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Indicators of Higher Education Attainment in Maine

College as a Right and Responsibility for all Maine People

August 2007



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College as a Right and Responsibility for all Maine People

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August 2007

The purpose of this report is to assess the extent to which we are achieving the Compact's goal of 40,000 additional degree-holders above projections by 2020, and to 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.



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Indicators of Higher Education Attainment in Maine: What's New

The Compact's goal is to increase the number of working-age degree holders in Maine to the New England average, requiring an estimated 40,000 additional degree holders above projections by 2020.

The purpose of this report is to enable the Compact and others to assess the extent to which we are making progress achieving this goal. The report is organized around six key questions that provide a framework for discussing, analyzing and making decisions to increase attainment. In terms of measuring progress, this year we find:

Do more Maine working-age people have degrees?

■ The proportion of Maine working-age adults with a college degree increased by 12% between 2000 and 2005, but has remained the same since 2003.

Do more Maine people value postsecondary education?

■ 78% of Maine adults believe that today's high school students will need at least a two-year degree to be successful, while only 34% of these adults agree that "all students are capable of graduating from high school ready to go to a two- or four-year college".

• Are more Maine people ready for postsecondary education?

- The proportion of Maine eighth-graders taking Algebra increased by 20%, lower than the New England increase of 26% over the same period.
- Advanced Placement (AP) exam taking increased faster in Maine than in New England, and is now slightly higher in Maine.
- Maine's on-time high school graduation rate remains slightly higher than New England's.

• Are more Maine people enrolling in postsecondary education, and graduating?

- While intentions to enroll in college among Maine's graduating seniors have steadily increased, actual college enrollment within a year after graduation has dropped slightly.
- The proportion of Maine adults enrolled part-time in college grew from 5.3% in 2000 to 6.0% in 2004. New England's rate has remained at 5.0% since 2000.
- Total enrollment in Maine colleges and universities has grown by nearly 16% since 1995, led by a 43% increase in community college enrollments from 2001-2005.
- The six-year graduation rate at Maine's public four-year universities grew by 30% from 2004 to 2005.

• Is Maine postsecondary education more affordable?

■ In 2005-06, Maine students from families with incomes in the lowest 40% of the population have to pay 46% of their annual income to cover average net college costs at community colleges and 50% of their income at public four-year colleges.

• Are Maine's people, communities, and economy benefiting?

■ In 2005, Maine workers with bachelor's degrees earned 48% more than those workers with only a high school degree, and Maine workers with an associate degree earned 33% more.

SUMMARY OF INDICATORS

I. Do More Maine Working-Age People Have Degrees?

Indicator 1: Working-age adults with college degrees. In 2005, 37% of Maine adults had a college degree, compared with 46% in New England. There was no change in either estimate from 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. 44% of Maine high school educators and 21% of college administrators agree that "all students are capable of graduating from high school ready to go to a two- or four-year college." Among adults in the general population, 34% agree with this statement.

III. ARE MORE MAINE PEOPLE READY FOR POSTSECONDARY EDUCATION?

Indicator 4: Student performance on assessment tests. The majority of Maine 4th- and 8th-graders meet or exceed MEA standards in reading and science. In math, 59% of 4th-graders but only 45% of 8th-graders meet or exceed MEA standards. Maine 11th-graders who take the PSAT score significantly lower than the New England average.

Indicator 5: Middle and high school math courses. About 30% of Maine 8th-graders are on an accelerated math track (taking Algebra 1 or higher), up five percentage points from 2003 to 2005. This compares to 39% in New England, where the measure increased by nine percentage points from 2003 to 2005. 19% of Maine 11th-graders do not expect to complete Algebra 2 while in high school, 47% expect to complete math courses only through Algebra 2, and 34% expect to complete a math course beyond Algebra 2.

Indicator 6: Advanced Placement courses and exams. The proportion of Maine high school graduates who had taken at least one AP exam increased from 15% of the class of 2000 to 24% of the class of 2006. In New England, 16% of the class of 2000 and 23% of the class of 2006 took an AP exam.

Indicator 7: Early college courses. Nearly three-quarters (73%) of Maine's public high schools report that their students can take college courses for dual credit. About 1,022 Maine students—or 3.4% of juniors and seniors—took an early college course in 2005-2006.

Indicator 8: High school completion. Maine's on-time high school graduation rate increased from 74% in 2000 to 78% in 2005, and is slightly higher than New England's.

Indicator 9: Remedial college courses. 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. In 2004, 36% 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 entering college: intentions and enrollment. Enrolling in college immediately after high school graduation is less common in Maine than in New England, and it dropped from 62% in 2001 to 57% in 2006. This is in spite of an increase in the proportion of Maine high school seniors reporting that they intend to enroll in college, from 64% in 2000 to 70% in 2005.

Indicator 11: Adults enrolled in postsecondary education. The proportion of Maine adults ages 25-44 who are enrolled part-time in college grew from 5.3% in 2000 to 6.0% in 2004. The New England proportion remained stable at 5.0% during those years.

Indicator 12: College enrollment. Between 1995 and 2005, college enrollment in Maine grew by nearly 16%, from 56,500 to more than 65,400 students. Just over one-half of college students in Maine are enrolled in the University of Maine system. The share of students enrolled in Maine community colleges was 19% in 2005, up from 15% in 2001.

Indicator 13: Degree completion. Maine postsecondary institutions awarded more than 10,000 degrees in 2004, a 12% increase over 1996. One degree is conferred for about every five full-time equivalent (FTE) Maine college students each year.

V. Is Maine Postsecondary Education More Affordable?

Indicator 14: Cost of college. Maine students from families with incomes in the lowest 40% of the population would have to pay 46% of their annual income to cover average net college costs at community colleges, 50% at public four-year colleges, and 121% at private four-year colleges.

Indicator 15: State contribution to higher education. As a percentage of total state expenditures, Maine's contribution to higher education—\$669.2 million or 8.9% in 2005—is slightly lower than the New England average of 9.1%, and is significantly lower than the national average of 10.4%.

Indicator 16: State grant aid. Maine provides about \$13 million annually in grant aid for college students, or about \$284 per FTE student in 2004-2005. The New England average is slightly higher, and the national average is much higher, at about \$560 per FTE student.

Indicator 17: Student borrowing. The average Maine undergraduate takes out nearly \$3,500 each year in student loans. This figure includes all students, not just those who borrow. Maine students borrowed \$705 less, on average, than the average New England student in 2004-2005.

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 bachelor's degrees earned 48% more on average in 2005 than those with only a high school diploma—\$36,190 versus \$24,464. Only workers with advanced degrees saw their average annual earning increase from 1999 to 2005.

Indicator 20: Unemployment by education level. Average unemployment among Maine workers with only a high school diploma was 5.8% in 2005, more than twice as high as the 2.3% average unemployment among workers with bachelor's degrees.

Indicator 21: Other benefits of higher education. 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?

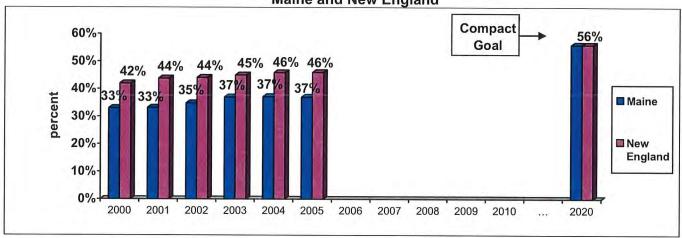
In its 2004 Action Plan, *Greater Expectations*, the Compact announced that its goal is to make Maine people among the best-educated in America, and that the primary measure of progress toward that goal is the proportion of working-age adults in Maine with postsecondary education degrees. Specifically,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

Indicator 1: Working-Age Adults with College Degrees

Overview:

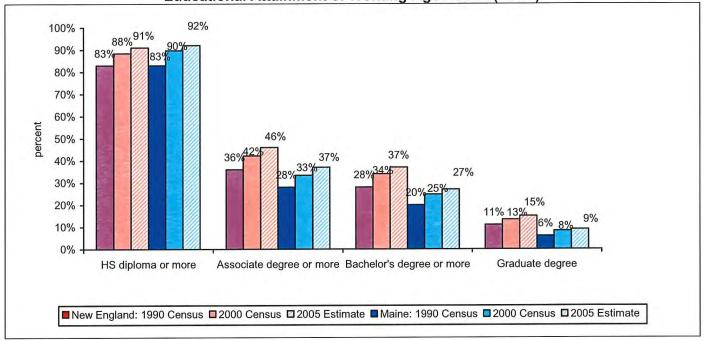
The most recent data indicate that 37% of Mainers ages 25-64 have an associate, bachelor's, or advanced degree, compared with 46% in New England (see chart below). If the growth rate of the past decade continues, those proportions will increase to 52% and 56%, respectively, by 2020. In order for Maine 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 13 years.

