

# MAINE STATE LEGISLATURE

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# Indicators of Higher Education Attainment in Maine

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





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

Prepared for the Compact by  
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January, 2006



MAINE COMPACT FOR HIGHER EDUCATION

# **Maine Compact for Higher Education Indicators of Higher Education Attainment in Maine**

**JANUARY 2006**

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 are intended to provide a framework for discussing, analyzing and making decisions to increase attainment:

- ◆ **Do more Maine working-age people have degrees?**
- ◆ **Do more Maine people value postsecondary education?**
- ◆ **Are more Maine people ready for postsecondary education?**
- ◆ **Are more Maine people enrolling in postsecondary education, and graduating?**
- ◆ **Is Maine postsecondary education more affordable?**
- ◆ **Are Maine's people, communities, and economy benefiting?**

The report may also inform and guide the decisions of policymakers, and help community leaders identify issues and opportunities.

The Compact plans to produce this report annually. We tried to select indicators for which data is available annually and regionally for comparison purposes. And, we intend to supplement these indicators with data from surveys. Lisa Plimpton, Director of Research for the Mitchell Institute, prepared the report for the Compact, with the advice of several researchers. 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.

This report is a 'work in progress'. We recognize that more indicators may be needed, that it may be desirable to set priorities among indicators, and that each indicator should include long-term targets. We encourage your reactions and ideas!

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## SUMMARY OF INDICATORS

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

**Indicator 1: Working-age adults with college degrees.** 37% of Maine adults have a college degree, compared with 46% in New England. 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.** 75% of Maine adults 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.** Maine 4<sup>th</sup>- and 8<sup>th</sup>-graders score close to the New England averages for math and reading on national assessments. Maine 11<sup>th</sup>-graders who take the Preliminary SAT score lower than both the New England and the U.S. averages.

**Indicator 5: Middle and high school math courses.** About 25% of Maine 8<sup>th</sup>-graders are on an accelerated math track (taking Algebra 1), compared with 31% in New England. 19% of Maine 11<sup>th</sup>-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 20% of the class of 2004. In New England, 18% of the class of 2000 and 23% of the class of 2004 took an AP exam.

**Indicator 7: Early college courses.** More than three-quarters (77%) of Maine's public high schools report that they have students taking early college courses. About 900 Maine students—or 3.0% of juniors and seniors—took an early college course last year.

**Indicator 8: High school completion.** Maine's high school graduation rate has been quite stable for the past five years and is slightly higher than New England's: 86.5% compared with 85.6% in 2001.

**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. We were not able to access statewide data on remedial course-taking Maine.

#### **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—50% compared with 60% in 2002. This is in spite of an increase in the proportion of Maine high school seniors reporting that they intend to enroll directly in college, from 64% in 2000 to 69% in 2004.

**Indicator 11: Adults enrolled in postsecondary education.** The proportion of Maine adults ages 25-44 who are enrolled part-time in college grew from 5.2% in 1999 to 5.9% in 2003. The New England proportion remained stable at 5.0% during those years.

**Indicator 12: College enrollment.** Between 1995 and 2003, college enrollment in Maine grew by nearly 14%, from 56,500 to more than 64,000 students. Just over one-half of college students in Maine are enrolled in the University of Maine system. The share of students enrolled in Maine community colleges was 18% in 2003, 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 44% of their annual income to cover average net college costs at community colleges, 50% at public four-year colleges, and 122% 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—\$559.3 million or 8.9% in 2002—is slightly higher than the New England average of 8.3%, but is significantly lower than the national average of 10.3%.

**Indicator 16: State grant aid.** Maine provides about \$12 million annually in grant aid for college students, or about \$290 per FTE student in 2003-2004. The New England average is slightly higher, and the national average is much higher, at about \$500 per FTE student.

