Serving Vermont's Students by Securing the Future of the Vermont State Colleges System

Office of the Chancellor

This white paper is intended to set the stage for consideration of concrete, strategic actions that the Vermont State Colleges System can take to secure its mission in an increasingly challenging and rapidly changing higher education environment. The first step is to gain a clear understanding of the forces affecting our colleges and universities.

Introduction: Planning a Bright Future for the Vermont State Colleges System

The future of the State of Vermont, and the State's capacity to realize the potential of generations of future students, will depend upon a thriving Vermont State Colleges System (VSCS or System).

And yet significant challenges to colleges and universities bear down upon our region and much of the United States and threaten access to the affordable, high quality, student-centered education our member institutions provide. Significant demographic and market pressures are undeniable. In this environment, cost controls and innovation must quickly be coupled so that students will have post-secondary opportunities and our colleges and universities will thrive, not merely survive.

Plans to secure the future should reflect a vision of a thriving Vermont State Colleges System:

- A comprehensive, interconnected, and coordinated system comprised of unique and innovative colleges and universities,
- with financially and functionally healthy institutions, all with consistently positive operating results,
- where students receive a high quality, useful, relevant, and contemporary educational experience,

- with engaged college communities of faculty, staff and students treating each other with mutual respect,
- which are great places to work with a good condition and up-to-date physical and IT infrastructure,
- that meet the workforce needs of the State and region, while launching the hopes and dreams of our students, both traditional and non-traditional, and
- with services delivered where and when students and clients need them.

A vision for the future must encompass our enduring mission for Vermont. It must also consider those actions taken by public higher education systems that are succeeding in this environment. Those systems are strategically and rapidly focusing resources on new delivery platforms and flexibly delivered credentials that reach traditional-age and adult students. They are creating opportunities distributed across a lifetime. Those who thrive will reduce the cost of delivery and will be the most entrepreneurial.

The Vermont State Colleges System must adapt, innovate, and leverage its strengths in order to secure a bright future. To that end, the Board of Trustees is embarking on a strategic initiative first to clarify and communicate the urgent challenges facing higher education and then to develop responses to allow the System to meet its critical mission of service to the State into the future.

As a statewide entity with strong regional presence and a long and proud history of educating Vermonters, the VSCS brings significant strengths to its work that will help it confront external forces. Because of our partnerships, our colleges and the System have the unique ability to respond to local, regional and state needs. Our State appropriation provides a predictable supplementary revenue source. As a System, the VSCS is capable of achieving necessary financial efficiencies. Significantly, strong leaders at the System and college level are guiding their institutions well through very challenging waters.

Challenges to the industry are facing nearly every college and university in the nation, but are hitting the Northeast and Vermont especially hard. Declining numbers of traditional college-age students and increased competition among colleges for those students are pressuring budgets. Student preferences and attitudes toward higher education are changing. Our traditional physical infrastructure and personnel processes do not always support timely responses to challenges. Vermont's ranking at the bottom of the nation in state support is a significant factor in our inability to compete on price, to innovate, and to keep up with basic infrastructure.

These challenges require fully leveraging our strengths. Areas with the greatest opportunity for solutions demand change: new delivery methods, new credential offerings, and strategically focusing resources as a system to efficiently and effectively deliver educational opportunities.

As the Board of Trustees develops plans for the future of the VSCS, a thorough exploration of the forces affecting our colleges and universities is a necessary first step. It will gather input

from the VSCS community and others about these challenges and about possible solutions to build a strong system that serves the needs of our students and our State into the future.

If the System's colleges and universities are to remain relevant and viable, leadership and stakeholders must have the foresight to recognize the forces upon us and the fortitude to make tough and timely decisions about what, how, and where to deliver relevant public postsecondary education to Vermonters.

This paper will first detail what the Chancellor believes are the forces negatively affecting the System. It will also review steps the VSCS has taken thus far to adjust to them. To gain consensus on the changing environment, this document is intended to evolve, reflecting vigorous and constructive dialogue with many constituencies.

The next step will be for the VSCS to identify a range of specific actions the System could take to secure its future for the benefit of Vermont. You are welcome to visit www.vsc.edu/securethefuture over the coming months to view revisions to this paper, find out about participating in input sessions, and other information about this strategic process.

The Vermont State Colleges System's Deeply Integrated Role

The Vermont State Colleges System, which includes Castleton University, Northern Vermont University, Vermont Technical College, and the Community College of Vermont, acts as the State of Vermont's public system of higher education.

The System's mission begins, "For the benefit of Vermont," and its colleges and universities serve over 11,000 students and employ over 2,000 Vermonters in 20 locations in thirteen of Vermont's fourteen counties. In addition, close to 9,000 adults are served in workforce and professional education programs offered at every institution. Over 80% of the System's students are Vermonters, and the vast majority its graduates stay and work in Vermont. These graduates, in turn, comprise a major input into Vermont's workforce pipeline and become the entrepreneurs and workers powering Vermont's economy.

The VSCS is the extension of the State of Vermont's public education system into the postsecondary years. This means that the System's colleges and universities are, by design, a logical continuation of the State's pre-kindergarten through 12th grade primary and secondary schools and are accessible to almost all Vermonters. In addition to providing traditional four-year, residential, bachelor's degree programs to 18 - 22 year-old students, they also provide a wide range of graduate, associate degree and certificate programs, serve commuter and online students, and provide continuing education opportunities for Vermonters of all ages. This broad accessibility and wide range of offerings enables the System's colleges and universities to

confer more bachelor's and associate's degrees and non-degree certificates to Vermonters than all of the other colleges and universities in the state combined.