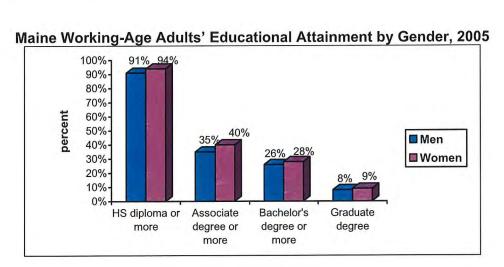
Working-Age Adults with a College Degree
Maine and New England



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. Among working-age adults in Maine in 2005, 40% of women had earned an associate degree or more, compared with 35% of men.



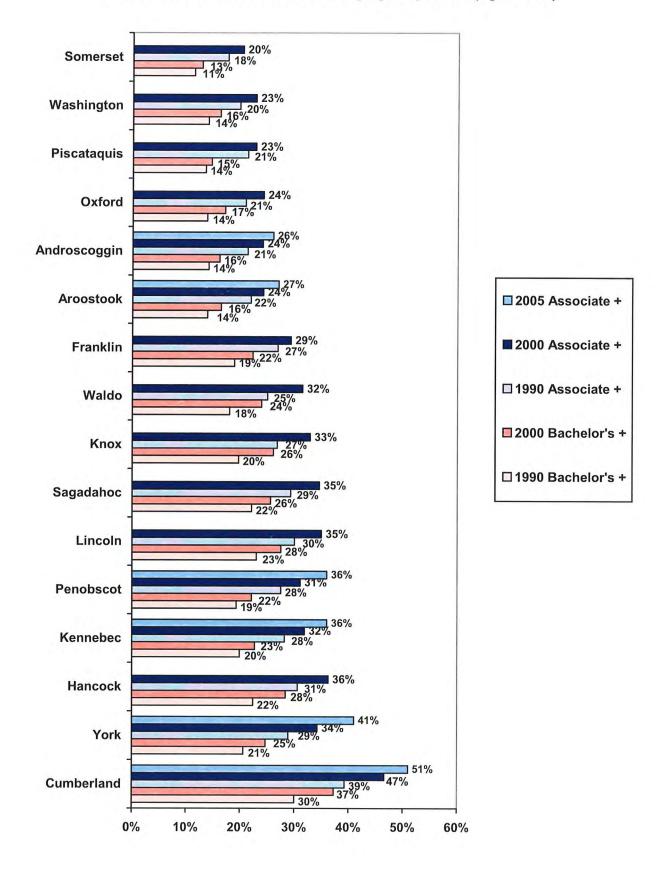




Regional Analysis:

Educational attainment in Maine's 16 counties varies widely. The proportion of working-age adults with a college degree (an associate degree or higher) in 2000 ranged from 20% in Somerset County to 47% in Cumberland County, as shown in the following chart. Only five counties—Cumberland, Hancock, Lincoln, Sagadahoc, and York—had higher proportions of college degree-holders than the state average in 2000. Most counties saw significant growth in postsecondary educational attainment between 1990 and 2000. In 2005, the Census Bureau expanded its annual American Community Survey to include estimates for Androscoggin, Aroostook, Cumberland, Kennebec, Penobscot, and York counties. These estimates of the proportion of adults with associates degrees or higher are included in the following graph.

Educational Attainment of the Working Age Population (Ages 25-64)



II. Do More Maine People Value Postsecondary Education?

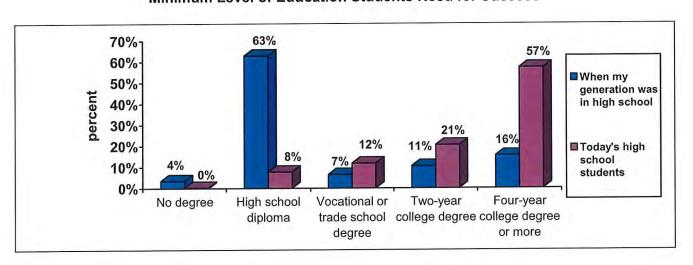
Public opinion about the importance of college affects the higher education environment in terms of both the level of public investment in higher education and expectations about college passed on to students. Maine adults were surveyed recently about key attitudes toward college.

Indicator 2: Education Level Needed for Success

Overview:

One measure of the importance of college is the degree to which citizens believe a college education is essential for achieving success. A recent 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, respectively, reporting this.

Minimum Level of Education Students Need for Success



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.

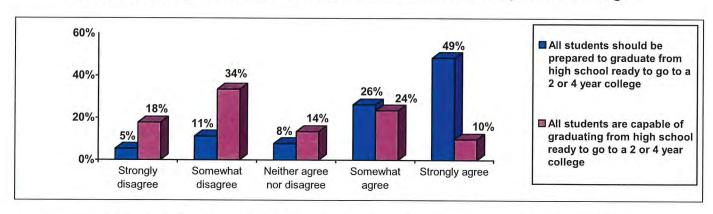
Indicator 3: All Students College-Ready

Overview:

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 predicated on the idea that high schools should graduate every student college-ready, and recent surveys gauged whether public opinion supports this goal.

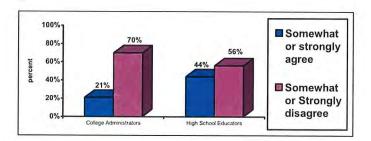
Three-quarters (75%) of respondents reported agreement that "all students should be <u>prepared</u> to graduate from high school ready to go to a two or four year college." About one in nine respondents (11%) somewhat disagreed with the statement, and only one in twenty (5%) strongly disagreed. Only about one-third of Maine adults (34%), however, report agreement that "all students are <u>capable</u> 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



A recent survey for the Mitchell Institute's 2007 *Barriers* study asked a similar question of Maine college administrators and high school educators. One in five college administrators (21%) agreed that "all students are <u>capable</u> 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 for college 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."



III. ARE MORE MAINE PEOPLE READY FOR POSTSECONDARY EDUCATION?

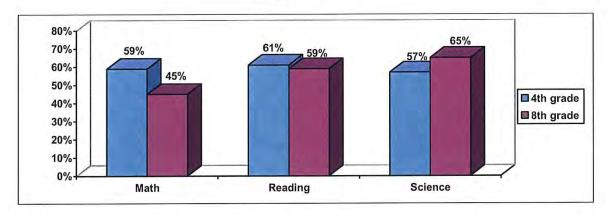
There are many measures of readiness for college among current elementary and secondary students. We look at performance on assessment tests, which include the MEA for 4th and 8th grade students, and the PSAT and SAT for high school students. In addition, we consider the performance in courses in middle and high school, Advanced Placement and Early College courses in high school, and high school completion rates. Remedial college course-taking is an indicator of the preparedness of students who enter college. We do not include indicators of college readiness among adults without a college degree, for lack of data.

Indicator 4: Student Performance on Assessment Tests

Overview:

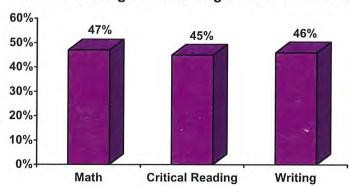
From 1999 to 2005, Maine Educational Assessment (MEA) tests were administered each year to all students in grades 4, 8, and 11. The results from these years may be found in Appendix 3. In 2006, the Maine Department of Education redesigned the MEA to better gauge student progress toward the *Maine Learning 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 assessment no longer contains a writing exam, and only students in the 4th and 8th grades take the science exam. The following graph displays 4th and 8th grade student performance on the new MEAs for the first year of assessment. The majority of students in both grades met or exceeded reading and science standards. In math, 59% of 4th-graders but only 45% of 8th-graders met or exceeded the standards. These data are not comparable to previous years.

Maine 4th and 8th Graders Meeting or Exceeding MEA Standards in Three Subject Areas 2005-2006



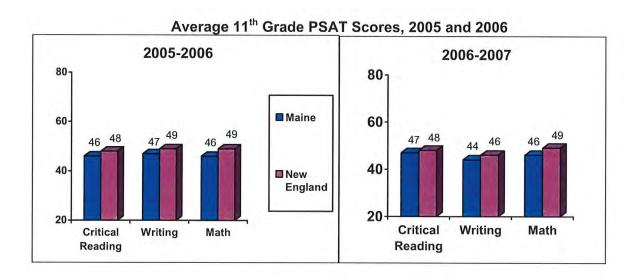
While the MEA is unique to Maine, the National Assessment of Educational Progress (NAEP) assesses what America's students know and can do in various subject areas, and is also designed to give results for individual states. Representative samples of 4th and 8th grade students in each participating state are tested in several subject areas in alternating years. For the past five years, Maine students' scores have been very close to the New England averages. See Appendix 3 for more detail.

