

65 by 25

Achieving Economic Prosperity Through Post-Secondary Education

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Executive Summary

By 2020, 68% of jobs in New Hampshire will require educational attainment beyond high school.¹ However, present trajectories indicate that far less than 68% of NH's workforce will reach that educational bar, if the state does not act to make it happen. The failure to reach it will harm the state's ability to retain, attract and grow business, and will have long-term effects on the state's economy and quality of life.

Various factors make it challenging to increase the percentage of adults with postsecondary education in New Hampshire. These include:

- Declining numbers of educated adults moving to NH.
- Declining numbers of students in the K-12 system over the next decade.
- A high percentage of high school graduates who leave NH to attend college.
- A well-educated population that is aging out of the workforce.

65 by 25 is the goal that 65% of NH adults (those 25 and over) will have some form of post-secondary education, from certificates to advanced degrees, by 2025. Achieving this goal moves NH much closer to the targets cited in national research and will position NH to support a strong future economy.

Recognizing that achieving 65 by 25 is critical to NH's economic well-being, the board of trustees of the Community College System of NH (CCSNH) has made 65 by 25 a central part of the system's strategic plan. CCSNH is committed to working closely with industry and education partners to reach this goal, and to help ensure that the next generation of Granite Staters has the chance to improve on the foundation it inherited, and secure a high quality of life.

¹ Projection by researchers at Georgetown University's Center on Education and the Workforce (<https://georgetown.app.box.com/s/6cni2n79w0eg62m9kbyv>)

In NH, adults with an associate degree earn on average 28 percent more than those with only a high school degree.

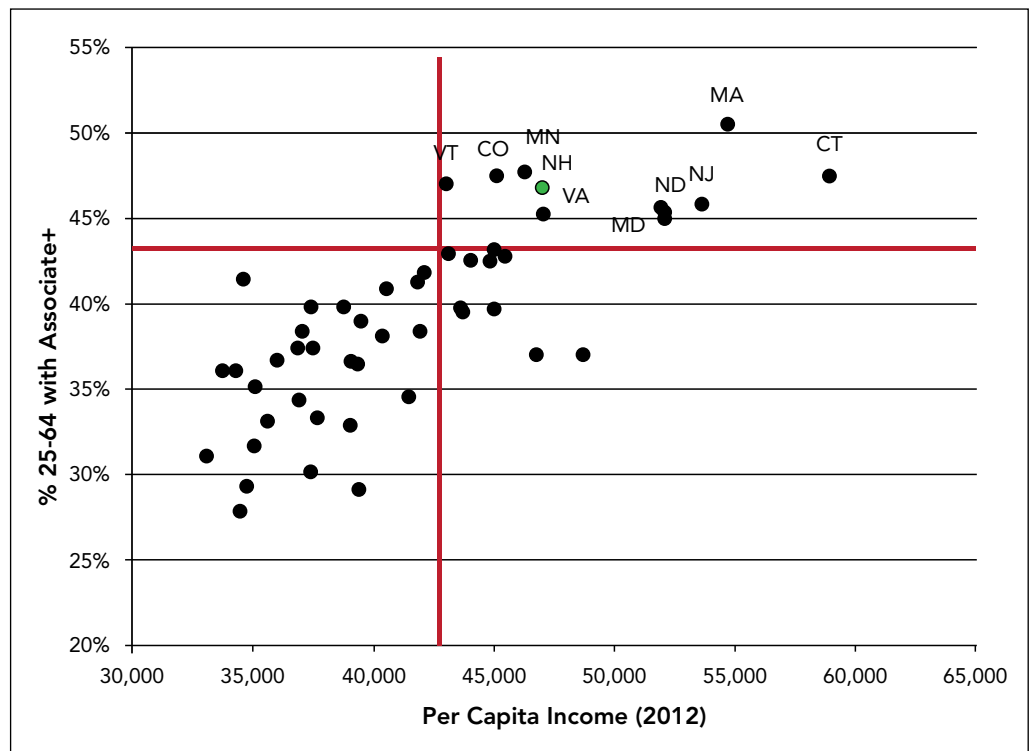
Higher Education Means Prosperity

Throughout the United States, both data and experience increasingly underscore the economic value of higher education. In a knowledge-based global economy, post-secondary education contributes significantly to prosperity and a better life.

College degrees are significantly associated with employment. Nationally and in NH, the unemployment rate for college-degree holders is consistently about one-third to one-half the unemployment rate for those without a higher education degree. From August 2013 to July 2014, the unemployment rate for those with an associate degree in NH was 3.5 percent, compared to 5.1 percent for all adults in NH. The unemployment rate for adults with a bachelor's degree or higher was still lower: 2.8 percent. Not surprisingly, NH has the seventh lowest unemployment rate in the nation.

Post-secondary education is strongly associated with increased income. In NH, adults with an associate degree earn on average 28 percent more than those with only a high school degree, and bachelor's degree holders earn an average of 20 percent more than those with an associate degree. As Figure 1 shows, 9 of the 10 top-ranked states in higher-education attainment, including New Hampshire, are among the top 13 states in per capita income. NH ranks 9th of 50 states in per capita income, and has the lowest poverty rate in the nation.

Figure 1: 50 states in terms of percent working age adults (25-64) with at least an associate degree by per capita income (2012)²



The benefits of higher education are collective, as well as individual.

