

MAINE STATE LEGISLATURE

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Indicators of Higher Education Attainment in Maine

College as a **Right and Responsibility** for all Maine People

August 2009



MAINE COMPACT FOR HIGHER EDUCATION

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College as a **Right and Responsibility** for all Maine People

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August 2009

The purpose of this report is to assess the extent to which we are achieving the Compact's goal, which is that the percentage of Maine's working-aged adults who have an associate, bachelor's or graduate degree will match the New England average by 2020. The report will also provide a framework to inform the decisions of policymakers, business people, community leaders, and educators. The Compact has produced this report annually since August 2005. We tried to select indicators for which data is available annually and regionally for comparison purposes. The Mitchell Institute has prepared the report each year for the Compact. The Nellie Mae Education Foundation and the Compact provided financial support for the initial research. Founded in 2003 by the Maine Development Foundation and the Maine Community Foundation, the Compact is a non-profit organization whose mission is to dramatically increase postsecondary education attainment. We encourage your reactions and suggestions. The full report is on the Compact's website, www.collegeforME.com. For more information, contact Henry Bourgeois, Compact Executive Director, at henryb@mdf.org or 207.347.8638.



MAINE COMPACT FOR HIGHER EDUCATION

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SUMMARY OF INDICATORS

I. DO MORE MAINE WORKING-AGE PEOPLE HAVE DEGREES?

Indicator 1: Working-age adults with college degrees. The proportion of Maine adults with an associate or higher degree increased from 37% in 2006 to 39% in 2007—meaning nearly 11,000 more Maine adults now have college degrees. New England’s proportion has not changed since 2004. The Compact’s goal is to match New England’s higher education attainment, projected to grow to 56%, by 2020.

II. DO MORE MAINE PEOPLE VALUE POSTSECONDARY EDUCATION?

Indicator 2: Education level needed for success. 78% of Maine adults believe that today’s high school students will need at least a two-year college degree to be successful, while only 26% believe that this was true when their generation was in high school.

Indicator 3: All students college-ready. Three-quarters (75%) of Maine adults surveyed agree that “All students should be prepared to graduate from high school ready to go to a two- or four-year college.”

III. ARE MORE MAINE PEOPLE READY FOR POSTSECONDARY EDUCATION?

Indicator 4: Student performance on assessment tests. In 2007-2008, the majority of Maine 4th and 8th graders met or exceeded Maine Educational Assessment standards in math, reading, and science. The proportion of 8th graders meeting or exceeding the standards has improved in all areas over the past three years. Maine 11th graders who take the PSAT score significantly lower than the New England and U.S. averages, and Maine’s average PSAT critical reading and writing scores have dropped over the past three academic years.

Indicator 5: Middle and high school math courses. About 32% of Maine 8th graders are on an accelerated math track (taking Algebra 1 or higher), up by 33% from 2003 to 2007. This compares to 39% of New England 8th graders; New England’s figure increased by 26% from 2003 to 2007.

Indicator 6: Advanced Placement courses and exams. From 2000 to 2008, the percentage of Maine high school seniors scoring three or higher on AP exams (now 19%) has increased to match the New England average, while the percentage of Maine students taking AP exams (now 32%) has surpassed the regional average.

Indicator 7: Early college courses. A 2009 survey found that 95% of Maine’s public high schools allow their students to take college courses for dual credit, up from 73% in 2006. The schools reported that their students took a total of 1,985 dual credit early college courses, up from 1,022 courses in 2006.

Indicator 8: High school graduation. Maine’s on-time high school graduation rate increased from 74% in 2000 to 82% in 2008, and is higher than New England’s (which was 76% in 2006, the latest year available). High school graduation rates in Maine’s counties in 2008 ranged from 76% in Androscoggin County to 91% in Lincoln County.

Indicator 9: Remedial college courses. Nationally, about three-quarters of degree-granting colleges offer remedial courses. In both 1995 and 2000, 28% of U.S. entering college freshmen took at least one remedial course. In 2004, 25% of University of Maine students and 37% of Maine Community College students took at least one remedial course.

IV. ARE MORE MAINE PEOPLE ENROLLING IN POSTSECONDARY EDUCATION AND GRADUATING?

Indicator 10: Recent high school graduates enrolling in college. College enrollment the fall after high school graduation dropped in both Maine and New England from 1998 to 2004, then increased significantly in 2006, to 65% and 68%, respectively.

Indicator 11: Adults enrolled in postsecondary education. Between 1991 and 2007, the proportion of Maine adults enrolled in college decreased significantly—from 5.4% to 4.4%—though not as fast as the decline in New England as a whole. Maine adults without a high school diploma, however, are earning general equivalency diplomas (GEDs) at a higher rate than their counterparts in New England and the U.S. as a whole.

Indicator 12: Total college enrollment. Between 1995 and 2007, total enrollment in Maine postsecondary institutions grew by nearly 20%, from 56,500 to more than 67,000 students. Just over one-half of college students in Maine are enrolled in the University of Maine system. The share of students enrolled in the Maine Community College System was 21% in 2007, up from 15% in 2001.

Indicator 13: Degree completion. Maine postsecondary institutions awarded more than 10,800 degrees in 2006, a 20% increase since 1996. The graduation rate at Maine's community colleges is higher than the New England average—31% compared with 18%—while Maine's public four-year institutions graduate students at a lower rate—37% compared with 45%—than their New England counterparts.

V. IS MAINE POSTSECONDARY EDUCATION MORE AFFORDABLE?

Indicator 14: Cost of college. The average increase in college costs from 1998 to 2008 was 44% in Maine and 61% in New England. Maine students from families with incomes in the lowest 40% of the population would now have to pay 48% of their annual income to cover average net costs at community colleges and 57% at public four-year colleges.

Indicator 15: State contribution to higher education. As a percentage of total state expenditures, Maine's contribution to higher education—\$715.2 million or 9.1% in 2006—lower than the New England and U.S. averages of 9.7% and 10.4%, respectively.

Indicator 16: State grant aid. Maine provides nearly \$15 million annually in grant aid for college students, or about \$314 per full-time equivalent (FTE) student in 2006-2007. The New England average (\$297) is lower, but the national average is much higher, at about \$613 per FTE student.

Indicator 17: Student borrowing. The average Maine undergraduate takes out more than \$4,400 each year in student loans, and this figure has increased by 40% since 2000, compared to a New England-wide increase of 15%. Maine college students now borrow \$128 more per year, on average, than the average for New England students.

Indicator 18: Employer support for education. Two-thirds (67%) of employed Maine adults report that their employer would provide support if they decided to pursue additional education. Only 14% indicate that they are currently enrolled in some form of education or training.

VI. ARE MAINE'S PEOPLE, COMMUNITIES, AND ECONOMY BENEFITING?

Indicator 19: Earnings and income by education level. In Maine, workers with some college now earn 20% more and workers with bachelor's degrees earn 50% more per year than those with only a high school diploma. Workers with only a high school diploma have experienced a decrease in earnings since 1999. Both across Maine counties and New England states, there is a strong correlation between higher educational attainment and per-capita income.

Indicator 20: Unemployment by education level. In Maine, unemployment among workers with less than a high school diploma nearly doubled—from 8.2% to 15.7%—from 2004 to 2007. Unemployment remained stable for workers with at least some college education. Maine generally has lower unemployment than the New England and U.S. averages, except among workers who have not completed high school.

Indicator 21: Other benefits of higher education. Beyond the purely economic benefits, higher education attainment benefits individuals and communities in many ways. The proportions of adults reporting that their health is good, that they have ever volunteered for or through an organization, and that they voted in the November 2000 election increase significantly with each successive level of education.

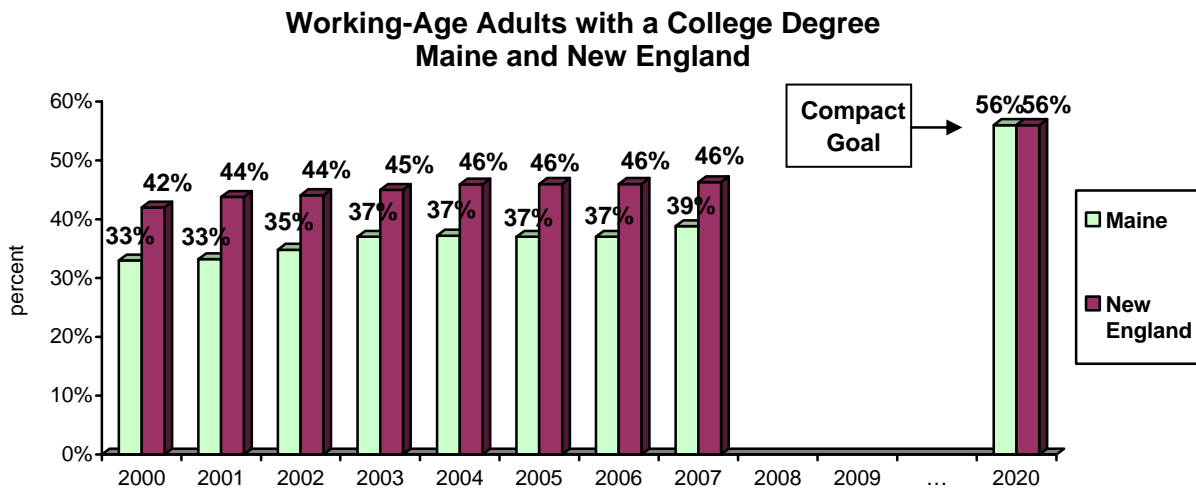
I. DO MORE MAINE WORKING-AGE PEOPLE HAVE DEGREES?

In its 2004 Action Plan, *Greater Expectations*, the Compact announced that its goal is to make Maine people among the best-educated in America, and that the primary measure of progress toward that goal is the proportion of working-age adults in Maine with postsecondary education degrees. Specifically, the Compact’s goal is to help Maine match educational attainment in New England by 2020.

Indicator 1: Working-Age Adults with College Degrees

Current U.S. Census Bureau estimates indicate that 39% of Mainers ages 25-64 have an associate, bachelor’s, or advanced degree, compared with 46% of working-age adults in New England. Maine’s figure increased by 1.8 percentage points from 2006 to 2007, while the New England figure has not changed since 2004.

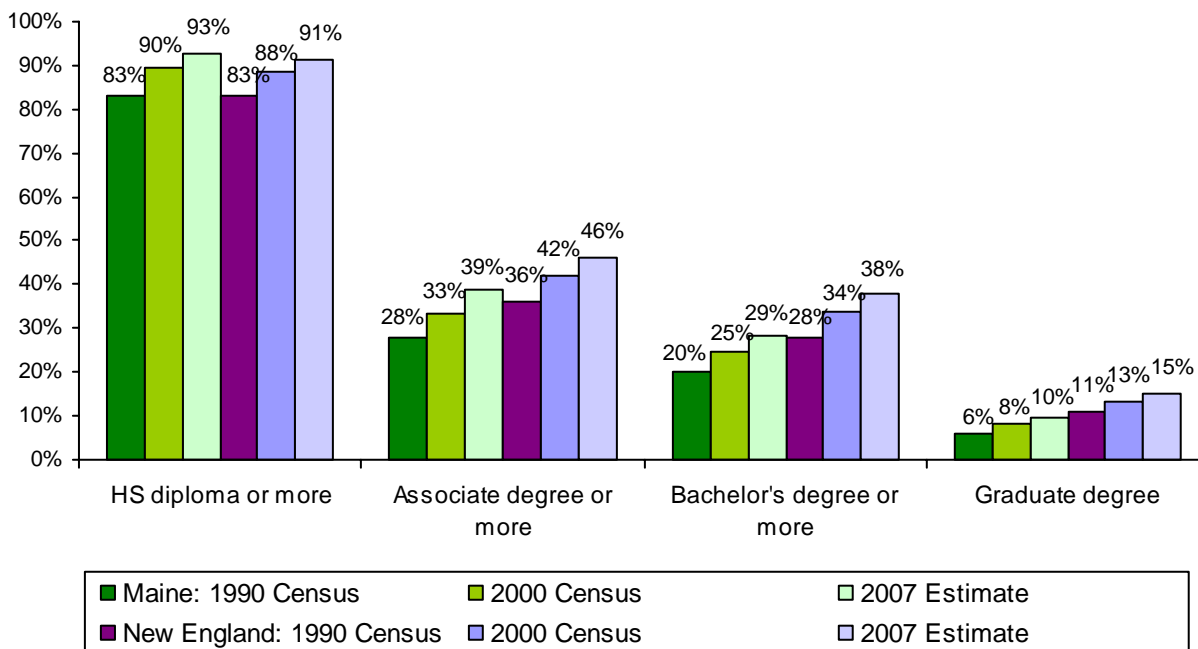
If the growth rate of the 1990s were to continue, the proportions of working-age adults with a college degree would increase to 52% in Maine and 56% in New England by 2020. In order for Maine to match the projected New England proportion of 56% of working-age adults with college degrees, we will need to produce and/or attract about 40,000 additional degree holders—above and beyond 120,000 additional degree holders that the state can expect with no special intervention—over the next 12 years.



Source: U.S. Census Bureau, Decennial Census (2000) and American Community Survey (2001-2007)

Maine compares favorably with New England in terms of its working-age population with high school diplomas, but our proportion of working-age adults with postsecondary degrees at all levels significantly lags behind the New England rates (see next chart). In fact, Maine has the lowest proportion of adults with postsecondary degrees of any New England state. However, the proportion of Maine adults with college degrees has grown nearly twice as fast as the New England average, increasing by 18.2% compared with 9.5%, during this decade.

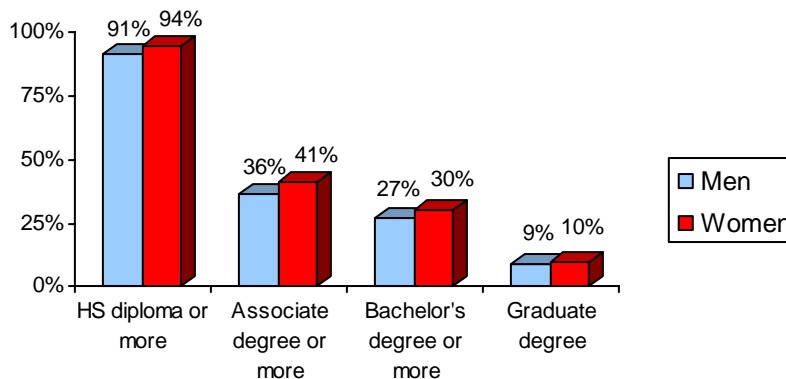
Educational Attainment of Working-Age Adults (Ages 25-64)



Source: U.S. Census Bureau, Decennial Census (1990 and 2000) and American Community Survey (2007)

Among working-age adults in Maine, women’s educational attainment is higher than men’s at all levels (see chart below). In 2007, 41% of Maine women had earned an associate degree or more, compared with 36% of men.