In their role as the State of Vermont's "access institutions," the System's colleges and universities also provide upward mobility for Vermont's citizens, which results in attendant benefits for the State. The Lumina Foundation's study, "It's Not Just the Money" demonstrates that on any number of human services measures, whether rates of poverty, incarceration, mental illness, poor health, or overall difficulty in life are inversely correlated with education levels. The System is one of the State's most cost-effective investments both to improve Vermonters' quality of life and to reduce dependency on State services.

Finally, the System's colleges and universities serve as the economic and cultural foundation of many rural parts of Vermont. The System spends almost \$170 million each year on employee salaries and benefits, paid almost entirely to Vermonters, and purchases of goods and services from Vermont based businesses. Its students and employees eat at local restaurants, shop in local stores, and flock to Vermont recreation areas. Additionally, the colleges and universities are centers of music, fine arts, theatre, athletic events, public lectures, summer youth camps, and innumerable other life-enriching activities that otherwise would be unavailable to Vermont's rural communities and regions.

Strengths of the Vermont State Colleges System

The VSCS is a sizable statewide public entity, which sets us apart from the many small, tuition-dependent, private colleges across the region that face significant pressures on their own. As a college system with a statewide footprint, the strengths inherent to a system are more valuable to our member institutions than ever before. Shared services, joint purchasing and systemwide contracts all provide financial efficiencies unavailable to independent colleges. In the past few years, several of our colleges have accessed timely financial support from the System when taking on a bank loan would not have been feasible. Additional strengths can be leveraged when academic policies are aligned at the system level to provide more opportunities for VSCS students (ie. Direct Admissions).

Our statewide presence makes us a valuable state asset. The map of VSCS campuses, academic centers, and workforce resources reveals a statewide presence and illustrates our mission: to provide access to educational opportunities for all Vermonters. Taken together, our four colleges and universities, spread out over thirteen counties, serve a majority of Vermont students attending college from those counties. Our statewide presence has fostered well-rooted connections with our host communities. Our partnerships with employers, local agencies, alumni, and friends are not confined to one region, but are statewide. Because of our established partnerships, the VSCS can respond quickly to regional employment or educational needs. Because we are a system, the VSCS can deliver programs for the State of Vermont in every county.

The State of Vermont's stake in the success of our colleges is enormous. The State is dependent on our member institutions as regional economic engines, workforce pipelines, and as access institutions for the majority of Vermonters remaining in state to go to college. While State funding accounts for only 17% of our budget, one of the lowest levels of funding in the nation, the VSCS annual appropriation does provide a predictable, annual source of revenue. Any independent college would be envious of a \$30 million annual disbursement from an endowment.

Another key strength is our strong system and college-level leadership. Squaring off against the challenges listed in this report, our presidents, with the support of their leadership teams, staff and faculty, are making bold decisions about the future of their institutions, all while offering innovations to better serve students and to remain competitive. The Chancellor's Office is supporting this work and pushing forward with significant business process redesign, systemwide academic policy and program changes, and transformation of our information technology. A highly knowledgeable and diversely talented Board of Trustees also provides invaluable guidance to and engaged oversight of this timely and urgent work.

Despite significant challenges, and because of them, the VSCS colleges and universities continue to innovate. New programs, including non-degree credentials and apprenticeships, are being developed faster than ever. Employer partnerships are flowering. New technologies, more convenient scheduling, and improved student support services abound.

"A clear view of the complexities opens the way to constructive action"
--- John W. Gardner

Challenges we face

The recent closures of Green Mountain College in Poultney, Southern Vermont College in Bennington, and the College of St. Joseph in Rutland make clear that Vermont is about to experience – in rapid sequence and without precedent in the history of the State, and quite possibly the country – the devastating impact of losing the economic and cultural anchors for several rural communities and their surrounding regions.

These closures provide stark evidence of the negative and powerful external forces that continue to bear down on almost all colleges and universities generally, but that are particularly acute in Vermont. Many observers and analysts predict the pace of college closures will escalate, and that small, rural, tuition-dependent, and less selective colleges are the most vulnerable.

While the System's institutions face many of the same problems and difficulties confronting other colleges and universities in Vermont and the Northeast, a few key challenges stand out in

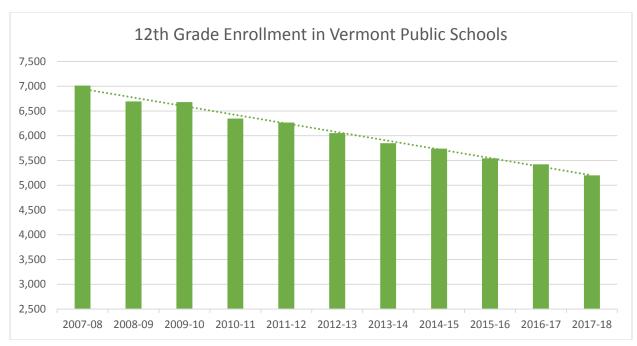
terms of financial magnitude and immediacy, and therefore in potential impact to the System's strategic outlook. These challenges include:

- 1. Historically weak demographics
- 2. Bottom-ranked State support
- 3. Accelerating pricing pressures
- 4. Barriers to adaptability
- 5. Changing student preferences and attitudes
- 6. Disruptive technology and delivery

Challenge 1: Historically Weak Demographics

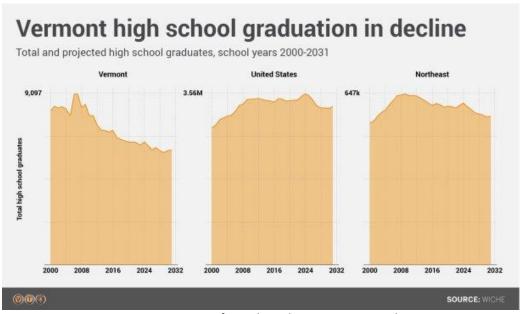
Downward demographic trends are serious and will continue to intensify indefinitely.

