this category. In addition, when looking at historical enrollment numbers for each of the institutions there is a significant decline after about 2011 without an apparent reduction in total ASF. These factors combined indicate an overall surplus of space, although the extent of the surplus varies. It should be noted that there may be a need for differentiation of urban versus rural campuses when establishing space need.

As seen with peer comparisons above, the total ASF/FTE can be quite variable from institution to institution. Thus, determining the size of the student population that could be accommodated by the current physical plant of each campus is also a challenge as there is no "one size fits all" approach to higher education. Looking at the average ASF/FTE in each peer comparison group, coupled with SmithGroup's experience working with colleges and universities throughout the country, a guide of 134 ASF/FTE (a range of 125-150 ASF/FTE) could be used for regional comprehensive institutions and a guide of 125 ASF/FTE (a range of 115-135 ASF/FTE) could be used for community colleges.

As discussed earlier, a factor to take into consideration for the community college range provided above is that enrollment has declined nationally for community colleges while the total square footage has remained relatively stable, as seen in Connecticut. Therefore, this range is higher than the average of the community college peers (in the table above) since the data of those peers comes from a wide range in years representing shifts in enrollment. For example, in 2013 CT State overall had 76 ASF/FTE using the data from a client-provided spreadsheet and historical enrollment numbers. (The year 2013 was chosen as a comparison year due to previous work done in the state that year from which SmithGroup could compare data. The factor of 76 ASF/FTE excludes four buildings built in 2017, since those were not in the inventory in 2013.) Compared with the current value of 122 ASF/FTE, this is in alignment with the national trends of increased ASF/FTE due to lower enrollment. It could also be stated that the community colleges were functioning effectively at the lower ASF/FTE value thus reaching the conclusion that there is now a surplus of space, and predicted future enrollment decline further supports this conclusion.

Recommendations

Based upon the information provided to the consultants, it does not appear that there is currently a standard or expectation for the Connecticut institutions to collect and report their facilities and course information data. Without such data available, it is not possible to truly measure performance or need for space. Therefore, SG recommends that routine data collection concerning space usage becomes a standard for CSCU moving forward to allow for data-informed decision-making concerning future requests related to space.

Evaluation of Requests for Future Capital Projects

While the total amount of assignable square feet of academic space is more than adequate, there are questions regarding facilities to be addressed. The attached two graphs indicate that much of the space on some is reaching an age when key systems—electrical, HVAC, etc.—begin to fail. This issue has to be addressed by funding for deferred maintenance, a topic that is addressed elsewhere in this report. Here it is important to note that the state has made significant investments in capital spending at CSCU with large amounts designated to address deferred maintenance. Nevertheless, like all other states, Connecticut has a backlog of deferred maintenance on its public campuses.

To assist with the development of a method for OPM to use in evaluating campus requests for additional facilities or renovation of existing facilities, SmithGroup completed an evaluation of building age among CSCU institutions, with results shown below. This information was compiled

from data provided with building age and adjusted age, which "resets" the age of the building to be the date at which a major renovation was completed. The most complete data for CSCU's facilities supplied the gross square footage (GSF) of each building; therefore, the summary below is presented as GSF rather than ASF used throughout the other sections of this report. The data includes any building categorized as academic as the primary use, with residence halls excluded. It is important to note that building age is just one factor to consider in assessing capital needs since building systems typically have a life cycle of 25-50 years. But by itself, it is not enough information on which to base critical capital needs decisions. A more comprehensive analysis would also take into account complete data such as that described above, supplemented by data on courses, a careful audit of the space categorization data, and onsite visits with facility managers and other institutional leaders. This is a significant labor-intensive activity that was out of scope for this project.

Summary Of Connecticut Universities

The majority of space (95%) on the CCSU campus is in buildings that are under 25 years old. Roughly one-third of space on the ECSU campus is in buildings that are over 25 years old. The SCSU campus has just under 40% of space in buildings over 25 years old, but also 5% of space in new buildings (less than 2 years old). WCSU has the largest percentage of buildings over 50 years old (11%), with 65% in buildings under 25 years old and 4% in newly renovated space. (All listed building ages are the adjusted age.)

Figure 136. Total Academic Gross Square Footage by Age, CSUs
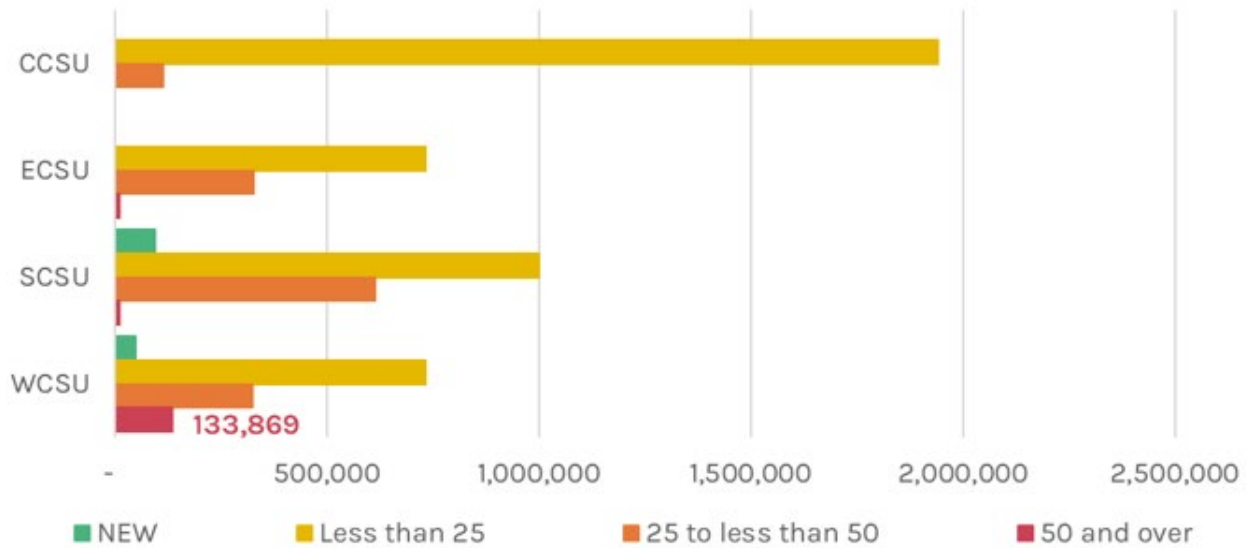
Note: "New" buildings are less than two years old.