Maine Working-Age Adults’ Educational Attainment by Gender, 2007

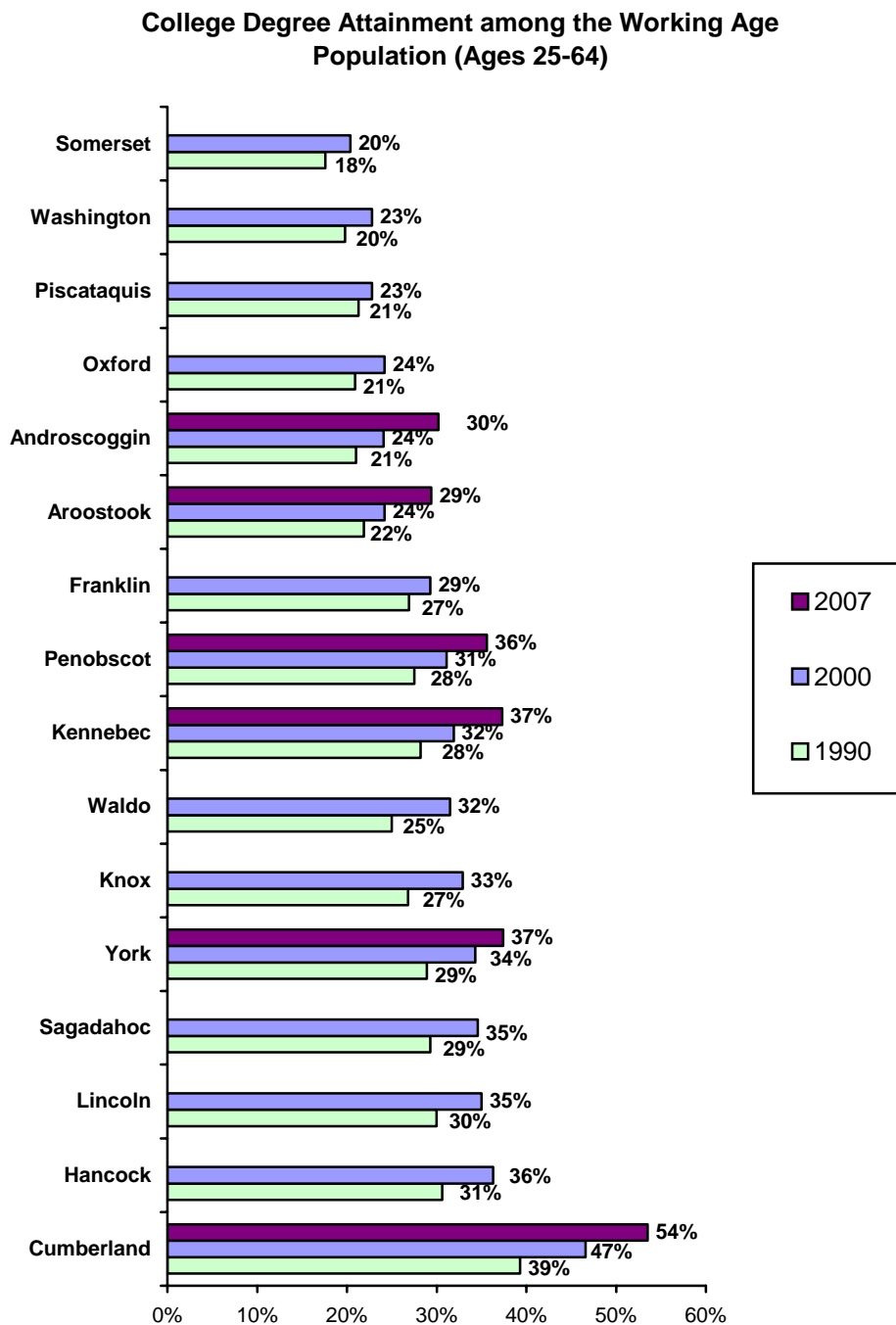


Source: U.S. Census Bureau, American Community Survey

Regional Analysis:

Educational attainment in Maine’s 16 counties varies widely. In 2000, the proportion of working-age adults with a college degree ranged from 20% in Somerset County to 47% in Cumberland County (see following chart). Five counties—Cumberland, Hancock, Lincoln, Sagadahoc, and York—had higher proportions of college degree-holders than the state average. All 16 counties saw at least some growth in postsecondary educational attainment between 1990 and 2000. The following chart includes 1990 and 2000 estimates for

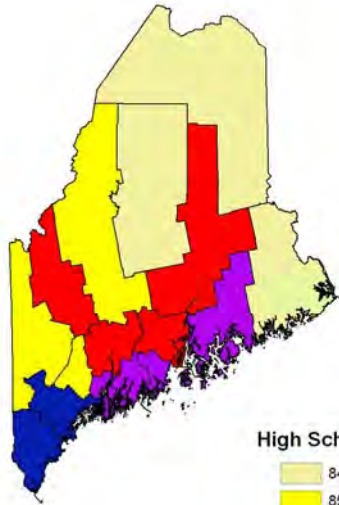
all of Maine's counties as well as 2007 estimates for its six largest counties, and shows continuing growth in college attainment during this decade.¹



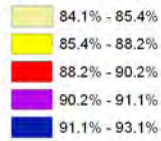
Source: U.S. Census Bureau, Decennial Census (1990 and 2000) and American Community Survey (2007)

¹ In 2005, the Census Bureau expanded its annual American Community Survey to include estimates for counties with populations over 65,000. Six Maine counties—Androscoggin, Aroostook, Cumberland, Kennebec, Penobscot, and York—are now included.

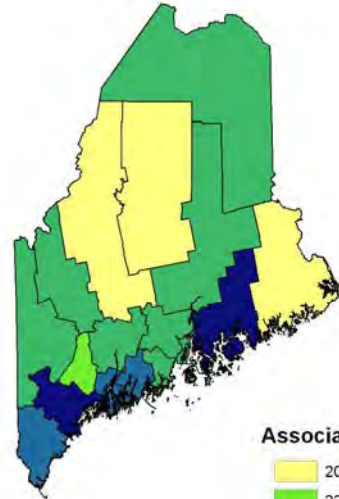
Education Attainment of the Working Age Population (Ages 25-64), 2000



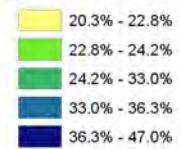
High School Degree



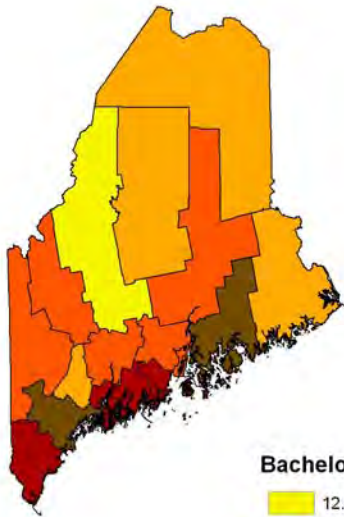
Maine Average: 90%
New England Average: 88%



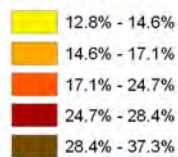
Associate Degree



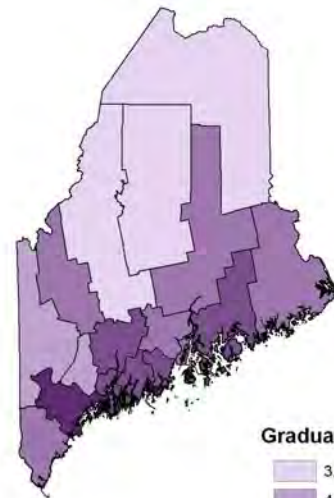
Maine Average: 33%
New England Average: 42%



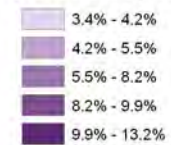
Bachelor Degree



Maine Average: 25%
New England Average: 34%



Graduate Degree



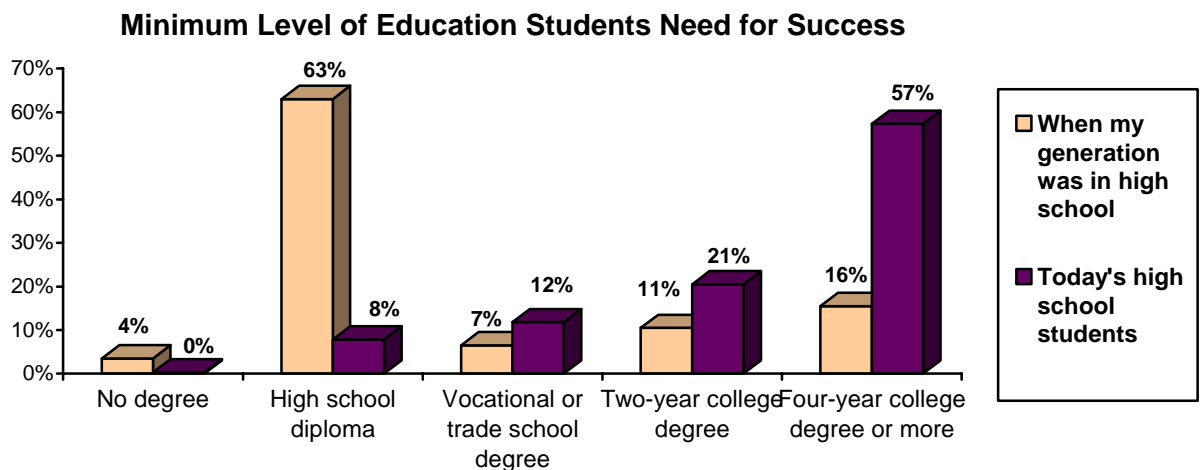
Maine Average: 8%
New England Average: 13%

II. DO MORE MAINE PEOPLE VALUE POSTSECONDARY EDUCATION?

Public opinion about the importance of college affects the higher education environment in terms of both the level of public investment in higher education and expectations about college passed on to students. Maine adults were surveyed recently about key attitudes toward college.

Indicator 2: Education Level Needed for Success

One measure of the importance of college is the degree to which citizens believe a college education is essential for achieving success. A 2005 poll of 400 Maine adults asked, “What is the minimum level of education that students need to be successful?” Respondents were asked to answer the question for the past (“thinking back to when your generation was in high school”) and for today’s high school students. Responses indicate that there has been a dramatic shift in Mainers’ beliefs about the level of education needed for success. While only about one-quarter of respondents (26%) said that students of their generation needed at least a two-year college degree to be successful, more than three-quarters (78%) said that today’s high school students need at least a two-year college degree to be successful. More than one-half (57%) of Maine adults believe that, for today’s high school students, a four-year college degree is the minimum level of education needed for success. Conversely, while nearly two in three respondents (63%) indicated that a high school diploma was the minimum level of education needed for success when their generation was in high school, only 8% indicate that a high school diploma is adequate for success among today’s high school students. Most survey respondents (63%) were 45 or older, including 24% who were 65 or older. Younger respondents were more likely to say that at least a two-year college degree was needed for success when their generation was in high school, with 43% of those ages 18-34, 33% of 35- to 54-year-olds, and 13% of those over age 55 reporting this.



Source: Strategic Marketing Services/ Pan Atlantic, 2005

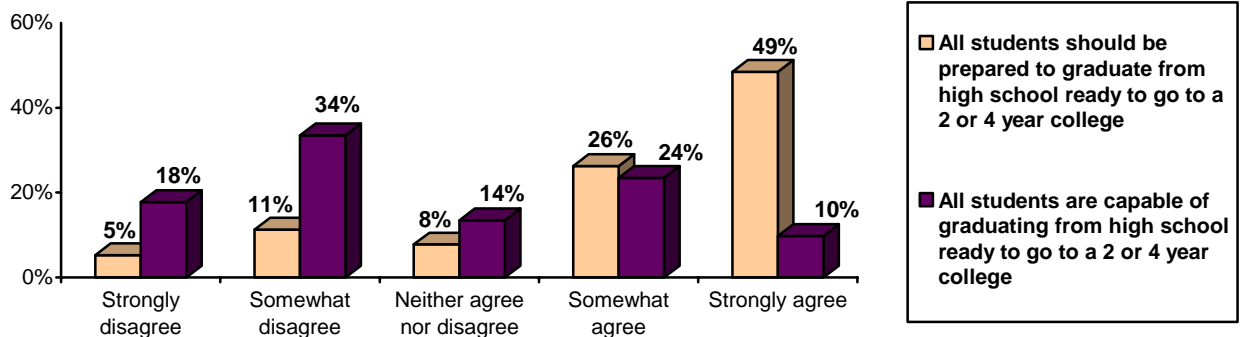
Survey respondents were also asked whether they think further education will be necessary to achieve their future career goals. Most respondents (60%) who are not retired and expect to be employed five years from now indicated that further education will be necessary to achieve their career goals.

Indicator 3: All Students College-Ready

Another key indicator of public opinion on the importance of college is the extent to which citizens believe that all students should graduate from high school prepared for college. High school reform efforts in Maine are based on the idea that high schools should graduate every student college-ready, and recent surveys gauged whether public opinion supports this goal.

In 2005, three-quarters (75%) of Maine adults reported agreement that “all students should be prepared to graduate from high school ready to go to a two- or four-year college.” About one in nine respondents (11%) somewhat disagreed with the statement, and only one in twenty (5%) strongly disagreed. Only about one-third of Maine adults (34%), however, report agreement that “all students are capable of graduating from high school ready to go to a two- or four-year college,” as shown below.

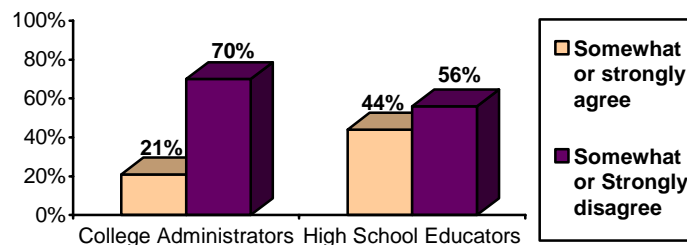
Agreement among Maine Adults that All Students Should be Prepared for College



Source: Strategic Marketing Services/ Pan Atlantic, 2005

A 2007 survey asked a similar question of Maine college administrators and high school educators. One in five college administrators (21%) agreed with the statement, “All students are capable of graduating from high school ready for two- or four-year college.” More than twice as many high school educators (44%) agreed that all students are capable of graduating ready for college. For college administrators who disagreed, the primary reasons were inadequate academic preparation and some students’ lack of maturity. Among high school educators who disagreed, the main reasons were students’ lack of motivation for academic work in high school and lack of interest in attending college.

“All students are capable of graduating from high school ready to go to a two- or four-year college.”



Source: Mitchell Institute, 2007

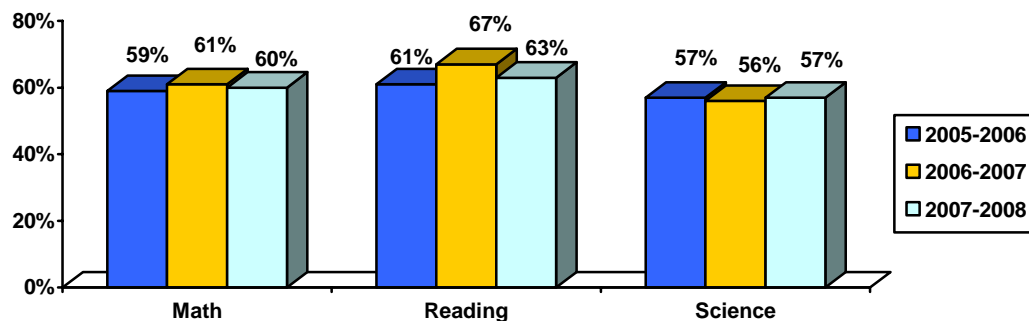
III. ARE MORE MAINE PEOPLE READY FOR POSTSECONDARY EDUCATION?

There are many measures of readiness for college among current elementary and secondary students. We look at performance on assessment tests, which include the MEA for 4th and 8th grade students, and the PSAT and SAT for high school students. In addition, we consider the performance in courses in middle and high school, Advanced Placement and Early College courses in high school, and high school completion. Remedial college course-taking is an indicator of the preparedness of entering college students. Indicators of college readiness among adults are not included, for lack of data.

