

Trends in Higher Education Sustainability

Presented by:

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NEBHE's Mission

To promote greater education opportunities and services for the residents of New England and its more than 230 colleges and universities.

It works across the six New England states to:

- Help leaders develop and implement sound education practices and policies of regional significance
- Promote regional cooperation and programs to encourage the efficient use of educational resources and better outcomes for institutions and students
- Strengthen the relationship between higher education and the economic well-being and quality of life in New England

NEBHE's Roles

Leadership Convener

NEBHE engages governors and education advisors; legislators; Pre-K-12 and higher education commissioners; public and independent college and university presidents; and business and industry leaders. We create the critical multi-state and cross-sector conversations that lead to change, collaboration and innovation.

Collaboration Platform and Facilitator

NEBHE executes multi-sector projects and programs to maximize resource efficiency, promote innovation, support policy adoption and forge cross-state alignment and integration. We have extensive experience in program development, management and evaluation.

Capacity Builder and Innovation Accelerator

NEBHE provides professional development and training to key leaders in education, government and business. We launch innovative pilot projects to promote the adoption of new education models across the region's diverse institutions and stakeholder organizations.

Consultant and Advisor

NEBHE conducts policy research, analysis, technical assistance and advising on state and institutional policy and program issues. It has a reputation for providing neutral, unbiased appraisals of key issues and topics of the day.

Savings and Revenue Generation

NEBHE programs save students and families money and generate significant revenue for colleges and universities. Our collaborative programs eliminate barriers, lower start-up costs, reduce duplication, increase efficiency and promote equity.



Tuition Break

- Strategic enrollment management tool for out-of-state/in-region recruitment
- All Vermont public institutions participate, generating \$10.9 million in tuition and fee revenue
- Saves nearly 500 Vermont residents \$2.9 million in discounted tuition (\$7,200 on average)



State Authorization Reciprocity (SARA)

- Enables more efficient provision of distance education to a broader market
- Establishes state-level reciprocity, eliminating the patchwork of authorization issues in offering distance education programs and experiences across state lines
- 12 participating Vermont postsecondary institutions, including all public institutions



COVID-19 Updates, Policy Resources and Other NEBHE News Sources

- Interactive information displays on institutional status, enrollment plans, refunds, other at nebhe.org
- Weekly COVID-19 newsletter
- New England Journal of Higher Education, weekly news digest and updates
- Analysis of federal legislation related to pandemic
- Subscribe at nebhe.org/subscribe

Regional Higher Education Action Group

- Regional collaboration to address COVID-related challenges
- System and institution leaders; leaders of independent higher education institution associations; public health officials; and regional postsecondary accreditation leaders
- Federal advocacy
- Back to Campus Collaborative (B2CC): assisting systems and institutions with re-opening plans and strategies

Survey of Adult Learners in New England with Maguire Associates

- Primary research survey of 2,500 adults across New England states
- Focus on adult learners' perceptions, plans, decision drivers, barriers and enablers
- Expected release in early June 2020

NEBHE's Vermont Representatives

NEBHE Board Delegates

Suresh Garimella

University of Vermont

Senator Andrew Perchlik

Vermont General Assembly

Michael Wool

Langrock, Sperry & Wool, LLP

Representative Kathleen James

Vermont General Assembly

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Rep. Peter Conlon

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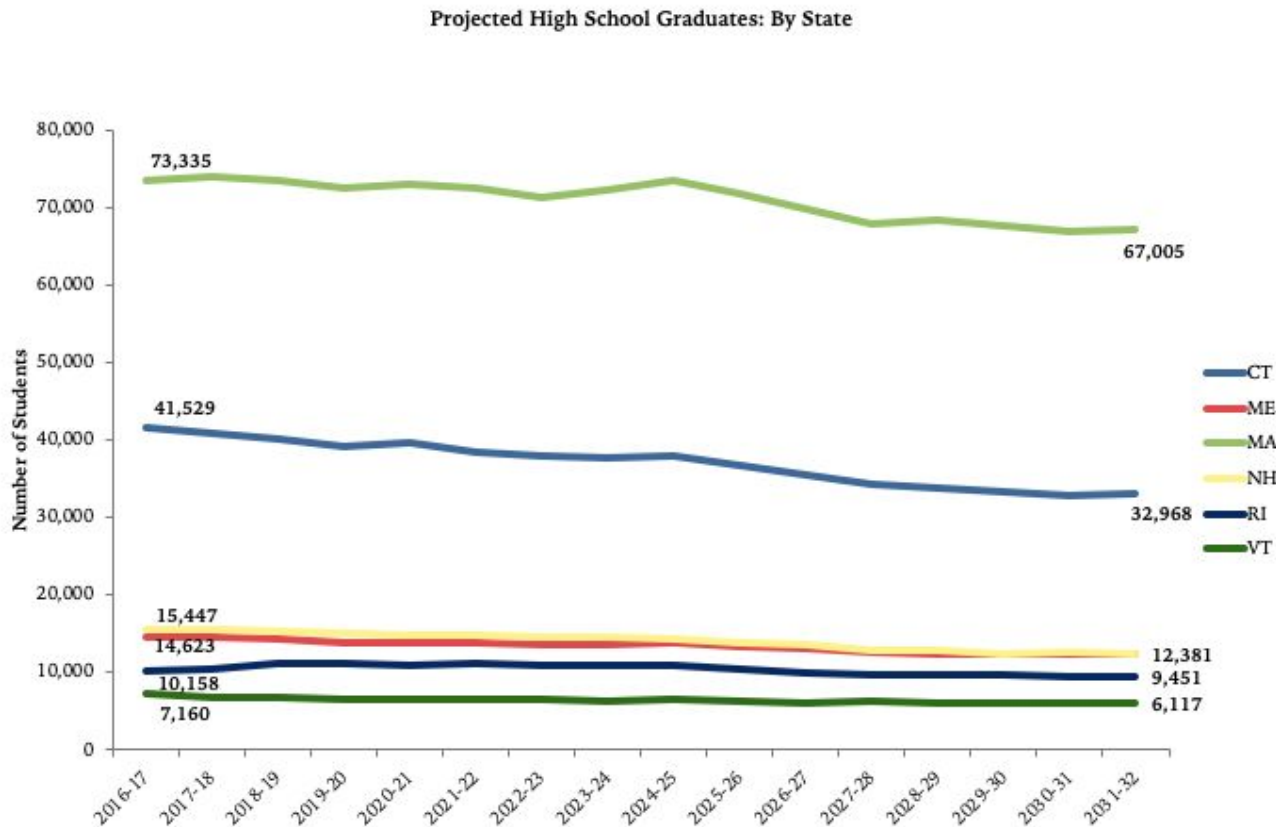
Senate Education Committee

Demographic Headwinds

The Pipeline of College Students Narrows

Due to declining birth rates:

- The numbers of high school graduates are falling (-14%)
- Enrollment in colleges is dropping (est. -25%)
- The New England states are, on average, getting older



Source: NEBHE analysis of WICHE's *Knocking at the College Door*, 2016

State Support for Higher Education

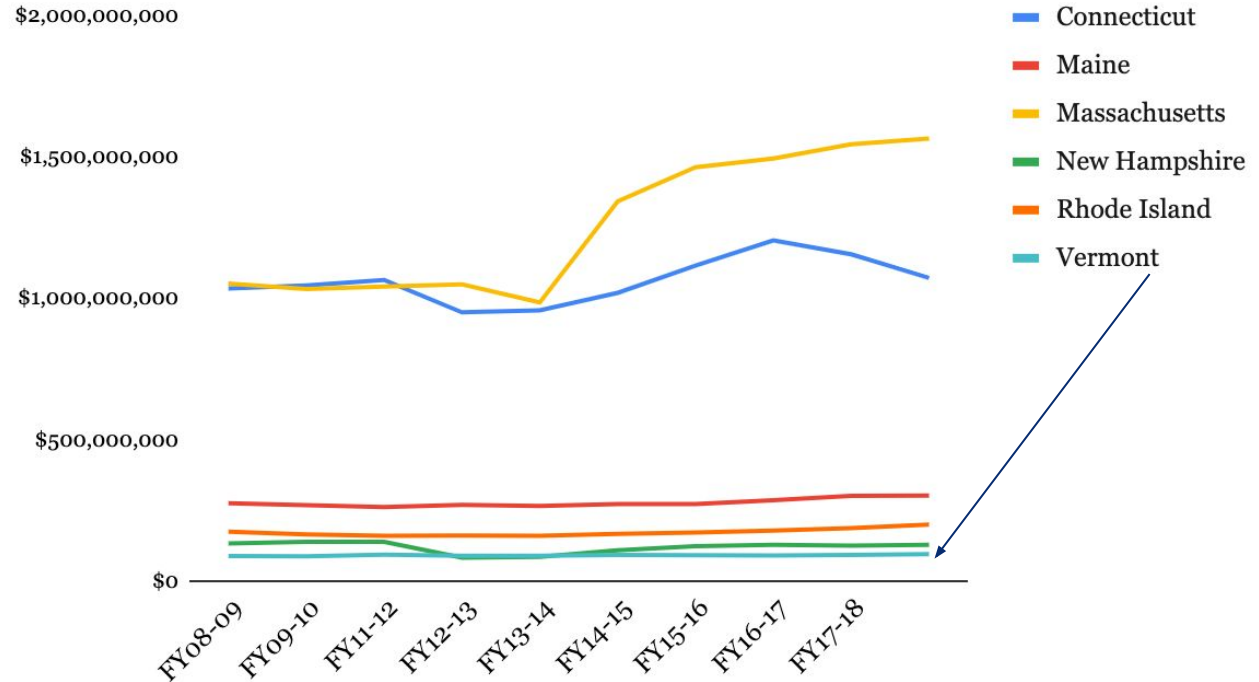


Total State Support for Higher Education

Many states have been unable to return state support for higher education to pre-Great Recession levels.

- While VT's appropriations have increased 8.3% -- accounting for inflation, this increase is negligible
- As a share of the total VT state budget, higher ed is 2.5%

State Higher Education Appropriations

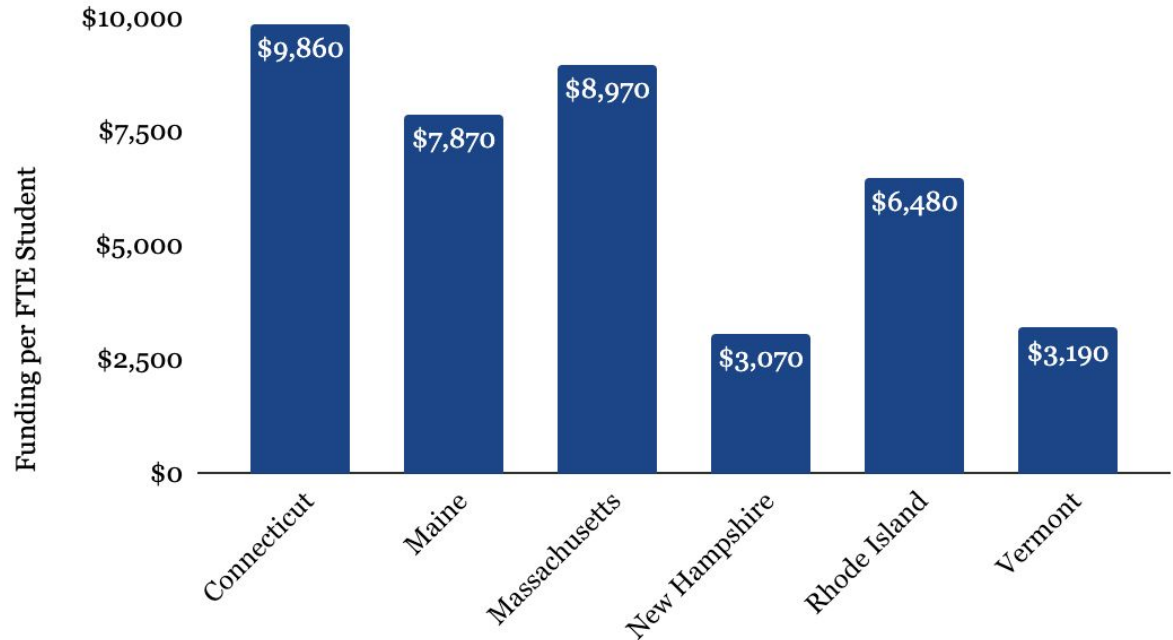


Source: NASSGAP Annual Survey Report on State-Sponsored Student Financial Aid, 2007-08 to 2017-18.

