

# The Economic Impact of New England Higher Education ... and K-12

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Economists and business leaders have recognized the role played by colleges and universities in driving economic development through their purchasing and employment (to say nothing of their longer-term contributions to workforce development and knowledge creation) and the institutions often promote that impact in order to gain public and political support. But the economic impact of public and private elementary and secondary schools has been noticeably absent from the discussion.

A 2006 report by the New England Association of Schools and Colleges (NEASC) indicates that New England's accredited colleges and universities *and* schools represent the leading economic stimulus in the six-state region with an annual direct economic impact exceeding \$93.4 billion in academic year 2003-2004, the latest year for which audited school data is available. That's greater than the sum of annual state government expenditures by the six New England states combined.

Economic impact studies often multiply an organization or sector's direct spending by a factor of 2.0 to 3.0 to illustrate its broader impact on the economy. The NEASC study does not factor in a multiplier. The \$93.4 billion is a measure of *direct* economic impact, with higher education accounting for \$80 billion and K-12 for more than \$13 billion annually.

Because NEASC is precise in its direct measurement and thereby conservative in its findings, the study is gaining attention from both educators and public officials. The NEASC study is also unique because it considers both K-12 and higher education.

Why bring K-12 into the fold of institutions and "industries" measuring and touting their economic impact? For one, public policy is heavily focused on issues of state and local spending, and K-12 public education represents a major commitment. In addition, the question of college readiness has spurred educators and politicians to look more closely at the pre-K-12-higher education continuum. And upcoming congressional consideration of universal preschool will surely underscore the importance of considering the pre-K through 16 and beyond education enterprise as a whole.

Accordingly, an economic impact study of New England's higher education institutions *and* schools combined would be a useful and timely tool for regional policymakers—and certainly for educators.

Public education is funded almost entirely by local property taxes. At budget time, policymakers tend to

focus on education expenditures as costs, overlooking the significant positive economic impact that school spending has on local communities in terms of jobs and economic growth. In their quest for public support, schools should make the point that education spending does not occur in a vacuum. Most citizens and politicians understand education spending to be an investment with long-term social returns corresponding to lower welfare and crime rates and a more skilled labor force. Less understood are short-term benefits corresponding to transactions between schools and other businesses which generate commerce, raise the state income, spawn job growth and increase property values. Likewise, when education spending is reduced, firms that conduct business with schools are adversely affected because schools' demand for their goods and services inevitably decrease.

Thomas L. Hungerford and Robert W. Wasserman wrote in a 2004 National Education Association working paper that reducing public K-12 expenditures by 1 percent of state income would produce a nearly 1 percent decrease in employment in the state in the short-term and a 1.4 percent decrease in the long-term.

**New England not only has the highest concentration of independent higher education institutions in the nation, but also the highest density of independent primary and secondary schools. And the six states spend 23 percent more per public school pupil than the U.S. average.**

Moreover, the K-12 sector provides stability and continuity because it is less susceptible to ailments associated with the overall economy.

With discussion of school spending focused on the extraordinary impact that schools have on jobs and growth, public investment is likely to be seen less as a public tax burden and more as a worthy investment in society and the economy.

To be sure, some factors have impeded economic impact studies of schools in the past. The K-12 sector is highly decentralized and generally does not have the resources or support structure to engage in highly complex analyses. Also, financial reporting definitions and requirements vary from state to state denying researchers access to comparative information. Schools just don't have the personnel or expertise to devote to the complex data-gathering effort.

### Economic Impact of Accredited Schools, Academic Year 2003-2004

<b>Public elementary schools</b>	\$357,654,580
<b>Public middle schools</b>	\$294,932,389
<b>Public secondary schools</b>	\$5,489,196,490
<b>Vocational-technical schools</b>	\$484,846,799
<b>Private elementary, middle, secondary schools</b>	\$6,402,903,071
<b>Higher education institutions</b>	\$80,455,073,488
<b>Total</b>	<b>\$93,484,606,817</b>

Still, the total \$8.4 billion in revenue for the six-state region's public elementary, middle and secondary schools during 2004 was greater than the individual revenues of many of the region's top-grossing companies including EMC Corp., State Street Corp., Reebok International, Gulf Oil, NStar, Bose Corp., Houghton Mifflin and TJX Cos.