While the System's institutions serve students of all ages, the primary student cohort, other than for Community College of Vermont, is still traditional-age high school graduates. The number of Vermont high school graduates has decreased by 25% over the past ten years and, given record-low birthrates, this trend is expected to continue indefinitely. The long-term outlook for other New England and the Northeastern states is similarly dire. This very likely means that the System's capacity, physical footprint, and cost of operations already likely is, or soon likely will be, "over built" relative to future demand.



Source: Vermont Agency of Education School Enrollment Reports

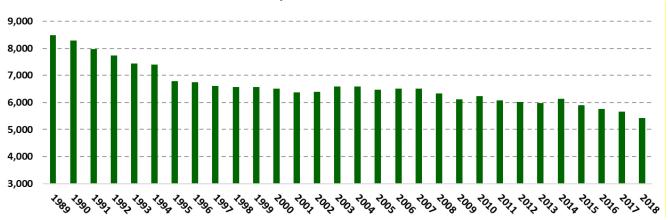
http://edw.vermont.gov/REPORTSERVER/Pages/ReportViewer.aspx?%2fPublic%2fEnrollment+Report



Source: Western Interstate Commission for Higher Education as reported in VTDigger, May 5, 2019.

The number of births in Vermont in 2015 was the lowest since before the Civil War and that number has continued shrinking each year since then. In the late 1980s, there were approximately 8,500 births a year in Vermont, a sharp increase from the 1970s, but starting in the 1990s, births have been declining and we now have closer to 5,500 births each year. That is more than a 25% decline.

State of Vermont Live Births by Year, 1989 to 2018

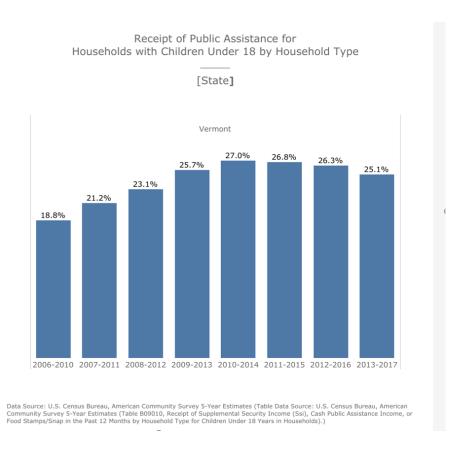


Source: Vermont Agency of Human Services

State of Vermont population projections indicate the number of 15-19 year-olds will decline by 21.8% between 2010 and 2030 and the number of 20-24 year-olds will decline by 19.9%.

The rest of northern New England and the rural Northeast face these same trends. Carleton College Professor Nathan Grawe, in his 2017 book *Demographics and the Demand for Higher Education*, predicts beginning in 2026 that the number of college-aged students in the Northeast and Midwest will drop almost 15 percent in just five years.

In addition to demographic decline, if recent trends continue, it is likely that in the coming years, a higher proportion of Vermont's 18-year-olds will have grown up in households receiving public assistance. The U.S. Census Bureau, American Community Survey 5-year estimates shows the proportion of households with children under 18 receiving public assistance growing from 18.8% in the 2006-2010 estimate to a peak of 27% in the 2010-2014 estimate, and then tapering to only 25.1% for 2013-2017, the most recent estimate available. In addition to the increasing poverty rate, the 2019 Building Bright Futures report notes the percentage of Vermont's children under 9 years old in DCF custody rose from 6.4% in 2012 to 12.9% in 2016.



Bottom line conclusion: As Vermont's access institutions with Vermonters representing over 80% of our student body, with the remainder of our traditional campus-based students primarily coming from New England and mid-Atlantic states, we must adapt to a significantly smaller traditional and potentially higher need student population.

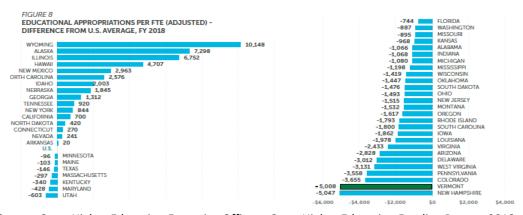
Challenge 2: Bottom-Ranked State Support

Vermont has seriously underfunded public higher education for decades to the detriment of its citizens and economy.