State Higher Education Funding per FTE Student

- NH and VT have the lowest state funding per FTE student in the US
- The states with the highest higher education funding per FTE are Alaska (\$17,700) and Hawai'i (\$16,940)
- The mean state higher education funding per FTE is \$7,600

State and Local Higher Ed Funding per FTE Student (2019)

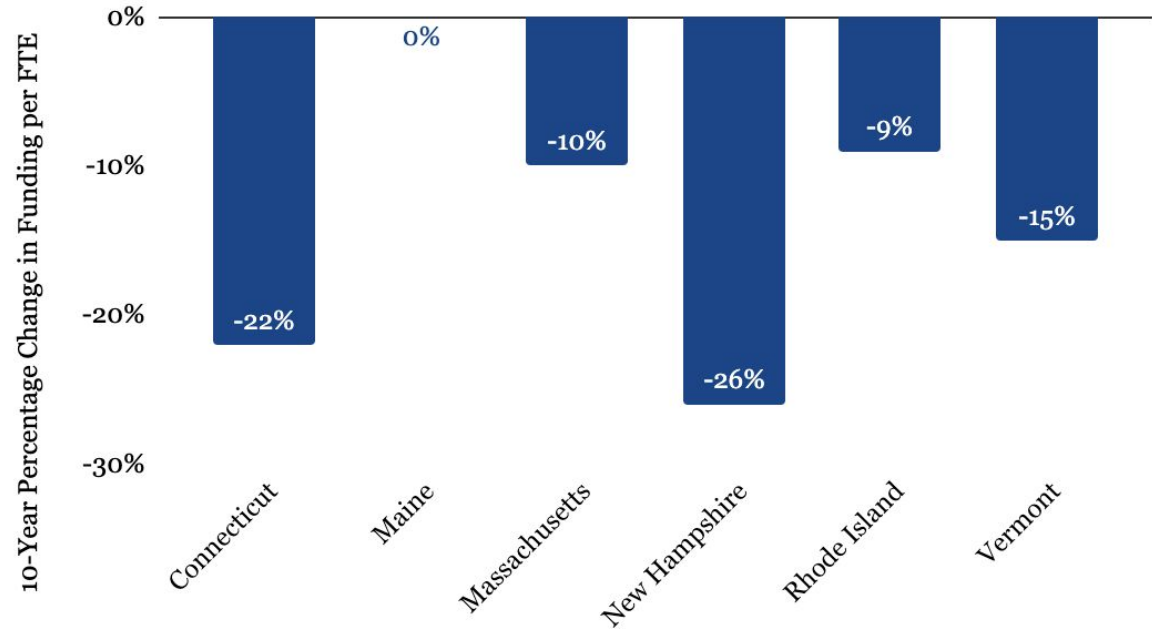


Source: NASSGAP Annual Survey Report on State-Sponsored Student Financial Aid, 2007-08 to 2017-18.

10-Year Percentage Change in Funding Per FTE Student

- New England states have struggled to increase state higher education funding per FTE student since the Great Recession
- Only 9 states have increased state higher education funding per FTE student over the last 10 years

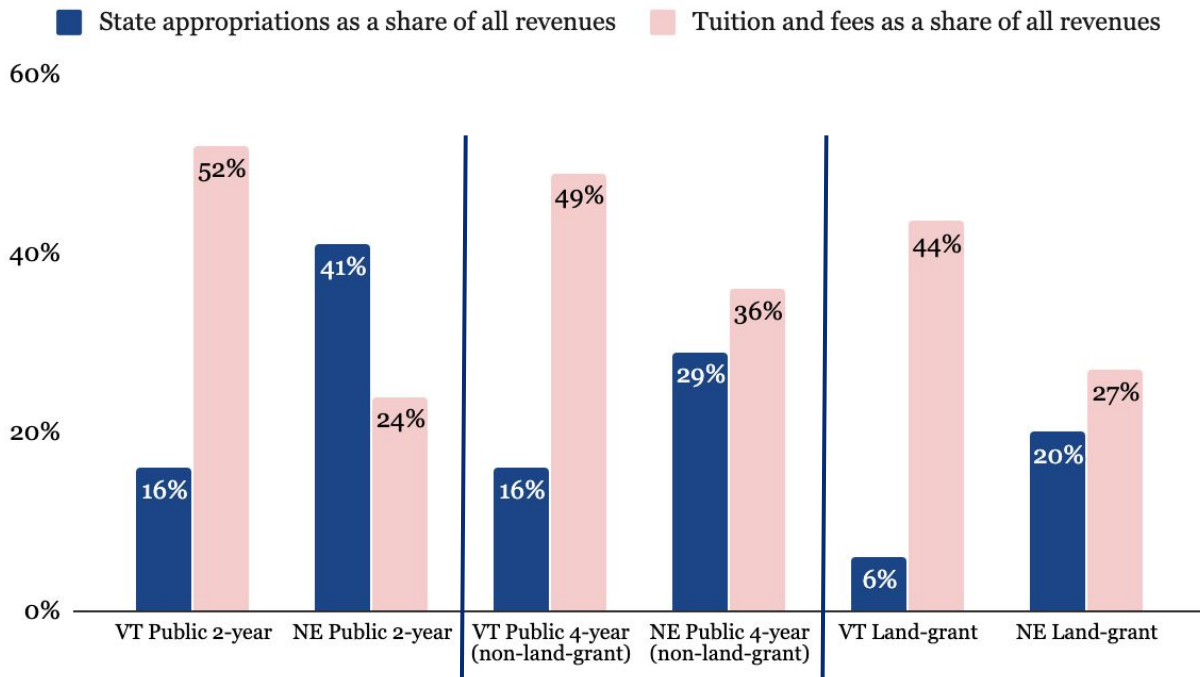
10-Year Percentage Change in Funding per FTE (2009-2019)



State Appropriations & Tuition Revenue by Sector

- With little state support, VT's higher education institutions rely heavily on tuition and fee revenue
- Roughly 45% of VT's public institutions' revenue comes in the form of T&F, compared to T&F making up roughly 30% of the region's public colleges' revenues

Public Institution State Appropriations and Tuition & Fees Revenue by Sector (2018)



Source: NEBHE analysis of National Center for Education Statistics IPEDS data

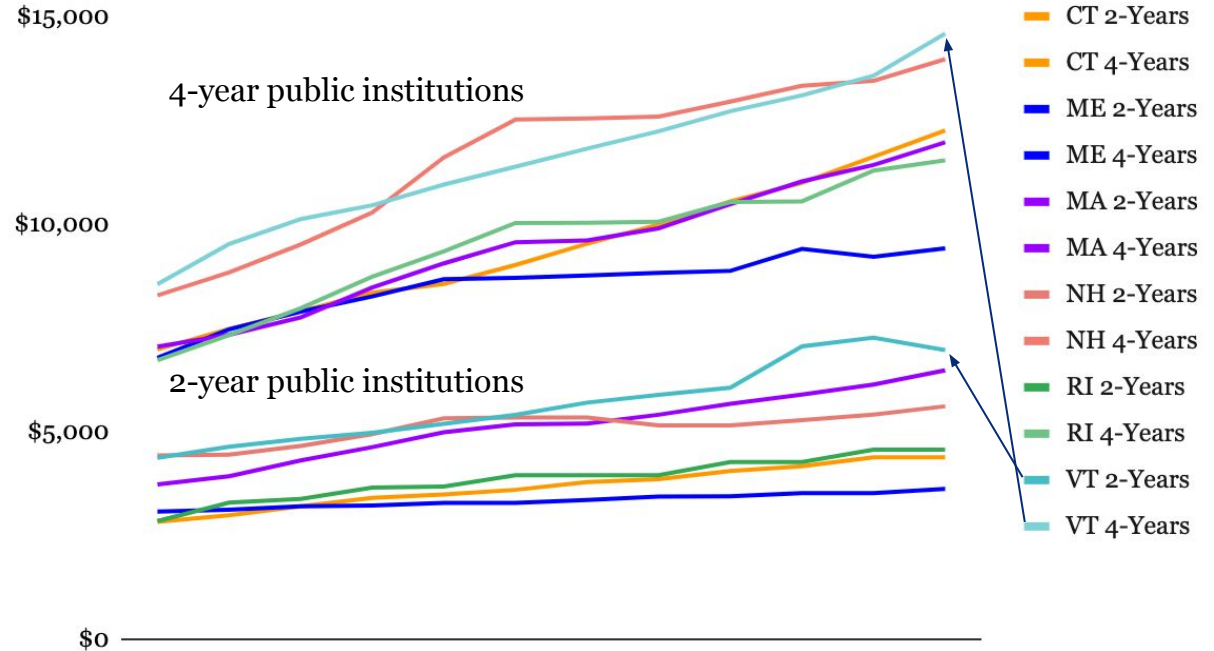
New England: A High-tuition & Low-aid Region



Public Institution Annual In-State Tuition & Fees

- Both VT's 2-year and 4-year public colleges have the highest T&F rates in New England
- In-state T&F at CCV have dropped 4% from 2017-18 to 2018-19
- Overall, VT's in-state T&F rates have increased 23% since 2013-14

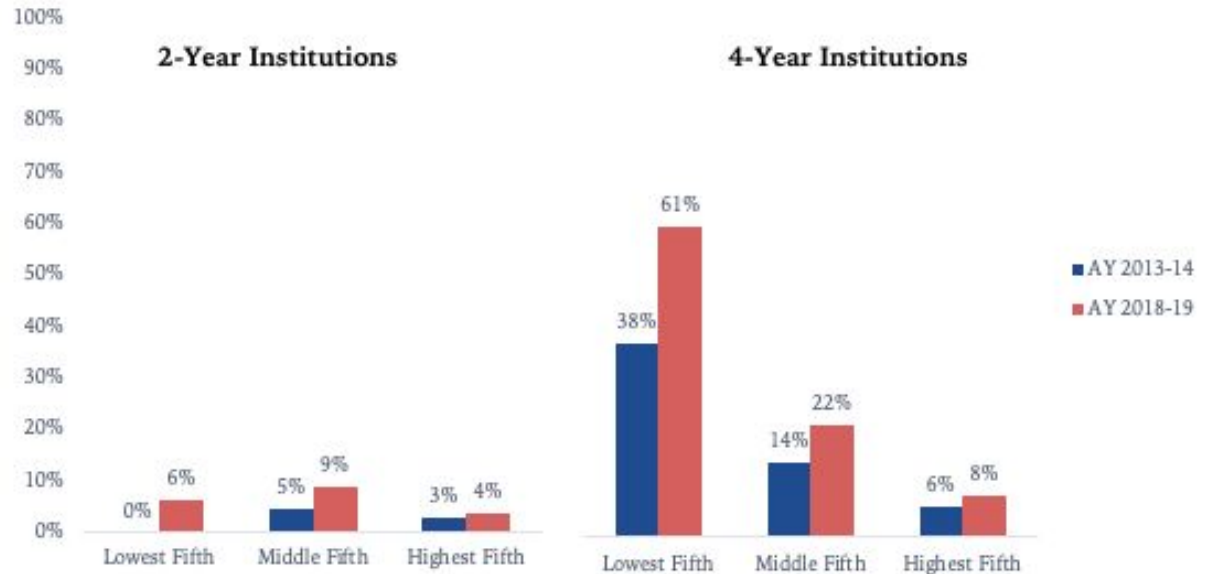
Public Institution Annual Tuition & Fees (AY 2007-AY2018)