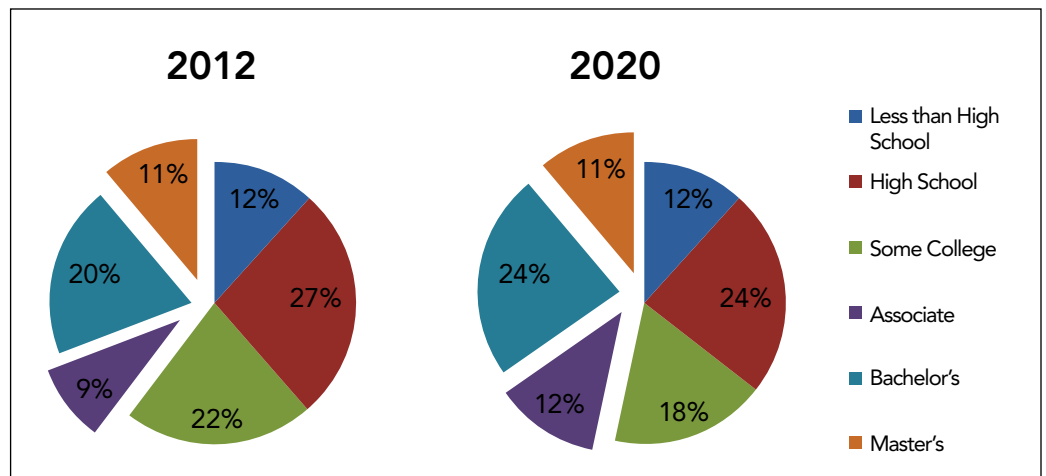
The overall educational achievement in a state is an important factor in its economic position. Companies looking to fill well-paying jobs will locate where there is a supply of highly educated young workers. This is particularly true of companies in technology-based and other knowledge-dependent industries.

² Data from Lumina's "A Stronger Nation through Higher Education" and the US Bureau of Economic Analysis. Vertical and horizontal axes represent US average. Horizontal and vertical red lines denote US median %25-64 with associate+ (43.6%) and PCI (\$42,693), respectively.

National Trends in Higher Education

Georgetown University estimates that by 2020, 65 percent of all US jobs will require some form of post-secondary education.³ Fewer jobs will be available to people with a high school diploma or less.

Figure 2: Postsecondary education and training projections for the US



Evidence suggests that the cumulative shortfall of postsecondary-educated Americans has been rising, and will approach 20 million nationally by 2020 if current trends continue.⁴ If we don't make significant changes, the skilled jobs that could have been created in the US will be located in nations such as Canada, the United Kingdom and South Korea.

³ Projection by researchers at Georgetown University's Center on Education and the Workforce (http://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.FR_Web_.pdf)

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46.7 percent of
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Higher Education in New Hampshire

Historically, the people of the Granite State have been well-educated, by national standards. According to 2012 figures⁵:

- New Hampshire ranks 6th among the 50 states in the percentage of the population with a college degree (associate degree or higher).
- 46.7 percent of New Hampshire adults hold a two- or four-year college degree. This is well above the national average of 39.4 percent.
- 10 percent of NH adults have an associate degree as their highest degree attained, 24 percent have a bachelor's, and 13 percent have a graduate or professional degree.
- An additional four percent of NH adults hold a post-secondary certificate with significant economic value, compared to five percent of adults nationally.⁶

This puts the percentage of NH adults with a higher-education degree or a post-secondary certificate with significant economic value above 50 percent.

Higher Education Trends in New Hampshire

The 50 percent of NH adults with significant post-secondary education makes the state currently a leader in higher-education attainment. However, 50 percent is well below the percentage of jobs in New Hampshire in the near future that will require education beyond high school. Moreover, NH's rate of improvement in this measurement has slowed in recent years, and is now below the rate of our international competitors, and also below the average US rate. Nationwide from 2008 to 2012, the percentage of American adults with an associate degree or higher increased by 1.5 percent, while NH's percentage increased by less than half that—.7 percent.⁷

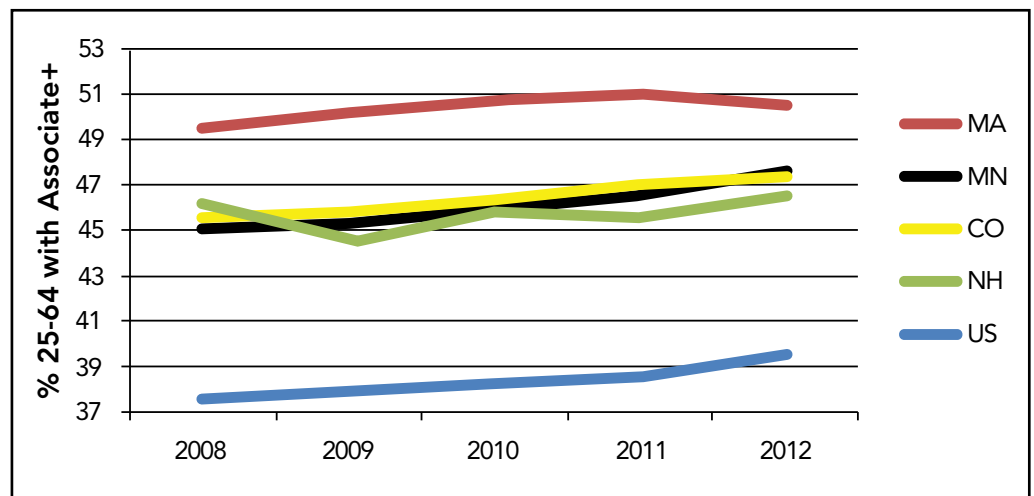
⁵ <http://strongernation.luminafoundation.org/report/downloads/pdfs/a-stronger-nation-2014.pdf>

⁶ *Certificates: Gateway to Gainful Employment and College Degrees*. Georgetown University Center on Education and the Workforce, 2012. The study estimates the number of Americans who hold a postsecondary certificate with "clear and demonstrable economic value" as their highest credential.

⁷ <http://strongernation.luminafoundation.org/report/downloads/pdfs/a-stronger-nation-2014.pdf>

Changes in domestic in-migration to NH leave the state in need of a different approach to ensuring a highly educated workforce.

Figure 3: Percent of adults in state who hold at least an associate degree (2008-2012)



NH's rate of increase in higher education attainment is well below the pace to meet the 68 by 20 or 65 by 25 target. If present trends continue and no action is taken, it will take NH 80 years—or until 2095—to achieve 65 percent of adults with a higher education degree or a certificate of significant economic value. That is why the CCSNH Board of Trustees set the 65 by 25 target. The goal raises awareness of the importance of ramping up educational achievement to a high, yet achievable goal. For example, Minnesota ranks ahead of NH in educational attainment and at its current rate of growth the state will be at 65 percent in 17 years (or 2029).