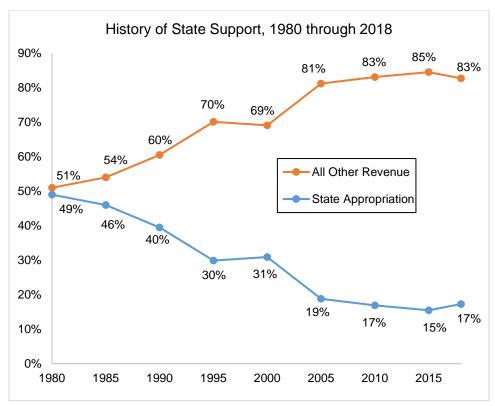
A definitional characteristic of a public college system is state funding, the fundamental purpose of which is to enable lower tuition prices. Even with recent large percentage increases to the System's base appropriation, and strong support from both the Governor and the Legislature, Vermont's State support still ranks at or near the bottom of the 50 U.S. states by any measure. In addition, the System's State funding remains just above half of what similar New England and New York public colleges receive as a percentage of overall revenues, with the exception of New Hampshire. This lack of State support has had, and continues to have, two pronounced effects on the System: very high tuition prices, and inability to invest in academic programming, innovation, and appropriate maintenance of facilities and basic infrastructure to remain competitive with other regional public colleges. Unfortunately, as evidenced by

Vermont's recent bond rating downgrade from Moody's Investors' Service, the State's own poor demographic outlook and increasing pension and retirement benefit liabilities challenge the State's ability to provide consistent, meaningful future increases to the System's base appropriation.

For decades, chancellors, trustees, faculty members, students, and individual legislators have implored Vermont governors and the Legislature to reverse the State's trend of disinvestment in its public higher education system. But inadequate funding has continued, with predictable results: The 1989 Vermont Higher Education Study Commission reported that Vermont ranked 3rd in the nation in spending on higher education as a percentage of personal income. The most recent State Higher Education Executive Officers report (FY 2018) shows Vermont now ranks 49th in the country in state funding per FTE student.



Source: State Higher Education Executive Officers, State Higher Education Funding Report, 2018



Source: VSCS

In Fall 2018, we requested that the State commit to a multi-year plan to increase funding for the VSCS to the average of its New England public college peers, or approximately 30%. This would have required an infusion of \$25 million this coming year to the current base appropriation of \$28 million. Our proposal included transitional \$5 million dollar increases annually until the New England average was reached. This level of funding would not only provide the System with positive operating results, but would support current campus footprints, the ability to innovate, provide appropriate student supports, and ameliorate tuition rates. Although not what we requested, the Governor proposed a \$3 million, 11% increase in State support for FY 2020. The Legislature settled on a \$2.5 million, 9% increase. While this increase is most appreciated and a tangible sign of support from the Governor and Legislature, it does not change the overall dynamics outlined in this paper.

Expectations for further meaningful increases of State financial support must be tempered. Even our most ardent supporters in the State House have warned significant increases in the coming years are unlikely. The General Fund is increasingly stressed to support an array of chronically underfunded programs and services. Available capital dollars for buildings and facilities are actually shrinking. The economy, and expected downturn in state revenues in FY 2021, is likely to increase pressure on the state budget and make appropriation increases more challenging.

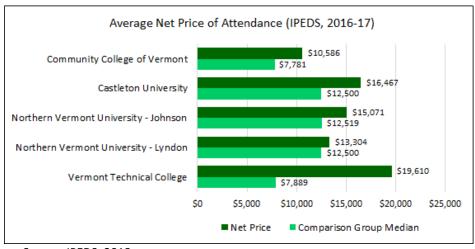
Bottom line conclusion: Despite all our efforts and modest recent successes, pinning the System's future on consistent and meaningful increases in State funding would be imprudent.

Challenge 3: Accelerating Pricing Pressure and New Competitors

Our prices, historically an advantage as public access institutions, are becoming a significant competitive disadvantage in the new era of declining traditional student populations and associated tuition discounting by other institutions. Competing institutions are discounting their higher "sticker prices" to levels that are often less than VSCS published tuition prices and often below our own discounted prices. In addition, new innovative providers are competing hard for non-traditional students.

Weak demographics and very low State support drive a third challenge: the System's high tuition and increasing inability to compete on price. Declining numbers of high school graduates regionally mean that colleges compete more aggressively both to keep their students in-state, and to recruit out-of-state students. In addition to providing higher levels of support for their public colleges, several states, most notably New York and Rhode Island, offer free college programs, resulting in more students staying in their home states. Online education also continues to expand rapidly, providing a low-cost alternative to traditional residential or inperson college programs. The largest online programs, of which Southern New Hampshire University (SNHU) is the most local example, enroll approximately 120,000 students and offer very low tuition prices.

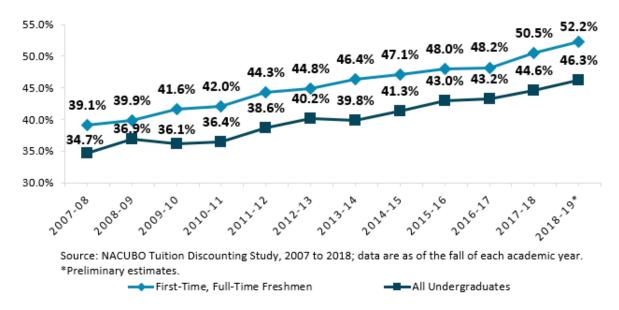
The College Board in 2018 proclaimed that Vermont has the highest tuition for public colleges in the nation, a dubious point of distinction.