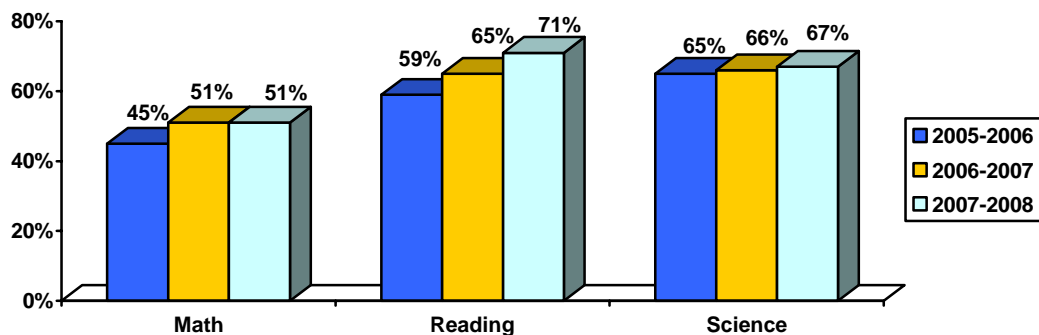
Indicator 4: Student Performance on Assessment Tests

Beginning in 1999, Maine Educational Assessment (MEA) tests were administered each year to all students in grades 4, 8, and 11. In 2006, the Maine Department of Education redesigned the MEA to better gauge student progress toward the *Maine Learning Results*, as recommended by the federal *No Child Left Behind Act*. Students are now tested in grades 3 through 8, and 11th graders now take the SAT rather than the MEA. The following charts show the proportions of 4th and 8th grade students who met or exceeded the new MEA standards in the past three academic years. Since 2006-2007, the majority of students in both grades have met or exceeded the standards in all three testing areas. In math, 60% of 4th graders but only 51% of 8th graders met or exceeded the standards in 2007-2008. The proportion of 8th graders meeting or exceeding the standards has improved in all areas over the past three years.

**Proportion of Maine Test-Takers Meeting or Exceeding MEA Standards:
4th Grade**



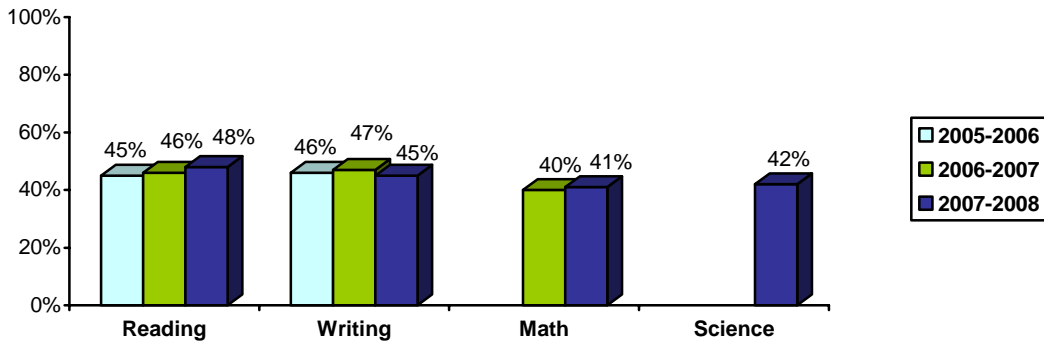
8th Grade



Source: Maine Department of Education, Maine Educational Assessment

Beginning in 2006, the Maine Department of Education replaced the MEA for 11th graders with the SAT, a college aptitude test administered by the College Board, and renamed it the Maine High School Assessment (MHSA). In 2007, the math portion of the MHSA was extended. In 2008, a new science section was added. To meet or exceed standards on the math and critical reading portions of the SAT, students must score 460 or higher on a 0 to 800 scale. To meet or exceed writing standard, students must score 450 or higher. In 2007-2008, less than one-half of Maine 11th graders met or exceeded the MHSA standards. Reading performance has improved steadily over the past three academic years.

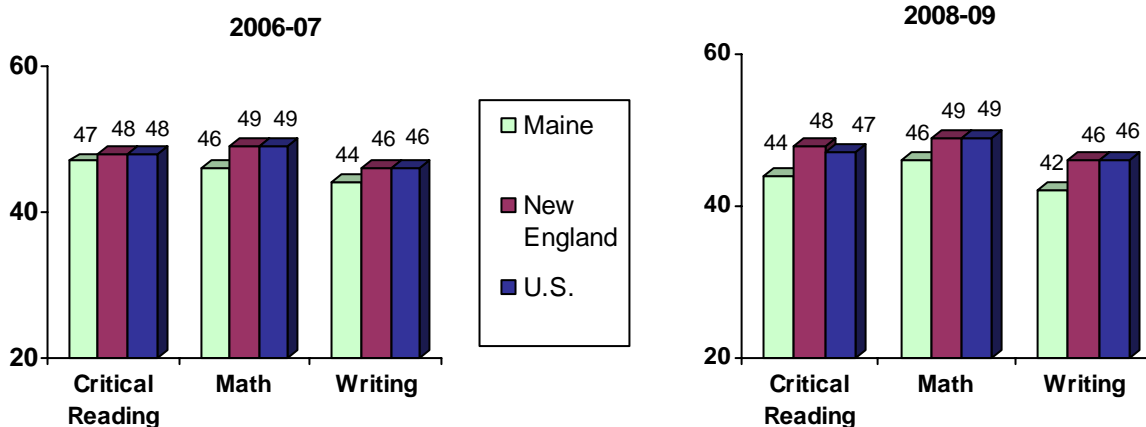
Proportion of Maine 11th Graders Meeting or Exceeding MHSA Standards



Source: Maine Department of Education, Maine High School Assessment

The Preliminary SAT (PSAT), scored on a scale of 20 to 80, gives an indication of how Maine high school students measure up to average achievement in New England and the U.S. The following chart compares the PSAT scores of Maine’s 11th graders to those of college-bound 11th graders in New England and the nation.² The average PSAT scores for Maine 11th graders are lower than the New England and U.S. averages in reading, writing, and math. While the New England and U.S. average PSAT scores have remained virtually the same since 2006-2007, Maine’s average scores in critical reading and writing have dropped by several points (see following chart).

Average 11th Grade PSAT Scores, 2006-07 and 2008-09



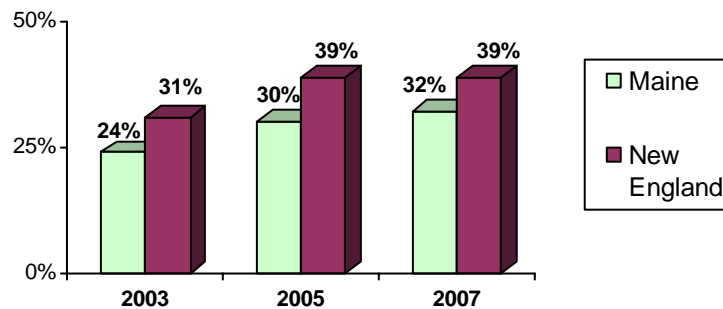
Source: College Board, PSAT Data and Reports

² One reason Maine’s average scores are likely to be lower than the New England and U.S. averages is that virtually all Maine students take the PSAT, while smaller proportions of students, more likely to be “college-bound”—roughly 75% of juniors in New England and only 45% in the U.S.—take the test.

Indicator 5: Middle and High School Math Courses

Students' courses in middle and high school are a vital component of preparation for college. Completion of math courses in particular is an important indicator of the likelihood that students will continue on to college after high school, and national research shows that finishing a math course beyond Algebra 2 (e.g., trigonometry or pre-calculus) more than doubles the odds that a student who enters college will earn a bachelor's degree. Compared with New England, Maine students are less likely to be in on accelerated math track, according to data from the National Assessment of Educational Progress (NAEP). Less than one-third (32%) of Maine 8th graders reported that they were taking Algebra 1 or a higher math course in 2007, compared with 39% of their New England peers. Since 2003, the proportion of Maine 8th graders taking Algebra has improved by 33%, however, slightly higher than the New England increase of 26%.

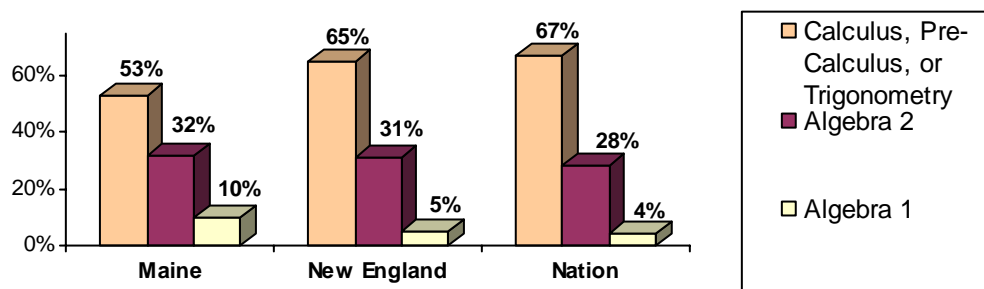
Proportion of 8th Graders Taking Algebra



Source: National Center for Education Statistics

Each year, several background questions are asked on the Scholastic Aptitude Test (SAT). In 2008, students taking the SAT were asked which math courses they expect to complete by the end of high school. In Maine, 53% of 2008 high school seniors who took the SAT expected to complete a math course beyond Algebra 2, significantly lower than the New England and U.S. figures of 65% and 67%, respectively.

Highest Math Course Completed by 2008 High School Seniors



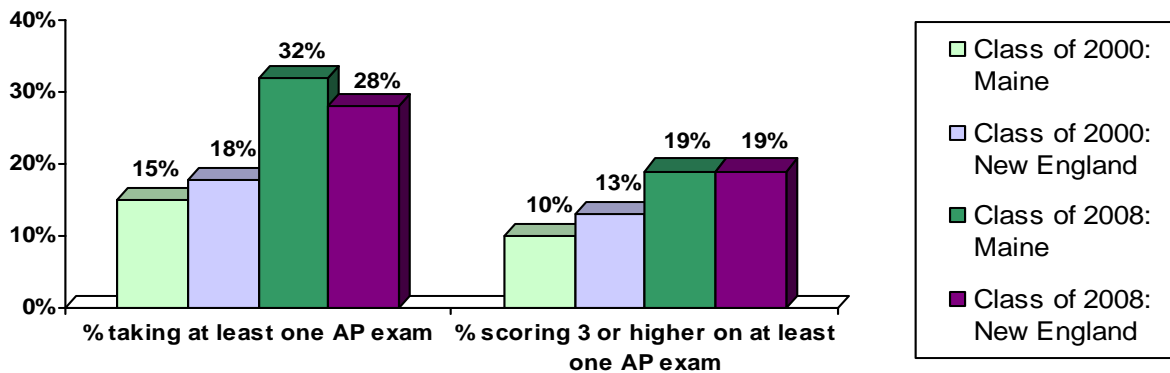
Source: College Board, SAT Data and Reports

Indicator 6: Advanced Placement Courses and Exams

Advanced Placement (AP) courses are high school courses designed to provide college-level learning experiences. A rigorous academic experience in high school is the most powerful predictor of college degree completion, and participation and success in AP courses is one measure of the level of academic rigor to which Maine high school students have access. The College Board has found that taking AP courses tends to improve students' academic attitudes and behavior in ways such as honing study skills and time management, strengthening academic persistence, and providing experience with study groups.

The College Board administers AP exams, developed in partnership with colleges and universities to assess college-level learning, in 34 subject areas. The exams are graded on a scale of one to five, and most U.S. colleges and universities grant college credit or placement into a higher level college course to students who earn a grade of three or better. AP exams are optional, and not all students who take an AP course opt to sit for the exam. In Maine, the proportion of high school graduates who had taken at least one AP exam more than doubled from 15% of the class of 2000 to nearly 32% of the class of 2008. In New England, 18% of the class of 2000 and 28% of the class of 2008 took an AP exam. The proportion of students who achieved a score of three or higher on at least one AP exam grew from 10% of the class of 2000 to 19% of the class of 2008 in Maine, and from 13% of the class of 2000 to 19% of the class of 2008 in New England. Thus, the percentage of Maine high school seniors scoring three or higher on an AP exam has increased during this decade to match the New England average, and the proportion who take at least one AP exam has surpassed the regional average.

AP Exams in Maine and New England: High School Classes of 2000 and 2008



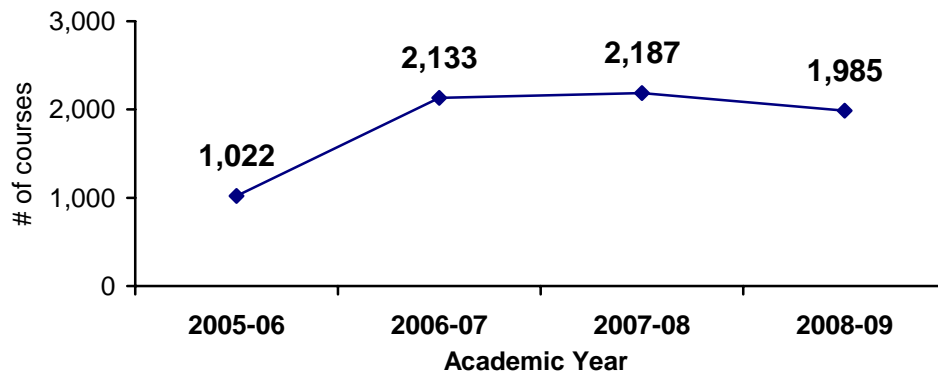
Source: College Board, AP Data and Reports

Indicator 7: Early College Courses

In most Maine high schools, students have the opportunity to take college courses for dual college and high school credit. “Early college”—also called dual enrollment or dual credit—courses differ from Advanced Placement in that students who pass the courses automatically earn college credit. Some early college courses are offered at high schools or online, but in most cases students take courses on college campuses side-by-side with college students. Early college courses both contribute to a rigorous academic experience in high school and give students the opportunity to experience college-level work and college-level success in a college environment. Particularly for students with uncertain aspirations, participating in early college courses may increase the likelihood that they will enroll and persist in college.

A 2009 survey found that 95% of Maine’s public high schools allow their students to take college courses for dual credit, up from 73% in 2006. The schools reported that their students took a total of 1,985 dual credit early college courses in 2008-09, up from 1,022 courses in 2005-06. Maine’s “Aspirations” program, in which the state splits the cost of tuition with public postsecondary institutions, began in 1998. In its early years, the program funded between 200 and 400 early college courses each year. The combination of a National Governors Association grant; broadened eligibility and expanded state funding for Aspirations courses; and the development of a distance education early college program at the University of Maine has rapidly increased access to early college in the past several years (see chart).

Maine High School Students’ Dual Credit Course-Taking



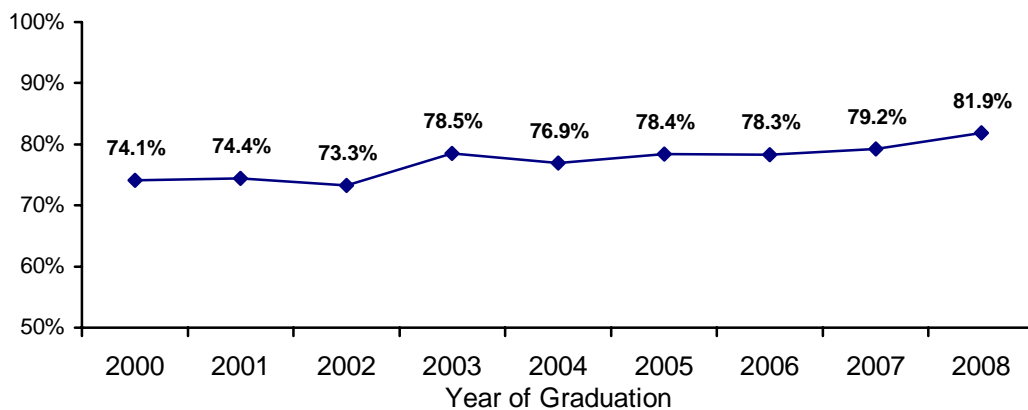
Source: Maine Department of Education; Mitchell Institute

The Early Studies program funded 756 early college courses in 2006-2007 and 1,421 courses in 2007-2008, an 88% increase. The Maine Community College System separately sponsors about 400 early college courses each year through its *Early College for ME* and *On Course for College* programs. Nonprofit organizations such as the Great Schools Partnership and the MELMAC Education Foundation also support early college programs, and several local high school-college partnerships have formed around the state to provide students easier access to early college courses.