Summary of Connecticut State Community College

For the combined community college campuses, 58% of buildings are less than 25 years old, 38% are 25-50 years old, and 4% are over 50 years old. (All listed building ages are the adjusted age.) Three of the campuses (Asnuntuck, Capital, and Manchester) have 100% of buildings less than 25

years old. Three campuses (Housatonic, Norwalk, and Naugatuck Valley) have the majority of space in buildings 25-50 years old. One campus (Middlesex) has 61% of buildings over 50 years old.

The chart below illustrates the values summarized above, with each campus listed by abbreviation. The abbreviation corresponds to the following list:

1. Asnuntuck (ACC)
2. Capital (CCC)
3. Gateway (GCC)
4. Housatonic (HCC)
5. Manchester (MCC)
6. Middlesex (MXCC)
7. Norwalk (NKCC)
8. Naugatuck Valley (NVCC)
9. Northwestern (NWCC)
10. Quinebaug Valley (QVCC)
11. Tunxis (TCC)
12. Three Rivers (TRCC)

Figure 137. Total Academic Gross Square Feet, CT State Campuses
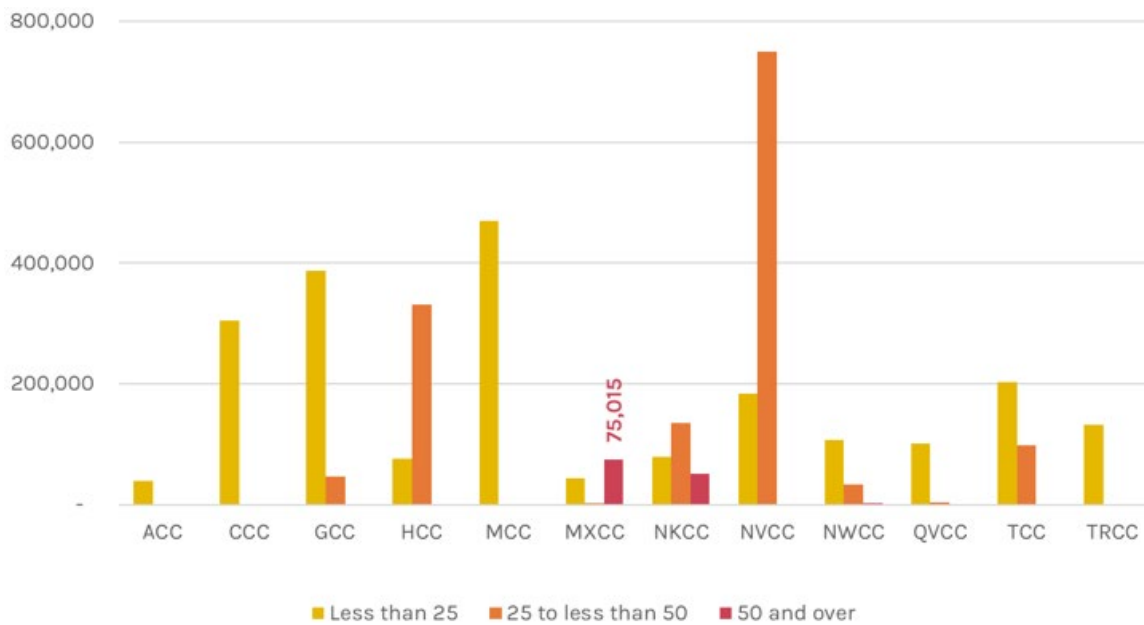
The information obtained from the overall building age on the various campuses across Connecticut is one variable for consideration of need for future capital projects. The information obtained from the overall building age on the various campuses across Connecticut can be one variable for consideration of need for future capital and renovation projects. The distinctions are particularly noticeable for the community colleges that have considerable space that will require upgrades (Housatonic, Middlesex, Norwalk, and Naugatuck Valley).

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Aging buildings may also be configured in ways that are inappropriate for contemporary approaches to instruction. The extent to which this is true on any given campus can only be determined by development of a campus facilities master plan, an activity beyond the scope of the NCHEMS and SmithGroup engagements. Such a plan would also identify facilities that should be demolished, bringing the facilities' inventory into line with enrollment demands and reducing the backlog of deferred maintenance projects.

In addition to this factor, additional items should be considered as described below.

Recommendation

Both the benchmarking analysis and other consultant studies are indicative of a surplus of space on all of the campuses in the system. This is further supported by a downward trajectory in enrollment for institutions from a peak around 2011. However, it should be noted that CT State and ECSU do not have complete space inventories or campus plans. These are essential components for proper management and stewardship of facility assets. The adage that one cannot manage what one does not measure certainly applies in this case. It should be further noted that even with an apparent surplus of space, there may still be important capital needs. In fact, the age of buildings suggests that there are likely issues of deferred maintenance and that the suitability of existing space to support 21st-century pedagogy and programming may be inadequate. These assessments lead to several recommendations.

1. Implement a two-year moratorium on new construction projects that add square footage to the overall inventory.
2. Use the two-year moratorium to fund space surveys as needed and prepare campus plans that are in alignment with strategic goals. These plans should address all facility needs, including those of deferred maintenance, capital renewal and renovation for programmatic needs and suitability.
3. Implement a rubric that prioritizes either the renovation or liquidation of existing assets. Many higher education institutions and systems and state legislatures use a rubric to objectively score capital project proposals. These rubrics are used to encourage alignment with strategic goals and the need to address liabilities. A possible rubric for CSCU might include the following:
   a. **Pass-fail: r**equirement that each institution has a complete space inventory and campus plan
   b. **CSCU Strategic Goals**
   c. **Cost Savings** achieved through reduction or elimination of deferred maintenance, operating costs; provide points for demolition of buildings (demolition should constitute a valid request for funding)
   d. **Fire and Life Safety/Code Compliance**
   e. **Space Utilization/Needs:** Consider existing uses and needs as determined by objective analysis
   f. **Impact on Student Outcomes/Student Success**
   g. **Impact on Growth and/or Revenue**

When multiple institutions are competing for system prioritization, some rubrics also take into account the institutional prioritization.