Getting to 65 by 25 will require a new focus. Domestic in-migration (from other states) to NH has slowed significantly. The baby-boomers who moved to the state in the 1970s, 1980s, and 1990s are beginning to retire. This has contributed to the recent slow growth in higher educational achievement relative to other states and nations. Changes in domestic in-migration to NH leave the state in need of a different approach to ensuring a highly educated workforce.

Forty-three percent of NH high school graduates go out of state to college.

In the last three decades of the 20th century, NH transformed from a state with a per capita income and higher education attainment among the middle group of states and with relatively slow growth, to a high-income and highly educated state and a standout for growth in the Northeast. This transformation was driven by the domestic in-migration of educated residents. In the mid-1990s, more than two-thirds of NH adults with a bachelor's degree or higher had been born in another state⁸. This remains true today. If NH adults born in NH and NH adults born elsewhere were stand-alone states, the born-in-NH cohort would rank 41st in the nation for holding associate degrees or beyond, while the non-native adult cohort would rank *first*.

The young adult population—those between the ages of 25 and 34—are the best indicators of a state's future. In NH over the last 25 years this cohort has declined 15 percent, while it has grown 2 percent nationally. This makes it all the more important to have the young adults that are in NH be well-educated and stay in NH to ensure a supply of skilled young workers in the state.

The rate of higher-education attainment for all young adults nationwide was higher than for all adults, at 40.9 percent. While the NH percentage of young adults with higher education achievement is higher than the US average, it is below the rate of the higher educational attainment of older adults in NH (*see figure 4*) and well below the 68 percent level required by 2020. And it is also below the percentage currently in countries that NH competes with for high tech employment including Canada, the United Kingdom and South Korea.

Requiring attention is the high percentage of NH's high school graduates going to college out of state. Forty-three percent of NH high school graduates go out of state to college. Going to college out of state makes it less likely that these NH residents will be part of a NH high skilled workforce when they graduate. To ensure a well-educated workforce in NH, the state has to retain more of its high school graduates going to college. Without this it will be very difficult to achieve 65 by 25.

⁸ According to the UNH Survey Center

Figure 4: Education Attainment of Young Adults, NH Natives and In-migrants (2012)⁹

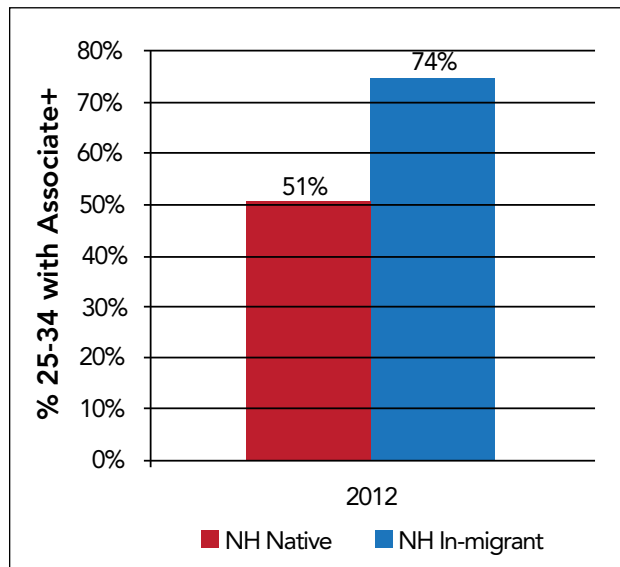
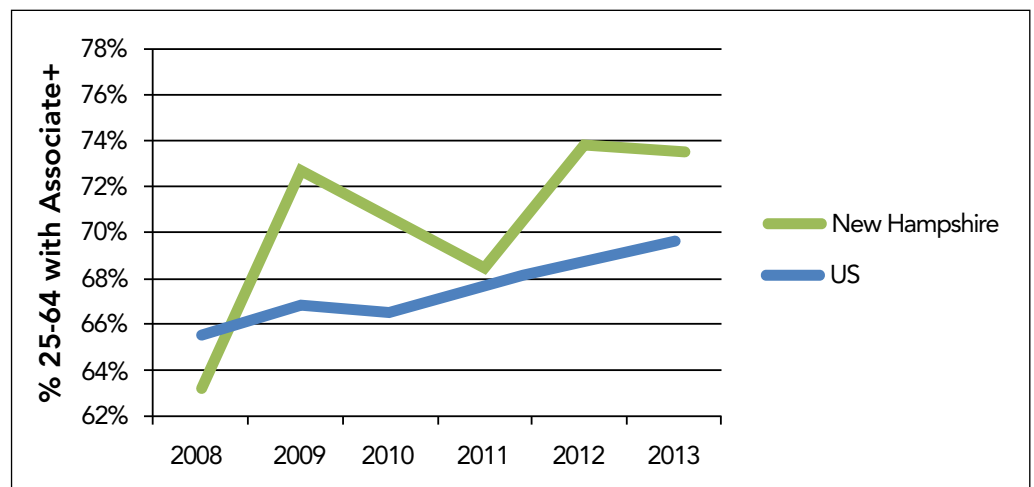


Figure 5: % of Domestic In-Migrants with at least an associate degree (Select States and US; 2008-2013)¹⁰