Beginning in 2006, the Maine Department of Education replaced the MEA for 11th graders with the SAT, a college readiness and aptitude test. To meet or exceed standards on the math and critical reading portions of the SAT, students must score between 460 and 800. To meet or exceed standards on the writing portion of the exam, students must score between 450 and 800. The statewide results from the first year of implementing this change are found in the following graph.



Maine 11th Graders Meeting or Exceeding Standards on SAT, 2005-2006

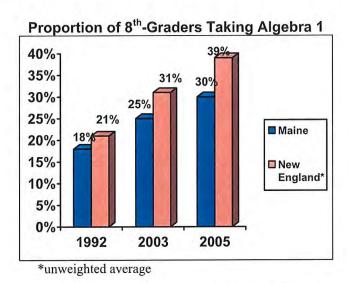
The Preliminary SAT (PSAT) gives a good indication of how Maine high school students measure up to average achievement in New England and the U.S. Currently, all 10th graders in Maine have the opportunity to take the PSAT, and in 2006, 98% of 10th graders and 75% of 11th graders took the exam. The following chart compares the scores of Maine's 11th graders to those of college-bound 11th graders in New England. The average PSAT scores for Maine 11th graders are lower than the New England averages in reading, writing, and math.



Indicator 5: Middle and High School Math Courses

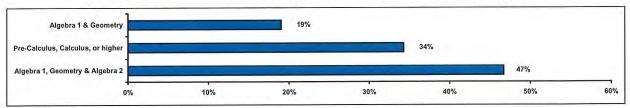
Overview:

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. Compared with New England, Maine students are less likely to be in on accelerated math track, according to data from NAEP. 30% of Maine 8th-graders reported that they were taking Algebra 1 in 2005, compared with 39% of their New England peers, as shown in the following chart. Further, the proportion of 8th-graders in New England taking Algebra 1 grew by eight percentage points, or 26% from 2003 to 2005, compared with an increase of only five percentage points, or 20%, in Maine.



Each year, several background questions are asked on the Maine Educational Assessment (MEA) tests. In 2004, 11th graders answered two MEA questions about their courses. One question is designed to identify students who are on a college track, asking whether students will complete all of the following courses by the time they graduate: a course in chemistry or physics; geometry and Algebra 2; and at least two years of a foreign language. 71% of respondents said that they will complete all of the courses, while 29% will not complete all of them. Another question asked which math courses students will complete. As shown in the following chart, nearly one in five 11th graders (19%) do not expect to complete Algebra 2 while in high school. Nearly one-half (47%) expect Algebra 2 to be their highest math course, and just over one-third (34%) expect to complete a math course beyond Algebra 2. National research shows that finishing a math course beyond Algebra 2 (e.g., trigonometry or precalculus) more than doubles the odds that a student who enters college will earn a bachelor's degree.

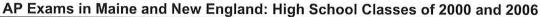
Math Courses 11th Graders Expect to Complete before Graduation

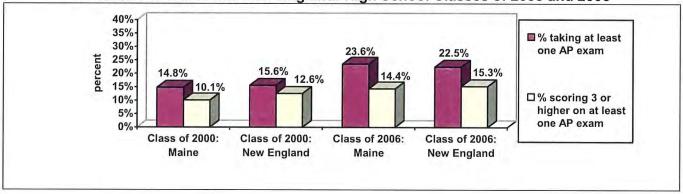


Indicator 6: Advanced Placement Courses and Exams

Overview:

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 vast majority (85%) of Maine high schools report that they had students taking AP courses during the 2005-2006 school year. This includes students taking AP courses online or via distance education, as well as those taking AP courses taught at their own school. Maine schools reported nearly 400 more students taking AP classes in 2005-2006, an increase of 7.4% over 2004-2005. The total number of Maine students taking at least one AP course was 5,711—8.9% of all high school students or 18.8% of juniors and seniors at responding schools. Regionally, the proportion of juniors and seniors taking AP courses in 2005-2006 ranged from a low of 3.4% in Franklin County to a high of 28.7% in Sagadahoc County.





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 increased from nearly 15% of the class of 2000 to 24% of the class of 2006, as shown in the table above. In New England, 16% of the class of 2000 and 23% of the class of 2006 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 14% of the class of 2006 in Maine, and from 13% of the class of 2000 to 15% of the class of 2006 in New England. Thus, the percentage of Maine students scoring three or higher on AP exams has increased comparably to the New England average, and the percentage of students taking AP exams has surpassed the regional average.

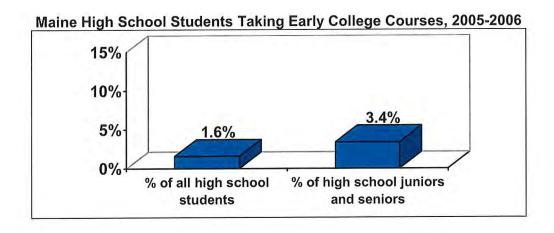
Indicator 7: Early College Courses

Overview:

In many high schools around Maine, students have the opportunity to take college courses for dual college and high school credit. "Early college" courses differ from Advanced Placement courses in that students who pass the courses automatically earn college credit. Some early college courses are offered at high schools, 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 in college and that they will successfully complete degrees.

Maine's "Early Studies" program, in which the state splits the cost of tuition with the postsecondary institution, provides early college course opportunities to roughly 400 high school students each year. The Maine Community College System's Early College for ME program is a college transition and scholarship program currently offered in 74 Maine high schools to students undecided about college. Some Early College for ME students take early college classes. Several high schools now have early college programs supported by the Great Maine Schools Project, and the MELMAC Education Foundation is also supporting early college programs. A grant from the National Governors Association will dramatically expand the number of early college programs in Maine over the next two years.

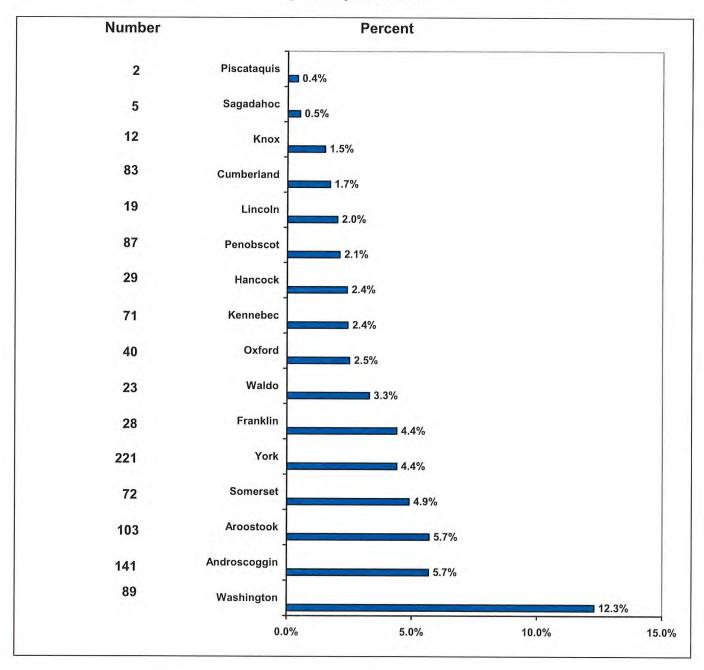
In 2006, nearly three-quarters (73%) of Maine's public high schools reported that their students can take college courses for dual credit. The total number of Maine students taking at least one early college course was 1,022—1.6% of all high school students or 3.3% of juniors and seniors at responding schools.



Regional Analysis:

The number of high school students taking early college courses in 2005-2006 as a proportion of all high school juniors and seniors ranged from less than one percent in Sagadahoc and Piscataquis Counties to 12.3% in Washington County. As shown in the following chart, six counties— Washington, Aroostook, York, Somerset, Franklin, and Androscoggin—had higher proportions than the statewide average.