Share of Income Needed to Pay Tuition & Fees After Pell

- High T&F rates create obstacles for individuals in VT to enroll in and complete bachelor's degrees, especially
- To afford one year of college, after the Pell Grant, the poorest VT residents are expected to pay 20 percentage points more of their incomes than their peers across the region

Share of Income Needed to Pay Average Tuition and Required Fees by Income Quintile After Maximum Pell Grant in Vermont



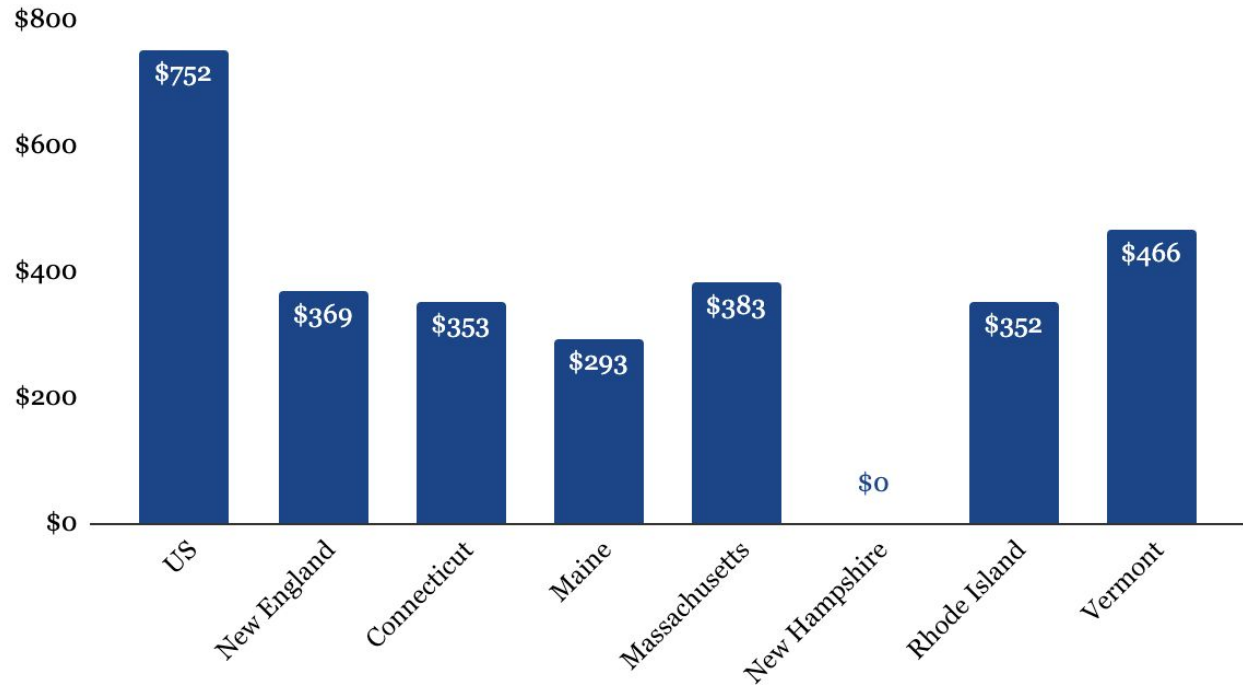
Source: NEBHE analysis of data from state system offices and institutions, U.S. Census Bureau, U.S. Department of Education

Note: Tuition and fees are average published rates for in-state students. Averages are not enrollment-weighted and dollar values are not adjusted for inflation. Median value for each quintile (fifth) of income used for calculation.

Public Student Aid per FTE

- VT provides the highest amount of per student in financial aid in New England
- The national average amount of public student aid is \$752 per FTE, and has increased 30% since 2008
- However, since 2008, VT has seen the largest decline in this figure (-11%)

Public Student Aid Per FTE (2018)

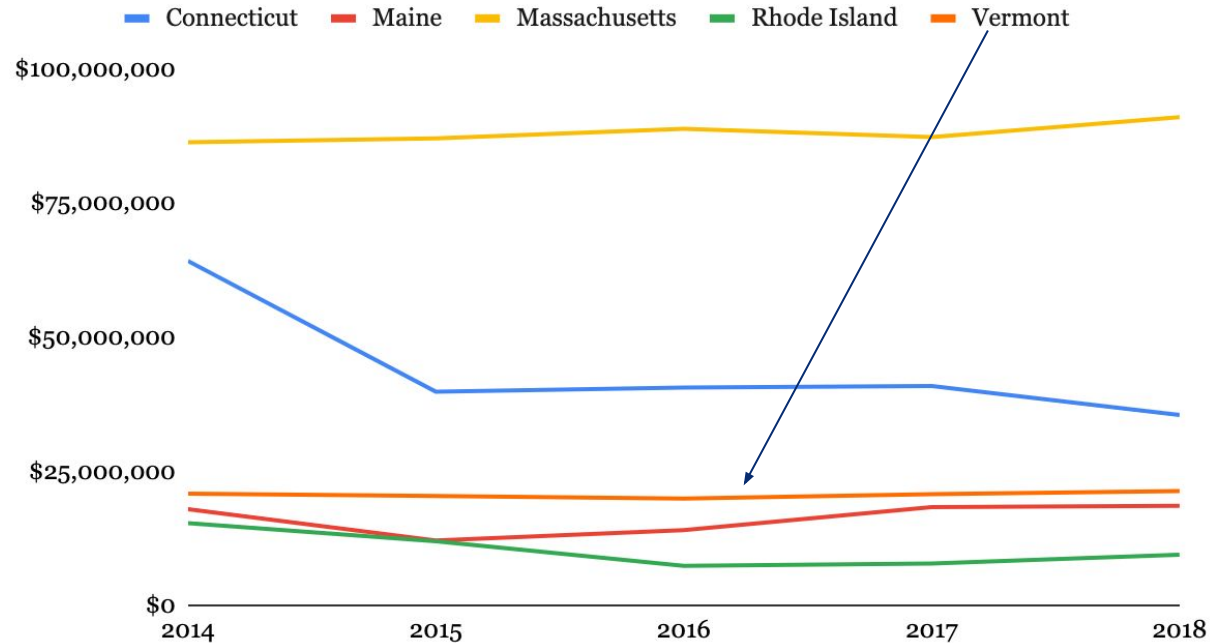


Source: NEBHE analysis of NASSGAP Annual Survey

Need-based Grants

- Most public financial aid in New England is disbursed based on need
- Only MA has increased funding for need-based grants since 2008
- VT is an exception in New England for its portable needs-based grant program
 - 25% of need-based grant monies support students who leave VT for college

Total State Need-Based Grant Allocations (2014-2018)



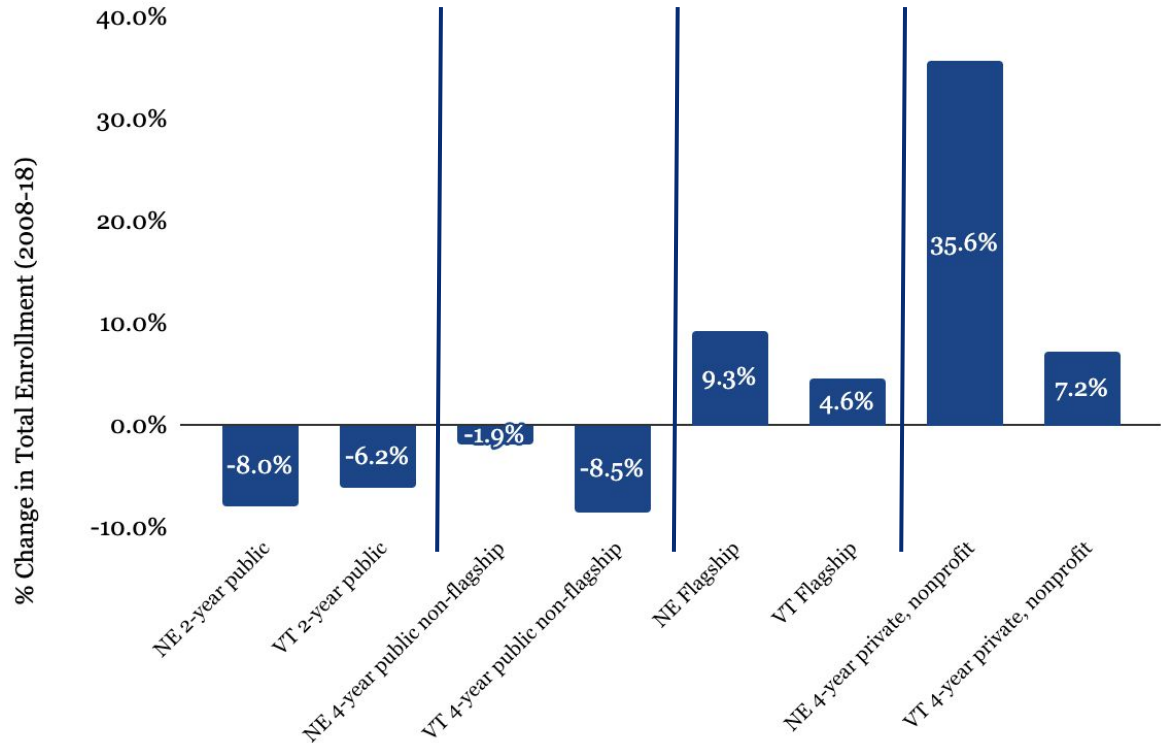
Source: NEBHE analysis of NASSGAP Annual Survey

Patterns in Enrollment

10-year Change in Enrollment

- The sector that appears to be most impacted by these factors, in terms of enrollment declines, is VT's 4-year regional public institutions
- CCV's decline is more muted than the regional average but follows counter cyclical trends experienced by community colleges

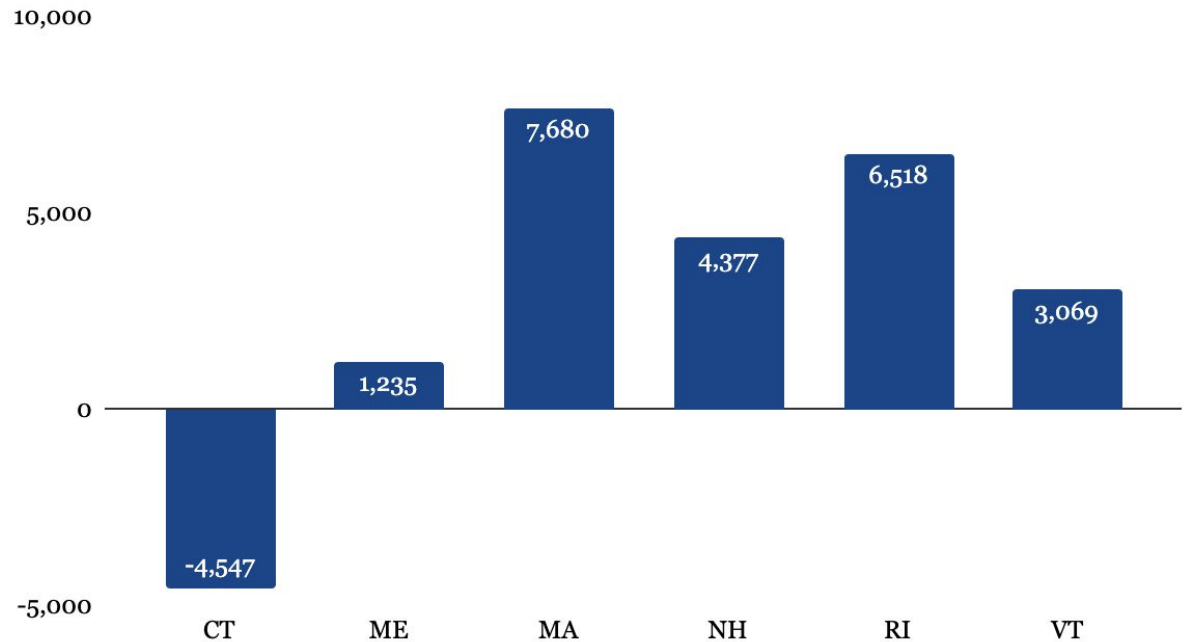
% Change in Total Enrollment (2008-18)