Appendix E. Authorizing Legislation for the Oregon Higher Education Coordinating Commission (ORS 350.075)

(3) The Higher Education Coordinating Commission shall:

(a) Develop state goals for the state post-secondary education system, including community colleges and public universities listed in ORS 352.002, and for student access programs.

(b) Determine strategic investments in the state's community colleges, public universities and student access programs necessary to achieve state post-secondary education goals.

(c) Coordinate the post-secondary elements of data collection and structure, with the advice and recommendation of the state's independent institutions, community colleges and public universities, as appropriate, in order to construct a state longitudinal data system.

(d) Adopt a strategic plan for achieving state post-secondary education goals, taking into consideration the contributions of this state's independent institutions, philanthropic organizations and other organizations dedicated to helping Oregonians reach state goals. State post-secondary education goals as described in this section should include, but need not be limited to:

(A) Increasing the educational attainment of the population;

(B) Increasing this state's global economic competitiveness and the quality of life of its residents;

(C) Ensuring affordable access for qualified Oregon students at each college or public university;

(D) Removing barriers to on-time completion; and

(E) Tracking progress toward meeting the state's post-secondary education goals established in the strategic plan described in this paragraph.

(e)(A) Each biennium, after receiving funding requests from the state's community colleges and public universities as authorized by law, recommend to the Governor a consolidated higher education agency request budget aligned with the strategic plan described in paragraph (d) of this subsection, including appropriations for:

(i) Student access programs;

(ii) Public universities listed in ORS 352.002, including but not limited to education and general operations, statewide public services and state-funded debt service;

(iii) Community colleges, including but not limited to education and general operations and state-funded debt service;

(iv) New facilities or programs;

(v) Capital improvements and deferred maintenance;

(vi) Special initiatives and investments; and

(vii) Any other program, duty or function a public university listed in ORS 352.002 is authorized to undertake.

(B) In the development of the consolidated higher education agency request budget:

(i) Determine the costs necessary to provide quality post-secondary education;

(ii) Solicit input from educators, education policy experts, appropriate legislative committees, students and other persons interested in the development of the funding model; and

(iii) Solicit public input regarding educational priorities.

(f) Adopt rules governing the distribution of appropriations from the Legislative Assembly to community colleges, public universities listed in ORS 352.002 and student access programs. These rules must be based on allocation formulas developed in consultation with the state's community colleges and public universities, as appropriate.

(g) Approve or disapprove any significant change to the academic program of a community college or a public university listed in ORS 352.002. In reaching a decision under this paragraph, the commission shall consider the recommendation from the community college or public university seeking to make the change to an academic program that is issued pursuant to the obligation of the governing board of a community college or public university to review and approve academic programs. The commission shall ensure that approved programs:

(A) Are consistent with the mission statement of the community college or public university;

(B) Do not unnecessarily duplicate academic programs offered by Oregon's other community colleges or public universities;

(C) Are not located in a geographic area that will cause undue hardship to Oregon's other community colleges or public universities; and

(D) Are allocated among Oregon's community colleges and public universities to maximize the achievement of statewide needs and requirements.

(h) For public universities listed in ORS 352.002:

(A) Approve the mission statement adopted by a governing board of a public university.

(B) Review and determine whether a proposed annual increase of resident undergraduate enrollment fees of greater than five percent is appropriate.

(C) Advise the Governor and the Legislative Assembly on issues of university governance.

(D) Approve and authorize degrees.

(E) Perform the evaluation and certification required by ORS 350.095.

(i) Authorize degrees to be offered by independent post-secondary institutions in this state under ORS 348.594 to 348.615.

(j) Oversee the licensing of career schools under ORS 345.010 to 345.340.

(k) Have the authority to enter into and administer interstate agreements regarding the provision of post-secondary distance education. The participation by an educational institution that is not based in this state in distance learning courses or programs that are part of an interstate agreement entered into and administered under this paragraph does not constitute operating in this state for purposes of ORS 348.594 to 348.615. The commission, by rule, may impose a fee on any educational institution that seeks to operate under or participate in such interstate agreements. The fee amount shall be established to recover designated expenses incurred by the commission in participating in such agreements.

(L) Administer a statewide longitudinal data system.

(m) In coordination with the Department of Education, the Employment Department and other state agencies, conduct statewide longitudinal studies and reporting of early learning, kindergarten through grade 12 education, higher education and workforce programs. For the purposes of this paragraph:

(A) The commission shall enter into written interagency agreements with the Department of Education, the Employment Department and any other state agencies necessary for conducting statewide longitudinal studies and reporting.

(B) The commission may share data from the statewide longitudinal data system with persons or public bodies. For purposes of this subparagraph, the commission shall adopt rules to establish procedures for requesting or sharing data and may enter into written agreements for sharing data.

(C) The commission is considered an authorized representative of state educational agencies under applicable state and federal law for purposes of accessing, compiling and storing student data for research, audit and evaluation purposes.

(4)(a) The Higher Education Coordinating Commission shall implement a process to review and appropriately act on student complaints regarding any school operating in this state. As part of the process implemented under this subsection, the commission may:

(A) Receive student complaints from students regarding a school;

(B) Specify the type of information that must be included in a student complaint;

(C) Investigate and resolve student complaints that relate to state financial aid;

(D) Refer a student complaint to another entity for investigation and resolution as provided in paragraph (b) of this subsection;

(E) Adopt rules to implement the provisions of this subsection; and

(F) Enter into agreements to implement the provisions of this subsection.