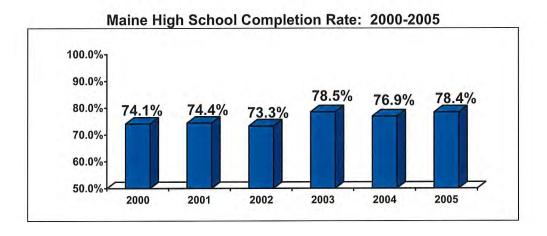
Number and Percent of 11th- and 12th-Graders Taking Early College Courses by County, 2005-2006



Indicator 8: High School Completion

Overview:

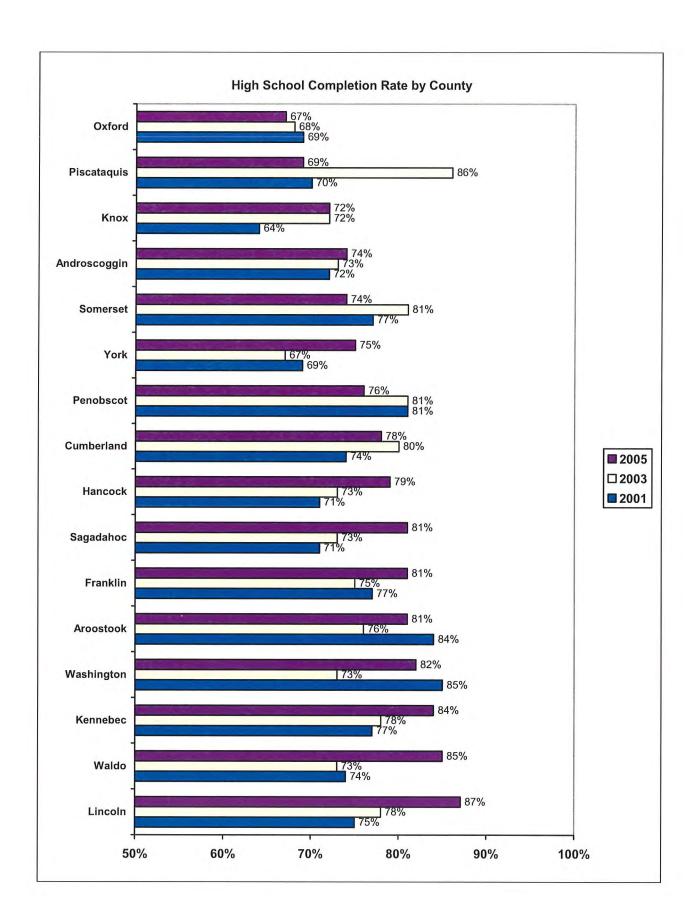
High school graduation is a critical step in preparing Maine students to move on to college. Here we calculate on-time high school graduation, or the number of 9th graders enrolled in Maine high schools that graduate four years later. The percentages are adjusted to reflect high school population change during the corresponding four-year period. The proportion of Maine students who complete high school on time increased from 74% in 2000 to 78% in 2005, as shown below. These are currently the best available data; however Maine, along with 46 other states, recently 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.



The National Center for Higher Education Management Systems provides comparable data for high school completion in Maine and New England. For the years 2001 through 2004, New England's ontime graduation rate was slightly below Maine's, increasing from 75% to 76%.

Regional Analysis:

As shown on the next page, the completion rate for the class of 2005 in Maine's public high schools ranged from 67% in Oxford County to 87% in Lincoln County. Six counties—Androscoggin, Hancock, Kennebec, Knox, Lincoln, and Sagadahoc—have had consistent increases in their graduation rates since 2001. Four counties—Aroostook, Oxford, Penobscot, Washington—have seen a downward trend in their on-time high school graduation rates over the past five years.



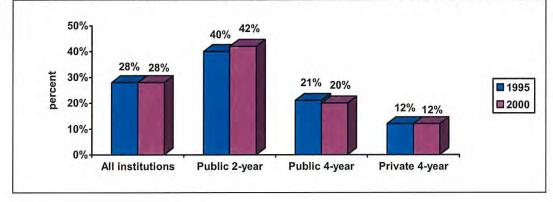
Indicator 9: Remedial College Courses

Overview:

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 any 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 long 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 36% of students in the UMaine system and 37% of Maine Community College students take at least one remedial course.





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

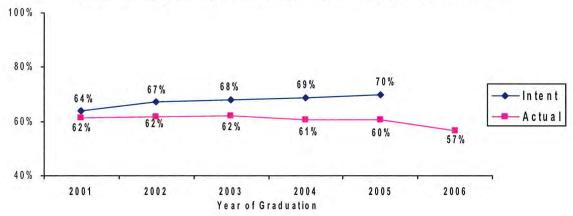
This section looks at the proportion of recent high school graduates intending to enter college and the proportion that actually enroll, Maine adults enrolled in postsecondary education, overall enrollment in Maine colleges, and the number of degrees earned in Maine.

Indicator 10: Recent High School Graduates Entering College: Intentions and Enrollment

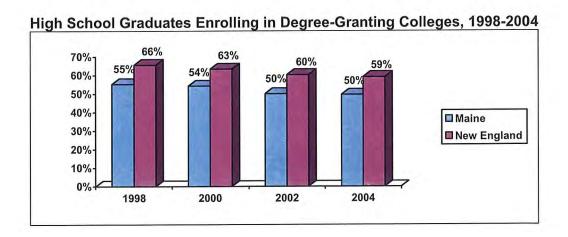
Overview:

Ideally, graduating students finalize their college plans before the end of their last year of high school. Intent to enroll in college in the spring of the senior year is one measure of student transition from secondary education to college. The proportion of Maine high school graduates reported by guidance counselors as intending to enroll in a postsecondary degree program has risen by six percentage points since 2001, from 64% to 70% in 2005. Actual enrollment in college within one year after graduation, however, has not increased. 62% of Maine high school graduates enrolled at least part-time in a two-or four-year college degree program within a year after graduation in 2001 through 2003. The proportion dropped slightly in 2004 and 2005, then dipped to 57% for the class of 2006.



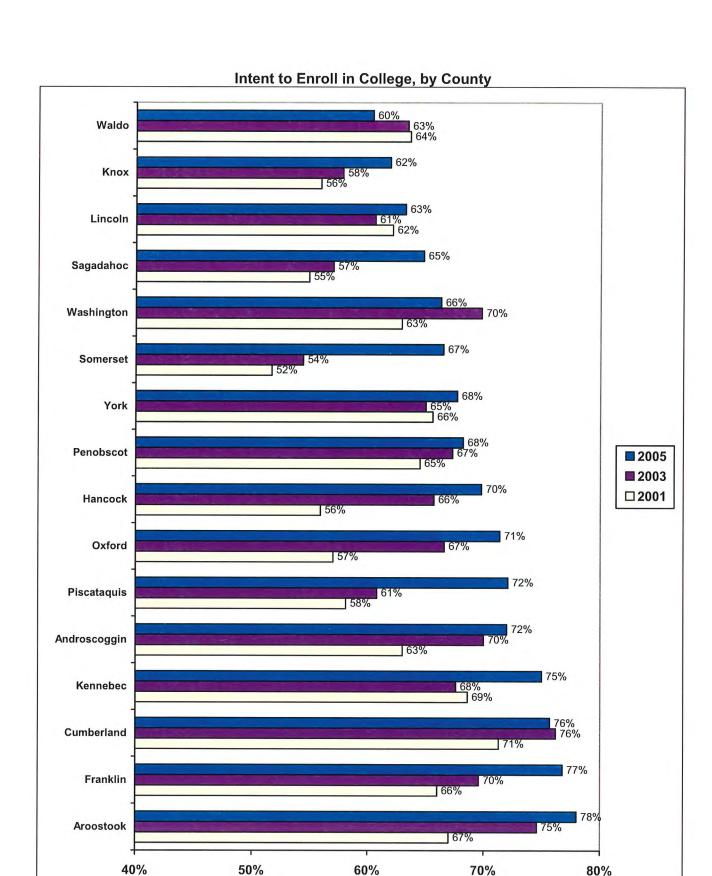


In order to compare Maine with New England, we must use a different data set that includes only students who enrolled in college in the fall after high school graduation, rather than within a full year after graduation. These data indicate that, both in Maine and New England, actual college enrollment among recent high school graduates has not risen since 1998 (see following chart). The rate of continuation on to college in New England has remained roughly ten percentage points higher than Maine's during that time period. In 2004, 59% of New England high school graduates enrolled directly in college, compared with 50% in Maine.



Regional Analysis:

The chart on the next page shows that the proportion of 2005 high school graduates planning to enroll in postsecondary education—including two- and four-year college degree programs—ranged from 60% in Waldo County to 78% in Aroostook County. Eight counties—Androscoggin, Aroostook, Franklin, Hancock, Oxford, Piscataquis, Sagadahoc, and Somerset—saw the proportion of high school graduates planning to enroll in postsecondary degree programs grow faster than the statewide average from 2001 to 2005.



60%

70%

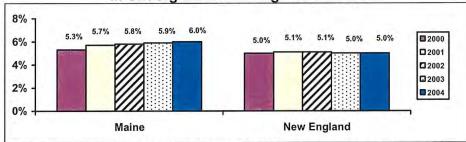
80%

Indicator 11: Adults Enrolled in Postsecondary Education

Overview:

The other indicators in this section all examine people of traditional college age (roughly 18 to 22). Adult or non-traditional students, defined as those aged 23 and older, are 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. As shown below, part-time college enrollment among adults age 25-44 in Maine is slightly higher than in New England. Between 1999 and 2004, the proportion of Maine adults enrolled part-time in college increased from 5.2% to 6.0%. In New England, adult college enrollment remained at roughly 5.0% during the same time period.