Migration of First-time Freshmen

- VT is a net importer of first-time freshmen, attracting more freshmen from out-of-state than exports
- This data includes 4-year independent colleges

Net Migration of First-time Freshmen Undergraduates (2017)

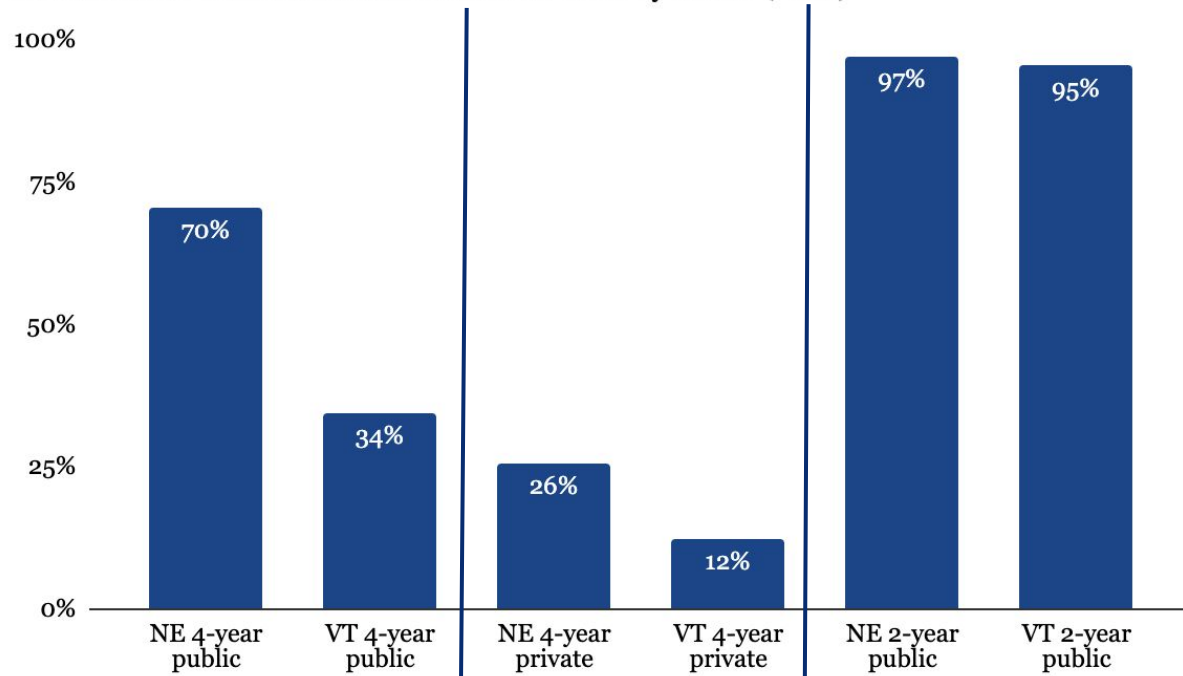


Source: NEBHE analysis of National Center for Education Statistics IPEDS data

In-State Enrollment

- Nonetheless, VT residents make up a smaller share of the freshmen classes at 4-year institutions than in-state students in other New England states do

Share of First-time Freshmen Enrolled In-State by Sector (2018)

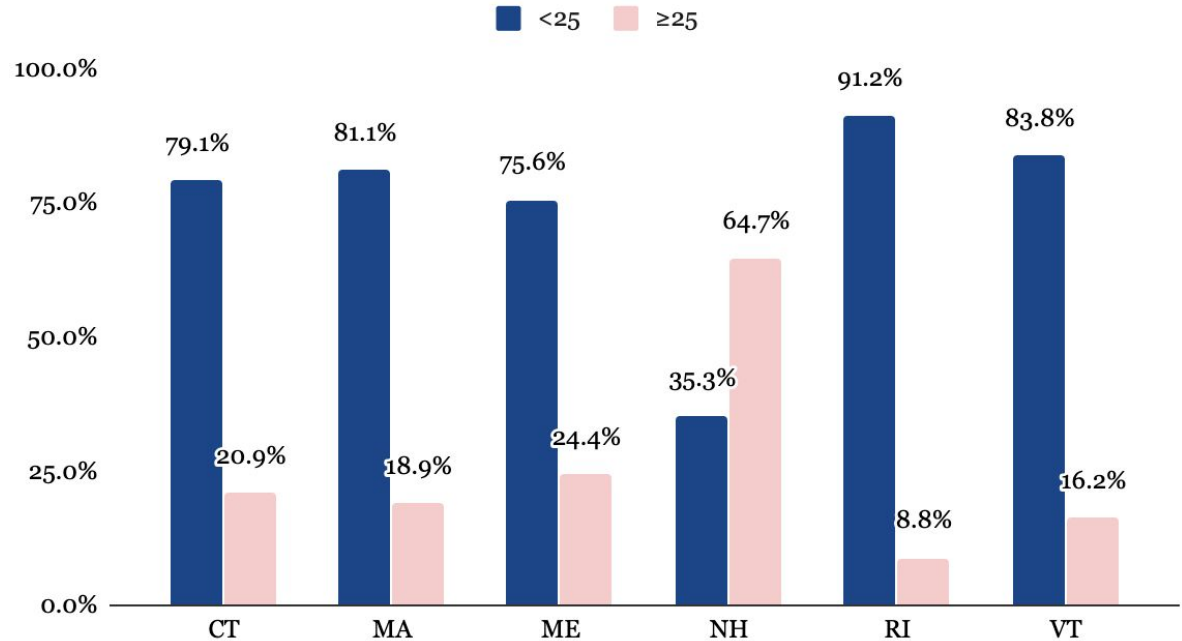


Source: NEBHE analysis of National Center for Education Statistics IPEDS data

Enrollment of Adult Learners

- RI and VT have the smallest share of adults enrolled in undergraduate programs
- However, CCV enrolls the highest share of adults compared to the region's community colleges
- Meanwhile, VT's 4-year public institutions enroll the smallest share of adults compared to the region

Share of Undergraduates Enrolled by Age Group (2018)



Completion & Attainment of Demand-Driven Credentials

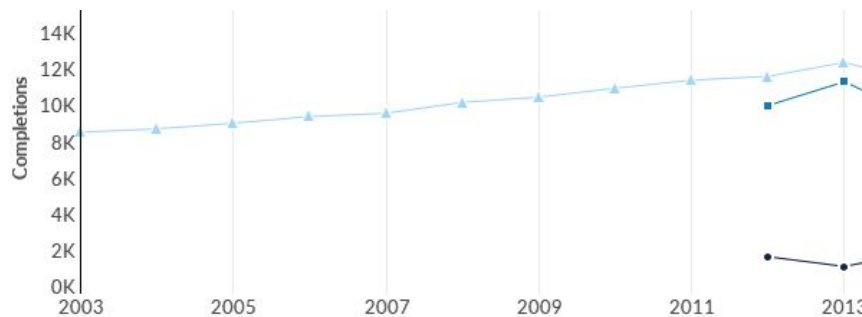


2018 Higher Education Completions in VT

- The top institutions at which students are completing credentials are:
 - UVM
 - Champlain College
 - Norwich University
- Completion of distance education programs has more than doubled since 2012



	Completions (2018)	% Completions	Institutions (2018)	% Institutions
All Programs	12,079	100%	24	100%
Distance Offered Programs	3,422	28%	10	42%
Non-Distance Offered Programs	8,657	72%	24	100%



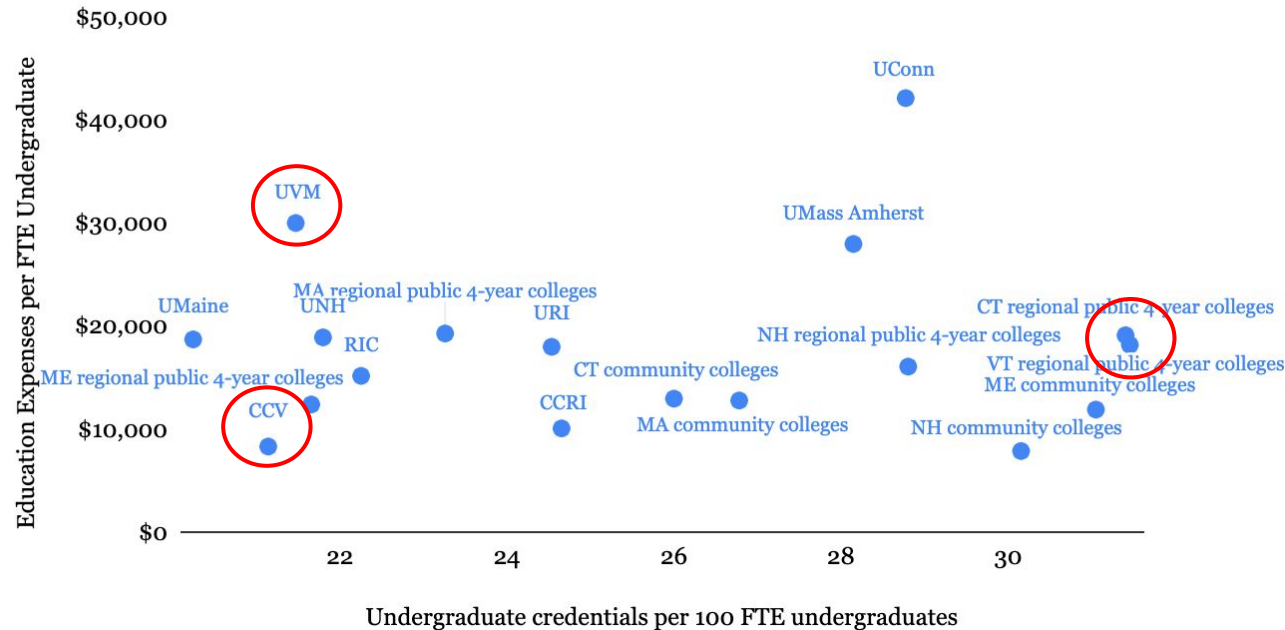
	2012 Completions	2018 Completions	% Change
Distance Offered Programs	1,610	3,422	+112.5%
Non-Distance Offered Programs	9,970	8,657	-13.2%
All Programs	11,580	12,079	+4.3%