(b) The commission may refer the investigation and resolution of a student complaint to:

(A) An appropriate state agency if the complaint alleges that a school has violated a state law concerning consumer protection, civil rights, employment rights or environmental quality;

(B) A school's accrediting association if the complaint relates to the school's authorization to offer academic degree programs or to the quality of the school's academic degree programs; or

(C) The school at which the student is enrolled if the commission determines that the complaint should be resolved through the school's internal review process.

(c) As used in this subsection:

(A)(i) "School" means an independent institution of higher education that meets the requirements of ORS 348.597 (2)(a).

(ii) "School" does not mean a school that is exempt from ORS 348.594 to 348.615 under ORS 348.597 (2)(b) or (c).

(B) "Student" means a person who is enrolled at a school for the purpose of obtaining a degree, certificate or other recognized educational credential offered by that school.

(5) A student complaint that is received by the Higher Education Coordinating Commission, including but not limited to a student complaint filed under subsection (4) of this section, is not subject to disclosure under ORS 192.311 to 192.478.

(6) In addition to the duties described in subsections (2) to (4) of this section, the Higher Education Coordinating Commission shall advise the Legislative Assembly, the Governor, community colleges, public universities and other state boards and commissions on policies in order to:

(a) Ensure or improve access to higher education by diverse and underserved populations.

(b) Encourage student success and completion initiatives.

(c) Improve the coordination of the provision of educational services, including:

(A) Transfers and coenrollment throughout the higher education system;

(B) Accelerated college credit programs for high school students;

(C) Applied baccalaureate and other transfer degrees;

(D) Programs and grants that span multiple institutions; and

(E) Reciprocity agreements with other states.

(d) In coordination with the State Board of Education, enhance the use and quality of dual credit, career and technical pathways and efforts to create a culture of college attendance in this state.

(e) In coordination with the State Workforce and Talent Development Board, local workforce development boards, the Oregon Health and Science University and independent institutions, ensure that the state's colleges and universities offer programs in high-demand occupations that meet Oregon's workforce needs.

(f) Improve economies of scale by encouraging and facilitating the use of the shared services among post-secondary institutions in this state.

Appendix F. Adequacy Funding Model Conceptual Framework

Building from our experience working with states on finance for higher education over many decades, NCHEMS has developed a conceptual framework for thinking about state funding for public higher education institutions in a manner that is suited for the challenges ahead. These challenges, namely unfavorable demographic conditions, fiscal stress, heightened competition from alternative providers, and diversifying demands from students, employers, and the public, will force generational changes on colleges and universities. State funding approaches must become more coherent in alignment with these shifts and with state priorities, while also accounting for institutional cost structures, in ways that were not necessary during the prior decades of predictable growth. What follows is a basic description of that conceptual framework, excerpted with minor adjustments from a report NCHEMS delivered to the Missouri Department of Higher Education and Workforce Development under a contract seeking the development of a new funding model for the State of Missouri. The full report is available here.

The conceptual framework, developed by NCHEMS and used to good effect in other states, provides the foundation for the funding model and is presented in simplified form in Figure 13130. It is driven by:

- The idea that institutional costs and state funding should be linked in policy and in practice.
- The recognition that institutions vary in their missions—instructionally they offer a varied mix of programs to different populations of students and also engage in research and public service activities at different levels; a funding model must account for these differences in mission.
- The state's responsibility to maintain its state assets, such as the maintenance of institutional facilities but also curricula that are relevant and oriented toward workforce needs and students' educational aspirations.
- The imperative to provide educational services to all citizens of the state, regardless of their background or where they live within the state.
- The need for state funding policy to reward institutions for improvement in making contributions to the achievement of state priorities related to raising educational attainment levels, driving economic growth, operating efficiently, and ensuring educational opportunities are widely available to all.

This diagram conceptualizes the full operational costs of a public institution by dividing those costs into broad categories and assigning a funding responsibility for each. A particular feature of this framework is that it estimates the total funding needed to run an institution effectively as a function of the different types of costs its activities generate. Only after the model generates the estimates are each institution's costs summed, and the total funding requirement determined. In that respect, it works in the opposite direction from a Base-Plus approach. A Base-Plus approach works by allocating the available funding to institutions with only a vague sense of the actual costs of different institutions and how they have changed over time.

Figure 132. Institutional Adequacy Conceptual Framework (Simplified Version)

Expenditure Type Category	Funding Responsibility
Non-Instructional Mission-Related Activities and Other Activities	External Funders & Self-Support
Capacity Building	State, Tuition, & External Funders
Performance	State
Variable Costs	State + Tuition
Fixed Costs	State

(Left vertical label: Funding Model)

This framework has the following components:

1. **Fixed Costs**—Reimbursement of costs that are *relatively* impervious to the total enrollment of the institution, but which reflect a "frugal" level of funding needed for administrative operations, as well as to maintain the value of the institution's assets at current levels. These fixed costs include core administration and the maintenance of key institutional assets, including buildings, equipment, and the curriculum.
2. **Variable Costs**—Funding to cover costs that vary in accordance with the number of semester credit hours (SCH) produced, differentiated by discipline and level, and in accordance with the characteristics of students served by the institution. This funding recognizes that supports for today's diverse student populations, including adults, underrepresented minorities, low-income, rural, and first-generation students, will be different.
3. **Performance**—Funding based on contributions made to goals established in the state's strategic plan.
4. **Capacity Building**—This category captures investments in new programs/capacity or enhancements to existing capacity. These are allocations that are made to institutions that are outside the scope of the funding model and are generally expected to consist of one-time support. One exception is that this category also includes recurring funding provided for specific projects that operate as though a particular higher education institution would be "vendor of choice." An example here is payments to the land-grant

university for Cooperative Extension, along with other applied research that may be of particular interest to the state or to a portion of the state or regional economic development activities.