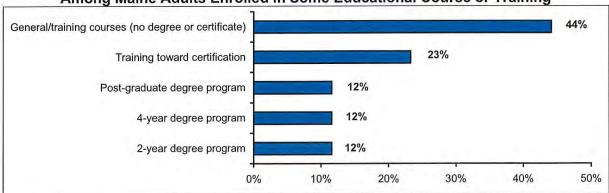
Proportion of Adults (Ages 25-44) Enrolled Part-Time in Undergraduate College Education



In order to enroll in college, adults without a high school diploma must complete a high school credential. In 2005, 54,000 Mainers between the ages of 25 and 64 had not completed high school. New information from the Maine Department of Education indicates that about 4,500 adults participate in secondary education each year in Maine. In 2004, 1,751 Maine adults received high school diplomas or GEDs at 50 adult education programs surveyed. Among these adults, 465 (26.5%) applied for admission to a postsecondary institution and nearly all (420 or 24%) enrolled in one or more college classes.

A 2005 poll of 400 Maine adults looked more broadly at participation in education and training. 11% of respondents indicated that they are currently enrolled in an educational course or training program. The following chart shows that among these 43 respondents, more than one-third (35%) were working toward a college degree and another 23% were working toward a certification, while 44% were enrolled in general courses but not working toward a degree.



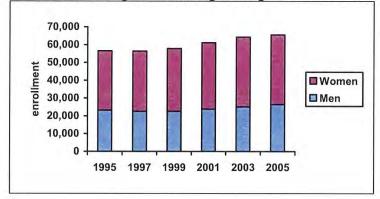


Indicator 12: College Enrollment

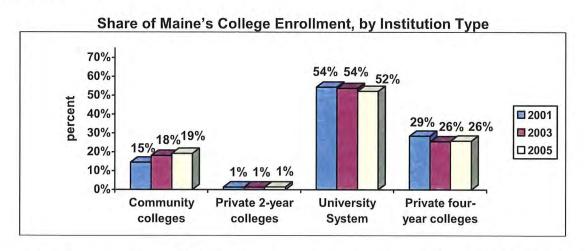
Overview:

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 2005, enrollment grew by nearly 16%, or just over 9,000 students. The latest student enrollment figures indicate that 65,412 students were enrolled in Maine's degree-granting institutions in the fall of 2005. From 1995 to 2003, the share of women enrolled in Maine's colleges and universities grew from 59% to 61%. The share of women fell to 59.7% in 2005.

Total Enrollment in Maine's Degree-Granting Colleges and Universities, 1995-2005



The University of Maine System currently 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 19%. The share of Maine students attending private four-year colleges has dropped from 29% to 26%.



The table on the next page shows both part-time and full-time enrollment at selected Maine colleges and universities. Maine's community colleges tend to enroll more part-time than full-time students, while full-time students outnumber part-timers at our four-year public universities. At the private four year colleges, full-time students outnumber part-time students by roughly two to one overall. While women make up only slightly more than half the enrollment at Maine's community colleges, students at four-year colleges in Maine are more than 60% female.

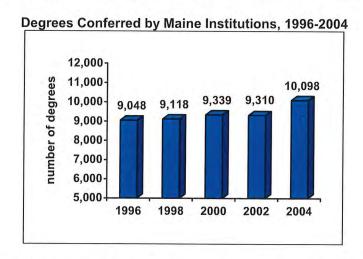
Total Enrollment at Maine Degree-Granting Colleges and Universities

	2001		2005	
COLLEGE	Part-time	Full-time	Part-time	Full-time
Community Colleges				
Central Maine Community College	810	625	1,351	919
Eastern Maine Community College	933	663	899	932
Kennebec Valley Community College	874	381	1,259	523
Northern Maine Community College	332	551	316	605
Southern Maine Community College	1,385	1,086	2,190	2,297
Washington County Community College	56	216	98	296
York County Community College	584	247	575	299
Tork county community conege	4,974	3,796	6,688	5,871
Community College Total	8,770 (51°		12,559 (53	
		,	,	,
Private 2-Year Colleges				
Andover College	16	505	62	528
Beal College	83	221	134	239
Private 2-Year College Total	825 (74%	<u> </u>	963 (81%	
Till vale 2 Tour Conego Total	0_0 ((
Public 4-Year Colleges & Universities				
Maine Maritime Academy	19	708	22	817
University of Maine System		, , , ,		
University of Maine	2,857	7,841	2,648	8,787
University of Maine at Augusta	4,099	1,476	3,950	1,544
University of Maine at Augusta University of Maine at Farmington	340	2,095	329	2,123
University of Maine at Fort Kent	305	592	431	762
University of Maine at Machias	475	542	687	462
	414	953	436	1,112
University of Maine at Presque Isle	5,592	5,374	4,987	5,987
University of Southern Maine		18,873	13,468	20,777
UMaine System Subtotal	14,082	<u> </u>	35,084 (61	<u> </u>
Public 4-Year College & University Total	32,955 (62	2% female)	33,064 (6)	% lemale)
		I .		Γ
Private 4-Year Colleges		4.767	0	1 600
Bates College	0	1,767	5	1,699
Bowdoin College	14	1,621	0	1,661
Colby College	1	1,808		1,871
College of the Atlantic	9	262	16	303
Husson College	905	959	705	1,388
Maine College of Art	35	400	26	468
New England School of Communications	1 1	102	10	303
St. Joseph's College	4,107	1,163	2,452	1,184
Thomas College	310	469	272	603
Unity College	21	480	11	517
University of New England	706	2,131	897	2,415
Offiversity of 14047 England		i	1 4 6 6 4	40 440
	6,109	11,162	4,394	12,412
Private 4-year College Total		11,162 3% female)		12,412)% female)

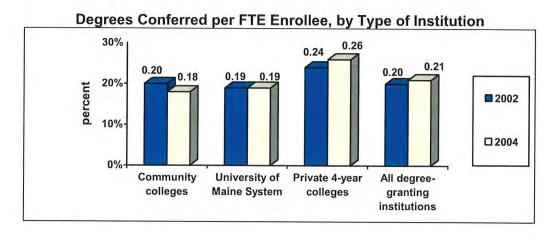
Indicator 13: Degree Completion

Overview:

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 10,000 degrees in 2004, a 12% increase over the more than 9,000 degrees awarded in 1996. The greatest increase in degrees conferred occurred between 2002 and 2004. In 2004, women earned 62% of the degrees awarded in Maine. This proportion increased from 57% in 1996 to 59% in 2000.

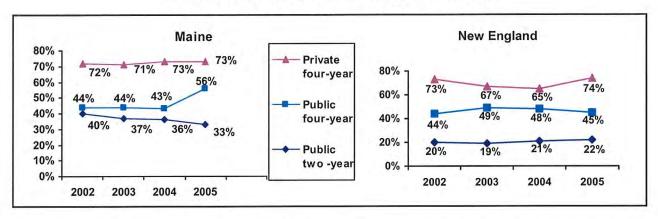


The number of degrees conferred per full-time equivalent (FTE) student enrolled is one measure of degree completion. The number of degrees conferred per FTE enrollee in Maine institutions has been about 0.20 for the past several years, meaning that one degree is conferred for about every five full-time equivalent students each year (see chart below). These figures include associate, bachelor's, and graduate degrees.



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 flawed 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, and the graduation rate at Maine's public and private four-year colleges and universities is comparable to the New England average, though the trends over the past several years have varied slightly.

Graduation Rates by Institution Type, 2002-2005



The 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?

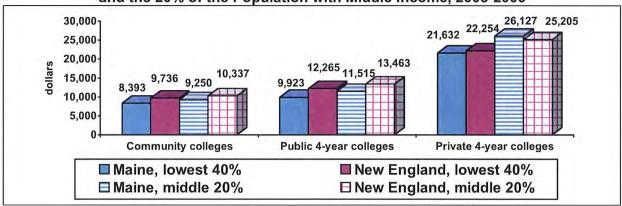
As measures of college affordability in Maine, we look at the cost of college (both the net cost and the cost as a proportion of income for lower- and middle-income Maine families), state investments in higher education and in grant aid to students, student borrowing for college, and employer support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

Indicator 14: Cost of College

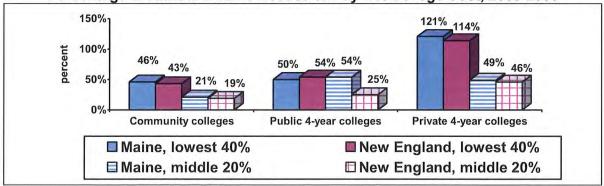
Overview:

College cost is a key indicator of the affordability of higher education. Here, we consider net college cost, or 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 students' family income. The first chart below shows the net college costs for students from families with incomes in the lowest 40% and the middle 20% of the population (for Maine, those incomes are \$18,371 and \$43,316 on average, respectively). The second chart shows the percentage of families' incomes needed to pay the average net costs at community colleges, and public and private four-year colleges. For middle income Maine families, the net cost increased by 9% at community colleges and 16% at public four-year universities over the past two academic years.