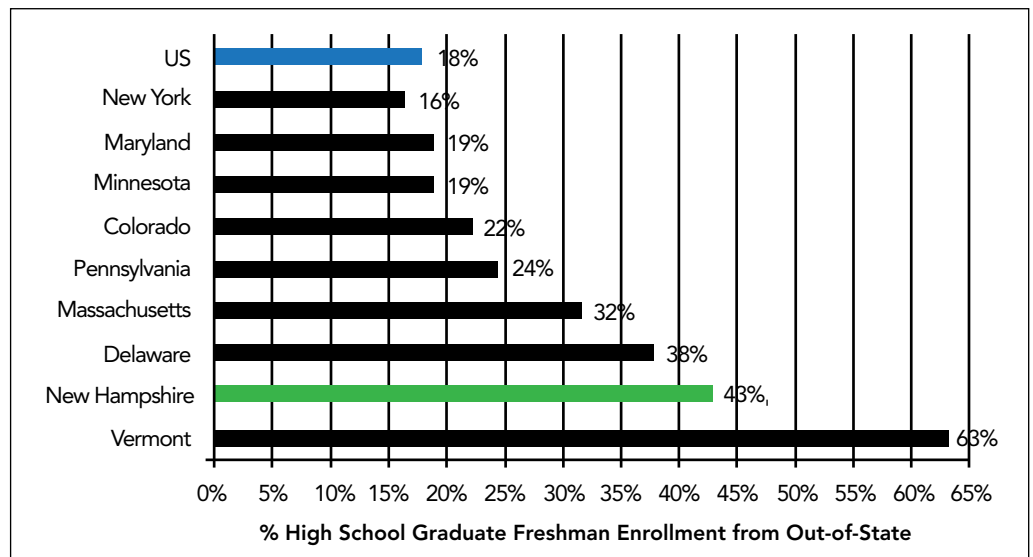


⁹ ACS 1-year estimates for selected years, including domestic and foreign immigrants.
<http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

¹⁰ ACS 1-year estimates for selected years, including domestic and foreign immigrants to selected states.
<http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

NH has the 2nd highest percentage of HS graduates going out of state for college.

Figure 6: Percent of HS Graduates Going to College that Depart the State (2012)¹¹



Another contributing factor to the challenge of replenishing the supply of skilled workers as baby boomers retire is the contracting pipeline from secondary education in the state. The prominent baby boom generation peaked in births of children in the 1980s and early 1990s and most of their children are now well beyond secondary school. With this, NH's K-12 school enrollment has been declining since 2007 (see Figure 8). The NH high school graduating class is expected to decline by 20 percent in the next 20 years. This heightens the importance of having high percentages of high school graduates in NH go on to college and go on to college in NH to ensure that the state retains its strong position in the education of its workforce. This is far from the case currently. NH has the 2nd highest percentage of HS graduates going out of state for college, 43 percent in NH compared to 18 percent nationally. (see Figure 6)

¹¹ Student migration data measures the migration of all first-time degree/certificate undergraduates in degree-granting institutions who graduated from high school in the previous 12 months. Data from the NCES IPEDS data system. (http://nces.ed.gov/programs/digest/d13/tables/dt13_309.10.asp)

Figure 7: NH % of State Age Cohort with at least an Associate degree (2013)

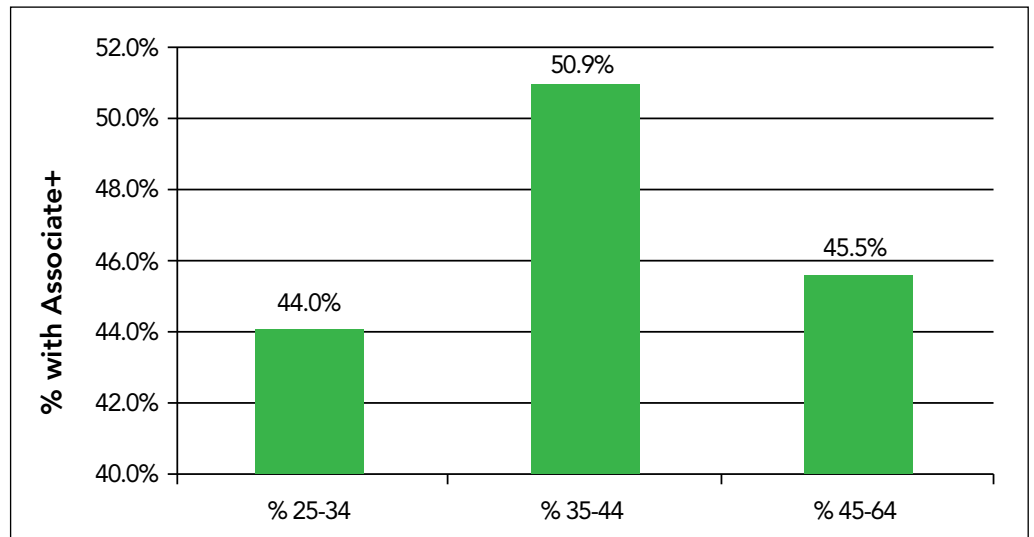
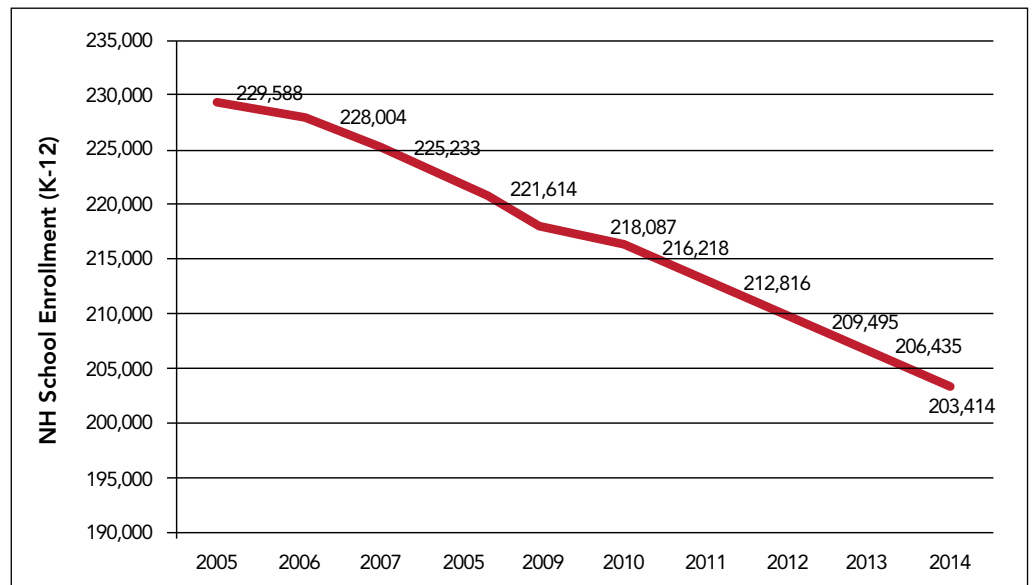


Figure 8: NH School Enrollment (K-12; all schools)¹²



¹² <http://www.education.nh.gov/data/attendance.htm>

NH's community colleges are the logical agent in improving NH's positioning.