5. **Non-Instructional Mission-Related Activities and Other Activities**—This category covers institutional costs for activities that are largely self-supporting. This includes research and public service activities that are funded externally, and which tend to pay for their own direct costs and contribute revenues that cover indirect operational costs (as well as capital expenditures). It also includes the costs of other activities such as housing, athletics, museums, performing arts centers, and the like, which are typically expected to pay for themselves. In numerous states there is an explicit prohibition against the use of state funding for the support of such activities.

As indicated in the diagram above, the portion of institutional funding requirements that the new funding model will address includes only the fixed and variable costs and the performance component.

An important purpose of the adequacy framework is to help policymakers better understand the links between institutional costs and funding requirements. At its most basic, the framework suggests that there is a minimal amount of expense associated with operating an institution that the state is obliged to cover. This "frugal" funding level represents what is necessary to preserve the institution's value as a state (and local) asset. As depicted in the figure above, these are the fixed costs. Additionally, as institutional performance funding will be determined based on state priorities, the state is solely responsible for funding that amount as well.

Variable costs, however, are supported by a mix of state and tuition funding. With a more complete picture of the actual costs of instruction and administration *to be recognized under the funding model,* the determination of what portion of the variable costs should be paid by the state and what portion of those costs should be paid by students is a matter for public policy.

The framework provides utility in developing a rational approach to that decision, but each state makes its own choices in this regard. Although most states regularly produce reports about affordability, states seldom establish a target for the share of total costs to be paid by students. Even if there is language in the constitution or in statute that specifies costs should be "as nearly free as possible," the reality is that tuition levels are set based primarily on what they were in the prior year with some consideration for how much more or less funding will be provided by the state, also relative to the prior year. Those that do try to set a cost-sharing target (along with their targets) include:

- Minnesota: seeks to provide 2/3 of total educational revenue, operationalized in part through its state grant program.
- Nebraska: no numerical target but aims for "most" costs to be covered by the state, with variation based on institutional mission. For community colleges, the expectation is that 40% will be paid by the state, 40% by local taxes, and 20% by students.
- Tennessee: student payments should account for 45% of total costs at public four-year institutions; 33.3% at community colleges; 20% at colleges of applied technology.
- Virginia: 66%/33% state/student target.

- Wyoming: tuition revenue falls within 23-28% of system-wide unrestricted revenue.

Additionally, 29 states regularly measure or report on affordability, 10 with formalized requirements. Considerable variation exists in affordability measures.[51]

Appendix G. Oregon's Capital Project Rubric

Docket Item:

Adoption of Revised University Capital Rubric

Summary:

The existing capital rubric was the product of a lengthy and collaborative process. As the result of the development of a plan intended to guide capital investments during the next decade, the rubric should be updated to more closely align with the state's strategic priorities. A summary of the staff recommended revisions is included with a more detailed version of the recommended rubric in the Appendix.

Docket Material:

HECC University Capital Principles

The prioritization of capital projects will focus on aligning economic incentives of the institutions with the state's strategic capital plan. The prioritization process is not a distribution model. All state-backed debt will support E&G space and will serve to extend the useful life of current assets, extend the capacity of existing facilities to meet student needs, and develop or extend key competitive advantages.

Projects that demonstrate the following will be prioritized:
- Operational cost savings
- Public-private and multi-party collaborations
- Leveraging of private resources and institutional funds

Existing Rubric

The existing rubric was most recently evaluated in the spring of 2018. As part of that process, HECC staff and the Commission considered more than 40 suggested improvements. Following consideration of all comments and suggestions from stakeholders, the current capital scoring rubric was created. The two major changes from the previous version included more emphasis on student success and inclusion of civic, cultural and economic development projects.

The current rubric, which awards up to 100 points for each project, is divided into eight categories, each listed below with the relevant points available for that section:
   A. Compliance with HECC and Institutional Strategic or Master Plans (Pass/Final). Any projects failing this item will not proceed farther in the rubric.

B. HECC Priorities (Up to 30 points) divided into the following categories: (1) Easing Capacity Constraints (Up to 10 points), (2) Supporting Student Completion (Up to 10 points), (3) Supporting Research and Economic Development (Up to 5 points) and (4) Collaboration Between Educational Institutions (Up to 5 points)

C. Cost Savings (Up to 10 points)

D. Life, Safety and Code Compliance (Up to 10 points)

E. Institutional Priority (Up to 20 points)

F. Clear Identification of Student Focus (Up to 5 points)

G. Leveraging Dollars (Up to 15 points)

H. Strategic Priority (Up to 10 points)

Revised Rubric

Overall, the pass/fail component of compliance with an institution's master plan, noted as section A in the current rubric, was removed as superfluous. And the existing strategic priority component, noted a section H in the current rubric, was absorbed in to the revised component that speaks to the project's alignment with the Strategic Capital Development Plan.

52% Based on Alignment with Strategic Capital Development Plan

With that, the proposed rubric recommends a larger share of the scoring align with the state's strategic capital development plan allocating 52% of the total to plan alignment including a focus on deferred maintenance. Of those 52 points, the following allocations are made:

24 points – Space renewal, workforce and completion priorities

12 points – Deferred Maintenance Reduction/Planning

8 points – Collaboration between educational institutions

8 points – Supporting research and economic development capacity

48% Based on Other State Priorities

The other 48% of the rubric is allocated to other values that are considered important to achieving the HECC's university capital principles. These priorities and the accompanying allocations include:

15 points – Leveraging private resources and institutional funds

10 points – Student Success for Underserved Populations

10 points – Life safety, security, code compliance and/or loss of use

8 points – Operational savings and sustainability

5 points – Institutional priority

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Comparison to Existing Rubric

The appendix includes a detailed version of the revised rubric for consideration. A summary of the changes from the existing rubric to the recommended rubric is included below.

Section A and H – removed

Section B – Strategic Capital Development Plan – revised to focus on alignment with the Strategic Capital Development Plan; value increased to 52 points; although the plan development is still under way, the elements included should be compatible to the report findings. The report will also focus on deferred maintenance (DM). DM is in two parts which includes not only the reduction of DM but also the commitment by an institution to create a DM buy down account to fund future DM on the facility under consideration.