Indicator 8: High School Graduation

High school graduation is a critical step in preparing Maine students to move on to college. Here we calculate on-time high school graduation, or the number of 9th graders enrolled in Maine high schools that graduate four years later. The percentages are adjusted to reflect high school population change during the corresponding four-year period. The proportion of Maine students who complete high school on time increased from 74% in 2000 to 82% in 2008, as shown below. These are currently the best available data; however Maine, along with 46 other states, has agreed to implement a high-quality, comparable high school graduation measure which will account for student transfers. In Maine, the new data are scheduled to be available beginning with the class of 2010.

Maine High School Graduation Rate: 2000-2008



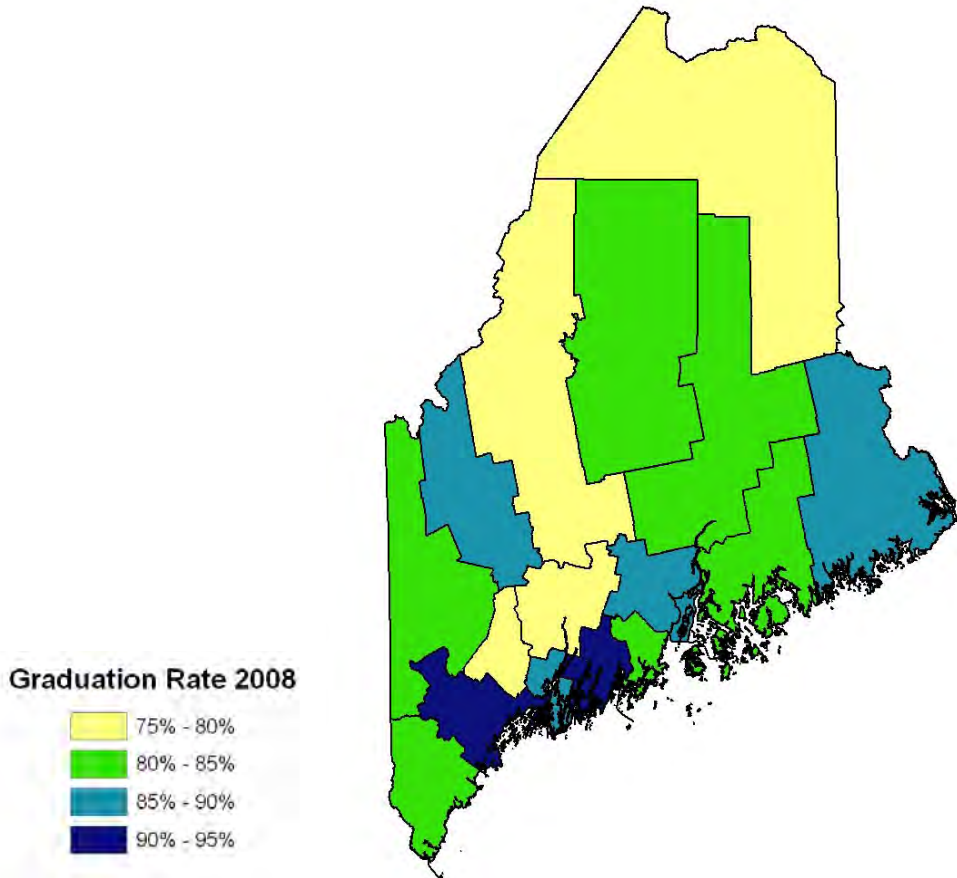
Source: Mitchell Institute calculations using Maine DOE data

The National Center for Higher Education Management Systems provides comparable data for high school completion in Maine and New England. For the years 2000 through 2006 (the latest available), New England's on-time graduation rate increased from 75% to 76%, not quite keeping pace with the increase in Maine.

Regional Analysis:

There is considerable variation in high school graduation rates among Maine's counties. In 2008, graduation rates ranged from 76% in Androscoggin County to 91% in Lincoln County (see map on next page). From 2000 to 2008, all but two counties—the northern counties of Aroostook and Somerset, which had among the highest rates at the start of the decade—have seen increasing high school graduation rates. Coastal/Downeast Maine Counties—Knox, Washington, Waldo, and Hancock—are strongly represented among the seven counties in which high school graduation has increased by more than 20% since 2000.

2008 High School Graduation Rates in Maine's Counties



County	2000	2008	Percent Change, 2000-2008
Knox	58.7%	84.5%	43.9%
Piscataquis	64.8%	81.0%	25.0%
Washington	70.2%	87.4%	24.5%
Waldo	70.1%	86.8%	23.8%
Cumberland	74.3%	90.2%	21.4%
Oxford	67.9%	81.9%	20.7%
Hancock	70.1%	84.5%	20.5%
Lincoln	76.0%	90.8%	19.5%
Androscoggin	65.2%	76.1%	16.7%
Sagadahoc	77.0%	88.6%	15.1%
Penobscot	75.6%	83.9%	11.0%
York	74.0%	81.5%	10.2%
Franklin	80.7%	87.8%	8.8%
Kennebec	74.4%	80.0%	7.5%
Aroostook	80.8%	79.3%	-1.9%
Somerset	81.2%	76.6%	-5.6%
Maine	73.38%	81.89%	11.6%

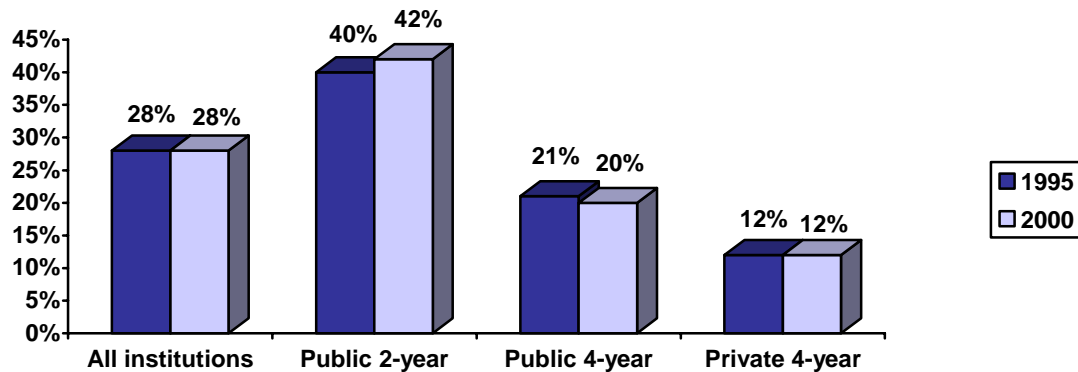
Source: Mitchell Institute calculations using Maine DOE data

Indicator 9: Remedial College Courses

A final indicator of student preparedness for college is the extent to which students entering postsecondary institutions need remedial work. Remedial or developmental college courses may be offered in reading, writing, and math for students lacking the necessary skills to perform work at the level required by their institution. Remedial courses generally cost the same as other college courses, but credits earned do not count toward degree requirements. While it is of concern if students need remedial courses when enrolling in college directly from high school, remedial college courses are an important service for many adults entering college after being out of school for a period of time.

Nationally, about three-quarters of degree-granting colleges offer remedial courses. In both 1995 and 2000, 28% of entering college freshmen took at least one remedial course. Students entering two-year public institutions are more likely to take remedial courses than are students entering four-year institutions, as shown below. A 2004 survey found that 25% of students in the University of Maine System and 37% of the Maine Community College System students take at least one remedial course. Many of Maine's private four-year colleges also offer remedial courses, and require students with SAT scores below a certain cut-off point to take them.

Entering Freshmen in U.S. Institutions Taking Remedial Courses, by Institution Type



Source: National Center for Education Statistics

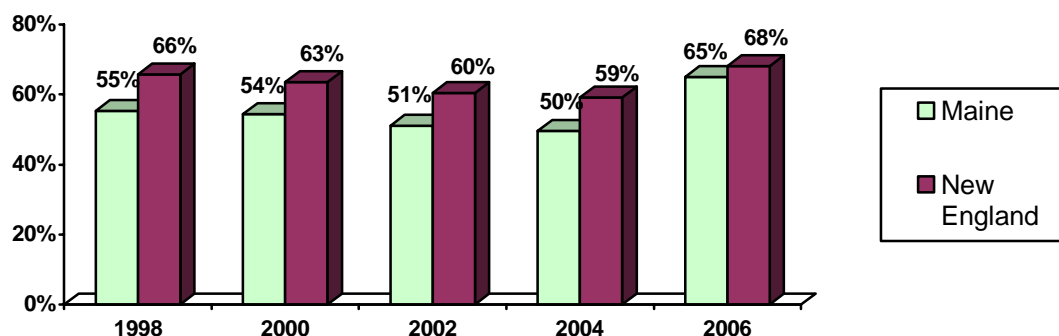
IV. ARE MORE MAINE PEOPLE ENROLLING IN POSTSECONDARY EDUCATION AND GRADUATING?

This section looks at the proportion of recent high school graduates enrolling in college, Maine adults enrolled in postsecondary education, overall enrollment in Maine colleges, and the number of degrees earned in Maine.

Indicator 10: Recent High School Graduates Enrolling in College

College enrollment the fall after high school graduation dropped in both Maine and New England from 1998 to 2004, then increased significantly in 2006. These data show that while Maine trails New England, it is closing the gap. The difference between Maine and New England has dropped from 11 percentage points in 1998 to only 3 percentage points in 2006. In 2006, Maine had the highest proportion of any New England state of its own recent graduates staying in-state for college—73% compared with a New England average of 66%. Nationwide, 81% of comparable students enroll in a college in their home state.

High School Graduates* Enrolling in Degree-Granting Colleges, 1998-2006



*Includes both public and private school graduates

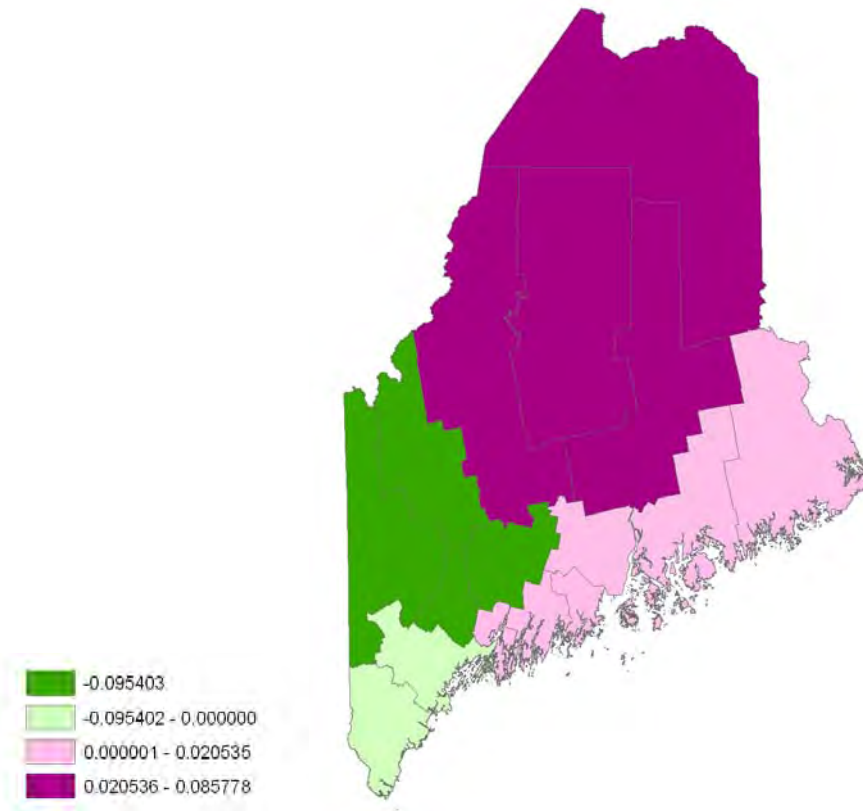
Source: National Center for Higher Education Management Systems

Regional Analysis:

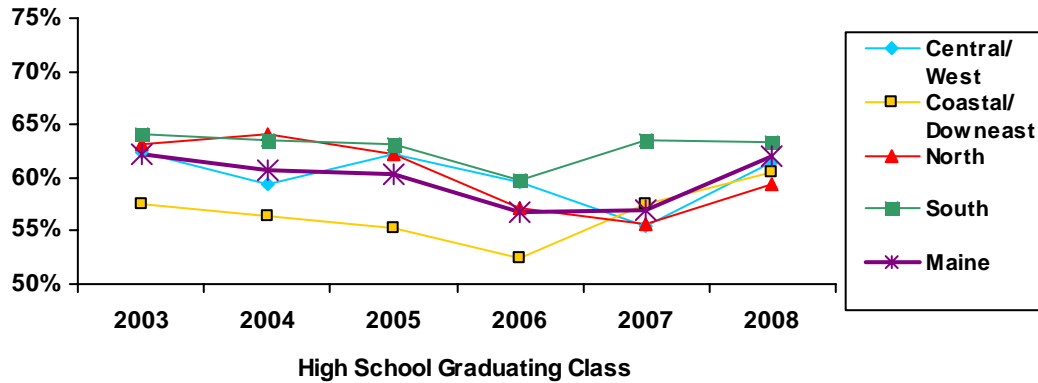
In order to compare Maine regions, we use a different data set that includes only public school graduates and measures college enrollment within a full year after high school graduation. These data indicate that college enrollment among Maine's recent high school graduates declined to a low of 57% in 2006, and has since rebounded back to 62% in 2008.

College enrollment rates among public high school graduates among four regions of Maine, but in 2008 they are closer than at any other time this decade. Graduates from southern Maine enroll in college at the highest rate, but the college enrollment rate in this region has dropped slightly since 2003. The map on the following page shows the change in recent high school graduates' college enrollment rates from 2003 to 2008 by region, and the chart displays the statewide and regional trends in college-going rates over the past five years.

Percent Change in Recent High School Graduates' College Enrollment, 2003-2008



Recent High School Graduates' College Enrollment by Maine Region



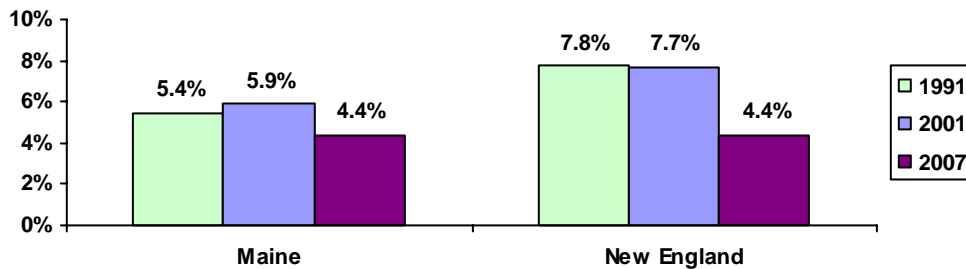
Source: Mitchell Institute calculations using National Student Clearinghouse data

Region	Counties
Central/Western Maine	Androscoggin, Franklin, Kennebec, Oxford
Coastal/Downeast Maine	Hancock, Lincoln, Knox, Sagadahoc, Waldo, Washington
Northern Maine	Aroostook, Penobscot, Piscataquis, Somerset
Southern Maine	Cumberland and York

Indicator 11: Adults Enrolled in Postsecondary Education

The other indicators in this section all examine people of traditional college age (roughly 18 to 23). Adult or non-traditional students, defined as those aged 24 and older, are also an important population in Maine, both because we have an adult population with relatively low rates of college degree attainment, and because our numbers of traditional-age high school graduates are predicted to decline in the coming years. Between 1991 and 2007, the proportion of Maine adults enrolled in college (associate or bachelor's degree programs) decreased from 5.4% to 4.4%. In New England, adult college enrollment decreased even more, from 7.8% to 4.4% during the same time period.