The Necessary Steps

The Lumina Foundation, the largest foundation supporting higher education in the nation, has identified three steps that states with concerns like New Hampshire's can and should take to produce real increases in education attainment:

- Help students learn more, complete their education, and find jobs.
- Align investments with state priorities and student needs.
- Create smarter pathways for students.

For NH to take these steps, it must:

- Improve performance in core skill areas (such as math and science) in primary and secondary schools, so students will enter postsecondary education well-prepared.
- Increase post-secondary matriculation rates from NH high schools and from NH high schools to NH colleges.
- Expand opportunities and improve outcomes in early college and dual-enrollment programs to help to improve pipeline from NH high schools to NH colleges.
- Increase college completion and graduation rates, particularly in science, technology, engineering and mathematics (STEM) fields.
- Ensure that NH graduates get good jobs at high average wages in NH.

These priorities are supported by national experience and empirical studies. The longer we wait to act on them, the harder it will be to retain NH's historic advantage in education and skills, and the state's economic position. NH's community colleges are the logical agent in improving NH's positioning within nearly all of these areas.

CCSNH is working closely with other sectors to create strong pathways for students to attain economically meaningful post-secondary credentials aligned with jobs.

NH's Community Colleges: Bridges to Opportunity

NH's seven community colleges and three academic centers cover the state. All are "bridging" institutions. They provide bridges to post-secondary education and economic opportunity for students. Community colleges link secondary with post-secondary education; they align higher education with the economy; they coordinate associate degrees with bachelor's and advanced-degree pathways; and they unite education efforts across the state.

Given the looming shortfall in New Hampshire residents with significant post-secondary education, the CCSNH board of trustees recognizes that community colleges must do even more. To this end, CCSNH is committed to 65 by 25. As part of this commitment, CCSNH is working closely with other sectors to create strong pathways for students to attain economically meaningful post-secondary credentials aligned with jobs. These sectors include the NH Department of Education, the University System of NH (USNH), and private industry:

- CCSNH partners with over 90 NH **high schools** in Running Start, an award winning dual credit program with over 6,000 annual course registrations.
- The colleges have dual admissions and bachelor's completion programs with **USNH**, and articulation agreements focused on STEM and other fields aligned with the state's workforce needs. Dual admissions programs and transfer agreements can provide affordable and easily-accessible first steps to bachelor's degrees and beyond.
- Each community college has advisory boards with **industry representatives**, which provide strong bridges to the local area regional economies.
- The CCSNH Chancellor chaired the Governor's K-12 STEM education task force, which released a series of recommendations to strengthen STEM education and alignment at all levels.
- Other organizations, such as "Stay Work Play NH," the Business and Industry Association of NH; the NH High Tech Council; and more, are also working with CCSNH to strengthen the state's future workforce.

Between 2012 and 2022, it is estimated that 49% of job openings in NH will be middle-skill.

Which Degrees Make Economic Sense?

As defined by the National Skills Coalition, a “high-skill job” requires at least a bachelor’s degree, a “middle-skill job” requires more than a high school degree, and a “low-skill job” does not require post-secondary education. In 2012, 54 percent of the U.S. labor market consisted of middle-skilled jobs, but only 44 percent of the country’s workers were trained to that level. In 2012 in NH:

- 31% of all jobs were high-skill
- 54% of all jobs were middle-skill
- 15% of all jobs were low-skill

Demand for middle-skill jobs continues to grow. Many of these jobs—such as front-line healthcare workers, automotive technicians and customer service representatives—require advanced technology and customer service skills. Between 2012 and 2022, it is estimated that 49% of job openings in NH will be middle-skill.¹³ ***These demand projections indicate that a significant proportion of the increase in education achievement in NH should be obtained at NH’s community colleges, which issue associate degrees and certificates.***

Currently 10% of NH adults have an associate degree as their terminal degree. Increasing the number of associate-degree graduates and the number of certificates awarded annually—particularly in high-demand fields such as STEM—can help meet the need for middle skilled workers in NH. This can help retain NH’s young people in the state, and contribute to 65 by 25.

¹³ National Skills Coalition (2012) “Middle-Skill Jobs State by State: New Hampshire”. <http://m.nationalskillscoalition.org/resources/publications/file/middle-skill-fact-sheets-2014/NSC-New-Hampshire-MiddleSkillIFS-2014.pdf>

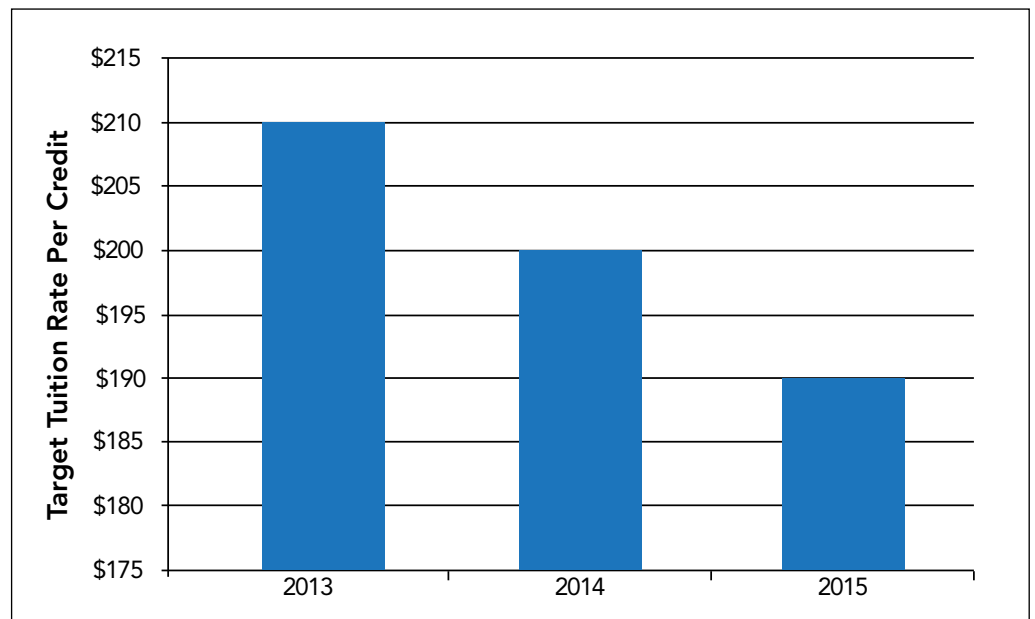
In 2015, NH was the only state in the nation to lower community college tuition.