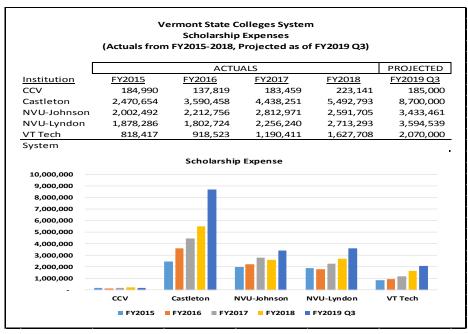
Source: IPEDS, 2018

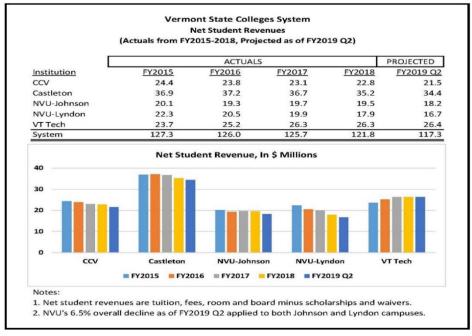
The amount of discounting (scholarship assistance, including non-need based and out-of-state) has escalated very significantly, putting downward pressure on net student revenues.

FIGURE 1: AVERAGE INSTITUTIONAL TUITION DISCOUNT RATE
BY STUDENT CATEGORY



The VSCS used to have a meaningful pricing advantage over private colleges, but the combination of low State support, consistent (if modest) tuition and fee increases, and dramatic price cutting by competitors means it is increasingly common to hear from Vermont families that it is less expensive for their children to go to college out of state, at private or public institutions, than to go to their own public colleges. Out-of-staters are increasingly balking about paying non-resident tuition. Here at home, the University of Vermont is tuition free for all accepted Pell-eligible students.



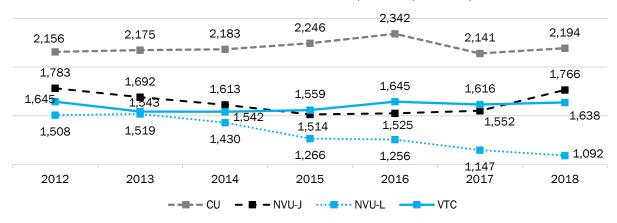


Source: VSCS

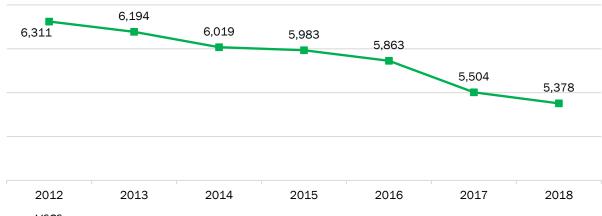
At the same time, the number of institutions serving non-traditional and post-traditional students in different ways and at lower prices has grown. There were 1,000 more degree-granting colleges and universities in 2015 than there were in 1996 (McGee, Breakpoint, 2015). Online enrollment at Southern New Hampshire University grew from 8,600 degree-seeking students in 2008 to more than 122,000 in 2018. Straighterline, a company founded in 2009, offers students a \$99/month course subscription option, with guaranteed credit pathways to

accredited degree programs, and served more than 25,000 students last year. Moody's Investors Service states that this trend of growth and investment in online education will lead to intensified competition and changing key players (Moody's Investor's Service "U.S. higher education outlook remains negative on low tuition growth," December 18.).

Fall Headcount Enrollment - CU, NVU-J, NVU-L, VTC

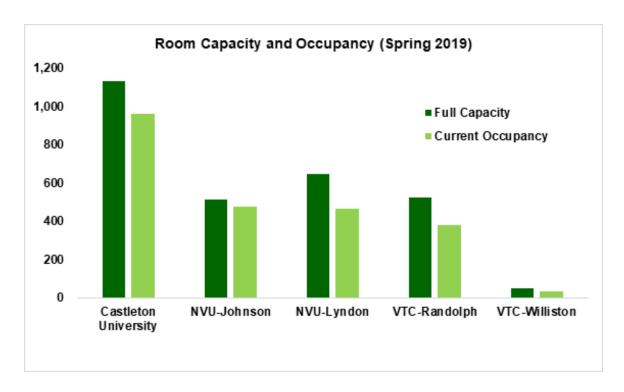


Fall Headcount Enrollment - CCV



Source: VSCS

The 40% of Vermont high school graduates not immediately going on to college and other post-traditional populations do need postsecondary education, but they are less likely to be looking for a four year residential experience. They simply cannot afford it. Bricks and mortar will play a less important role in the future. In the 2018-19 academic year, there were approximately 540 empty beds throughout the Vermont State Colleges System, representing about a 20 percent vacancy rate.



Source: VSCS

Employers are investing in talent development strategies to attract young employees with a job-first pathway to a college degree. A recent <u>Kaplan University Partners-Quest Research</u> study indicates that a major shift is underway whereby a substantial number of students, including many of the most talented, will go straight to work for employers that offer a good job along with a college degree. That study predicts that as many as one-third of all traditional students in the next decade will choose to go to a job to earn their degree, instead of going to college to get a job (<u>Busteed, Forbes, 2019</u>). The recently announced partnership between Global Foundries and Vermont Technical College is one close-to-home example of this evolving model. Global Foundries will hire students right out of high school at \$18-20 per hour and pay for 34 credits of college education delivered by Vermont Technical College.

Bottom line conclusion: The days when our colleges could rely on increasing enrollment, tuition, and fees are over. New technologies and competitors will continue to split up the declining customer base of traditional college students. Increasingly, the delivery of education beyond high school for all learners, inclusive of post-traditional students, will involve bringing education to the people, not bringing people to the institution.

Challenge 4: Barriers to Adaptability

Our campus cultures, mature union contracts, and aging physical infrastructure do not lend themselves to rapid adaptation.