Source: NEBHE analysis of Department of Education data via Emsi's Labor Analyst

Degree Productivity of Public Colleges in New England

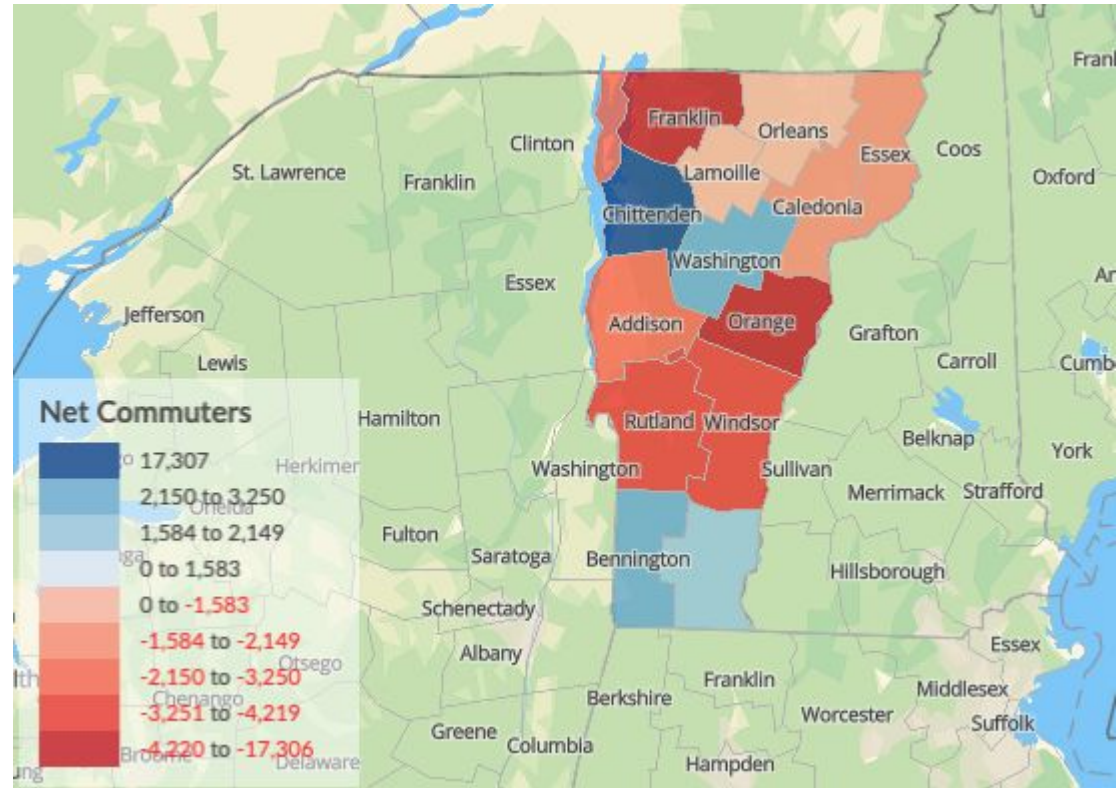
- How much does an institution spend per FTE undergrad on instructor, academic support and student services AND how many credentials are completed per 100 FTE undergrads?

Education Expenses per FTE Undergraduate vs. Undergraduate Credentials per 100 FTE Undergraduates (2017-18)



Vermont's Labor Market Demand: Commuting Patterns

- Much of the state's economic activity is concentrated around Burlington
- Workers in nearby counties are likely to commute to Chittenden, Washington and southern areas for work



Vermont's Labor Market Demand: Top Employers



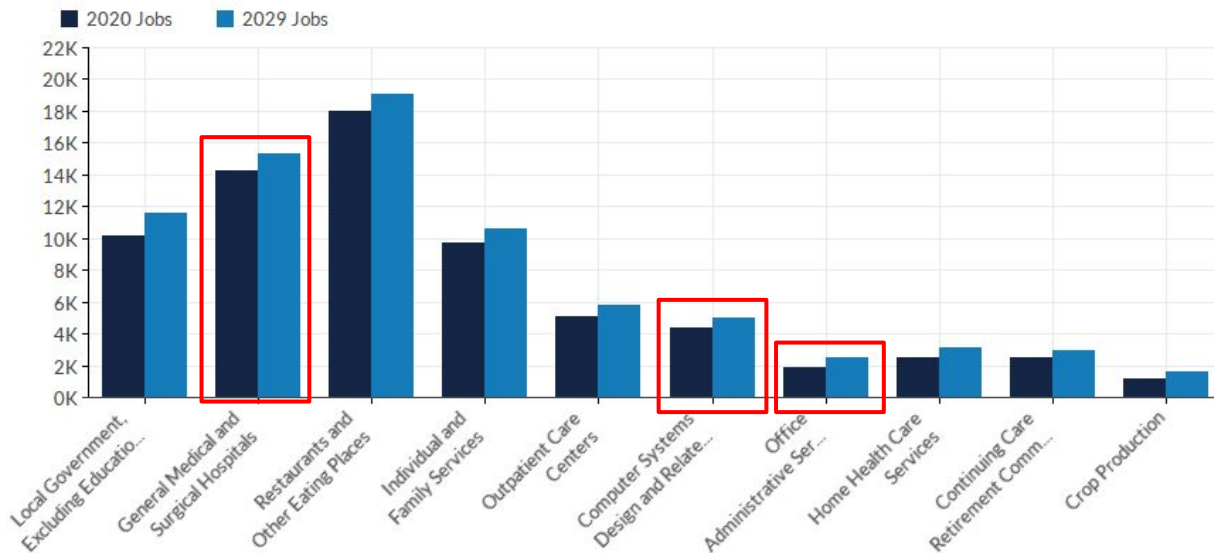
Top Companies	Profiles	
The University of Vermont Medi...	3,861	<div></div>
Vermont Agency of Human Serv...	3,543	<div></div>
Biomedical Engineering Society	2,708	<div></div>
International Business Machines...	1,728	<div></div>
Dartmouth College	989	<div></div>
Globalfoundries U.S. Inc.	837	<div></div>
Keurig Green Mountain, Inc.	723	<div></div>
Dealer Com	654	<div></div>
Oodle, Inc.	635	<div></div>
Howardcenter, Inc.	628	<div></div>

Top Companies Posting	Unique Postings	
HealthCare Employment Network	4,395	<div></div>
Oracle Corporation	3,035	<div></div>
HomeAdvisor, Inc.	2,595	<div></div>
Vermont Agency of Human Serv...	2,359	<div></div>
University of Vermont	2,259	<div></div>
Army National Guard	1,923	<div></div>
Soliant Health, Inc	1,850	<div></div>
Seven Days	1,795	<div></div>
National Agents Alliance	1,780	<div></div>
Uber Technologies, Inc.	1,537	<div></div>

Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Fastest Growing Industries in Vermont

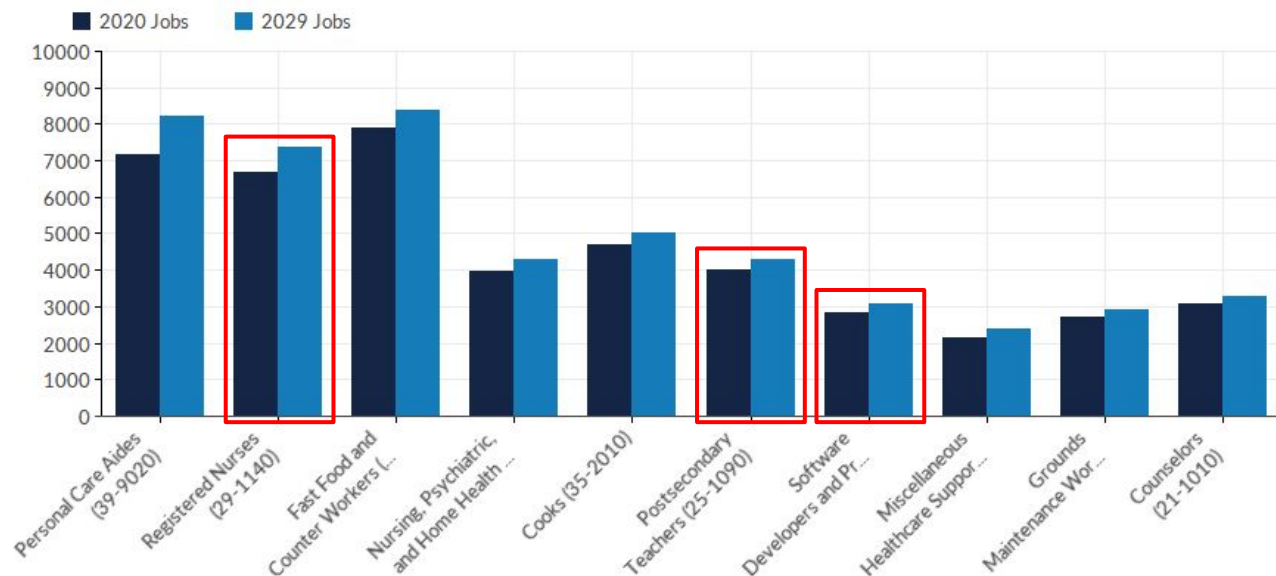
- The industries are projected to employ 6-35% more workers by 2029
- Only three industries offer a family-sustaining wage (\$31.50 per hour)



Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Fastest Growing Occupations in Vermont

- Mirroring the fastest growing occupations, the number of healthcare and restaurant workers is expected to grow from 6-15% by 2029.
- Three occupations offer family-sustaining wages (\$31.50)



Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

The Demand for Healthcare Workers in Vermont

- Job posting activity per month for healthcare workers is higher in VT than the nation
- Top companies include Soliant Health, Inc., Bayada Home Health, KA Recruiting, and CompHealth
- Top job titles include registered nurses (2,623 unique postings), physicians (786), nurse practitioners (749) and LPNs (704)



14,593 Unique Job Postings

The number of unique postings for this job from Jan 2020 to Apr 2020.



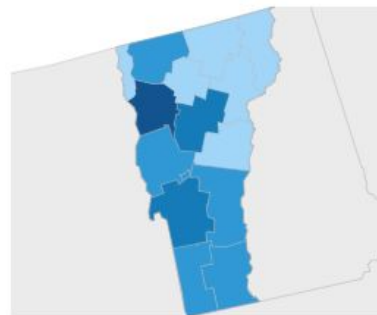
892 Employers Competing

All employers in the region who posted for this job from Jan 2020 to Apr 2020.



42 Day Median Duration

Posting duration is 6 days shorter than what's typical in the region.



30 Programs

Of the programs that can train for this job, 30 have produced completions in the last 5 years.



1,149 Completions (2018)

The completions from all regional institutions for all degree types.



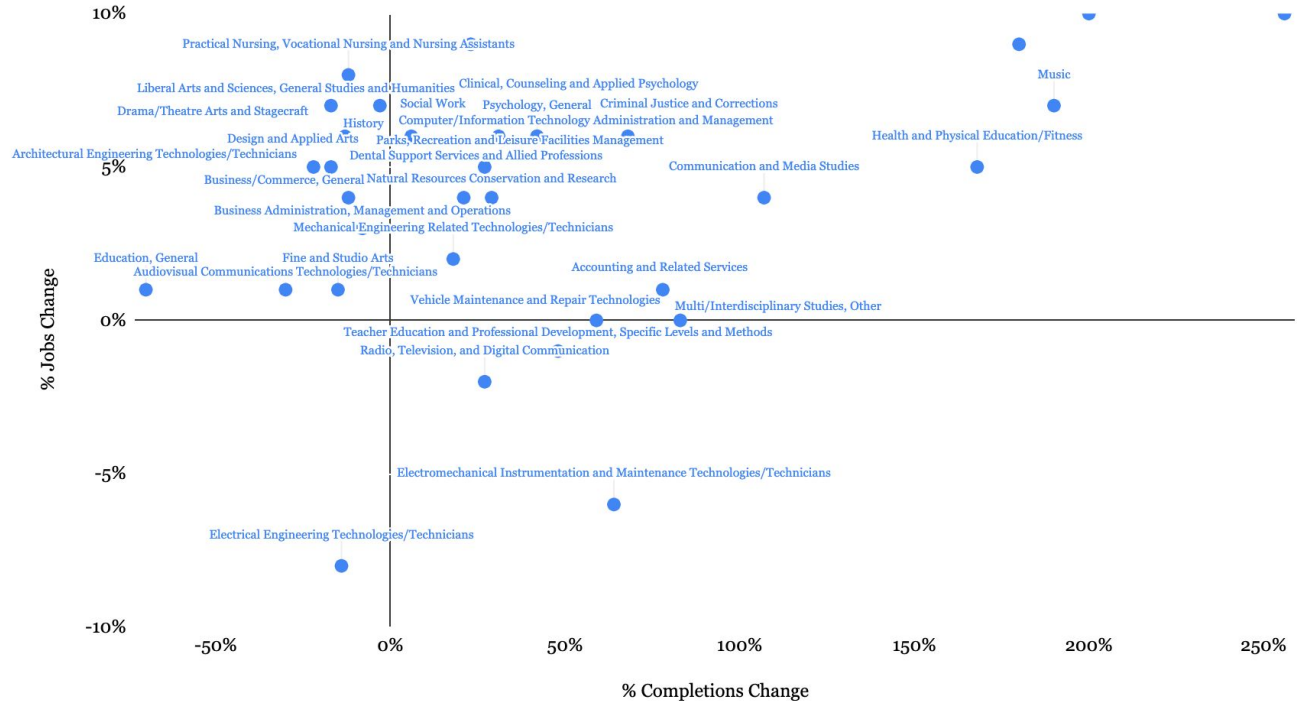
2,140 Openings (2018)

The average number of openings for an occupation in the region is 55.