The Crucial Role of Affordability

To increase higher-education achievement in NH, it is also essential to make higher education more affordable. The percent of NH community college funding from public (state and local) resources has averaged approximately 30 percent in recent years. The national average is over 50 percent.

NH's community colleges are committed to lowering tuition, with help from the state. This academic year (2014-2015)—aided by state support—NH was the only state in the nation to lower community college tuition. The price of a community college education will have to be lowered further if more NH high school graduates are to attend college in New Hampshire.

Figure 9: Target Tuition Rate Per Credit



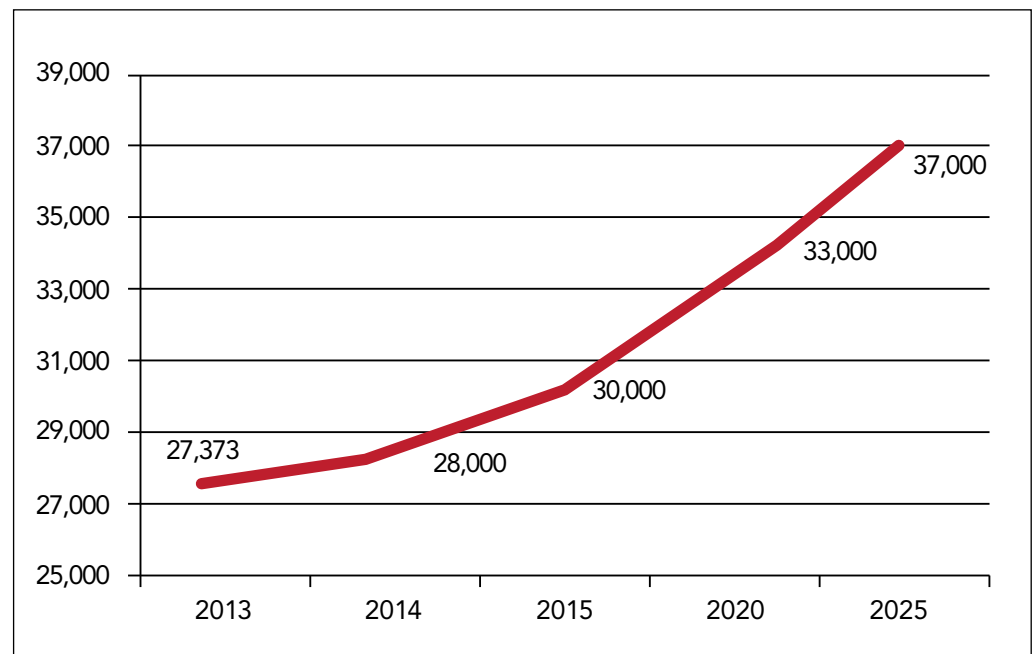
Target: Grow Enrollment By 3% Per Year

As Figure 10 illustrates, CCSNH is committed to growing enrollment in community colleges by an average of 3% per year. To achieve this goal, it will be necessary to enhance recruitment, targeting two populations:

- those who have not traditionally gone on to higher education; and
- those who have attended college out of state, because of NH's high costs.

Lowering tuition will help CCSNH make inroads with both of these target groups. In addition, to reach the first population, community colleges will need to target NH high schools with low post-secondary matriculation rates. In these and other schools, NH's community colleges will work closely with school officials to increase dual credit opportunities and put NH secondary students on pathways to higher education in-state.

Figure 10: NH Community College Enrollment, 2013-2025



CCSNH is optimistic that it can double the number of degrees and certificates it awards by 2025.

Staying Enrolled and Completing Degrees

Completion rates at community colleges are measured by counting first-time, full-time freshmen who complete associate degrees within six years. Currently, completion rates for all NH's community colleges, which stand at 31%, are above the national average. While this is positive, completion rates will have to be improved significantly for the state to achieve the 65 by 25 goal.

To improve completion rates, NH community colleges will implement best practices learned both nationally, and from within. These practices include strengthening pathways from high schools, strong student advising and support, contextualized developmental education, and broader access to hybrid and online learning. CCSNH is already making progress in these areas, including a 15 percent increase in Running Start enrollment from 2013 to 2014 (the system's dual-credit program offered in 90 high schools) and strong growth in online enrollment in recent years.

CCSNH has already exceeded its internal "scorecard" for completion metrics for 2014, a good sign in the early stages of the system's efforts to achieve 65 by 25 (*see scorecard on page 22*). With the strategies identified above, CCSNH is optimistic that it can double the number of degrees and certificates it awards by 2025. Its efforts to do so will focus on STEM credentials and certificates. Certificates are particularly important for the older, returning students who are updating their skills and retraining, and who CCSNH can support with programs that provide high economic value. Here again, CCSNH has exceeded its early targets, with a 6% increase in degrees and certificates awarded between 2013 and 2014, and an impressive 31.5% increase in STEM degrees and certificates (*see scorecard on page 22*).