What makes the economic contribution of K-12 schools unique is the scale and breadth of its impact; few companies or industries consist of as many establishments as widely dispersed throughout a region as schools. Schools are in every district, in both urban and rural areas. And New England's schools appear to have a greater impact on their regional economy than schools in other regions. New England not only has the highest concentration of independent higher education institutions in the nation, but also the highest density of independent primary and secondary schools. And the six states spend 23 percent more per public school pupil than the U.S. average.

Schools contribute to growth and employment in a range of industries that the NEASC study does not measure but which should be appreciated. Schools spend significantly on goods and services like heat, electricity, equipment, food, health services, teaching

materials, transportation and employee benefits and have a major effect on industries like construction, health, publishing, energy and sporting goods.

Public elementary, middle, and secondary schools in the study spent over \$443 million on construction, \$45 million on instructional equipment, \$322 million on pupil transportation, and \$696 million on school operations. At the same time, public K-12 spending on salaries amounted to \$4.8 billion and spending on health and other benefits topped \$1 billion.

Perhaps most importantly, the education sector is the leading employer in New England. The 429,000 people working in the sector outnumber those employed in health care occupations (385,980) or business and financial services (307,600). The number of New Englanders working in schools, colleges and universities surpasses the total number of accountants, engineers, doctors, nurses, lawyers, police officers, electricians, mechanics, taxi drivers, dentists, clergy, photographers and architects in New England *combined*.

New England's construction industry benefits particularly from school construction and renovation. The New England region has many aging school buildings, some in use for a century or more. Connecticut and Massachusetts are the two New England states that spend the most (in terms of per-student spending) on school construction, ranking second and third in the nation after Alaska. In fact, they even outrank states like Nevada, where spectacular population growth has led to an explosion of new school construction in Clark County. In the decade leading up to 2004, the New England states spent a combined total of \$10.1 billion on construction and \$1.5 billion on the purchase of instructional equipment.

The construction industry should benefit considerably from growth in school construction and renovation projects, as 100-year old school buildings are replaced and ever-increasing use of technology and the Internet require both schools and colleges to build in sophisticated energy and electrical services.

The NEASC study allows us to make a few other important projections as well:

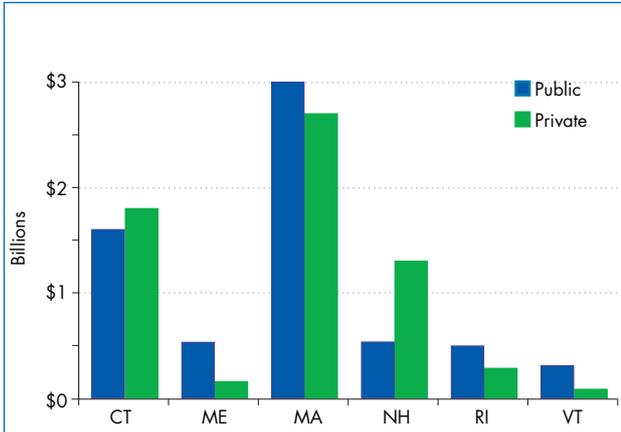
- The trend toward smaller classes and greater use of teacher aides and special education staff will demand more spending on teachers, while changing technologies will require more spending on capital equipment like computers and multimedia supplies.
- Aging school buildings and new electricity and wiring needs brought on by technologies will fuel spending on capital projects.
- Demand for additional school services such as early childhood education, full-day kindergarten, after-school activities and special education will grow.
- Greater demand for educational goods and services foreshadows growth in industries like publishing, multimedia, construction, supplemental educational services (particularly due to No Child Left Behind), and more health benefits.