The System's physical and personnel infrastructure is increasingly ill-suited to respond to accelerating pricing pressure and the attendant demands for rapid innovation in response. The System's four institutions own 145 buildings comprising 2.34 million square feet of space on over 1,350 acres of land, and the average building is almost 50 years old. The buildings and land are also concentrated on five major campuses in mostly rural parts of Vermont, making piecemeal property sales difficult. VSCS employees are organized into six labor unions, in addition to non-union employees. Almost any initiative or change that affects "working conditions" broadly defined is subject to collective bargaining by State statute.

Across the country as well as within our System, there is much discussion of innovation. We must continue the hard, incremental work we already know how to do: innovation in our teaching practices, innovation in design and delivery of our degree programs, innovation in the ways we engage, advise, and support our students.

However, the trends are clear that incremental improvement will not be sufficient. To fulfill our mission, we must be able to develop, deliver, and validate postsecondary education in units, timeframes, and locations not currently aligned with our academic cycles, processes, or infrastructure. We must achieve significant flexibility and integration with external partnership networks and not just across academic divisions within our individual institutions or System. We must serve student populations we are not yet, or not yet robustly, serving, and whom we may not yet know how to serve well, and we must do so with rapidly evolving technology.

Our ability to maintain and improve our physical infrastructure is questionable and our risks of systems failures are increasing. The total system-wide deferred maintenance level for the last several years has hovered at approximately \$55 million. Our major campuses are aging, all about the same vintage, and our fundraising and borrowing capacity to renovate or replace infrastructure is very limited. At some point it is likely that we will have multiple major – and potentially concurrent -- infrastructure (boilers, HVAC, etc.) failures. The conditions at some of our residential campuses is already a negative factor for student recruitment.

Campus	Year Founded	Campus Acres	No. of Buildings	Square Footage	Deferred Maintenance
Castleton University	1787	165.0	31	676,904	\$11,944,950
Spartan Arena	1707	1.0	1	42,256	Ψ11,044,000
Vermont Technical College					10,463,022
Randolph Center	1866	75.0	30	439,256	, ,
VTC Farmstead		525.0	6	30,403	
Williston		12.0	7	66,000	
NVU- Lyndon	1911	200.0	27	496,010	8,972,147
NVU- Johnson	1828	380.0	39	440,079	22,376,600
Community College of Vermont	1970				450,000
CCV St. Albans		2.5	1	9.900	,
CCV Upper Valley		2.0	1	15,000	
CCV Montpelier		8.3	1	34,000	
CCV Winooski		1.5	1	65,000	
Totals		1,372.3	145	2,314,808	\$54,206,719

Source: VSCS

Bottom line conclusion: The future of the VSCS requires overcoming barriers that impede a significant degree of institutional adaptation in a short timeframe.

Challenge 5: Changing Student Attitudes and Preferences

The value and return on investment for a college degree is being questioned, resulting in significantly different enrollment patterns.

A number of generational changes are impacting the higher education industry, including students and parents questioning the value of college and wishing to avoid student loans, employers providing training and increasingly not requiring a college degree, and a preference among younger people for urban or suburban locations.

"Confidence in higher education in the US has decreased significantly since 2015, more than any other U.S. institution that Gallup measures." (Marken, "A crisis of confidence in higher education," Gallup 2019).

One third of Americans no longer believe a four-year degree prepares graduates to succeed in a job (<u>Pew Research Center, 2017, The State of American Jobs</u>). Increasingly, companies are rethinking whether a degree is mandatory in the employee selection process. Many large companies in the tech sector are no longer requiring applicants to have a college degree.

Members of Generation Z have observed the massive amounts of student debt accumulated by the generations before them–particularly by Millennials, who will find themselves struggling to pay off their student loans for many years to come. As a result, members of Generation Z are carefully evaluating whether or not a traditional college path is really for them–and in many cases, college isn't making the cut. (<u>Busteed, Forbes, 2019/Chronicle of Higher Education, 2018)</u>.

The "College for All" mantra that for decades has dominated the advice from guidance counselors to politicians is increasingly being called into question. Evidence suggests that in recent decades too many Vermont high school graduates have been encouraged to enroll in four year programs. 2018 Data from the Vermont Student Assistance Corporation indicates that while Vermont is below the New England and National averages when it comes to our high school graduates continuing on to college, when it comes to the percentage going onto four year schools, Vermont significantly outpaces New England and the nation (VT 53%, NE 47%, nation 37%) and, at the same time sends a much, much smaller, percentage of high school students on to two year institutions (VT 7%, NE 15%, nation 29%).

At best, only half of the students who start at our four year residential colleges ever actually graduate, a stubborn fact that despite our efforts, contributes to student and public doubt about the value of a degree.

Six Year Graduation Rate of Full-Time First Time Cohort, Fall 2011-18

	2011	2012	2013	2014	2015	2016	2017	2018
CU	50%	41%	51%	49%	52%	48%	54%	55%
NVU – J		33%	33%	37%	36%	35%	35%	29%
								39%
NVU – L	33%	31%	35%	37%	37%	38%	43%	
VTC	47%	50%	48%	55%	48%	48%	52%	51%

Higher education should be about more than getting a job. It is a societal good. But our customers are speaking. They have more and more accessible choices to pursue education beyond high school. Further, forward thinking employers are able to instill in their employees elements such as critical thinking, collaborative skills, and cultural understanding as well (Busteed, Forbes, 2019), which have, up to now, been the traditional responsibility of higher education.