Figure 11: NH Community College Completion Rate and Goal, 2013-2025

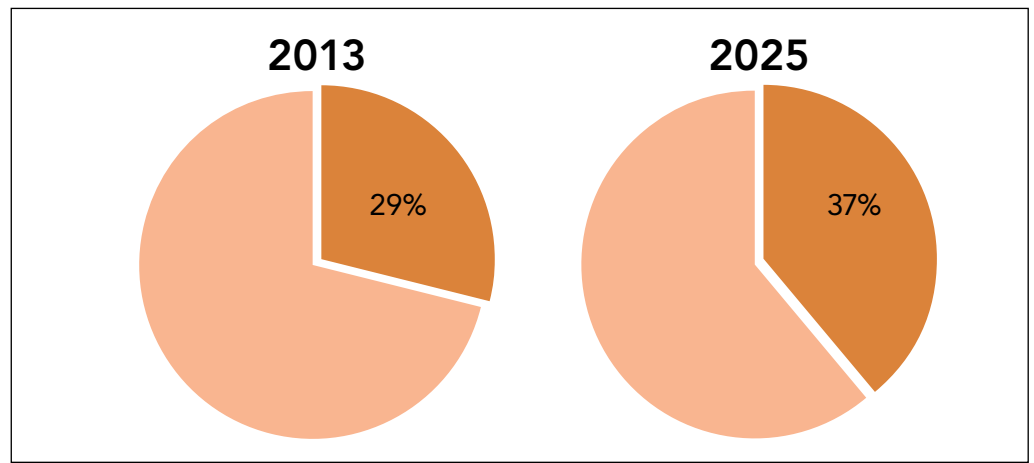
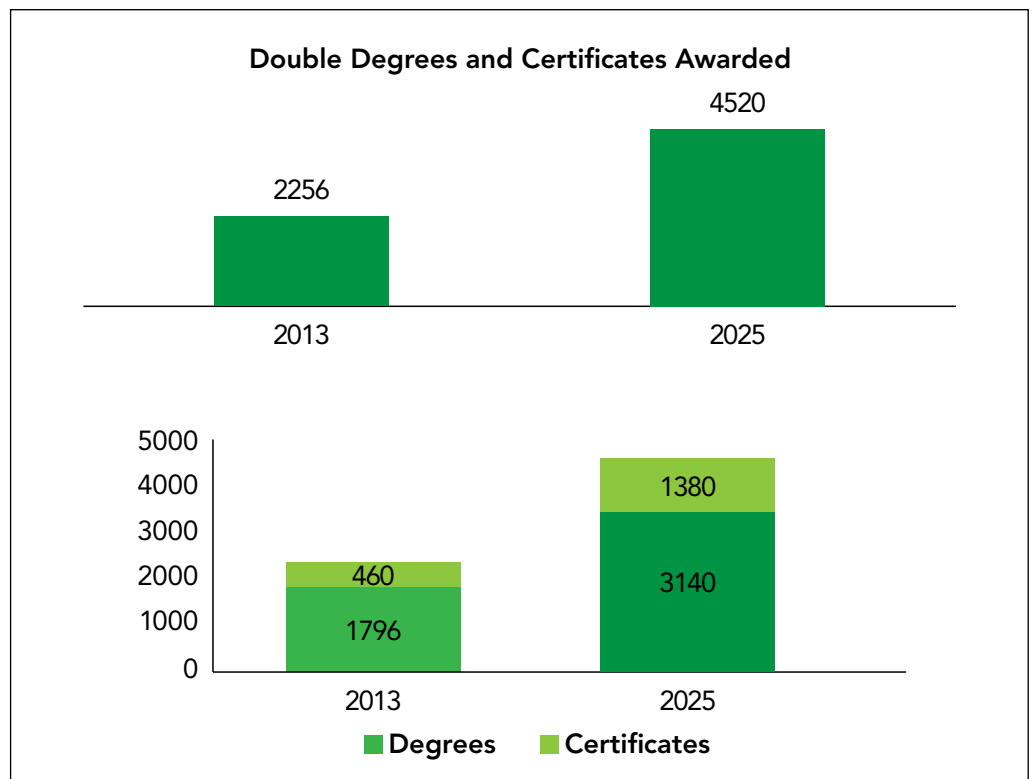


Figure 12: NH Community College Degrees Awarded and Goal, 2013-2025



STEM is second only to healthcare as the fastest-growing occupational sector in the national economy.

The Importance of STEM

CCSNH, with USNH, has committed to doubling the number of STEM graduates between 2013 and 2025. CCSNH is well on its way to achieving this goal, having increased STEM graduates over 30 percent last year.

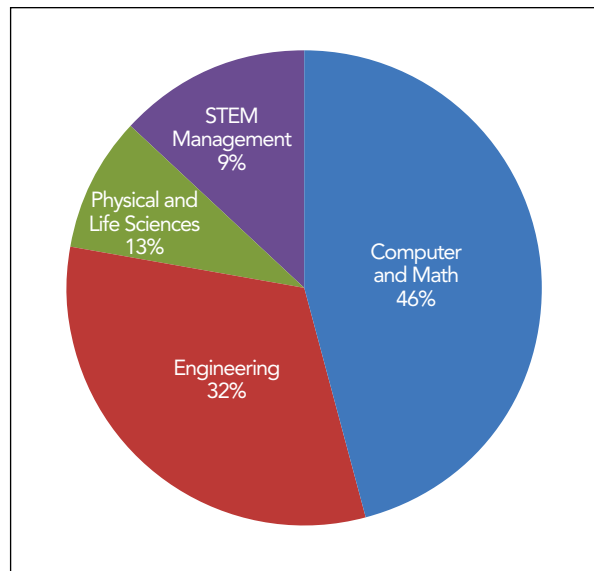
CCSNH's commitment to STEM is essential because STEM is second only to healthcare as the fastest-growing occupational sector in the national economy. Computer and math occupations account for close to half of all STEM employment today, followed by engineering, physical and life sciences, and STEM management jobs¹⁴. (see *Figure 13*) CCSNH has a strong history of supplying skilled professionals for the healthcare industry, with programs at all seven community colleges and strong ties to hospitals and other healthcare employers. Recent advances in support of NH's healthcare workforce include the creation of a bachelor's completion program with USNH for associate degree nurses, with the final 2 years at community college tuition and locations; and a focus on training students in emerging fields of health information technology and home healthcare. An increasing proportion of healthcare jobs require advanced STEM education. CCSNH is increasing enrollment and programing that reflects industry workforce needs. This is true in healthcare and in traditionally defined STEM fields.