Section C –Operational Savings – revised to focus solely on operational savings; value reduced to 8 points; deferred maintenance was moved to section B as noted above.

Section D – Life Safety, Security, Code Compliance and/or Loss of Use – expanded to include security upgrades as part of a facility renovation and the imminent loss of use due to facility deficiencies as elements in the component.

Section E – Institutional Priority – simplified to award points for an institution's top 3 priorities; value reduced to 5 points.

Section F – Student Success for Underserved Populations – clarified to focus on underserved populations consistent with the existing Student Success and Completion (SSCM) funding model; targeted populations include low income students, underrepresented minorities, rural students and veterans; value increased to 10 points.

Section G – Leveraging Private Resources and Institutional Funds – revised to include different matching ranges based on the type of institution to acknowledge the differing abilities of institutions to raise external funding.

Staff Recommendation:

Adopt.

Appendix: Revised 2019-2021 University Capital Project Rubric

A	Strategic Capital Development Plan
1-52 Points	

Points	Components within the Plan
24	**Space renewal, workforce and completion priorities** Examples could be proposals that increases the capacity and effectiveness of instructional space. Or addresses workforce needs pursuant to the SCDP. Or potentially increases degree completion numbers pursuant to the 40-40-20 Strategic Plan.
12	**Addressing deferred maintenance issues** This could be tied to either the reduction of deferred maintenance at an institution or the creation of a deferred maintenance set aside account to proactively address future deferred maintenance needs.
8	**Supports the research & economic development capacity of the institution** Examples could be the development of innovation districts tied to the creation of traded sector jobs. Or supporting degree programs that are important to traded sector employers. Or if a project maps to academic pathways as referenced in the SCDP.
8	**Collaboration between Oregon education institutions** This could be collaborative efforts between the university and other education entities or the creation of consortia.

B	Operational Savings and Sustainability
1-8 Points	

Projects are scored based on cost savings generated by operational savings. Proposal drives operational savings including sustainability.

C	Life Safety, Security, Code Compliance and/or Loss of Use
1-10 Points	

Projects are scored based on the priority of the project to meet life, safety and code compliance needs of mission critical items, including lifecycle cost analysis or projects that support key programs and initiatives.

1. **Life Safety – 5 points**. For a project to be considered critical, the project must predominantly address facility deficiencies (code compliance) related to the health, safety, and welfare of the occupants and the public. The request will be considered as to the significance of the hazard or risk the facility conditions pose and the immediacy of the period requested to address those concerns.

2. **Security – 3 points**. The proposal supports a safe and secure environment in all buildings and grounds owned, leased and/or operated by the universities. The proposal promotes safety through policies and programs. The proposal safeguards the university's property and physical assets.

3. **Code Compliance and/or Loss of Use – 2 points**. A project may be considered critical if it addresses imminent loss of use due to facility deficiencies. These can include mechanical, electrical, or structural systems as well as the accreditation requirements of a program. Critical loss of use projects would directly result in the inability of that program to function in the related area and/or maintain the funding necessary to sustain that program.

D	**Institutional Priority**
1-5 Points	

Each institution will identify the top three projects from only the tier one category as defined by the university presidents:

5 points – 1st priority
3 points – 2nd priority
1 points – 3rd priority

E	Student Success for Underserved Populations
1-10 Points	

Projects are based on the focus or expected impact of the project on student success, with special emphasis on those underserved populations that are similarly emphasized in the Student Success and Completion Model such as, clear links to higher degree and certificate attainment tied to the following targeted populations:

1. Low income
2. Underrepresented minority
3. Rural
4. Veteran

F	Leveraging Private Resources and Institutional Funds
1-15 Points	

External funding should be a factor in prioritizing projects, but should not inappropriately determine institutional or HECC priorities. The campus match component identifies a minimum percentage of project costs to be borne by the institution, ideally from private funding. Technical and Regional institutions have an adjusted matching schedule to acknowledge a smaller private funding base in the rural communities of the state.

Ten points are based on the level of matching and five points are based on the availability of funds according to the scheduled below.

OSU, UO and PSU Matching	
% Match	**Points**
25% or over	10
25%	8
20%	6
15%	5
10%	4
0%	0

OR

Technical Regional Matching (EOU, SOU, OIT, WOU)	
% Match	Points
5% or more	10
4%	8
3%	6
2%	4
1%	2

AND

| Majority pledged or in hand verified in proposal	
% Match	Points
100% add	5
75% add	4
50% add	3
25% add	2
0%>=10% add	1
0%	0

**Total Potential Points**   **100 Points**

Endnotes

[1] National Student Clearinghouse Research Center, *Current Term Enrollment Estimates* reports.

[2] These data are provided by SHEEO SHEF. It is difficult to standardize capital appropriations in a manner that enables effective comparisons across states due to variances in the sources and timing of the use of appropriated funds. The project-specific nature of capital expenditures also means that the use of FTEs also yields results that cannot be appropriately compared among states.

[3] While Figure 11 illustrates the change in market share, the figure below shows the same data in terms of number of students.