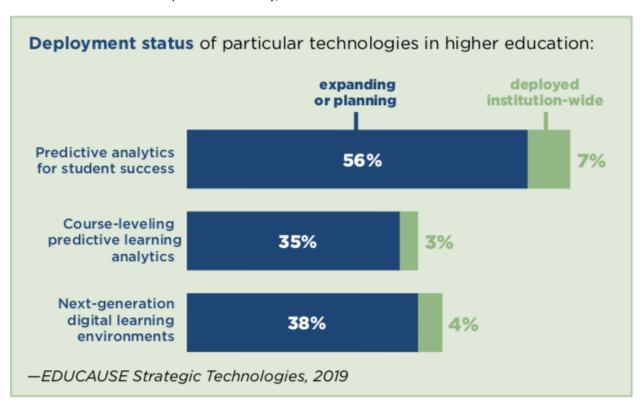
There are many good paying jobs that do not require a four-year degree (<u>Georgetown Center for Education and Workforce, 2017</u>; <u>McClure Foundation, Pathways to Promising Careers</u>). As more apprenticeships and professional certificates leading to good paying jobs are developed, it seems reasonable to assume that students who in the past would have gone to a four-year college will chose an alternative route. Certainly, the majority of the 40% of high school students not going onto college do need some type of education post high school, but it is likely most of them will not pursue a traditional four-year program.

Bottom line conclusion: To maintain our mission for the benefit of Vermont and good service to our students, we must provide education in a variety of credentialed segments students can successfully complete at relevant moments over a lifetime of learning.

Challenge 6: Pace of Technological Change and Disruption

From data analytics and artificial intelligence tools to increasingly sophisticated virtual reality interfaces, the pace and scope of technological change is or will soon be disrupting entire industries, including higher education. The challenges for us are twofold: we risk near-obsolescence if we do not keep pace with our higher education competitors and, at the same time, the costs of doing so will exacerbate an already growing divide between "have" and "have not" institutions.

As during the Industrial Revolution, those enterprises which did not or could not adapt and deploy such technologies as steam engines and telegraph communication were soon eclipsed by those that did, albeit in a timeframe that spanned a century, not a decade or less.

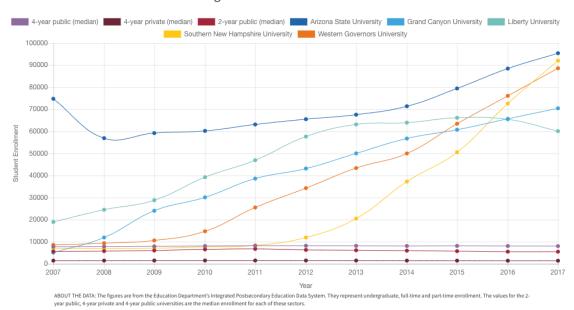


We are fortunate to be able to leverage our system structure to implement high-quality technologies, including in just the past few years our Slate CRM platform for admissions, identity management, Zoom videoconferencing, Canvas learning management system, and in the coming year, a predictive analytics advising platform. However, all of these tools require us to improve our own skills and practices to

make best use of them. A failure to do so would result in our competitors seeing more robust admissions and retention rates than ours.

Indeed, as the <u>Chronicle of Higher Education reported in February, 2019</u> on the rise of the megauniversity, non-profit institutions including Southern New Hampshire University, Western Governors University, and Arizona State University have rapidly grown their online education programs (these three institutions alone currently serve nearly 300,000 students and are planning further significant growth) and now have the power of scale to further innovate in ways that will continue to lower cost, increase flexibility, and achieve outcomes equal or better than those of traditional face-to-face institutions.

12-month Undergraduate Enrollment at Various Universities

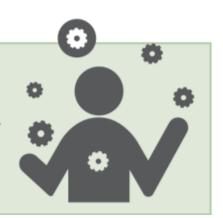


Infographic Source: The Rise of the Mega-University. Chronicle of Higher Education, February 18, 2019.

Outside of higher education, many of these same core information technologies, together with their industrial applications, are transforming the work environments our graduates will enter. Additive manufacturing, blockchain technology, virtual reality, and artificial intelligence applications in everything from cancer diagnosis to legal services and cybersecurity will define the work available to, and the entry-level skills required of, our graduates. It is imperative we find ways to introduce our students to these technologies as part of their undergraduate learning, but the resources we have to outfit our institutions with such technologies are virtually nil.

66% of students agree or strongly agree that the **technological skills** they develop in their courses now will adequately prepare them for their careers.

-2018 Student Study



(Source: Educause Horizon Report: 2019 Higher Education Edition)

Bottom line conclusion: Adoption and deployment of new technologies is an essential ingredient to our future and we must place a priority on these investments, both in terms of budgets and in full adoption by faculty, staff, and students.

The System's Response to These Challenges

In 2015, the Board of Trustees adopted Six Priorities to support the mission of the Vermont State Colleges System. Much has been accomplished in the past several years.

Strategy 1: Increase the continuation rate of high school students on to postsecondary education.

The VSCS spearheaded the creation of Advance Vermont, a statewide partnership of leaders from business, education, government, non-profits, and philanthropy with a unified goal to increase educational attainment in Vermont for the benefit of our citizens, communities and economy. This past year, VSCS mathematics faculty have worked in partnership with VSAC and the Agency of Education to develop EMC², a college math readiness course that will be piloted in three high schools this fall. All VSCS institutions now provide dual enrollment and early college opportunities, which national evidence shows to be effective in increasing college-going among underrepresented student populations. Our system emphasizes access to these opportunities, particularly for first-generation and low-income students.