From 2000 to 2010, growth in STEM jobs (7.9%) was three times greater than growth in non-STEM jobs (2.6%) in the United States. Through 2018, STEM occupations are expected to grow by 17 percent. In addition, over the same period there will be 1.3 million replacement positions generated by STEM workers who permanently leave the workforce, with the result that STEM will account for about 8.6 million jobs in the U.S. economy. This is compared to slightly less than 10 percent growth for non-STEM occupations.

¹⁴ "The Competitiveness and Innovative Capacity of the United States" (2012) U.S. Department of Commerce (in consultation with the National Economic Council) (http://www.commerce.gov/sites/default/files/documents/2012/january/competes_010511_0.pdf)

The Council on Postsecondary Education encourages a focus on STEM and health degrees.

Figure 13: U.S. STEM Workforce Composition



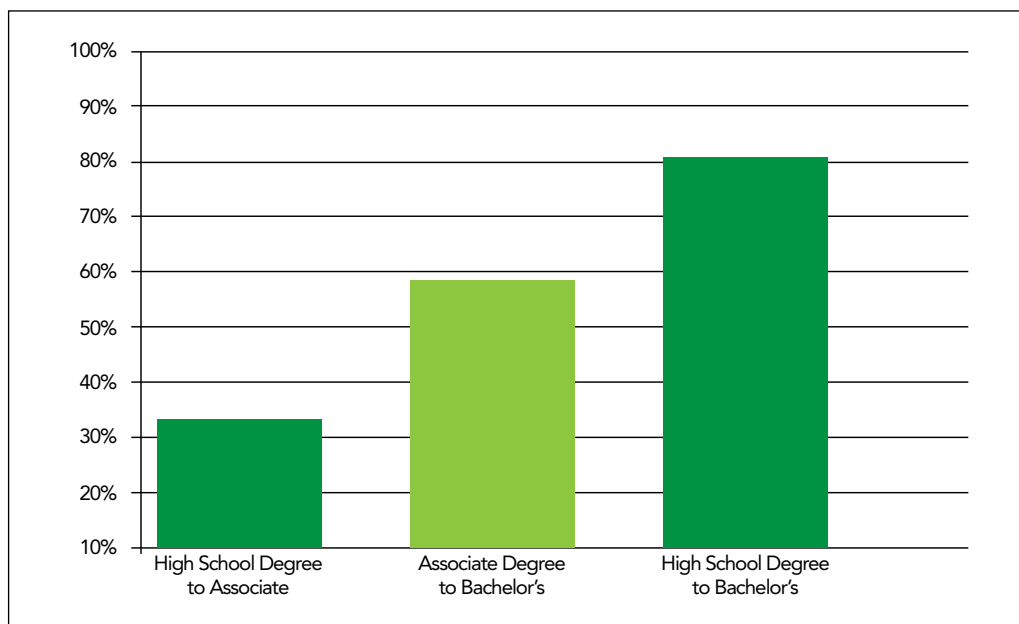
It's no wonder, then, that the Council on Postsecondary Education encourages a focus on STEM and health degrees. In NH, this need is especially urgent. The state currently ranks second to last in the number of STEM degrees and credentials awarded per STEM employee¹⁵. This makes the state relatively unappealing to companies that need STEM employees. It also presents a problematic outlook for current STEM employers in NH who increasingly must address vacancies created by older STEM-worker retirements, without an adequate, appropriately educated in-state pipeline.

Increasing the number of STEM graduates in higher education is also critically important for individual earnings. STEM graduates working in NH earn 30 percent more on average than their peers.¹⁶ For STEM workers in NH, the increase in earnings from a high school degree to an associate degree is 34 percent, and another 35 percent from the associate to the bachelor's degree, or over 80 percent from high school to the bachelor's. (see *Figure 14*)

¹⁵ National Center for Education Statistics. (2012). Custom download file using 2012-2013 data and Education Commission of the States and the National Center for Higher Education Management Systems.

¹⁶ SHHEO, 2012, (<http://www.sheeo.org/sites/default/files/publications/Econ%20Benefit%20of%20Degrees%20Report%20with%20Appendices.pdf>)

Figure 14: Increase in Earnings for STEM Degree Holders



CCSNH Scorecard

The CCSNH scorecard will be our roadmap to 65 by 25, guiding our work and documenting our progress. To date, the scorecard shows that CCSNH is exceeding targets in the areas of credentials awarded and completion rates.

CCSNH Scorecard	2013 (Actual)	2014 (Actual)	2015 (Projected)	2020 (Projected)	2025 (Projected)
Degrees and Certificates Awarded	2,256	2,395	2,500	3,300	4,520
Total Enrollment	27,373	27,765	30,000	33,000	37,000
STEM Degrees Awarded	219	288	241	353	520
Completion Rate from 2-Year Institutions First time, full-time freshman, 6-year rate (2008)	29%	30.6%	30%	33%	37%
Completion Rate from 4-Year Institutions First time, full-time freshman, 6-year rate (2008)	9%	10.2%	10%	13%	16%
Post-Secondary Matriculation Rate from New Hampshire High Schools to CCSNH	15%	16%	17%	20%	25%

Source: <http://www.ccsnh.edu/>

Conclusion

The linkages between a better-educated citizenry, economic prosperity, and better lives are clear, and an educated public has been one of the pillars of the New Hampshire Advantage in our state's recent history. With domestic in-migration no longer a reliable source of well-educated New Hampshire residents, declining grade school enrollment in NH, and a large percentage of NH students who leave the state to pursue postsecondary education, increasing the percentage of our population with post-secondary degrees and credentials is increasingly important to the state. 65 by 25 can help ensure that New Hampshire remains a strong and high-performing state economically, and that its residents have opportunities for economic advancement and a high quality of life in the years to come.

Have Questions or Comments?

We'd love to hear from you.
Please join the conversation at

www.ccsnh.edu/whitepaper



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