Change in First-Time In-State Students
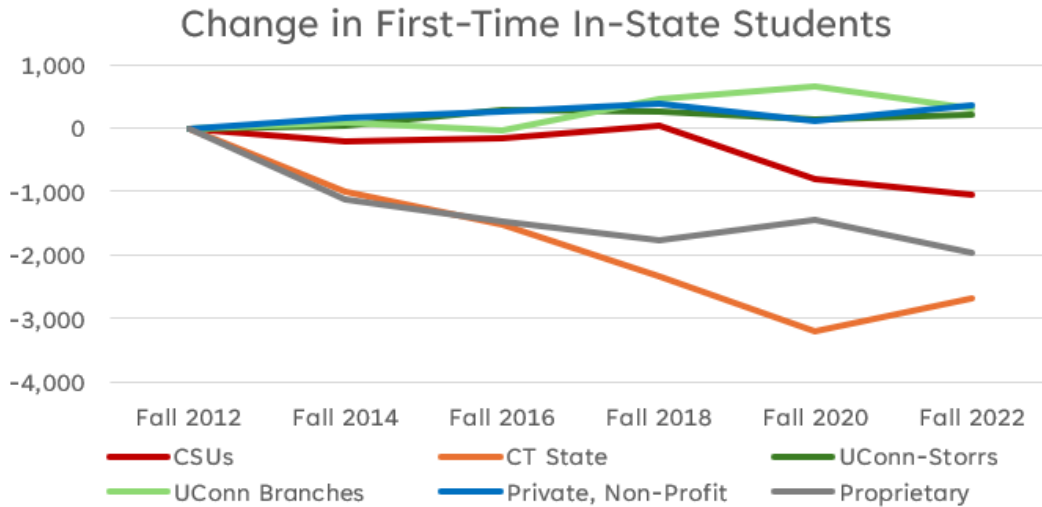
[4] The graph below shows first-time out-of-state students at Connecticut's institutions. It is clear that CSCU institutions are minor players in this market, which is dominated by private, nonprofits, proprietary institutions, and, to a lesser degree, the University of Connecticut Storrs campus. Proprietary institutions in both graphs include Title IV-eligible institutions authorized to operate in Connecticut by OHE.

First-Time Out-of-State Students
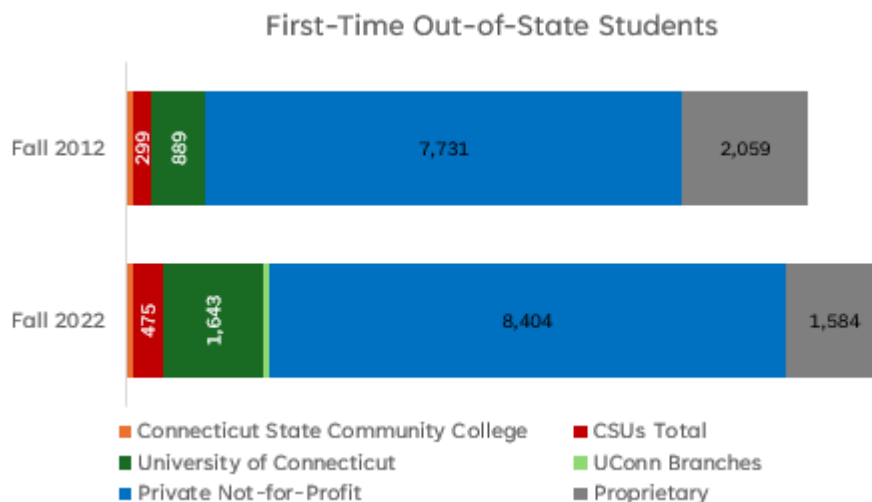
[5] This graph excludes students enrolled at private, for-profit institutions.

[6] As reported in CSCU's response to the NASH/NCHEMS Survey of Systems.

NCHEMS

7 Changes since 2022-23 are not reflected in our data, but interviews with CT State suggest renewed efforts to bring staffing into closer alignment with enrollment.

8 Using more detailed data than IPEDS provides for its study on WCSU in 2022, NCHEMS found that WCSU was losing unusually large numbers of students who had accumulated substantial credits. These dropouts and stopouts occurred after their second year, and federal data does not track student losses beyond first-to-second year retention.

9 Currently, some campus-level leaders carry the title of "President" and others are titled "Campus CEO."

10 The NASH survey went into the field in March 2024. NASH and NCHEMS are continuing to gather data and conduct analyses. To date, NCHEMS has responses from about two dozen systems. NASH's membership is about 45 systems.

11 Per communication with John Maduko, the $59.4 million surplus is attributable to increased revenue from a 3% enrollment gain, improved collections from student accounts, and unanticipated interest income on reserves, as well as delays in hiring full-time positions, a re-estimate of fringe benefit expenditures, and variable forecasts for Other Expenses across the campuses that yielded savings.

12 SEBAC earned the right to negotiate on behalf of its union members in 1986 through Conn. Acts 86-411 for healthcare and retirement benefits. Although there does not appear to be statutory authorization permitting SEBAC to negotiate wages in a similar manner, historic practices are that the state negotiates a framework with SEBAC for wages that becomes incorporated in the agreements reached by CSCU and its institutions with the bargaining units they respectively oversee. (Sources: "About SEBAC", https://www.ccsu.edu/suoaf/about-sebac; SEBAC 2022 Agreement, https://hr.media.uconn.edu/wp-content/uploads/sites/1421/2022/05/2022-SEBAC-Agreement.pdf)

13 Phillips, Erica E. (2023, Nov. 14). "CT spent $8.4 million fixing up a college building – but hasn't paid to staff it." *Connecticut Mirror.* Retrieved June 5, 2024 from https://ctmirror.org/2023/11/14/ct-tunxis-community-college-manufacturing-center-budget/.

14 CSCU and OPM continue to operate a single "grandfathered" agreement that permits CSCU to send data through P20 WIN for the narrow purpose of obtaining employment records of their former students which CSCU uses for institutional reporting: But the grandfathered agreement only serves CSCU's needs and does not allow for broader use of CSCU data: https://portal.ct.gov/datapolicy/knowledge-base/articles/data-requests/multi-year-post-secondary-wage-employment?language=en_US. Current reporting from P20 WIN on postsecondary outcomes has been accomplished in part without CSCU participation through a dashboard posted by CSDE: https://public-edsight.ct.gov/performance/college-enrollment-dashboard?language=en_US

15 Private institutions share their data through the Connecticut Conference on Independent Colleges (CCIC). Like all signatories, those institutions are able to withhold their data for specific projects. UConn has made commitments that it intends to do so upon receipt of a data-sharing agreement created using the template approved by all other partnering agencies.