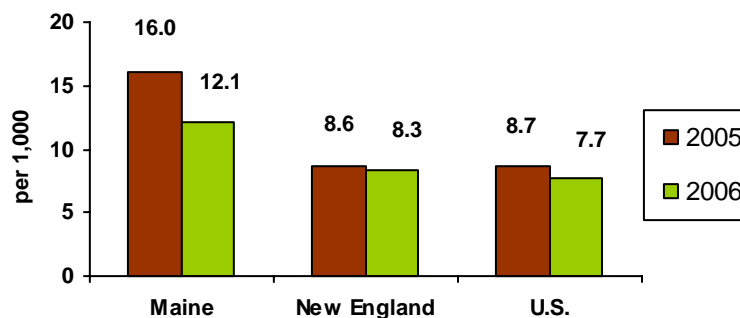
Proportion of Adults (Ages 25-49) Enrolled in Undergraduate College Education



Source: National Center for Higher Education Management Systems

In order to enroll in college, adults without a high school diploma must complete a high school credential. In 2006, 35,534 Mainers between the ages of 25 and 49 had not received a high school diploma, and of these, 430 (1.2%) received general equivalency diplomas (GEDs). As shown below, Maine adults without a high school diploma are earning GEDs at a higher rate than are their counterparts in New England and the U.S. as a whole.

GEDs Awarded to Adults (Ages 25-49) per 1,000 with No High School Diploma

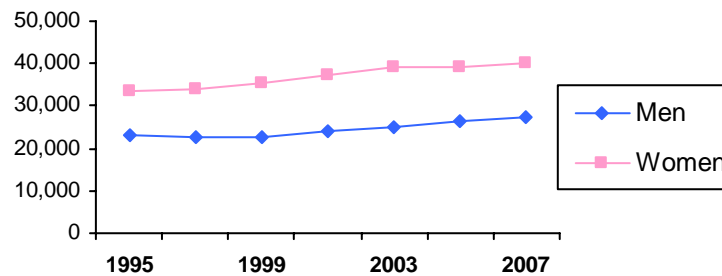


Source: National Center for Higher Education Management Systems

Indicator 12: Total College Enrollment

The number of students enrolled in Maine’s colleges and universities is a key indicator of the scope of higher education in our state. The figures in the chart below include full-time and part-time students at both the undergraduate and graduate levels. Between 1995 and 2007, enrollment grew by nearly 20%, or just over 10,500 students. The latest student enrollment figures indicate that 67,059 students were enrolled in Maine’s degree-granting institutions in the fall of 2007. From 1995 to 2003, the share of women enrolled in Maine’s colleges and universities grew from 59% to 61%, then fell back to 59% by 2007. Total Maine resident enrollment in college (77,643 in 2006) is a higher figure because more Maine residents go to college in other states than the number of students from other states enrolled in Maine colleges (see Appendix 1).

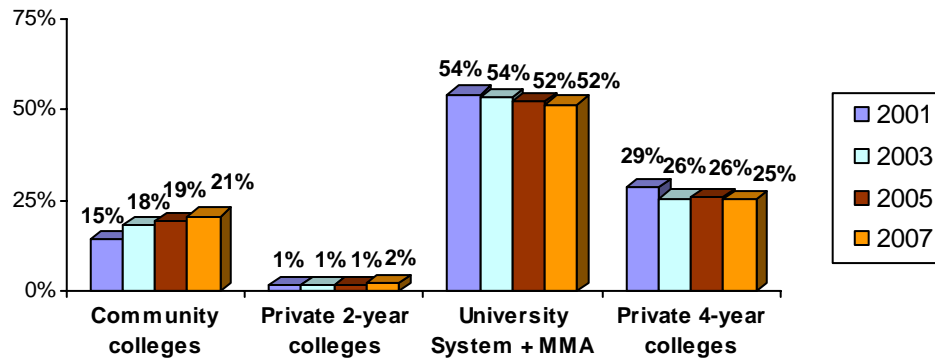
Total Enrollment in Maine’s Degree-Granting Colleges and Universities, 1995-2007



Source: National Center for Education Statistics

The University of Maine System enrolls more than half (52%) of Maine’s college students (see below). Since 2001, the Maine Community College System’s share of Maine’s college students has increased from 15% to 21%. The share of Maine students attending private four-year colleges has dropped from 29% to 25%.

Share of Enrollment in Maine Postsecondary Institutions by Type



Source: National Center for Education Statistics

The table on the next page shows enrollment figures for Maine’s colleges and universities. Community colleges tend to enroll more part-time than full-time students, while full-time students outnumber part-timers at four-year public universities. At the private four year colleges, full-time students outnumber part-time students by roughly two to one overall.

Total Enrollment at Maine Degree-Granting Colleges and Universities

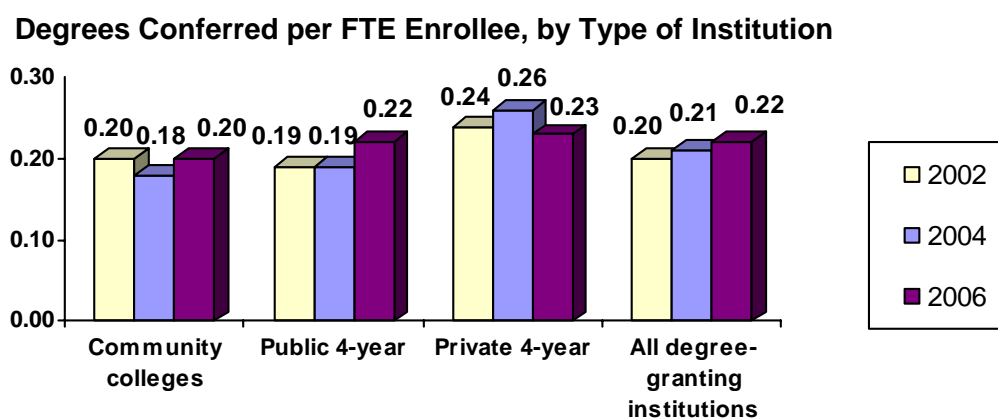
COLLEGE	2001		2007	
	Part-time	Full-time	Part-time	Full-time
<u>Community Colleges</u>				
Central Maine Community College	810	625	1,447	1,063
Eastern Maine Community College	933	663	841	1,082
Kennebec Valley Community College	874	381	1,523	541
Northern Maine Community College	332	551	382	573
Southern Maine Community College	1,385	1,086	2,713	2,400
Washington County Community College	56	216	94	276
York County Community College	584	247	661	337
Maine Community College System Total	4,974	3,796	7,661	6,272
	8,770 (51% female)		13,933 (53% female)	
<u>Private 2-Year Colleges</u>				
Andover College	16	505	462	606
Beal College	83	221	138	302
Private 2-Year College Total	825 (74% female)		1,508 (78% female)	
<u>Public 4-Year Colleges & Universities</u>				
Maine Maritime Academy	19	708	27	874
University of Maine System				
University of Maine	2,857	7,841	2,904	9,008
University of Maine at Augusta	4,099	1,476	3,582	1,519
University of Maine at Farmington	340	2,095	250	2,101
University of Maine at Fort Kent	305	592	531	738
University of Maine at Machias	475	542	656	437
University of Maine at Presque Isle	414	953	452	1,081
University of Southern Maine	5,592	5,374	4,457	5,996
UMaine System Subtotal	14,082	18,873	12,832	20,880
Public 4-Year College & University Total	32,955 (62% female)		34,613 (61% female)	
<u>Private 4-Year Colleges</u>				
Bates College	0	1,767	0	1,660
Bowdoin College	14	1,621	6	1,710
Colby College	1	1,808	0	1,867
College of the Atlantic	9	262	21	328
Husson College	905	959	782	1,692
Maine College of Art	35	400	24	355
New England School of Communications	1	102	18	373
St. Joseph's College	4,107	1,163	1,680	1,167
Thomas College	310	469	341	634
Unity College	21	480	16	539
University of New England	706	2,131	627	3,165
Private 4-year College Total	6,109	11,162	3,515	13,490
	17,271 (63% female)		17,005 (60% female)	
GRAND TOTAL	60,548 (61% female)		67,059 (59% female)	

Source: National Center for Education Statistics

Indicator 13: Degree Completion

The total number of degrees awarded by Maine colleges and universities is one factor in determining educational attainment in the state. The figures presented in the chart below include associate, bachelor's, graduate, and professional degrees. Maine institutions awarded more than 10,800 degrees in 2006, a 20% increase over the more than 9,000 degrees awarded in 1996. In 2004, women earned 62% of the degrees awarded in Maine, up from 57% in 1996.

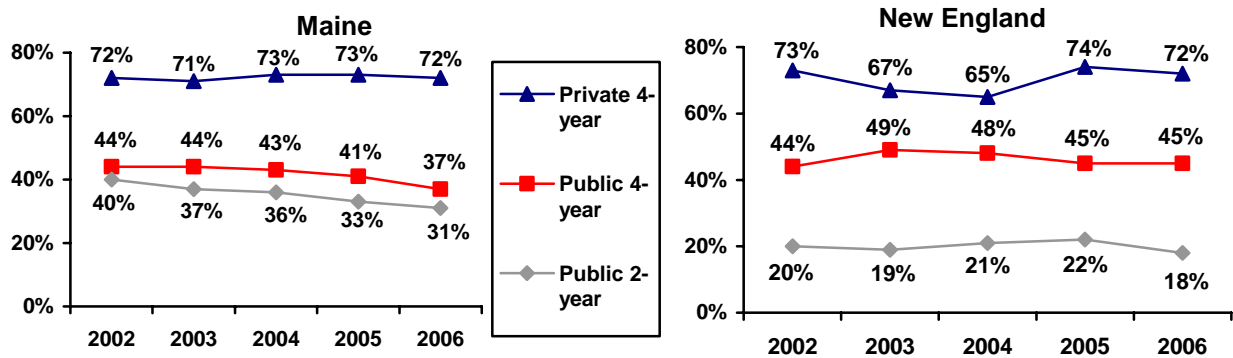
The number of degrees conferred per full-time equivalent (FTE) student enrolled is one measure of degree completion. The number of degrees conferred per FTE enrollee in Maine institutions grew slightly from 0.20 in 2002—meaning that one degree was conferred for every five full-time equivalent students each year—to 0.22 in 2006 (see chart below).



Source: National Center for Education Statistics

Another indicator of degree completion is the graduation rate, defined here as the percentage of entering undergraduate students who complete an associate degree within three years or a bachelor's degree within six years at the same institution in which they initially enrolled. The data available for this indicator are incomplete in that students who transfer are counted as a negative at the institution they leave and are not counted at all at the institution(s) to which they transfer. As shown in the following charts, Maine's graduation rate at public two-year colleges is significantly higher than that of New England as a whole. The graduation rates at Maine's public four-year colleges and universities tend to be lower than the New England average, and graduation rates at private colleges and universities in Maine and New England are comparable.

Graduation Rates by Institution Type, 2002-2006



Source: New England Board of Higher Education

These college completion indicators show that the rates of degree completion vary by institution type, and are lower at community colleges and public universities, where many part-time and non-degree seeking students enroll, compared with private four-year colleges, many of which primarily enroll full-time, degree-seeking students.

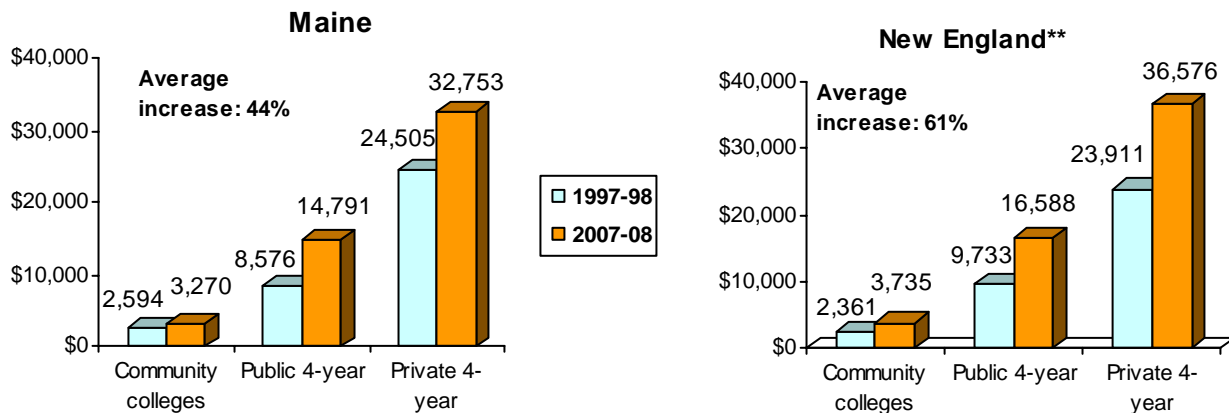
V. IS MAINE POSTSECONDARY EDUCATION MORE AFFORDABLE?

As measures of college affordability in Maine, we look at the cost of college (both the net cost and the cost as a proportion of income for lower- and middle-income Maine families), state investments in higher education and in grant aid to students, student borrowing for college, and employer support for education.

Indicator 14: Cost of College

College cost is a key indicator of the affordability of higher education. The cost of college has increased steadily over the past decade. In Maine, the average increase in college costs from 1997-98 to 2007-08 was 44%, compared with 61% in New England as a whole (see following charts). While financial aid has also increased, its increase equals only about two-thirds of the increase in private college tuition and fees and almost all of the increase in public four-year college tuition and fees, but none of the increase in costs of attendance like room and board (College Board, 2007). This means that unmet financial need is on the rise.

**Increase in College Cost (Tuition, Fees, Room and Board*)
by Institution Type, 1997 to 2007**



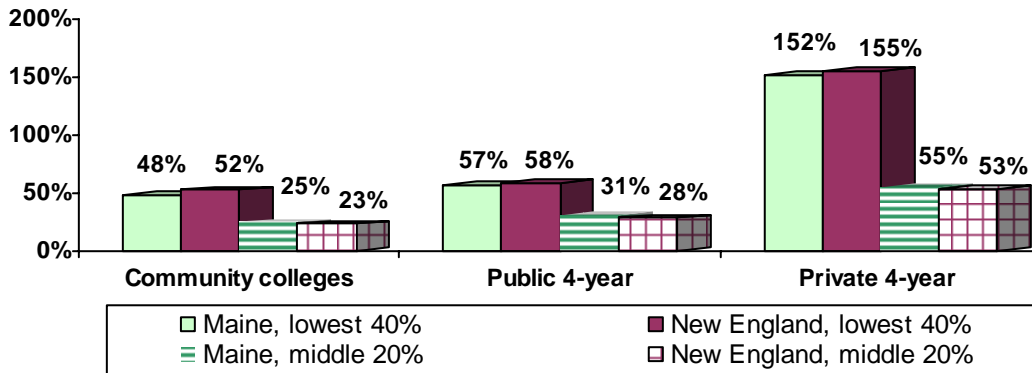
*tuition and fees only for community colleges

**unweighed averages

Source: National Center for Education Statistics

The next chart shows the percentage of families' incomes needed to pay the average net costs at community colleges, and public and private four-year colleges. Net college cost is the cost of tuition, fees, room and board minus financial aid (including federal, state, and institutional grants). Because financial aid varies based on demonstrated financial need, the net cost of college varies, primarily depending on a student's family income.