Completions x Job Demand

- Northwest quadrant depicts programs for which completions have decreased in past 10-years, while associated jobs are expected to increase over the next 10 years.
 - Nursing
 - Liberal arts
 - Business
 - Architectural Engineering Technicians

Percent Change in VSC Completions (2008-2018) vs. Projected Jobs (2020-2029)



Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Completions x Job Demand

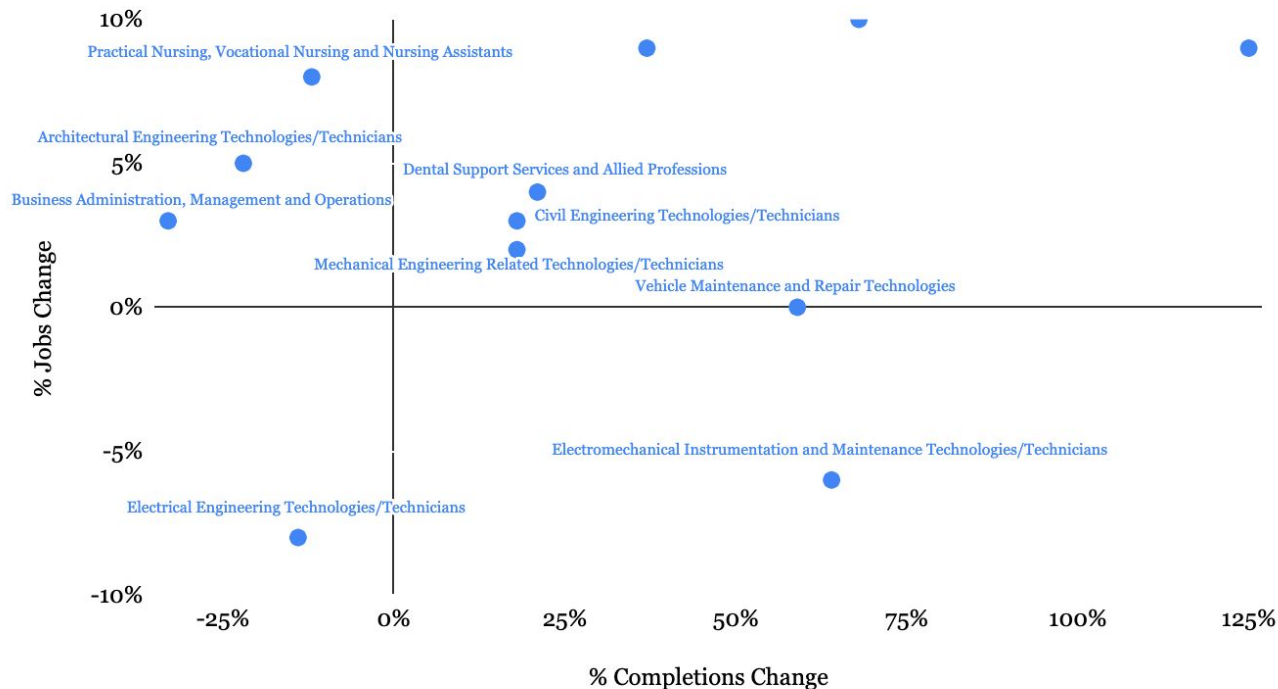
Northwest quadrant:

- Nursing
- Architectural Engineering Technicians

Northeast quadrant:

- Computer and Information Sciences
- Allied Health
- Electromechanical Instrumentation

Percent Change in VTC Completions (2008-2018) vs. Projected Jobs (2020-2029)



Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Completions x Job Demand

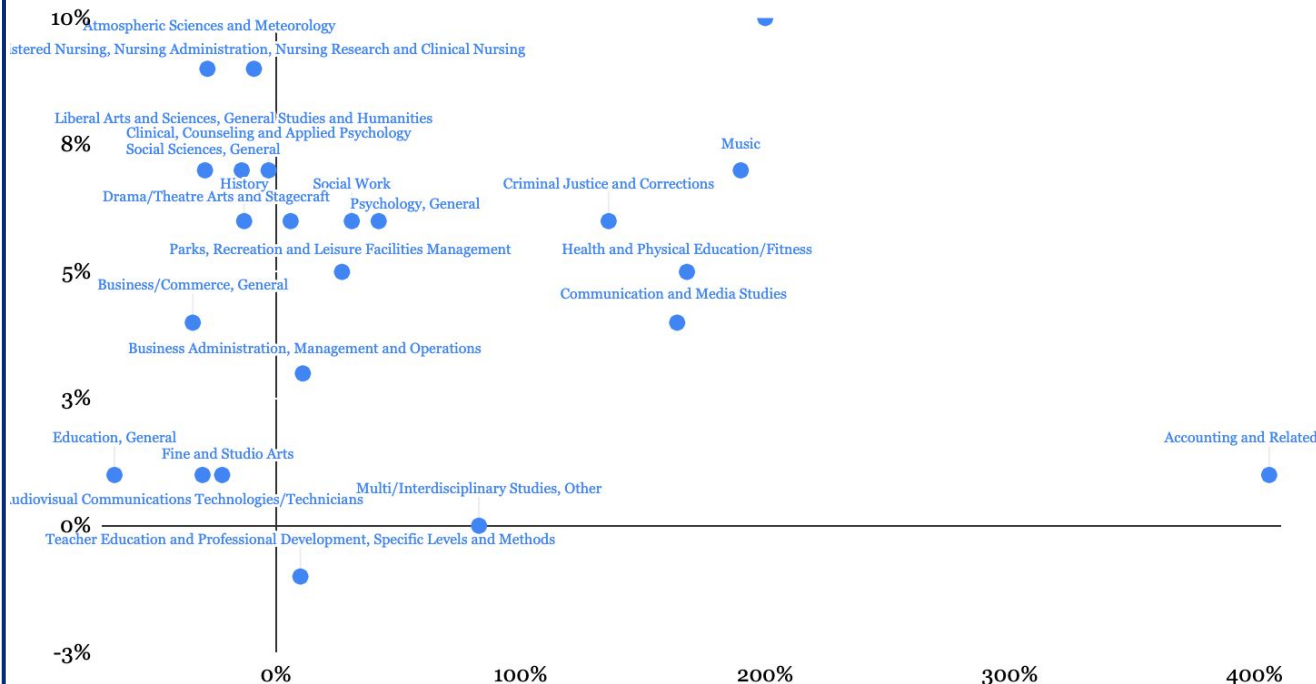
Northwest quadrant:

- Atmospheric Sciences
- Nursing
- Clinical Psychology
- Business
- Liberal Arts

Northeast quadrant:

- Biology
- Music
- Criminal Justice

Percent Change in Castleton & NVU Completions (2008-2018) vs. Projected Jobs (2020-2029)



Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Completions x Job Demand

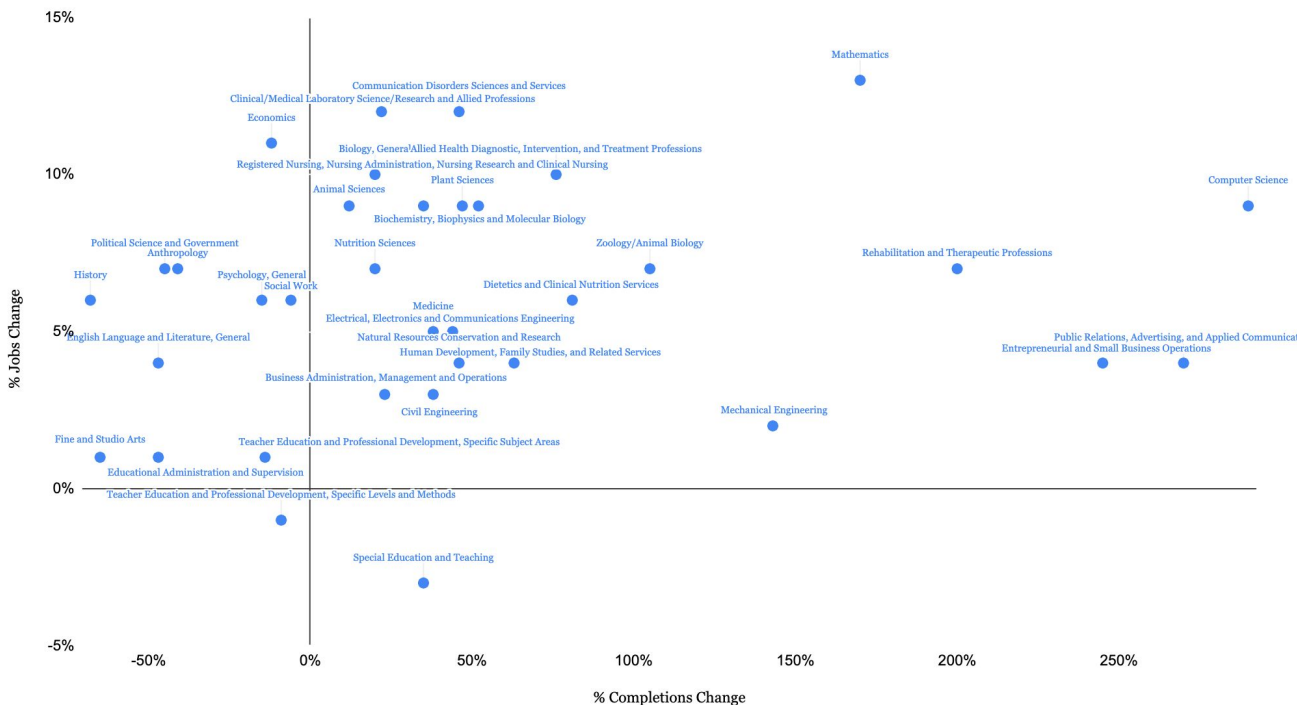
Northwest quadrant:

- Economics
- Political Science
- Anthropology
- Psychology
- Social Work

Northeast quadrant:

- Math
- Computer Science
- Rehab and
Therapeutic
Professions

Percent Change in UVM Completions (2008-2018) vs. Projected Jobs (2020-2029)

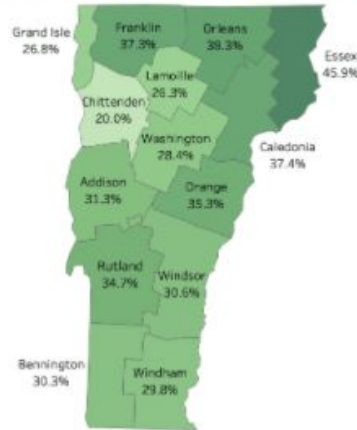


Source: NEBHE analysis of real-time labor market data through Emsi's Labor Analyst

Higher Education Attainment in Vermont

- VT's attainment goal of 70% of residents with a credential of value was established in 2018
- Recognizes that a postsecondary credential offers earnings premiums and job security