Net College Cost for the 40% of the Population with the Lowest Family Income and the 20% of the Population with Middle Income, 2005-2006







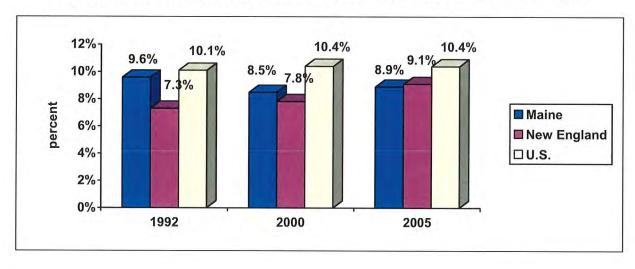
While net college costs are slightly lower for low-income than for middle-income Maine families, those costs represent at least twice the share of annual income for lower income families compared with middle income families (see previous charts). Compared with unweighted New England averages, net college costs in Maine are lower in all the categories. However, Maine families must pay a higher proportion of their incomes than the average for comparable families in New England to cover net college costs at community colleges and private four-year colleges.

Indicator 15: State Contribution to Higher Education

Overview:

The state government's contribution to higher education is measured here as a percentage of total state expenditures. This is a key measure 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 contribution to higher education as a percentage of total expenditures has been declining since the late 1980s. As shown below, the proportion declined from 9.6% in 1992 to 8.9% in 2005. Higher education expenditures in Maine in 2005 were \$669.2 million, 8.9% of the total state budget of \$7.485 billion. Maine's contribution in 2005 is slightly lower than the New England average of 9.1%, and is significantly lower than the national average of 10.4%.

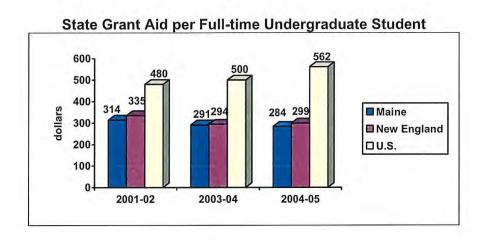
Higher Education Expenditures as a Proportion of State Budgets, 1992-2005



Indicator 16: State Grant Aid

Overview:

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 students do not have to pay back. Maine provides nearly \$13 million in grant aid each year to undergraduate students, which was about \$285 per full-time equivalent (FTE) undergraduate student enrolled in 2004-2005 and about \$315 in 2001-2002. The New England average is slightly higher than this, at about \$300 in 2004-2005 and \$335 in 2001-2002. Nationally, the amount of grant aid states provide to undergraduates is much higher, at about \$560 per FTE student. Nationwide, the amount of state grant aid per FTE undergraduate student increased from 2001-2002 to 2004-2005, while it fell both in Maine and in New England (see chart and table below).



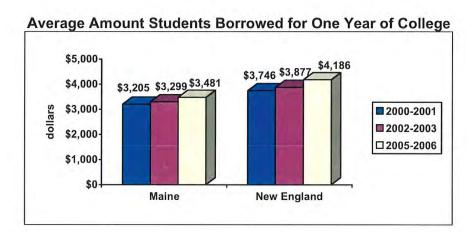
	2001-2002		2003-2004		
	Undergraduate Grant Aid	Grant Aid per FTE student	Undergraduate Grant Aid	Grant Aid per FTE student	
Maine	\$12,021,000	314.06	\$12,562,000	290.94	
New England	\$196,584,000	334.60	\$165,814,000	294.39	
United States	\$5,034,648,000	480.10	\$5,719,842,000	500.16	

	2004-2005		
	Undergraduate Grant Aid	Grant Aid per FTE student	
Maine	\$12,984,000	284.27	
New England	\$163,760,000	298.75	
United States	\$6,684,049,000	562.11	

Indicator 17: Student Borrowing

Overview:

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. Among all undergraduates nationally, 35% took out student loans in 2003-04. The proportion of students who borrow rises to 65% among bachelor's degree recipients. The average Maine undergraduate takes out more than \$3,500 each year in student loans. This figure includes all students, not just those who borrow. Since 2000, average annual student borrowing in Maine has increased slightly from \$3,205 to \$3,481 (see chart below). This translates into roughly \$7,000 for two years of college or nearly \$14,000 for four years. In fact, the national average of total student debt among the 65% of bachelor's degree recipients in 2000 who took out student loans was \$19,300. For the 2005-2006 school year, Maine students borrowed \$705 less, on average, than the average for New England students. For Maine students graduating from four-year colleges in 2005, the average student loan burden was \$20,239, the seventh highest in the U.S.

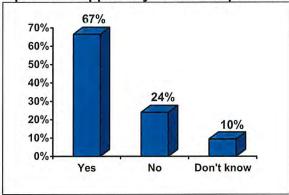


Indicator 18: Employer Support for Education

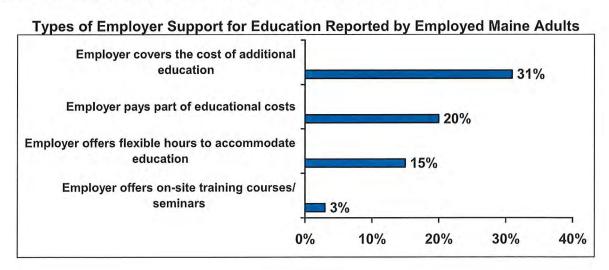
Overview:

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 survey also asked employed respondents what types of support for education employers provide. About three in ten employed adults (31%) said that their employer would pay for all of the cost of additional education, and another 20% said that their employer would pay part of the cost of additional education. The other most common types of employer support reported were flexible hours to accommodate education, reported by 15% of employed respondents, and on-site training courses or seminars offered by employers, reported by 3% of employed respondents.



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

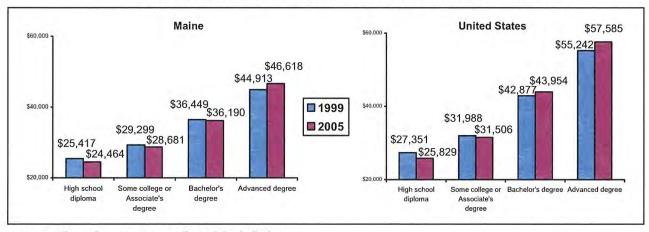
Besides the inherent value of higher education, there are economic and other benefits, both to the individuals who earn degrees and to the communities in which they live. We look at earnings and income of Maine people with college degrees, unemployment rates by level of education, and other benefits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

Indicator 19: Earnings and Income by Education Level

Overview:

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. Workers with an associate degree earn \$6.79 (or 47%) more per hour than those with only a postsecondary vocational certificate. Both in Maine and nationally, annual earnings of full-time workers increase significantly with each successive level of educational attainment (see charts below). In Maine, workers with some college earn 17% more per year than those with a high school diploma, and workers with bachelor's degrees earn 48% more than those with only a high school diploma (see chart below). The differences are larger in the U.S. as a whole (22% and 70%, respectively). Between 1999 and 2005, annual earnings increased only for workers with higher levels of education. In Maine, only workers with advanced degrees earned more on average in 2005 than in 1999. In the U.S., workers with bachelor's and advanced degrees earned more in 2005 than in 1999.

Annual Earnings of Full-Time Working Adults, 1999 and 2005



Note: These figures are not adjusted for inflation.

Regional Analysis

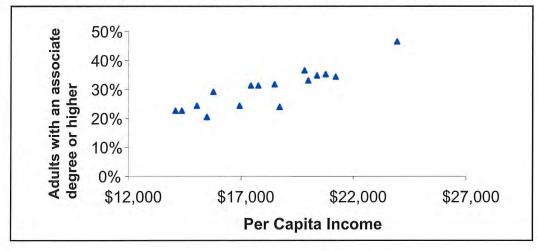
Comparing educational attainment with per capita income in Maine's counties reflects a national trend of higher incomes in communities with higher proportions of college-educated adults. The strong relationship between educational attainment and per capita income is illustrated in the table and the chart below. Cumberland County has the highest proportion of working-age adults with an associate

degree or higher—46.6%—and also has the highest per capita income at \$23,949. Washington and Piscataquis are the only counties with per capita incomes below \$15,000, and they also have nearly the lowest educational attainment—22.8% of working-age adults with an associate degree or higher.