Percentage of Annual Income Needed to Pay Net College Cost, 2007-2008



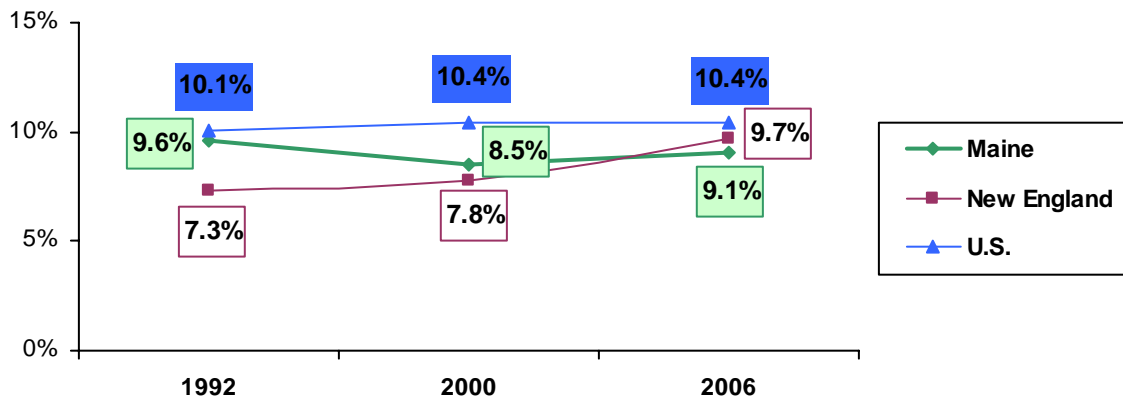
Source: National Center for Public Policy and Higher Education

Net college costs represent roughly two times the share of annual income for lower income families compared with middle income families. For example, the net cost of community college represents 48% of income for Maine families in the lowest 40% of the income distribution, and 25% of income for those in the middle quintile of the income distribution. Middle-income Maine families must pay a slightly higher proportion of their incomes than the average for comparable families in New England to cover net college costs.

Indicator 15: State Contribution to Higher Education

The state government's contribution to higher education is measured here as a percentage of total state expenditures. This is a key indicator of the state's commitment to higher education. Higher education expenditures include all costs associated with public degree-granting institutions of higher education (community colleges, universities, etc.) except for agricultural extension services. These figures exclude bonded indebtedness for higher education (e.g., capital investments). In Maine, the state government's contribution to higher education as a percentage of total expenditures has dropped since 1992. As shown below, the proportion declined from 9.6% in 1992 to 9.1% in 2006. Higher education expenditures in Maine in 2006 were \$715.2 million, 9.1% of the total state budget of \$7.854 billion. Maine's contribution in 2006 fell below the New England average of 9.7%, which has grown by 2.4 percentage points (33%) since 1992. Both Maine and New England have significantly lower postsecondary education expenditures as a percentage of total state expenditures than the national average of 10.4%.

Higher Education Expenditures as a Percentage of State Budgets, 1992-2006

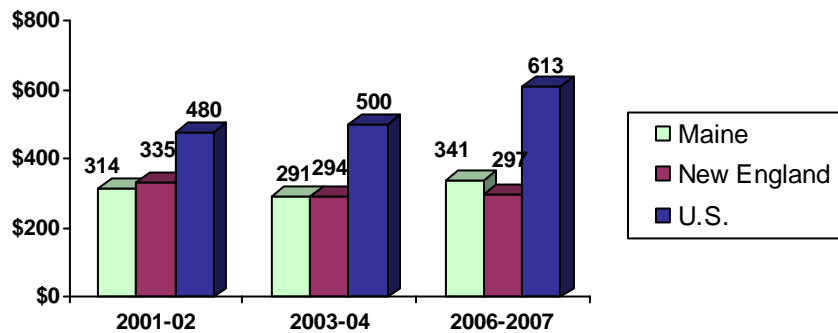


Source: U.S. Census Bureau

Indicator 16: State Grant Aid

Another indicator of a state’s investment in higher education is the amount of financial aid it provides to college students. The most desirable form of financial aid is grants, which are subsidies that students do not have to pay back. Maine provides over \$15 million in grant aid each year to undergraduate students, which was about \$341 per full-time equivalent (FTE) undergraduate student enrolled in 2006-2007 and about \$314 in 2001-2002. The New England average dropped from \$335 in 2001-2002 to \$297 in 2006-2007, falling below Maine’s figure. Nationally, the amount of grant aid states provide to undergraduates is much higher, at about \$613 per FTE student.

State Grant Aid per Full-time Undergraduate Student



	<u>2001-2002</u>		<u>2003-2004</u>	
	Undergraduate Grant Aid	Grant Aid per FTE student	Undergraduate Grant Aid	Grant Aid per FTE student
Maine	\$12,021,000	\$314.06	\$12,562,000	\$290.94
New England	\$196,584,000	\$334.60	\$165,814,000	\$294.39
United States	\$5,034,648,000	\$480.10	\$5,719,842,000	\$500.16

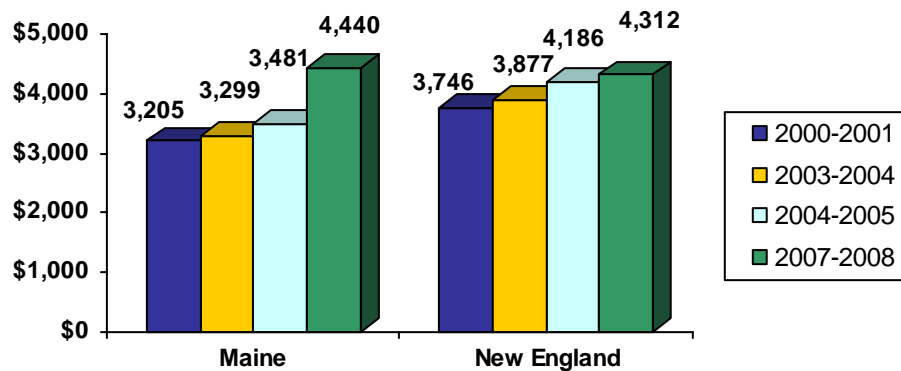
	<u>2006-2007</u>	
	Undergraduate Grant Aid	Grant Aid per FTE student
Maine	\$15,556,000	\$341.23
New England	\$176,494,000	\$296.96
United States	\$7,643,016,000	\$613.22

Source: National Association of State Student Grant & Aid Programs

Indicator 17: Student Borrowing

Another indicator of the affordability of higher education is the amount of debt students must incur in order to pay college expenses. This indicator looks at the average amount that undergraduate students (at two-year and four-year colleges) borrow each year. The average Maine undergraduate student now takes out over \$4,400 each year in student loans. Since 2000, average annual student borrowing in Maine has increased by nearly 40%, from \$3,205 to \$4,440, compared to a New England-wide increase of only 15%. For the 2007-2008 school year, Maine students borrowed \$128 more, on average, than the average for New England students.

Average Amount Students Borrowed for One Year of College



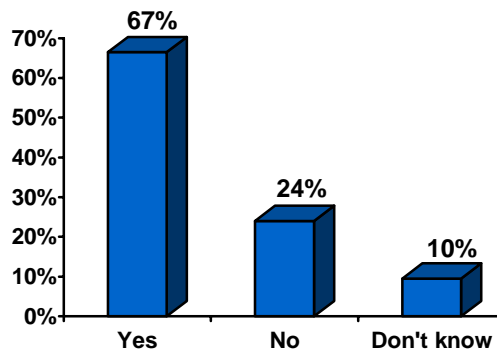
Source: National Center for Public Policy and Higher Education

For Maine students graduating from four-year colleges in 2007, the average student loan burden was \$22,948, the eighth highest in the U.S. Nearly seven out of ten (68%) of Maine students graduated with debt in 2007, the eighth highest ratio in the country.

Indicator 18: Employer Support for Education

Particularly for adults wishing to further their education, employers can be a key source of financial support. A November 2005 survey of Maine adults asked several questions about the types of support employers provide for education. Of 400 adults polled, 221 (55%) reported that they were currently employed and expected to be employed in five years. These respondents were asked, “Does your employer or would your employer provide any level of support if you elected to pursue additional education?” Two-thirds (66.5%) of employed Mainers indicated that their employer would provide support for additional education, 24% said that their employer would not provide support, and 9.5% did not know. Only 13.6% of employed respondents indicated that they were enrolled in education or training courses.

Would your employer provide support if you were to pursue additional education?



The Maine Employers' Initiative (MEI) is a new project working to engage employers in the effort to improve educational attainment among Maine adults. MEI encourages both public and private employers to take one more step in supporting college degree and certificate achievement for their employees.

VI. ARE MAINE'S PEOPLE, COMMUNITIES, AND ECONOMY BENEFITING?

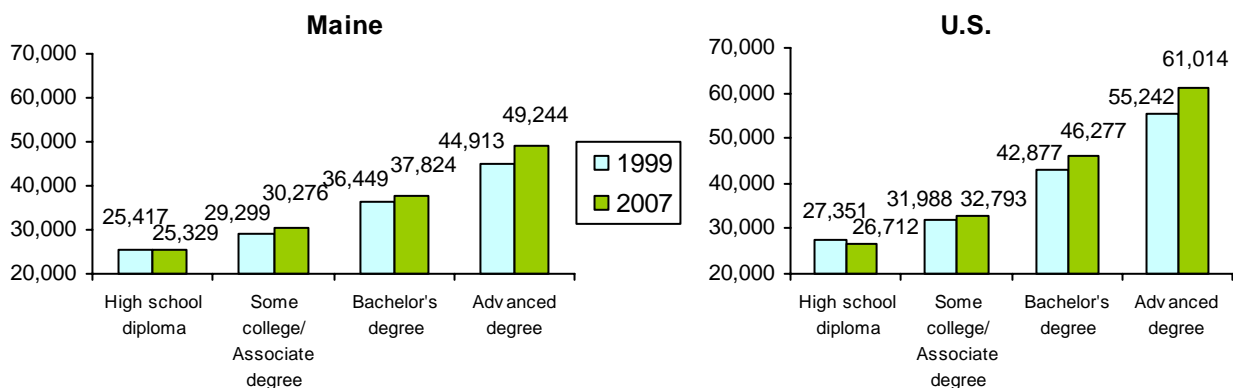
Besides the inherent value of higher education, there are economic and other benefits, both to the individuals who earn degrees and to the communities in which they live. We look at earnings and income of Maine people with college degrees, unemployment rates by level of education, and other benefits of higher education, such as better health and more civic involvement.

Indicator 19: Earnings and Income by Education Level

The wages and earnings of workers with increasing levels of education are indicators of how much value the labor market places on postsecondary education. There is a significant wage premium for Maine workers who have an associate degree or higher. In 2007, workers with an associate degree earned \$7.12 (or 41%) more per hour than those with only long-term on-the-job training and \$9.72 (or 66%) more per hour than those with only postsecondary vocational training.

Both in Maine and nationally, annual earnings of full-time workers increase significantly with each successive level of educational attainment. In Maine, workers with some college now earn nearly 20% more per year than those with a high school diploma, and workers with bachelor's degrees earn almost 50% more than those with only a high school diploma (see chart below). The differences are even larger in the U.S. as a whole (23% and 73%, respectively). Workers with only a high school diploma have not only failed to see an improvement but have actually experienced a decrease in earnings since 1999. This demonstrates a return on an investment in education and declining earning power among those with no college education.

Annual Earnings of Full-Time Working Adults, 1999 and 2007



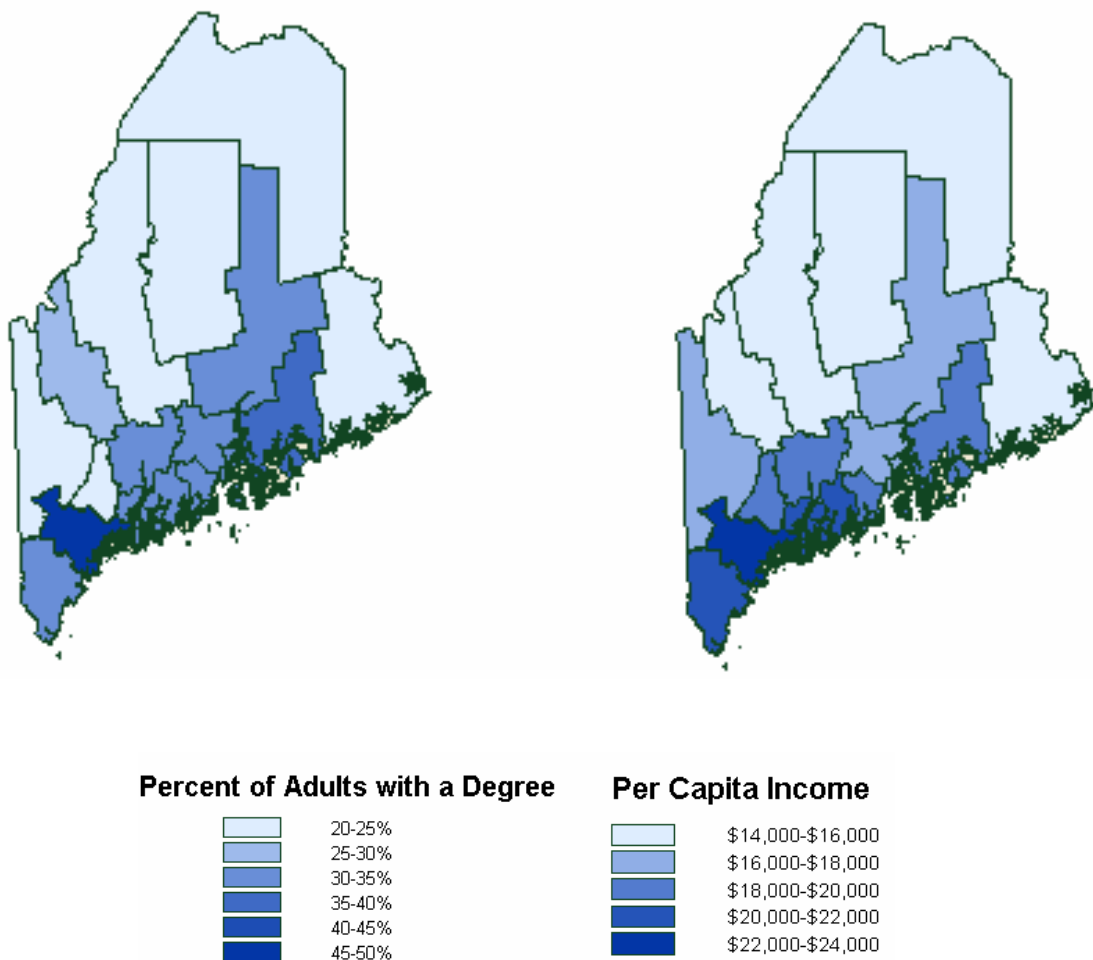
Note: These figures are not adjusted for inflation