Profile of Adults (Aged 25 or Older) with HS Diploma/GED as Highest Degree, 2017

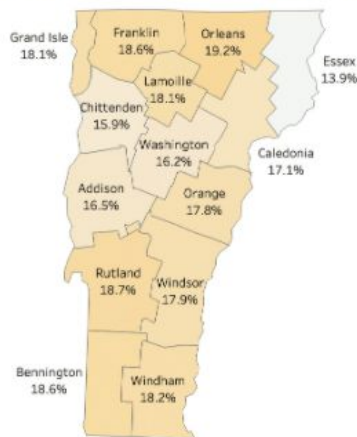


ADULT EDUCATIONAL ATTAINMENT	VT	NEW ENGLAND
Percent w/HS Diploma/GED Only	26.2%	26.7%
Pop. Total w/HS Diploma/GED Only	129,511	2,742,746
Median Annual Income (2017)	\$31,228	\$32,619
Unemployment Rate (Pop. 25-64 Years)	4.7%	6.8%
Poverty Rate (25 Years or Older)	11.4%	11.7%

Higher Education Attainment in Vermont

- An estimated 44% of Vermont residents do not have a postsecondary credential

Profile of Adults (Aged 25 or Older) with Some College, No Degree, 2017



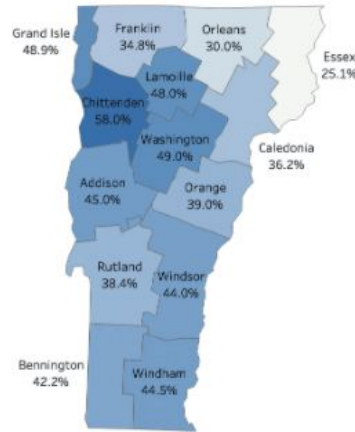
ADULT EDUCATIONAL ATTAINMENT	VT	NEW ENGLAND
Percent w/Some College, No Degree	17.4%	16.9%
Pop. Total w/Some College, No Degree	76,013	1,736,864
Median Annual Income (2017)*	\$35,028	\$38,072
Unemployment Rate (Pop. 25-64 Years)*	3.3%	4.8%
Poverty Rate* (25 Years or Older)	9.0%	8.5%

* Due to limitations in the available data from the Census Bureau, these figures are for individuals with some college.

Higher Education Attainment in Vermont

- The lifetime earnings premium for an individual with an associate degree over an individual with a high school diploma is \$250,000
- With a bachelor's degree, an individual stands to earn \$595,000 more over their lifetime than a peer with a high school diploma

Profile of Adults (Aged 25 or older) with Associate Degree or Higher, 2017



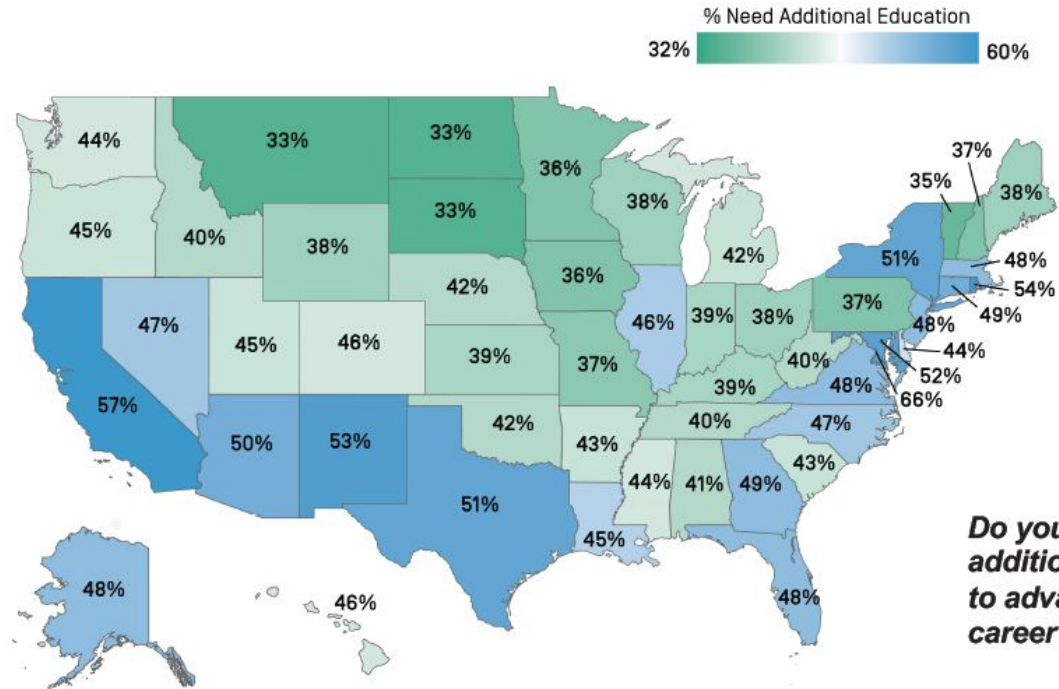
ADULT EDUCATIONAL ATTAINMENT	VT	NEW ENGLAND
Percent w/Associate Degree or Higher	45.3%	46.8%
Pop. Total w/Associate Degree or Higher	198,493	4,805,211
Median Annual Income (2017)*	\$42,267	\$52,365
Unemployment Rate (Pop. 25-64 Years)*	2.0%	3.1%
Poverty Rate* (25 Years or Older)	4.5%	3.9%

* Due to limitations in the available data from the Census Bureau, these figures are for individuals with a bachelor's degree or higher.

Perceived Need for Additional Education

- Adults in Vermont are the least likely to perceive a need for additional education to advance in their careers
- However, 35% of adults with less than an associates degree still represents tens of thousands of potential learners

Perceived need for additional education by state



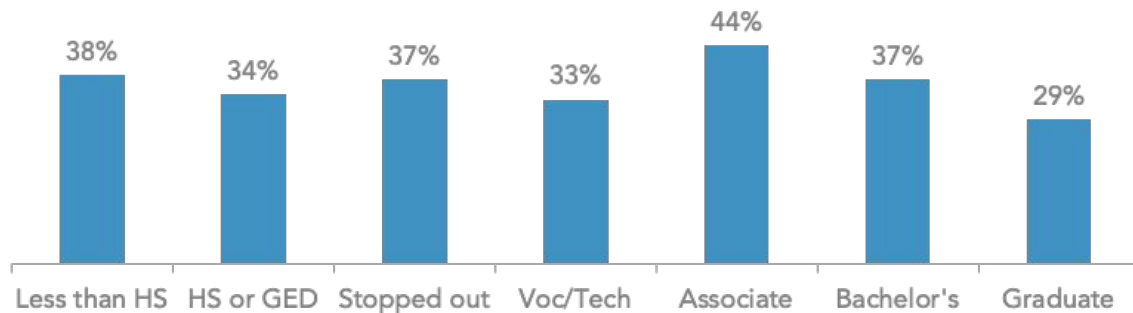
Do you feel you need additional education to advance in your career?

Source: Strada-Gallup Education Consumer Survey Base: U.S. adults ages 18-65 with less than an associate degree and not currently enrolled, n=106,214

Perceived Need for Additional Education in Vermont

- This perception is relatively steady across attainment levels but mirrors trends across the region

Perceived need for more education, by attainment level

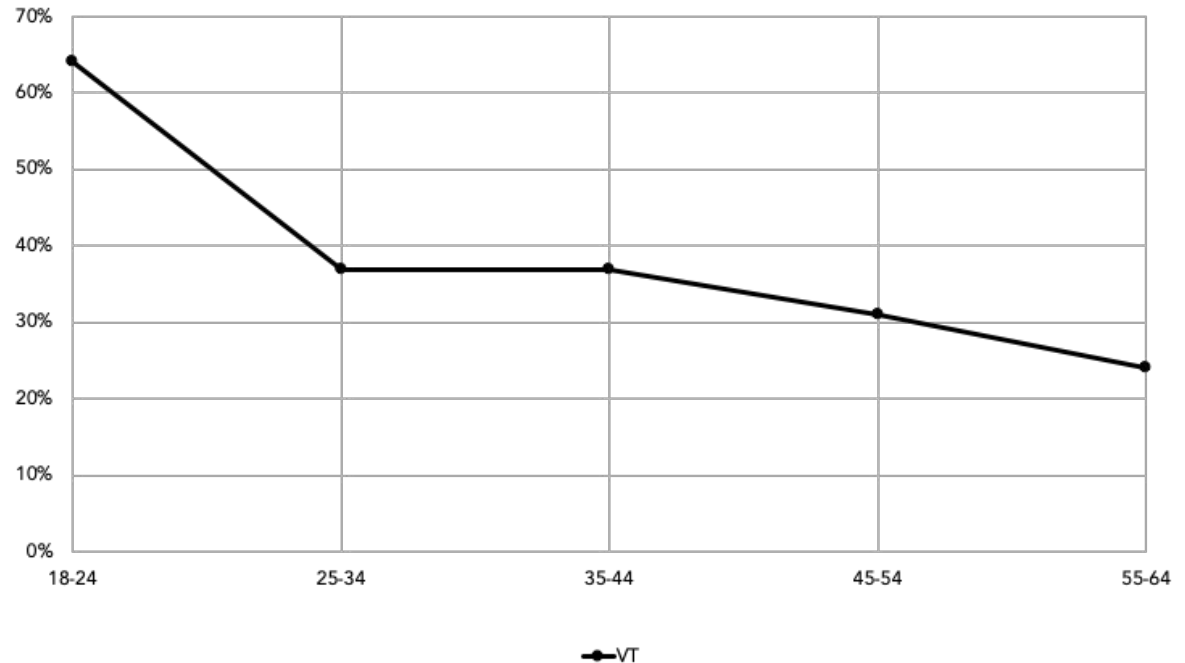


Source: Strada-Gallup Education Consumer Survey, New England residents not currently enrolled, n= 15,159

Perceived Need for Additional Education in Vermont

- Like in other New England states, young adults in Vermont are more likely to perceive the need for additional education and training than those 45 and over

Perceived need for more education, by age

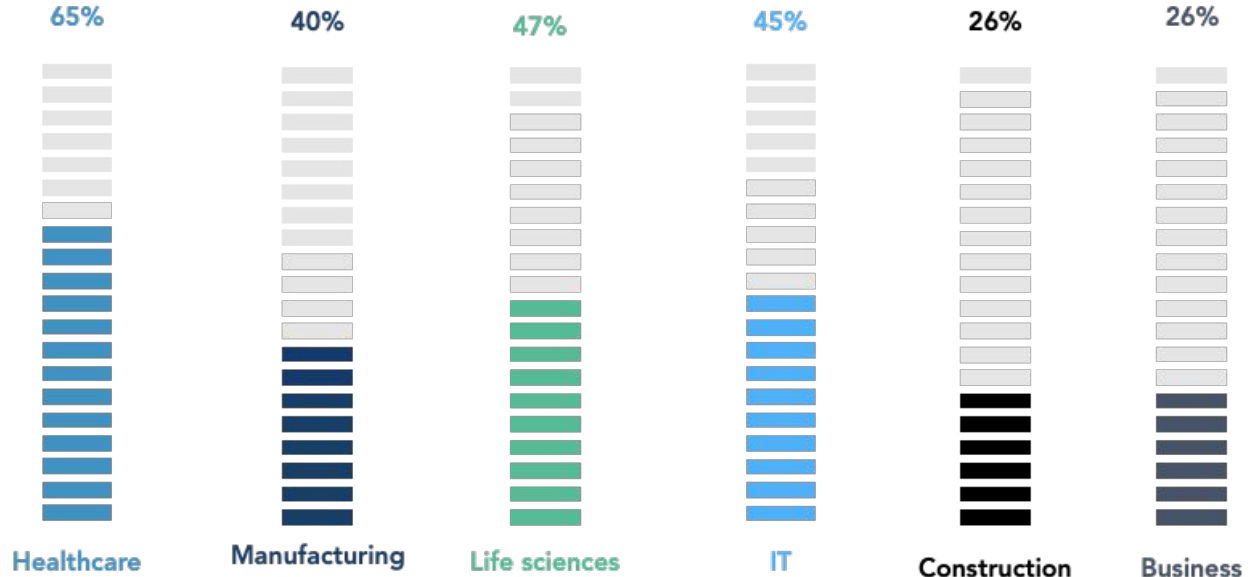


Source: Strada-Gallup Education Consumer Survey, New England residents not currently enrolled, n= 15,159

Perceived Need for Additional Education in Vermont

- However, Vermont adults working in fields like healthcare, life sciences and IT feel a pretty acute need for additional education and training

Perceived need for more education, by occupation



Impact of COVID-19

- Workers in service industries have been the hardest hit
- Across industries, people are likely to be concerned about COVID-19's impact on their employment
- The virus has had a huge effect on demand for education -- adults are more likely to prefer short-term, skills-based programs that are delivered online



of leisure and hospitality workers have **lost jobs, income, or hours** in the COVID-19 crisis.