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

County	Working-Age Adults with an Associate Degree or Higher	Per Capita Income
Somerset	20.4%	\$15,474
Washington	22.8%	\$14,119
Piscataquis	22.8%	\$14,374
Androscoggin	24.1%	\$18,734
Oxford	24.2%	\$16,945
Aroostook	24.2%	\$15,033
Franklin	29.3%	\$15,796
Penobscot	31.1%	\$17,801
Waldo	31.4%	\$17,438
Kennebec	31.9%	\$18,520
Knox	33.0%	\$19,981
York	34.3%	\$21,225
Sagadahoc	34.6%	\$20,378
Lincoln	35.0%	\$20,760
Hancock	36.3%	\$19,809
Cumberland	46.6%	\$23,949

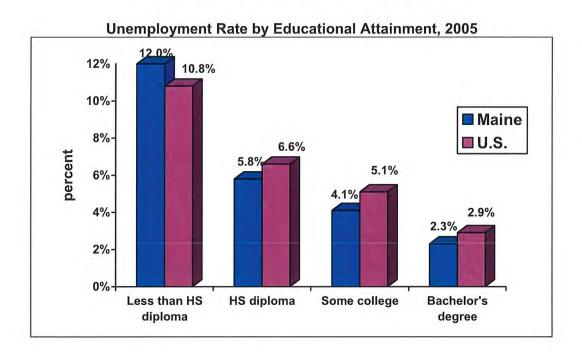
Maine's 16 Counties: Per-Capita Income and Educational Attainment, 2000



Indicator 20: Unemployment by Education Level

Overview:

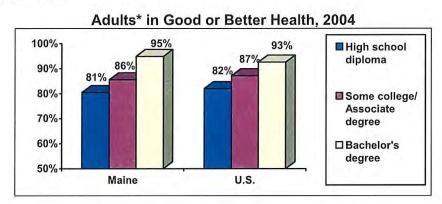
Unemployment rates are another indicator of the demand for higher education in the labor market. Both nationally and in Maine, unemployment is lower among those with higher levels of education, as illustrated in the chart below. In Maine, the unemployment rate among workers with only a high school diploma is more than twice as high as the unemployment rate for workers with a bachelor's degree—5.8% compared with 2.3%. Maine workers who have not completed high school have a higher unemployment rate than the national average, while unemployment among Maine workers with at least some college education is lower than in the U.S. as a whole.

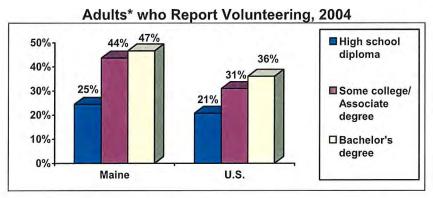


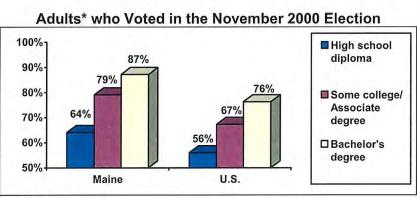
Indicator 21: Other Benefits of Higher Education

Overview:

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 nations. 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.







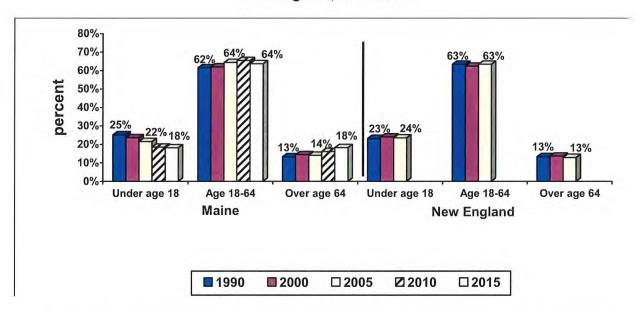
*Age 25 and older

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

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 2006, while the population in its northernmost county, Aroostook, declined the most. In addition to York County, two coastal counties, Lincoln and Waldo, saw population growth of more than 15% between 1990 and 2006. In three counties—Androscoggin, Piscataquis, and Washington—the population declined between 1990 and 2006.

[†] Maine State Planning Office Projections

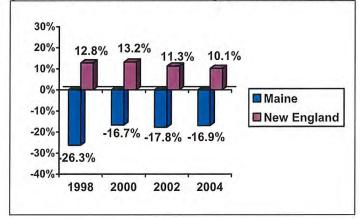
Population of Maine's Counties, 1990, 2000, and 2006

County	Population			% Change,
	1990	2000	2006	1990-2006
York	164,587	186,742	202,232	22.9%
Waldo	33,018	36,280	38,715	17.3%
Lincoln	30,357	33,616	35,234	16.1%
Hancock	46,948	51,791	53,797	14.6%
Knox	36,310	39,618	41,096	13.2%
Cumberland	243,135	265,612	274,598	12.9%
Sagadahoc	33,535	35,214	36,837	9.8%
Oxford	52,602	54,755	57,118	8.6%
Somerset	49,767	50,888	52,249	5.0%
Kennebec	115,904	117,114	121,068	4.5%
Franklin	29,008	29,467	30,017	3.5%
Androscoggin	105,259	103,793	107,552	2.2%
Penobscot	146,601	144,919	147,180	.4%
Piscataquis	18,653	17,235	17,585	-5.7%
Washington	35,308	33,941	33,288	-5.7%
Aroostook	86,936	73,938	73,008	-16.0%

Migration of Students Entering College

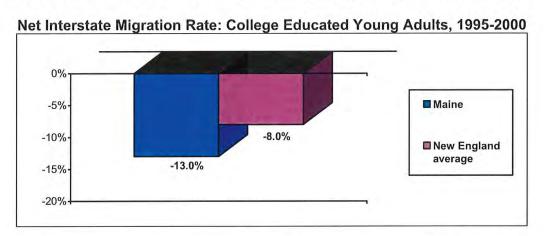
Interstate migration of students who enter college immediately after graduating from high school is an important factor in determining the overall educational attainment in a state. Nationally, students are more likely to stay in the state where they attend college than the one where they attended high school. In Maine, many more recent high school graduates leave the state for college than the number who come to Maine from other states for college, meaning that we are a net exporter of traditional-age college students. The figures in the chart below include any student who completed high school within the last 12 months and entered a two-year or four-year degree-granting college as a full-time student. In 2004, more than 4,100 of these Maine students left the state for college, while only about 2,900 students from other states entered Maine colleges, a net out-migration rate of 16.9%. For comparison, the 2004 average for all New England states was an in-migration rate of 10.1%.

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, Maine lost single young adults with bachelor's degrees at a faster rate than did 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.



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%

^{*}Adults ages 25-39 who were never married or were widowed or divorced and 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 at 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 2001-2005 are estimates from the U.S. Census Bureau's American Community Survey. 1990 and 2004 data are not readily available for the working-age adult population, so the figures used here are estimates developed by applying the differences in educational attainment between the population age 25 and over and the working age (25-64) subset in 2000 for 1990 and in 2003 for 2004. See www.census.gov.

Indicator 2: Education Level Needed for Success

November 2005 survey of Maine adults conducted by Strategic Marketing Services/Pan Atlantic Consultants 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 by Pan Atlantic SMS Group for Mitchell Institute's *Barriers* study (see www.mitchellinstitute.org).

Indicator 4: Student Performance on Assessment Tests

Maine Educational Assessment (MEA) scores for each school in the state are published annually on the DOE's website at www.state.me.us/education/mea/edmea.htm.

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

PSAT national and state reports are available from the College Board at http://www.collegeboard.com/researchdocs/2006 psat.html

Indicator 5: Middle and High School Math Courses

Dana Duncan at the Maine Department of Education provided data from 2004 MEA tests. National research cited is from *Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment*, U.S. Department of Education, Office of Educational Research and Improvement, June 1999 by Clifford Adelman.

Data on Maine and New England 8th-graders taking Algebra 1 come from NAEP and are available from Achieve, Inc. at www.achieve.org/achieve.nsf/StateProfiles?openform

Indicator 6: Advanced Placement Courses and Exams

Data on students taking AP courses are from Mitchell Institute surveys of Maine high schools, January 2005 and January 2006. Data on AP exams are from the College Board's *Advanced Placement Report to the Nation 2007* (apcentral.collegeboard.com). Data on high school enrollments are reported by the Maine Department of Education (see www.state.me.us/education/enroll/fall/fallbyschool.htm).

Indicator 7: Early College Courses

Mitchell Institute surveys of Maine high schools, January 2005 and January 2006.

Indicator 8: High School Completion

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 calculated by the Mitchell Institute using DOE graduate figures and school enrollment data from DOE at http://www.maine.gov/education/enroll/fall/fall.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/remedialed.asp?IndID=16 and Lynne Miller, Southern Maine.

Indicator 10: Recent High School Graduates Entering College: Intentions & Enrollment

Data on intent to enroll in college are based on student reports to guidance counselors prior to graduation, whether or not students actually enroll in postsecondary education. The figures in this report are for public high schools, and the statewide average includes the 11 private high schools with 60% or more publicly-funded students. The data are published on the Maine DOE's website at www.maine.gov/education/enroll/grads/gradspost.htm.

Data on student enrollment in college are from the Mitchell Institute's college enrollment data set. See From High School to College: Removing Barriers for Maine Students, July 2007 at www.mitchellinstitute.org.