Strategy 2: Improve the retention and graduation rates at our colleges.

In September 2017 the Chancellor and Board endorsed *Start to Finish*, an initiative to align and advance efforts across the system to increase academic success and retention in the first year, on-time completion of a VSCS degree or other credential of value, and progression within the System to further learning. Among these efforts, the System has focused the 2018 and

2019 academic retreats on national best practices for increasing student success and momentum. In 2018, the Council of Presidents approved a project to implement a new generation of digital tools and predictive analytics to achieve gains in student retention. For Fall 2019 we are implementing Canvas, a user-friendly learning management system, and in 2020 we will be implementing a new advising platform that leverages real-time data on students' assignment grades from Canvas.

Strategy 3: Be recognized as an attractive destination for Vermont high school graduates.

Visibility and marketing efforts by the colleges and Chancellor's Office have been ramped up. In 2018, the system implemented a new statewide jobs and internships posting site to increase visibility of VSCS students to employers and vice versa. Advocacy among statewide opinion leaders and legislators continues via our fourth annual Hall of Fame and second annual Student Research Symposium events.

Strategy 4: Serve well more working age Vermonters.

The System is currently recognized as a go-to partner for statewide workforce development efforts, including Talent Pipeline Management, career and technical education connections, and healthcare workforce. State and national funders are supporting VSCS faculty innovation of competency-based pathways designed to recognize and accelerate learning pathways. Our colleges are innovating with new degree and professional certificate programs, and expanding the use of online and telepresence modalities of instruction. We are experimenting with scheduling the delivery of programs and courses in condensed seven week semesters.

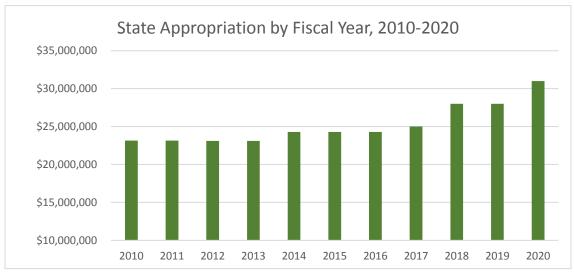
Strategy 5: Operate as a more integrated system to expand student opportunities and achieve operational efficiencies.

Operational integration has occurred with such significant accomplishments as the unification of Northern Vermont University; strengthened IT governance and implementation of single, hosted solutions such as identity management; consolidation of accounting, accounts payable, and grants compliance functions; and the current payroll and benefits (*UltiPro*) software implementation. These steps are providing more academic and co-curricular opportunities for students, higher-quality technologies, and savings from our non-student-facing operations that allow us to reinvest precious resources elsewhere.

Strategy 6: Increase state financial support and other supplemental revenues.

While our appropriations history illustrates nearly stagnant State support, and our state funding rank remains at 49th or 50th annually (SHEEO), the State has increased our base appropriation by 25% between FY16 through FY20. This is due to the support of key legislative leaders who represent our colleges' districts, especially Caledonia and Rutland. The support of the current Governor has also been essential to the success of recent funding increases. The VSCS has

changed the narrative in the State House about the connection between our colleges and the future workforce, the college continuation rate, and out-migration.



Source: VSCS

Unfortunately, recent appropriation increases have not gone far enough to support our annual cost increases, or to make up for decades of underfunding. As a result, we continue to squeeze operating budgets and reduce personnel. There are over 200 fewer people working for the VSCS than five years ago. Salaries and benefits declined from \$125.3 million in FY 2014 to \$121.9 million in FY 2018.

Bottom line imperative: While the steps we have taken towards our strategic priorities are significant and have been helpful, they are not yet enough to ensure the viability and "thriveability" of VSCS member institutions as a whole.

With a clear view of the complexities, continued rigorous focus on our strategic priorities, and wise leveraging of our key strengths, we can, and will, secure our future and our mission. But we must act.

What's Next?

The Board of Trustees Long Range Planning Committee and Chancellor will seek input on and will refine this document in the coming weeks, as it also seeks input on potential strategic and responsive actions. Next steps will include sharing this document with VSCS constituencies and engaging in constructive dialogue, with the goal of refining the document and, more importantly, elevating our collective understanding of the inexorable forces upon us. The VSCS community at large, Long Range Planning Committee, and Trustees will identify, consider, and act on a range of specific actions to ensure the Vermont State Colleges System will be strong

and secure in its ability to serve Vermont students for the benefit of Vermont for decades to come.

To get the conversation started, the Chancellor poses the following questions:

- 1. What forces and trends are missing in this white paper? What do you agree with? What seems off the mark?
- 2. How can we transform our operations as a responsive, relevant, and thriving system of unique and dynamic institutions without significant new resources?
- 3. How do we transform our operations to reduce the cost of delivery across the system to support the VSCS's long-term sustainability, ability to innovate, and for greater affordability for students?
- 4. How will we align our physical infrastructure to ensure vibrant student living and learning experiences within limited resources?
- 5. How can we transform our approach to programs and delivery models that support quicker degree and credential completion?
- 6. How can we prioritize our efforts to focus more on pathways into programs that align with Vermont's high-wage, high-growth occupations?
- 7. What new strategic alliances among our colleges would support a transformation of student access, expanded opportunities, and financial sustainability?
- 8. How do we operate as a more strategic partner with statewide entities and networks?