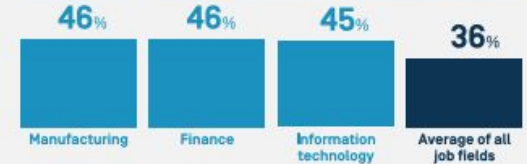


of information technology workers are **worried about losing their jobs**.

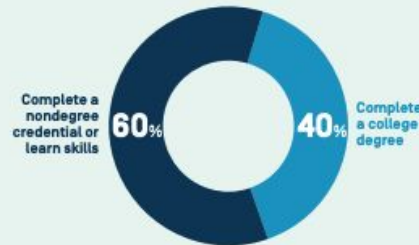


of education workers believe the **crisis will affect them personally for at least six months**.

Nearly half of workers in manufacturing, finance, and information technology say they **would change fields** if they lost their job.



A majority of American workers say they **prefer nondegree and skill-based education** and training programs.



Across job fields, workers prefer that education and training are **delivered online**.

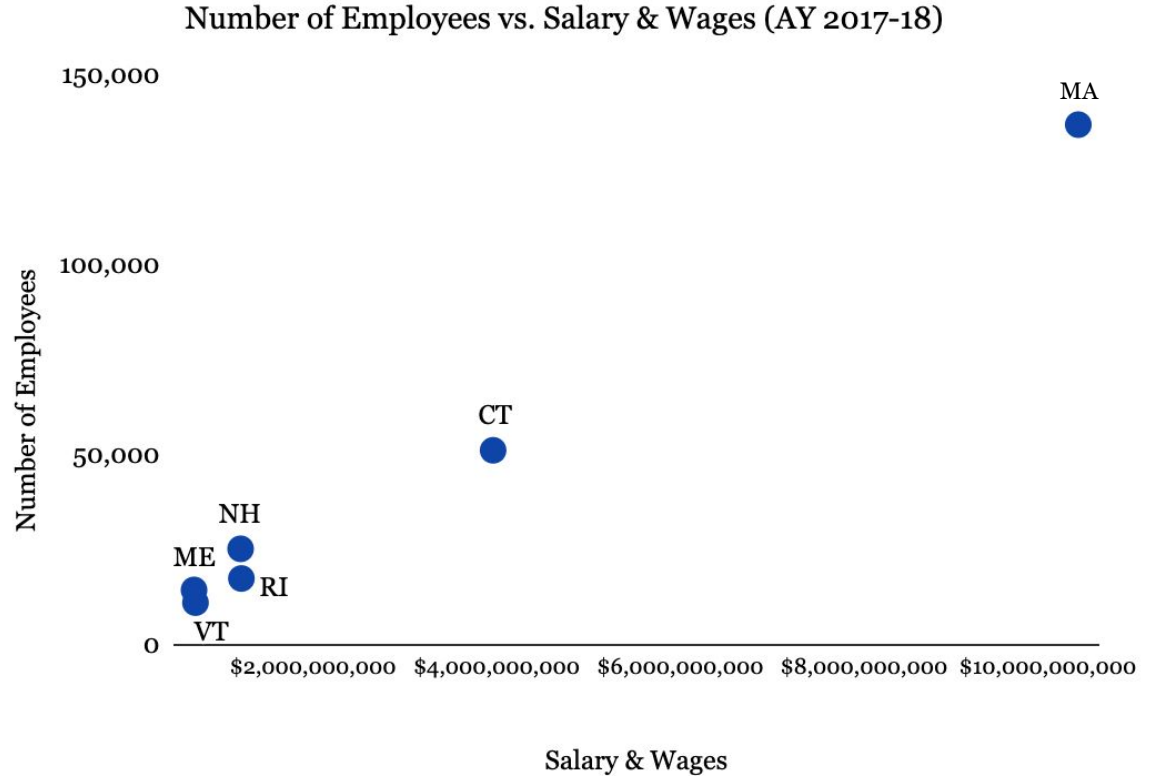


Economic Impact of Higher Education in Vermont



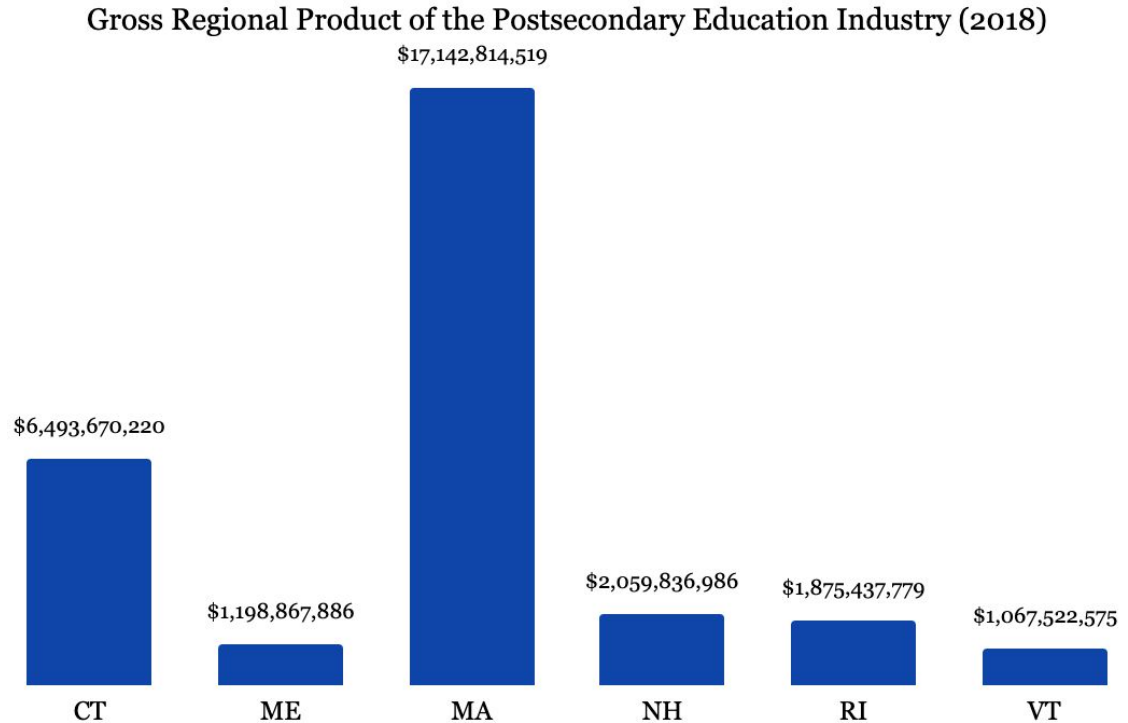
VT Higher Education Institutions as Employers

- VSC employs 17% of the state's higher education faculty and staff (1,900 people)
- Over \$360 million is paid to state higher education faculty and staff (\$72 million)
- VSC salaries make up 20% of total public higher education salaries



Gross Regional Product of Higher Education

- In New England, higher education is the third largest industry behind hospitals and secondary schools
- Higher education contributes \$1.1 billion to VT's economy annually



Source: NEBHE analysis of labor market data through Emsi's Labor Analyst

Lessons in Strategic Planning



Higher Education Restructuring: New England Consolidations

Initiative	Year	No. of HEIs	Description	Status
Connecticut: CSCU “Students First”	2017 (ongoing)	12 community colleges	Consolidation of the state's 12 two-year institutions	In Progress, Pending NECHE Approval
Maine: UMS “One University”	2015 (ongoing)	7 universities	The University of Maine System aims to become first in the nation to accredit its institutions jointly instead of individually.	In Progress, Pending NECHE Approval

CT: CSCU's "Students First" System Consolidation

Context: **Fiscal Challenges** — \$27 million budget deficit, 10-year low in enrollment

Plan: **Merge 12 community colleges** by 2023. Projected \$28M savings

Focused Messaging: **What's best for students** led guiding principles

Two Strategies

- **Strategy 1:** Single system-wide administrative infrastructure
- **Strategy 2:** One centrally managed community college, campuses state-wide

Current Status: NECHE rejected the plan in 2018 — “unrealistic” timeline. Plan reintroduced in 2019. Spring 2020, CSCU submitted a report to NECHE to indicate its progress toward consolidation.

ME: UMS “One University” System Consolidation

Context: Economic, demographic, competitive challenges

Plan: Unified system-wide accreditation — first in the nation

Mission-Differentiated Campuses: No closures. Each institution remains open, focuses on the programs that make it stand out — maintain specialization and identity.

Current Status:

- **January 2020:** the system’s Board of Trustees voted unanimously to move forward with single accreditation.
- **April 2020:** NECHE voted to accept System’s substantive change request. Will determine further steps to evaluate the System’s quality and effectiveness in its transition to unified accreditation.

Lessons Learned from Outside New England: Pennsylvania, RAND Corporation Report (2018)

Two Key Findings

- **Universities Face Challenges:** Shrinking youth population, Declining state appropriations
- **Challenges Will Persist:** Student costs expected to continue rising, Services expected to be curtailed or downsized.

5 Options for Change

1. Keep structure with improvements
2. Option 1 + consolidation
3. Eliminate state system structure, convert to state-related status
4. Consolidate management
5. Merge universities under one as branch campuses

Lessons Learned from Outside New England: University System of Georgia Mergers (2013–2018)

Plan: **Multi-phased series of consolidations** since 2011 — USG combined eight institutions into four in 2013; subsequent mergers in 2015, 2016, 2017, 2018.

Goal: Improve **student outcomes**, Increase the system's **overall effectiveness**.

Process: Consolidation committees + outside consultants

MIT Study of Impact of USG Mergers

- **Outcome:** Record **high enrollment**, **Increased retention/graduation** rates
- Possible mechanisms underlying these gains:
 - **Primary driver: Increased overall spending per student**
 - **Maintained steady tuition costs and grant aid**
 - **Seamless within-system transfers**
 - **Institutions to pool resources** to hire for specialized positions, collaborate on strategic approaches to student needs

Recommendations

The future of learning and earning

- Learner-centric
 - Delivery models
 - Target populations
- Workforce-connected
 - Demand-driven programs
 - Specialization
 - Employer partnerships
 - Workplace learning
- Future- and Talent-focused
 - What's the goal?
 - Affordability: low-cost degree alternatives
- Stakeholder-engaged
 - Collaborative, inclusive processes
 - Reframing business model

The future of learning and earning

- New learning infrastructure (digital and physical)
- Credential innovation: demand-driven
- Integration of institutions, programs and pathways
- As you envision the future of Vermont's economy, what's needed from public HEIs?
- How can Vermont public HEIs be a platform? Magnets?

One-stops?

- Credentials: multi-modal, not place-bound
- Economic and workforce development, entrepreneurship, work
- Culture, arts, libraries, etc.
- Housing, human services and healthcare

How NEBHE Can Support Vermont?

Topical

- Re-envisioning credentials
- Broadening recognition of learning
- Work-based learning and employability
- Digital talent pipeline initiatives

Roles

- Research and analysis capacity
- Expert testimony and presentations
- Commissioned studies and reports
- Convening capacity and thought leadership

Questions?

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