Source: U.S. Census Bureau

Regional Analysis

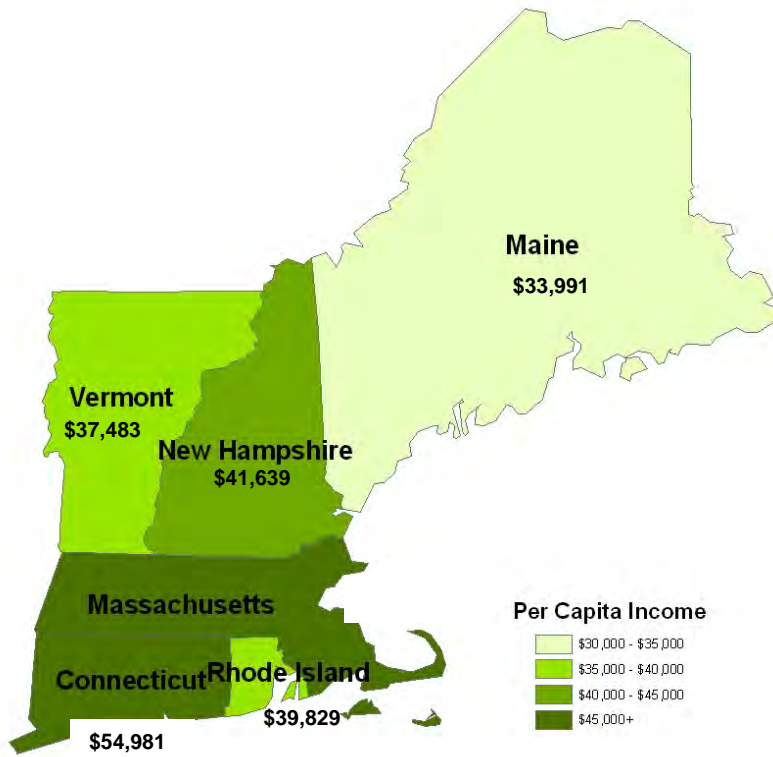
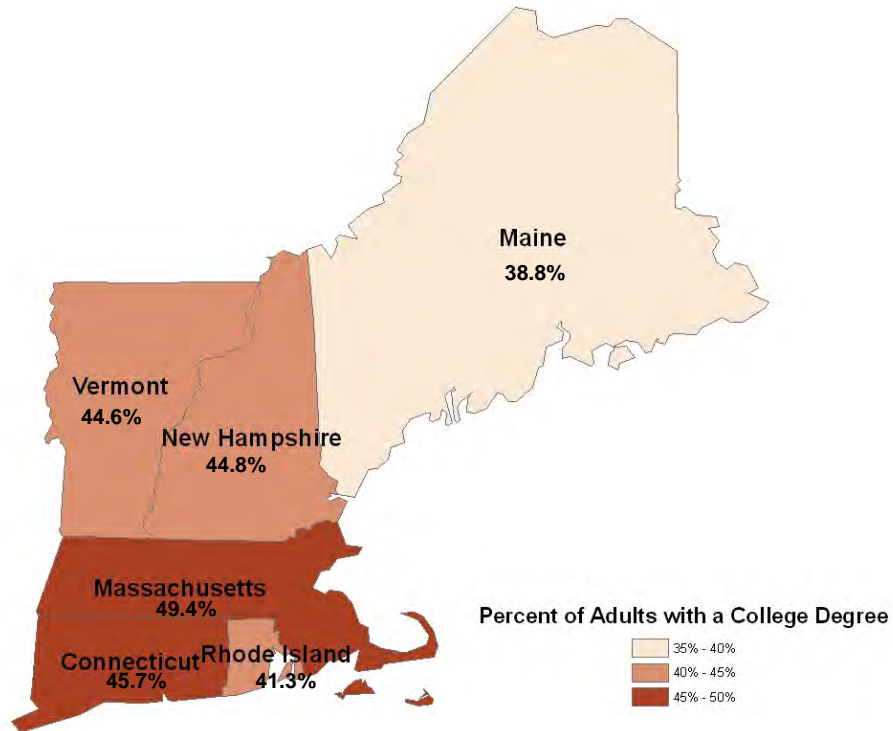
Comparing educational attainment with per capita income in Maine's counties reflects a national trend of higher incomes in communities with higher proportions of college-educated adults. The strong relationship between educational attainment and per capita income is illustrated in the maps below. In 2000, Cumberland County had the highest proportion of working-age adults with an associate degree or higher—46.6%—and also the highest per capita income, \$23,949. Washington and Piscataquis were the only counties with per capita incomes below \$15,000, and they also had nearly the lowest educational attainment—both at 22.8% of working-age adults with an associate degree or higher.

Educational Attainment (Percent of Adults Ages 25-64 with an Associate Degree or Higher) and Per Capita Income in Maine's Counties, 2000



Likewise, educational attainment and per-capita income across the New England states are strongly correlated (see maps on next page). As of 2007, Maine has the lowest per-capita income—\$33,722—in the region, and also the lowest rate of college degree attainment—39%.

Educational Attainment (Percent of Adults Ages 25-64 with an Associate Degree or Higher) and Per-Capita Income in New England States, 2007

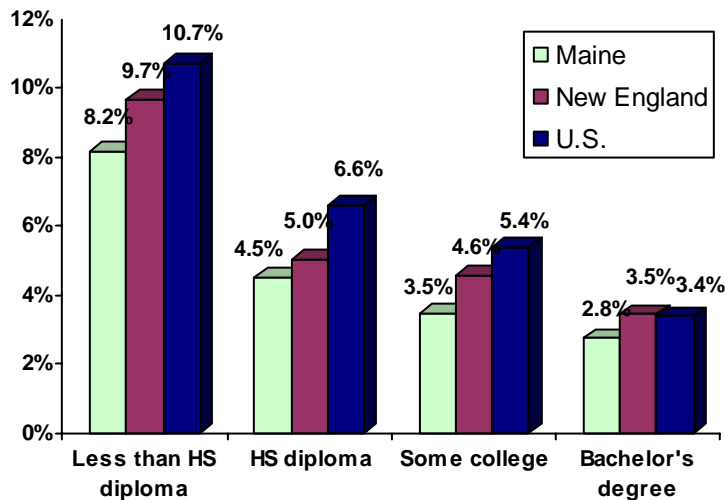


Sources: U.S. Census Bureau; Bureau of Economic Analysis

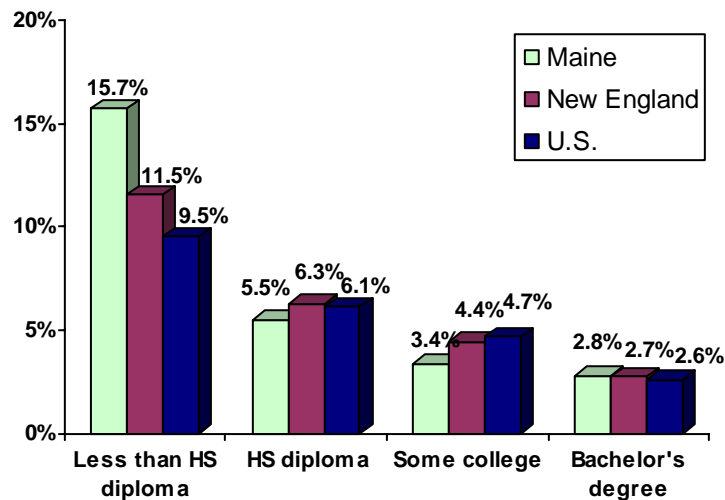
Indicator 20: Unemployment by Education Level

Unemployment rates are another indicator of the demand for higher education in the labor market. This indicator looks at unemployment among adults ages 25 to 64. Unemployment drops with each successive level of educational attainment, as illustrated in the charts below. In Maine, unemployment among workers with less than a high school diploma nearly doubled—from 8.2% to 15.7%—from 2004 to 2007. Workers with only a high school diploma also saw an increase in unemployment during that time period, while unemployment remained stable for workers with at least some college. Maine generally has lower unemployment than the New England and U.S. averages, except among workers who have not completed high school.

**Unemployment Rate by Educational Attainment
2004**



2007

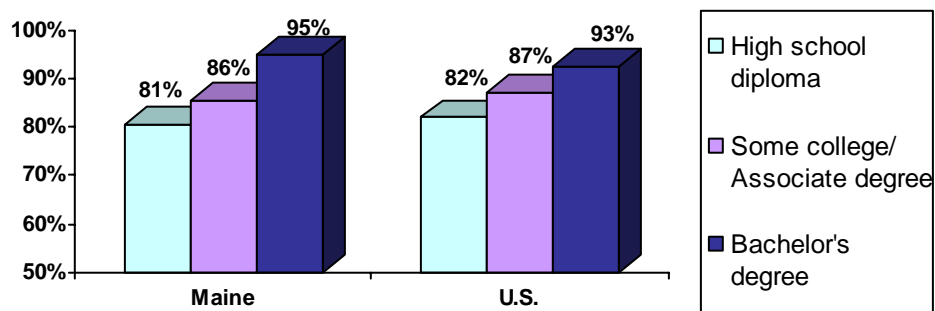


Source: U.S. Census Bureau

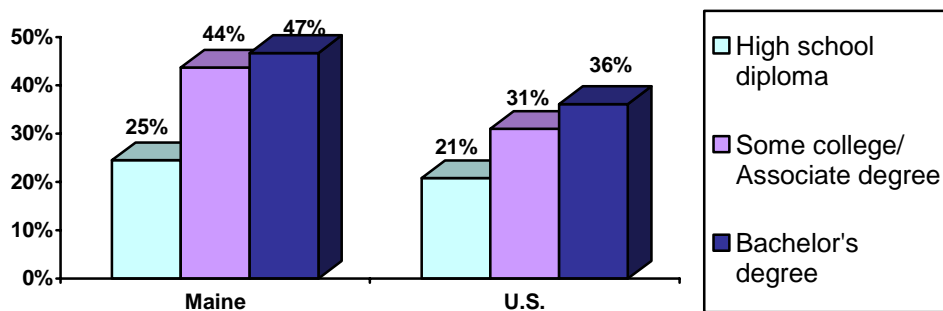
Indicator 21: Other Benefits of Higher Education

Beyond the purely economic benefits to individuals who earn a college degree and communities with more highly educated residents, there are many social benefits associated with higher education. While some of these advantages derive from the better employment opportunities—with higher pay and more benefits—that college graduates have relative to those without a college degree, others result from things like decision-making skills students learn in college and social relationships they form. Many of the private benefits of higher education—such as better health and civic engagement—also benefit communities, states, and the nation. The following charts show that the proportions of adults reporting that their health is good, very good or excellent; that they have ever volunteered for or through an organization; and that they voted in the November 2000 election increase significantly with higher levels of education.

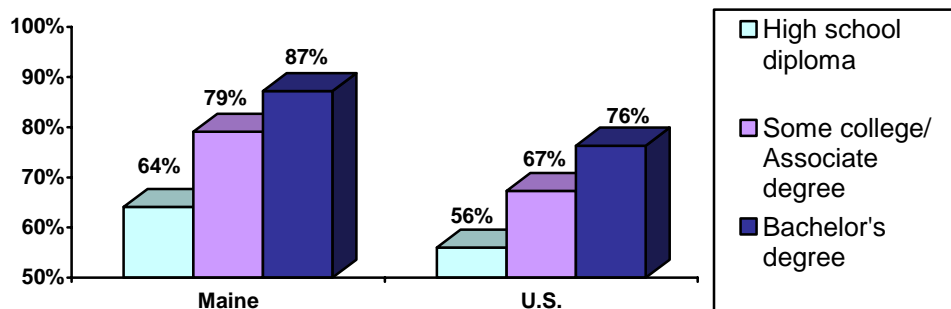
Adults* in Good or Better Health, 2004



Adults* who Report Volunteering, 2004



Adults* who Voted in the November 2000 Election



*Age 25 and older

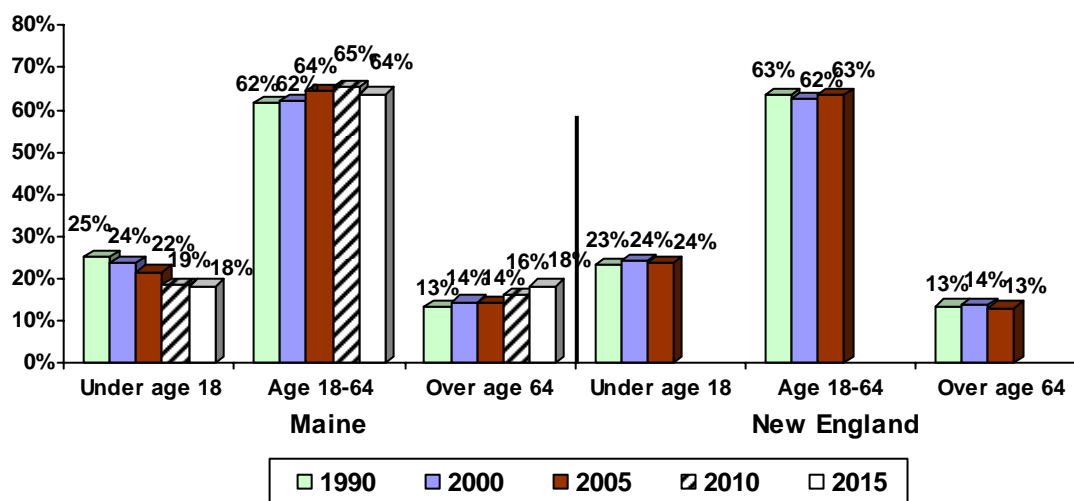
Source: Institute for Higher Education Policy

APPENDIX 1: BACKGROUND DEMOGRAPHICS

Population and Age Distribution

The most notable trend in Maine’s population since 1990 is a slow but steady decline in the number of people under age 18, as shown in the chart below. New England as a whole is not experiencing this decline (in fact, the number of people under 18 in New England increased slightly from 1990 to 2005). Maine’s population has grown slightly more slowly than New England’s since 1990—3.5% compared with 4.1%. Maine’s population under the age of 18 is projected to continue to decline over the next decade, while the population over age 64 is projected to grow.

**Age Distribution of the Population:
Maine, 1990-2015
New England, 1990-2005**



Maine Population	1990	2000	2005*	2010 [†]	2015 [†]
Under age 18	309,002	301,238	276,219	253,960	257,025
Age 18-64	755,553	790,283	826,139	897,285	904,010
Over age 64	163,373	183,402	181,315	220,850	258,465
Total	1,227,928	1,274,923	1,283,673	1,372,095	1,419,500

* U.S. Census Bureau 2005 American Community Survey

[†] Maine State Planning Office Projections

The table on the next page shows the population in each of Maine’s counties. The population of Maine’s southernmost county, York, grew the most between 1990 and 2007, while the population in its northernmost county, Aroostook, declined the most. In addition to York County, the coastal county of Waldo saw population growth of more than 15% between 1990 and 2007. In three counties—Aroostook, Piscataquis, and Washington—the population declined between 1990 and 2007.

Population of Maine's Counties, 1990, 2000 and 2007

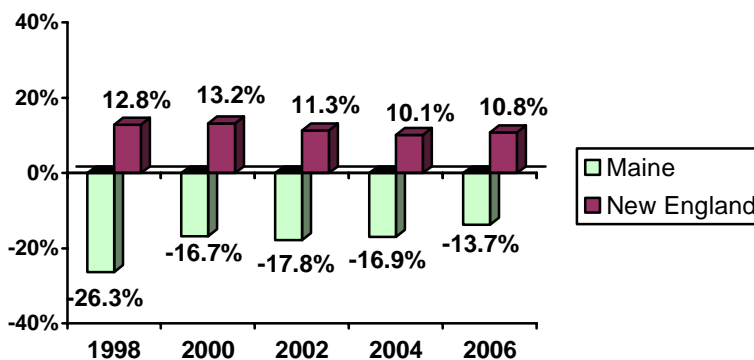
County	Population			% Change,
	1990	2000	2007	1990-2007
York	164,587	186,742	201,686	22.5%
Waldo	33,018	36,280	38,342	16.1%
Lincoln	30,357	33,616	34,628	14.1%
Cumberland	243,135	265,612	276,047	13.5%
Hancock	46,948	51,791	53,137	13.2%
Knox	36,310	39,618	40,686	12.1%
Sagadahoc	33,535	35,214	36,332	8.3%
Oxford	52,602	54,755	56,741	7.9%
Kennebec	115,904	117,114	120,959	4.4%
Somerset	49,767	50,888	51,377	3.2%
Franklin	29,008	29,467	29,857	2.9%
Androscoggin	105,259	103,793	106,877	1.5%
Penobscot	146,601	144,919	148,651	1.4%
Washington	35,308	33,941	32,499	-7.8%
Piscataquis	18,653	17,235	16,961	-9.1%
Aroostook	86,936	73,938	71,676	-17.6%
MAINE	1,227,928	1,274,923	1,316,456	7.21%

Source: U.S. Census Bureau

Migration of Students Entering College

Interstate migration of college students is an important factor in determining the overall educational attainment in a state. Students who move are more likely to stay in the state where they attend college than the one where they attended high school. In Maine, more recent high school graduates leave the state for college than come in from other states for college, meaning that Maine is a net exporter of traditional-age college students. The figures in the chart below include any student who completed high school within the prior 12 months and entered a two-year or four-year degree-granting college as a full-time student. In 2006, more than 4,200 of these Maine students left the state for college, while about 3,200 students from other states entered Maine colleges, for a net out-migration rate of 13.7%. For comparison, the 2006 average for all New England states was an in-migration rate of 10.8%.