16 P20 WIN has consulted repeatedly with the federal government and its representatives to provide guidance to states concerning their longitudinal data systems, as well as Connecticut's Office of the Attorney General, to ensure that the provisions in the E-MOU and the data-sharing agreement template are legal and represent best practice. Documentation includes a report of a site visit by USED's Institute of Education Sciences (IES (2024). *Connecticut's Longitudinal Data System.* Washington, D.C.: U.S. Department of Education), a review of P20 WIN's privacy and security by an outside expert (WestEd (2024)), *Enhanced Security and Privacy Review Executive Summary (for the State of Connecticut's Office of Policy and Management P20 WIN),* and numerous exchanges with USED's Privacy Technical Assistance Center, including annual reviews of the data sharing agreements and related policies and procedures for security and privacy.

17 SHEEO *Strong Foundations.* https://postsecondarydata.sheeo.org/strong-foundations/ and Data Quality Campaign *People Need Access to Data*: https://dataqualitycampaign.org/our-work/people-need-access-to-data/

18 Data provided by UConn Early College Experience at https://ece.uconn.edu/program-data/data/. UConn additionally operates a much smaller program in which students take classes at one of its campuses.

NCHEMS

[19] Public Act 24-78 (2024 SB 14).

[20] Velasco, T., Fink, J., Bedoya, M., & Jenkins, D. (2024). *The Postsecondary Outcomes of High School Dual Enrollment Students: A National and State-by-State Analysis.* Community College Research Center, Teacher's College, Columbia University. Retrieved Oct. 28, 2024 from https://ccrc.tc.columbia.edu/media/k2/attachments/postsecondary-outcomes-dual-enrollment-national-state.pdf.

[21] It is unclear how many other postsecondary providers may have made similar decisions on how to report dual enrollment data to national data collections.

[22] https://ece.uconn.edu/data-dashboard-high-school-partner-profile/. The 5% of enrollees with unknown race/ethnicity were excluded from the denominator in these figures.

[23] U.S. Census Bureau, 2023 Population Estimates. https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-detail.html

[24] CSCU reports that the four CSUs gained enrollments from this program, as well: together they enrolled 200 students while Charter Oak enrolled 219.

[25] Acton, R., Cortes, K.E., Miller, L., Morales, C. (2024). *Distance to Degrees: How College Proximity Shapes Students' Enrollment Choices and Attainment Across Race-Ethnicity and Socioeconomic Status.* (EdWorkingPaper: 24 -1057). Retrieved from Annenberg Institute at Brown University: https://doi.org/10.26300/vjyg-ta27.

[26] The following discussion comes from https://www.ecs.org/50-state-comparison-postsecondary-governance-structures/, which was most recently updated in 2020.

[27] These functions are specified in McGuinness (2016). *State Policy Leadership for the Future: History of State Coordination and Governance and Alternatives for the Future.* Denver, CO: Education Commission of the States.

[28] https://www.ct.edu/files/pdfs/3.5%20Fund%20Balance%20Guidelines.pdf

[29] McGuinness (2016).

[30] https://www.cga.ct.gov/current/pub/chap_185.htm#sec_10a-34, section (l).

[31] Gagliardi, J.S. & Lane, J.E. (eds.) (2022). *Higher Education Systems Redesigned: From Perpetuation to Innovation to Student Success.* Albany, NY: State University of New York Press.

[32] Planning Commission for Higher Education (2015). *Strategic Master Plan for Higher Education in Connecticut.* https://www.cga.ct.gov/hed/related/20180329_Strategic%20Master%20Plan%20for%20Higher%20Education%20in%20Connecticut,%20Planning%20Commission%20for%20Higher%20Education,%20February%202020,%202015/The%20Strategic%20Master%20Plan%20for%20Higher%20Education%20in%20Connecticut,%20February%2020,%202015.pdf.

[33] A decision to seek specialized accreditation for a new or existing program should be made in full view of the documented need for graduates to have completed such a program, against the associated fiscal impacts of accreditation. In other words, there are clear requirements for some programs, especially those leading to licensure such as nursing and teaching. It may not be strictly necessary for some programs to be specially accredited for their graduates to obtain good jobs upon completion. In such cases, specialized accreditation may create unnecessary access, success, and affordability barriers for students.

[34] Hignite, K. (2020). "Rainy-Day Reserves." *Business Officer.* Retrieved from https://www.businessofficermagazine.com/features/rainy-day-reserves/

[35] P.A. 23-204 (HB 6941) §64.

[36] Planning Commission for Higher Education (2015).

[37] See the link to Oregon's 10-Year Strategic Capital Plan at https://www.oregon.gov/highered/about/postsecondary-finance-capital/pages/postsecondary-capital.aspx.

[38] Personal communication with SmithGroup, Sept. 24, 2024.

[39] During NCHEMS' prior engagement with CSCU to study WCSU and its specific challenges, WCSU objected to excluding the other CSUs from their peer group. We therefore included all CSUs in the peer

groups for each individual CSU. The differences these inclusions made does not substantially change any of the analyses since they are based on peer medians and averages.

[40] The source for the graphs in this section is CSCU System Office.

[41] The source for the graphs in this and subsequent sections is NCES IPEDS.

[42] The Higher Education Cost Adjustment, an adjustment developed by SHEEO. The definition can be found at https://shef.sheeo.org/data-definitions/#data-adjustments.

[43] Jennifer Zinth's personal communication, Aug. 1, 2023

[44] As of June 2024, UConn ECE is the only NACEP-accredited program in Connecticut.

[45] Jennifer Zinth's personal communication, July 1, 2024

[46] However, as a condition of accreditation, Connecticut IHEs must meet NECHE Standard for Accreditation 6.3

[47] Jennifer Zinth's personal communication, July 2, 2024

[48] Jennifer Zinth's personal communication, June 18, 2024

[49] Jennifer Zinth's personal communication, June 17, 2024

[50] Jennifer Zinth's personal communication, June 18, 2024

[51] Prescott, B., Laderman, S., & Allison, T. (2022, August 9). *Results from a National Survey on Approaches to Funding Base Operations.* Presentation at SHEEO Policy Conference, Indianapolis, IN.