Indicator 11: Adults Enrolled in Postsecondary Education

National Center for Higher Education Management Systems (NCHEMS) Information Center for State Higher Education Policymaking and Analysis at www.higheredinfo.org. Enrollment data are from the NCES IPEDS and population data are from the U.S. Census Bureau.

Data on secondary education in Maine is from two surveys conducted by the Compact's College Transitions consultant in the early spring of 2005. Data on Maine adults engaged in any education or training come from the Strategic Marketing Services survey referenced in Indicators 2 & 3.

Indicator 12: College Enrollment

2001 and 2005 enrollment data are from the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) Peer Analysis System. Total Maine enrollment data from 1995 through 2001 are from the Digest of Education Statistics at http://nces.ed.gov/programs/digest. More information on Maine's degree-granting institutions is available at the Maine Department of Education website: www.maine.gov/education/highered/institutionslist.htm.

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 Board of Higher Education's annual analysis of U.S. Department of Education data presented in its journal *Connection*. The latest issue is from Spring 2007, "Trends & Indictors in Higher Education 2007."

Indicator 14: Cost of College

These figures were calculated by the National Center for Public Policy and Higher Education for its report *Measuring Up 2006: 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 2006: The State Report Card on Higher Education* (see Indicator 14). The estimate of average debt among bachelor's degree recipients is from *Debt Burden: A Comparison of 1992-93 and 1999-2000 Bachelor's Degree Recipients a Year After Graduating*, National Center for Education Statistics, March 2005 at http://nces.ed.gov/pubs2005/2005170.pdf. The average student loan burden for four-year college graduates is from The Project on Student Debt, *Student Debt and the Class of 2005: Average Debt by State, Sector, and School*, August 2006.

Indicator 18: Employer Support for Education

Strategic Marketing Services survey referenced in Indicator 2.

Indicator 19: Earnings and Income by Education Level

Annual earnings data are from the Census Bureau's 2005 American Community Survey. Hourly wage data are from *Maine Employment Outlook 2002-2012*, December 2004 at www.maine.gov/labor/lmis/pdf/MaineEmploymentOutlook.pdf.

For educational attainment by county, see Indicator 1. Per capita income estimates are from the 2000 U.S. Census at www.census.gov.

Indicator 20: Unemployment by Education Level

U.S. Census Bureau, 2005 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. 2006 data are estimates based on the 2006 American Community Survey (estimates for Maine's counties are not available). See http://factfinder.census.gov/servlet/DatasetMainPageServlet. 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. See Enrollment in Postsecondary Institutions, Fall 2004 and Financial Statistics, Fiscal Year 2004 at

http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2006155 for 2004 data, the *Enrollment in Postsecondary Institutions, Fall 2002* and *Financial Statistics, Fiscal Year 2002* at http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005168 for 2002 data and the Digest of Education Statistics 2002 and 2000 at http://nces.ed.gov/programs/digest for 2000 and 1998.

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

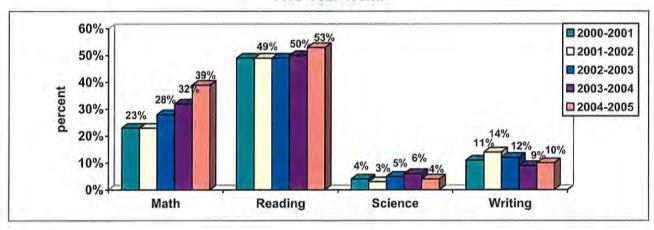
Maine Youth Migration Profiles 1995-2000, Prepared for REALIZE! Maine, by Charles S. Colgan of the University of Southern Maine and Joyce Benson of the Maine State Planning Office. www.maine.gov/governor/baldacci/news/events/Realize!/issue_papers/index.htm

APPENDIX 3: SUPPLEMENTARY DATA

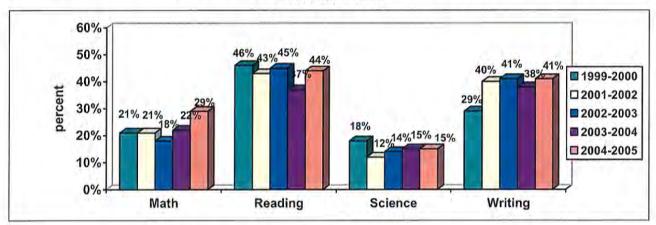
From 1999 to 2005, Maine Educational Assessment (MEA) tests were administered each year to all students in grades 4, 8, and 11. MEAs measure student progress toward achieving the standards of the Maine Learning Results, the educational standards for students in grades Pre-K to 12 adopted by the Legislature in 1996. Tests are scored on a scale from 501 to 580; scores between 541 and 560 meet the standards, and scores between 561 and 580 exceed the standards. A group of teachers and citizens set the standards based on the quality of student responses to MEA tests administered during the 1998-1999 school year.

Higher proportions of students met or exceeded the MEA standards in reading and writing than in math and science. Fourth-graders were significantly less likely to meet the MEA standards in science and writing than are 8th- and 11th-graders. The proportions of fourth- and eighth-graders meeting or exceeding math standards increased between 2000 and 2005. Among 11th-graders, the proportions meeting or exceeding reading and writing standards dropped over the same time period.

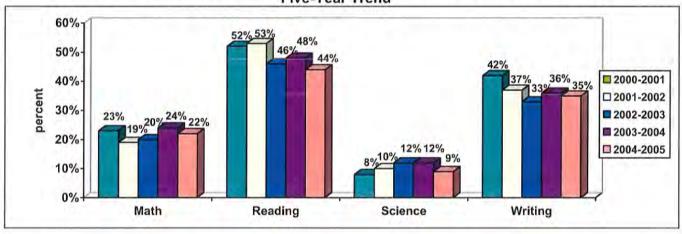
Maine 4th Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend



Maine 8th Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend



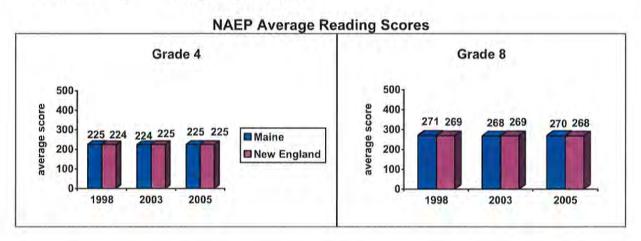
Maine 11th Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend



The National Assessment of Educational Progress (NAEP) assesses what America's students know and can do in various subject areas, and is also designed to give results for individual states. Representative samples of 4th and 8th grade students in each participating state are tested in several subject areas in alternating years. As shown in the following graphs, the average scores of Maine students are quite close to those of the New England averages in all subject areas.

NAEP Average Math Scores Grade 4 Grade 8 500 500 average score 400 average score 400 281 278 282 283 281 283 241 242 300 300 238239 230231 ■ Maine 200 200 New England 100 100 2000 2003 2000 2003 2005

Note: New Hampshire did not participate in 2000.



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Any mistakes are those of the authors.

CITING INFORMATION IN THIS REPORT

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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 that 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.

To dramatically increase Maine's educational attainment levels, the Maine Community Foundation and the Maine Development Foundation created the Maine Compact for Higher Education in 2003. For a year, the Compact examined studies to prepare an action plan to increase attainment. The action plan, *Greater Expectations*, completed in 2004, describes the Compact's vision, goals, and strategies. The Compact is now implementing the strategies.

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

<u>The Compact's mission</u> 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 age adults have an associate's, bachelors, or graduate degree – compared with 45% for New England. Our aim is to match the New England percentage within 15 years – this will require an additional 40,000 new college degree holders above projections by 2020.

Action Strategies to achieve the goal are:

- 1. *Maine's Promise Scholarship program* to ensure that no Maine student is denied a college education for financial reasons.
- 2. *Maine Early College efforts* to encourage students to continue their education beyond high school.
- 3. Maine College Transition program to help adults earn degrees.
- 4. *College for ME Employer program* to help employers support the education of their workforce.
- 5. College for ME Campaign to change public beliefs and behaviors about higher education.

<u>Organization.</u> The Compact's board of directors is composed of education, business, community and government leaders from throughout the state. The Board meets quarterly, and an executive committee carries out the work of the Board between meetings. The Compact is a non-profit corporation with an IRS 501c3 designation. Joseph Foley, senior vice president and Chief Marketing Officer of Unum is chair of the Board of Directors.

<u>Funding.</u> The Compact has been funded through grants received by MCF from the Cianbro Corporation, Great Maine Schools Project of the Mitchell Institute, Joseph F. Boulos, Libra Foundation, Maine Community Foundation, Maine Educational Loan Authority, MELMAC Education Foundation, TD Banknorth, N.A., and Unum. A National Governors Association grant to the State Dept. of Education supported the Compact's work on the Maine Readiness Campaign. Lumina Foundation for Education grants to MCF supports College Transitions, Early College and Employer Initiative programs. Other supporters of Compact strategies include the Nellie Mae Education Foundation and Ford Foundation.

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