### Expenditures per Student in Average Daily Attendance, 2003-04

<b>New England</b>	\$11,306
<b>Middle Atlantic</b>	\$11,499
<b>Southeast</b>	\$7,206
<b>Great Lakes</b>	\$9,963
<b>Plains</b>	\$7,945
<b>Southwest</b>	\$7,118
<b>Rocky Mountains</b>	\$8,006
<b>Far West</b>	\$8,495
<b>U.S. average</b>	<b>\$8,807</b>

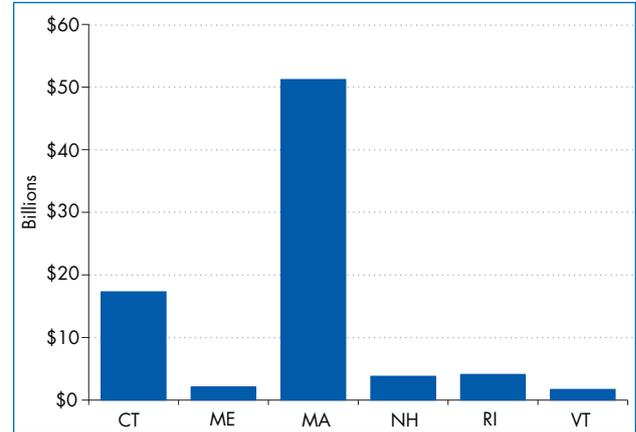
Source: NEA Research. (June 2005). Rankings & Estimates: Rankings of the States 2004 and Estimates of School Statistics 2005. National Education Association. Summary Table J: Estimated Expenditures for Public Schools 2003-04 (Revised).

## Economic Impact of Accredited K-12 Schools by State, Academic Year 2003-2004



Clearly, the economic impact of the region's education community is significant and growing. At a time when districts, states and the nation are considering how best to align pre-K-12 and higher education institutions, organizations such as NEASC and the New England Board of Higher Education should help the pre-K-16 sector in examining, compiling and disseminating credible information on education's impact. Greater appreciation of the

## Economic Impact of Accredited Higher Education Institutions by State, Academic Year 2003-2004



significance of the pre-K-12 education sector's economic impact as part of the broader picture will be good for the region's entire education enterprise.

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# Foundations and Higher Education: Whose Agenda?

JOHN C. SCHNEIDER

A little over 15 years ago, I went with my university's provost to visit the higher education program director at a major foundation. The two had a lively exchange and we were invited to submit a proposal that was the brainchild of a creative young assistant professor of engineering. We got the grant, providing several years of support for a wonderfully innovative curriculum that in turn seeded a process that would culminate in revised pre-college teaching standards throughout Massachusetts.

After the grant ended, I took the faculty member to the foundation to report on the extraordinary success and impact of the project—the sort of thing foundations say they love to hear. The program officer who had reluctantly agreed to meet with us was polite but disinterested, and she ushered us out before we could even complete our presentation. As it turned out, we

had been caught in a critical moment of change at this foundation similar to what was happening at many other foundations. Grant programs that had been relatively open-ended were now tightly drawn, grounded in the foundations' own carefully articulated take on issues and receptive only to proposals that responded appropriately. Initiative and creativity had shifted heavily from prospective grantee to grantor. Our funded project, whatever its merits, was now out of step with what this foundation wanted quite specifically to accomplish in its education program.

As foundations embraced this funding-by-agenda, it burdened their relationship with colleges and universities, who still preferred to bring their own ideas to the table. Some cut back or completely eliminated their programs in higher education teaching and learning. They also turned increasingly to pre-college education, funding for which in absolute dollars increased twice as fast as that for colleges and universities between 1990 and 2004. Much of this actually went to intermediary organizations,