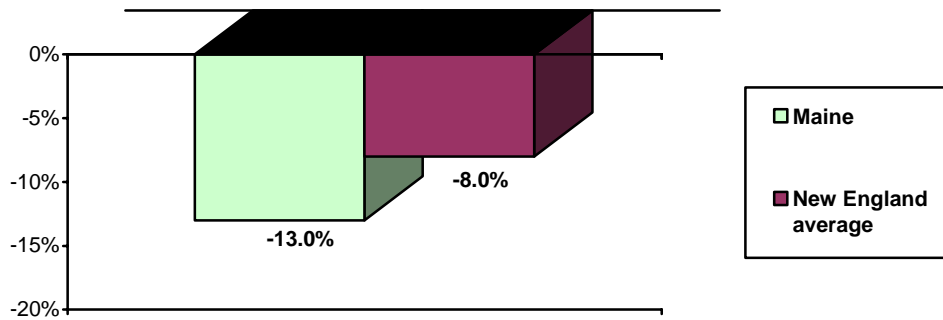
Net Migration of High School Graduates Entering Two- and Four-Year Degree Programs



Net Migration of College Educated Young Adults

A special Census Bureau analysis found that between 1995 and 2000, single young adults with bachelor's degrees moved out of Maine at a faster rate than in New England as a whole. While nearly 5,700 college-educated adults moved to Maine during those years, nearly 7,400 left the state, as shown below.

Net Interstate Migration Rate: College Educated Young Adults, 1995-2000



Young, single, college-educated adults*	Maine	New England
Approximate 1995 population	21,305	414,316
In-migrants	5,693	107,799
Out-migrants	7,399	126,513
Net migration	-1,706	-18,714
Net migration rate	-13.0%	-9.8%

*Ages 25-39 who had at least a bachelor's degree in 2000

Migration of Maine's young adults was explored in more depth in a 2004 report produced by the University of Southern Maine and the Maine State Planning Office. The analysis found that most of the net out-migration of young people from Maine between 1995 and 2000 was accounted for by those in the 20 to 24 age group. Among those between the ages of 25 and 34, Maine actually experienced a net in-migration. The authors conclude that the opportunity to go to college is the greatest force contributing to out-migration of youth from Maine, but that Maine remains an attractive place for young people (primarily those born in other states) to move to.

APPENDIX 2: DATA SOURCES

Indicator 1: Working-Age Adults with College Degrees

1990 and 2000 figures are from the decennial U.S. Census. Data for 2001-2007 are estimates from the U.S. Census Bureau's American Community Survey. See www.census.gov. 1990 data for the working-age adult population (ages 25-64 only) are not readily available, so the figures used here are estimates developed by applying the differences in educational attainment between the entire adult population and the working age (ages 25-64) subset in 2000 to the 1990 data.

Indicator 2: Education Level Needed for Success

November 2005 survey of Maine adults conducted by Pan Atlantic SMS Group for the Steering Committee of the Maine Readiness Campaign.

Indicator 3: All Students College-Ready

November 2005 survey of Maine adults (see above).

Educator data from surveys conducted in 2007 as part of the Mitchell Institute's *Removing Barriers* study. See www.mitchellinstitute.org.

Indicator 4: Student Performance on Assessment Tests

Maine Educational Assessment (MEA) and Maine High School Assessment (MHSA) scores are published annually on the DOE's website at www.maine.gov/education/mea/edmea.htm and www.maine.gov/education/mhsa/school_reports.htm.

PSAT national and state reports are available from the College Board at <http://professionals.collegeboard.com/data-reports-research/psat>.

Indicator 5: Middle and High School Math Courses

National Assessment of Educational Progress (NAEP) data for each state are available at <http://nces.ed.gov/nationsreportcard/states/>.

SAT data are reported by the College Board at <http://professionals.collegeboard.com/data-reports-research/sat>.

Indicator 6: Advanced Placement Courses and Exams

The College Board, *Advanced Placement Report to the Nation* 2000 and 2008, <http://professionals.collegeboard.com/data-reports-research/ap>.

Indicator 7: Early College Courses

Maine Department of Education, *Maine's High School Aspirations Program, Enrollment Data, 2007-2009*, prepared by Donna Weeks.

Mitchell Institute estimates collected from Maine high schools. See *2008-2009 Early College Survey of Maine High Schools* at www.mitchellinstitute.org.

Indicator 8: High School Graduation

Numbers of graduates are reported annually by public high schools and are published on the Maine Department of Education website at www.maine.gov/education/enroll/grads/comprate/comprate.htm.

On-time graduation rates are calculated by the Mitchell Institute using DOE graduate figures and attending school enrollment data at www.maine.gov/education/enroll/attending/statefallpub.htm.

For the New England comparison, data are from www.higheredinfo.org.

Indicator 9: Remedial College Courses

Postsecondary Remedial Education, Education Indicators for the White House, Social Statistics Briefing Room at <http://nces.ed.gov/ssbr/pages/remediated.asp?IndID=16>.

2004 Maine institution survey by Lynne Miller, Southern Maine Partnership, University of Southern Maine. See *Aspirations and Readiness* at www.usm.maine.edu/smp/college.htm.

Indicator 10: Recent High School Graduates Enrolling in College

New England and Maine comparison data are from the National Center for Higher Education Management Systems (NCHEMS) Information Center for State Higher Education Policymaking and Analysis at www.higheredinfo.org.

Regional college enrollment data are from the Mitchell Institute's college enrollment data set, aggregated from graduate data provided annually by 90 of Maine's 130 public high schools and enrollment reports from the National Student Clearinghouse's StudentTracker service. See *From High School to College: Removing Barriers for Maine Students* at www.mitchellinstitute.org.

Indicator 11: Adults Enrolled in Postsecondary Education

NCHEMS at www.higheredinfo.org

Indicator 12: Total College Enrollment

Enrollment data are from the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) Peer Analysis System. See the Digest of Education Statistics at <http://nces.ed.gov/programs/digest>.

Indicator 13: Degree Completion

Degree data from 1996 through 2002 are from the Digest of Education Statistics at <http://nces.ed.gov/programs/digest>. Both the degree total for 2004 and FTE enrollment data are from the NCES IPEDS Peer Analysis System.

Graduation rates come from the *New England Journal of Higher Education's* annual analysis U.S. Department of Education data. The latest issue is from Spring 2008, "Trends & Indicators in Higher Education 2008."

Indicator 14: Cost of College

Data on college costs 1998 to 2008 come from the U.S. Department of Education's *Digest of Education Statistics*. See <http://nces.ed.gov/programs/digest>.

Financial aid trend information is from the College Board, *Trends in Student Aid 2008*, www.collegeboard.com/trends.

Percent of income needed to pay net cost data are from the National Center for Public Policy and Higher Education, *Measuring Up 2008: The State Report Card on Higher Education*. See <http://measuringup.highereducation.org> for a national report, state report cards, and a technical guide detailing data sources.

Indicator 15: State Contribution to Higher Education

U.S. Census Bureau's annual survey of state and local government finances: www.census.gov/govs/www/estimate.html

Indicator 16: State Grant Aid

National Association of State Student Grant and Aid Programs (NASSGAP) annual survey reports at www.nassgap.org.

Indicator 17: Student Borrowing

Average annual student borrowing data are from the National Center for Public Policy and Higher Education, *Measuring Up 2008: The State Report Card on Higher Education* (see Indicator 14).

The average student loan burden for four-year college graduates is from The Project on Student Debt, *Student Debt and the Class of 2007: Average Debt by State, Sector, and School*, 2008. Project on Student Debt (September 2007). *Student Debt and the Class of 2007*. Berkeley, CA. http://projectonstudentdebt.org/state_by_state-data.php

Indicator 18: Employer Support for Education

Strategic Marketing Services survey referenced in Indicator 2.

Indicator 19: Earnings and Income by Education Level

Hourly wage data are from *Maine Employment Outlook to 2016*, September 2008, www.maine.gov/labor/lmis/pdf/ME_Emp_Outlook_to_2016.pdf. Annual earnings data are from the Census Bureau's American Community Survey.

For educational attainment by county, see Indicator 1. Per capita income estimates for 2000 are from the U.S. Census at www.census.gov and for 2007 are from the Bureau of Economic Analysis at www.bea.gov/regional/spi.

Indicator 20: Unemployment by Education Level

U.S. Census Bureau, American Community Survey.

Indicator 21: Other Benefits of Higher Education

Institute for Higher Education Policy, February 2005, *The Investment Payoff: A 50-State Analysis of the Public and Private Benefits of Higher Education*. www.ihep.org/Pubs/PDF/InvestmentPayoff2005.pdf

Appendix 1: Background Demographics

1990 and 2000 population data are actual counts from the decennial U.S. Census. 2005, 2006 and 2007 data are estimates based on the American Community Survey. Projections for 2010 and 2015 are from the Maine State Planning Office at www.state.me.us/spo/economics/economics/forecasts.php.

Data on student migration are from NCES IPEDS, www.nces.ed.gov. See annual *Enrollment in Postsecondary Institutions* and *Digest of Education Statistics* reports.

Data on college educated young adults are from *Net Migration for the Young, Single, and College Educated for the United States, Regions, States, and Metropolitan Areas: 2000* at www.census.gov/population/www/cen2000/phc-t34.html

Maine Youth Migration Profiles 1995-2000, Prepared for REALIZE!Maine, by Charles S. Colgan of the University of Southern Maine and Joyce Benson of the Maine State Planning Office. www.maine.gov/governor/baldacci/news/events/Realize!/issue_papers/index.htm

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Any mistakes are those of the authors.

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ON THE WEB

Indicators of Higher Education Attainment in Maine is available at the website of the Maine Compact for Higher Education as a PDF file for easy download and printing. Visit the Compact’s website at www.collegeforme.com.

Maine Compact for Higher Education – Fact Sheet

Greater Expectations. Maine's higher education challenge is well known and well documented: Maine's working age adults have one of the highest high school completion rates -- and the lowest overall postsecondary attainment levels -- in New England. We know our students are not fulfilling their potential when their education stops with a high school diploma. And we know that a 21st century economy requires a highly educated workforce.

The Maine Community Foundation and the Maine Development Foundation created the Maine Compact for Higher Education in 2003 to dramatically increase Maine's educational attainment levels by implementing five action strategies. The Compact is implementing those strategies. In 2008, the Compact was asked to help create and administer the new Alford Scholarship Foundation, organized to support the Harold Alford College Challenge.

The Compact's vision is that a college education is a right and responsibility of all Maine people.

The Compact's mission is to champion higher education achievement by: providing a consistent and unified voice that promotes the vision; changing the attitudes and values of Maine people regarding higher education; implementing the action strategies; and promoting innovation, best practice, and accountability for results.

The Compact's goal is that Maine people will be among the best educated in America. Today, only 37% of Maine's working-aged adults have an associate, bachelor's, or graduate degree – compared with 46% for New England. Our aim is to match the New England percentage in 11 years – this will require an additional 40,000 new college degree holders above projections by 2020.

Action Strategies to achieve the goal are:

1. *Scholarship program* to ensure that no Maine student is denied college for financial reasons.
2. *Early College efforts* to encourage students to continue their education beyond high school.
3. *College Transition program* to help adults earn degrees.
4. *Employer Initiative* to help employers support the education of their workforce.
5. *Campaign* to change the values and behaviors of Maine people regarding higher education.

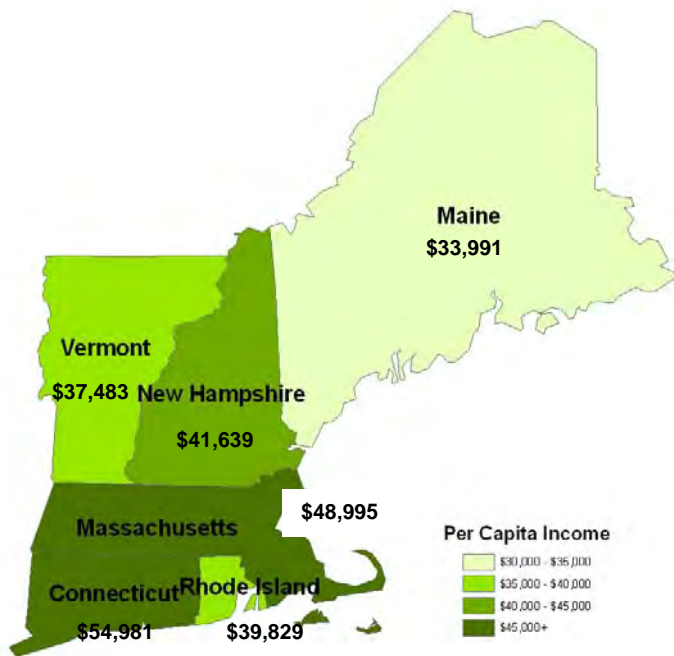
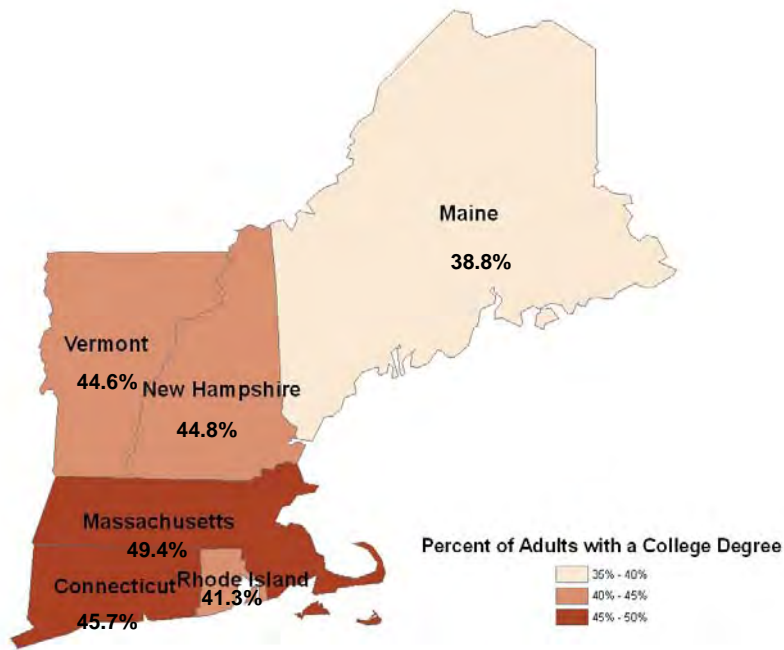
The new Harold Alford College Challenge will provide every child born in Maine with a \$500 college savings fund and challenge parents and families to save toward that child's education. The Compact administers the Alford Scholarship Foundation, created to provide the incentive scholarship grants through Maine's NextGen 529 College Investing Plan, which is administered and delivered by the Finance Authority of Maine.

Other Compact initiatives include: the annual *Maine Symposium on Higher Education*, the annual *Indicators of Higher Education Attainment* report to assess progress toward our goal, and launch of the new *Leadership Program for Educational Achievement* in the planning stages.

Organization. The Compact's board of directors is composed of education, business, community and government leaders from throughout the state. Joseph Foley, senior vice president and chief marketing officer of Unum, is chair of the Board of Directors. The Compact is a non-profit corporation with an IRS 501c3 designation.

Funding for the Compact and its strategies is from: the Alford Scholarship Foundation, Cianbro Corporation, Ford Foundation, Great Schools Partnership, Joseph F. Boulos, Libra Foundation, Lumina Foundation for Education, Maine Community Foundation, Maine Educational Loan Authority, MELMAC Education Foundation, National Governors Association, Maine Department of Education, Nellie Mae Education Foundation, TD Banknorth, N.A., and Unum. The original \$1 million investment in our 2004-2009 business plan has leveraged over \$1.5 million to support programs.

Educational Attainment (Percent of Adults Ages 25-64 with an Associate Degree or Higher) and Per-Capita Income in New England States, 2007



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Maine Compact for Higher Education was founded by the Maine Development Foundation and Maine Community Foundation.