**Indicator 17: Student borrowing.** The average Maine undergraduate takes out more than \$3,200 each year in student loans. This figure includes all students, not just those who borrow. Maine students borrowed \$578 less, on average, than the average New England student in 2002-2003.

**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 43% more on average in 1999 than those with only a high school diploma—\$36,449 versus \$25,417.

**Indicator 20: Unemployment by education level.** Average unemployment among Maine workers with only a high school diploma was 5.9% in 2004, more than twice as high as the 2.5% 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?

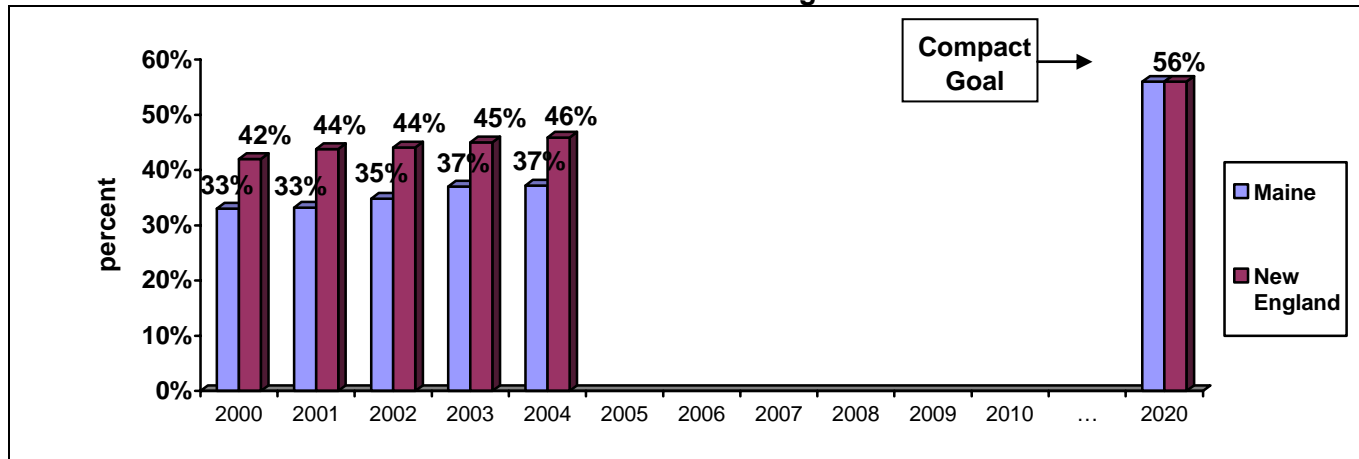
In its 2004 Action Plan, *Greater Expectations*, the Compact announced that its goal is to make Maine people among the best-educated in America, and that the primary measure of progress toward that goal is the proportion of working-age adults in Maine with postsecondary education degrees. Specifically, 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:

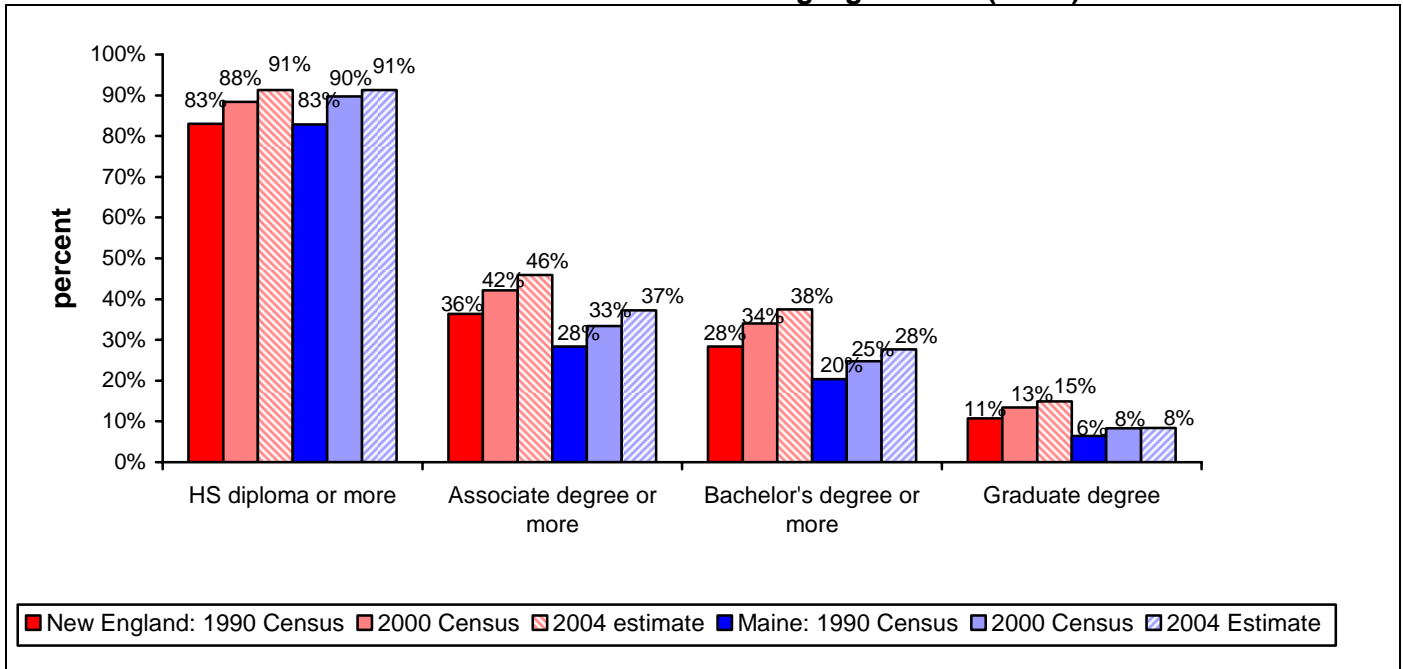
The most recent data indicate that 37% of Mainers ages 25-64 have an associate, bachelor's, or advanced degree, compared with 46% in New England (see chart below). If the growth rate of the past decade continues, those proportions will increase to 52% and 56%, respectively, by 2020. In order for Maine 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 15 years.

Working-Age Adults (ages 25-64) with an Associate, Bachelor's, or Advanced Degree  
Maine and New England

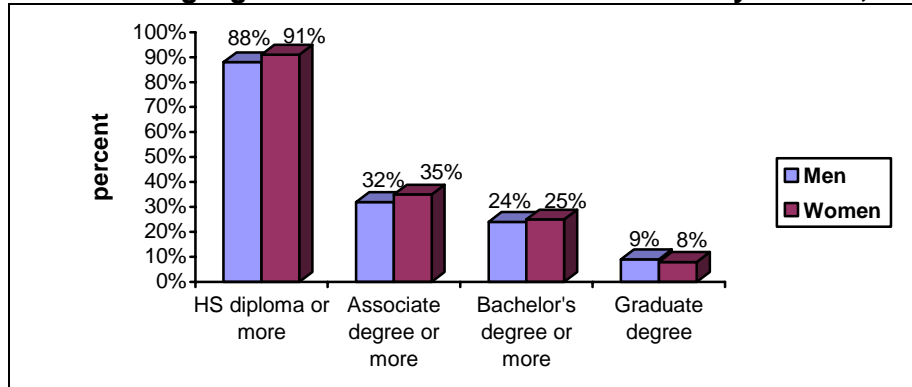


Maine compares favorably with New England in terms of its working-age population with high school diplomas, but our proportion of working-age adults with postsecondary degrees at all levels significantly lags behind the New England rates (see next chart). In fact, Maine has the lowest proportion of adults with postsecondary degrees of any New England state. Among working-age adults in Maine in 2000, 35% of women had earned an associate degree or more, compared with 32% of men.

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



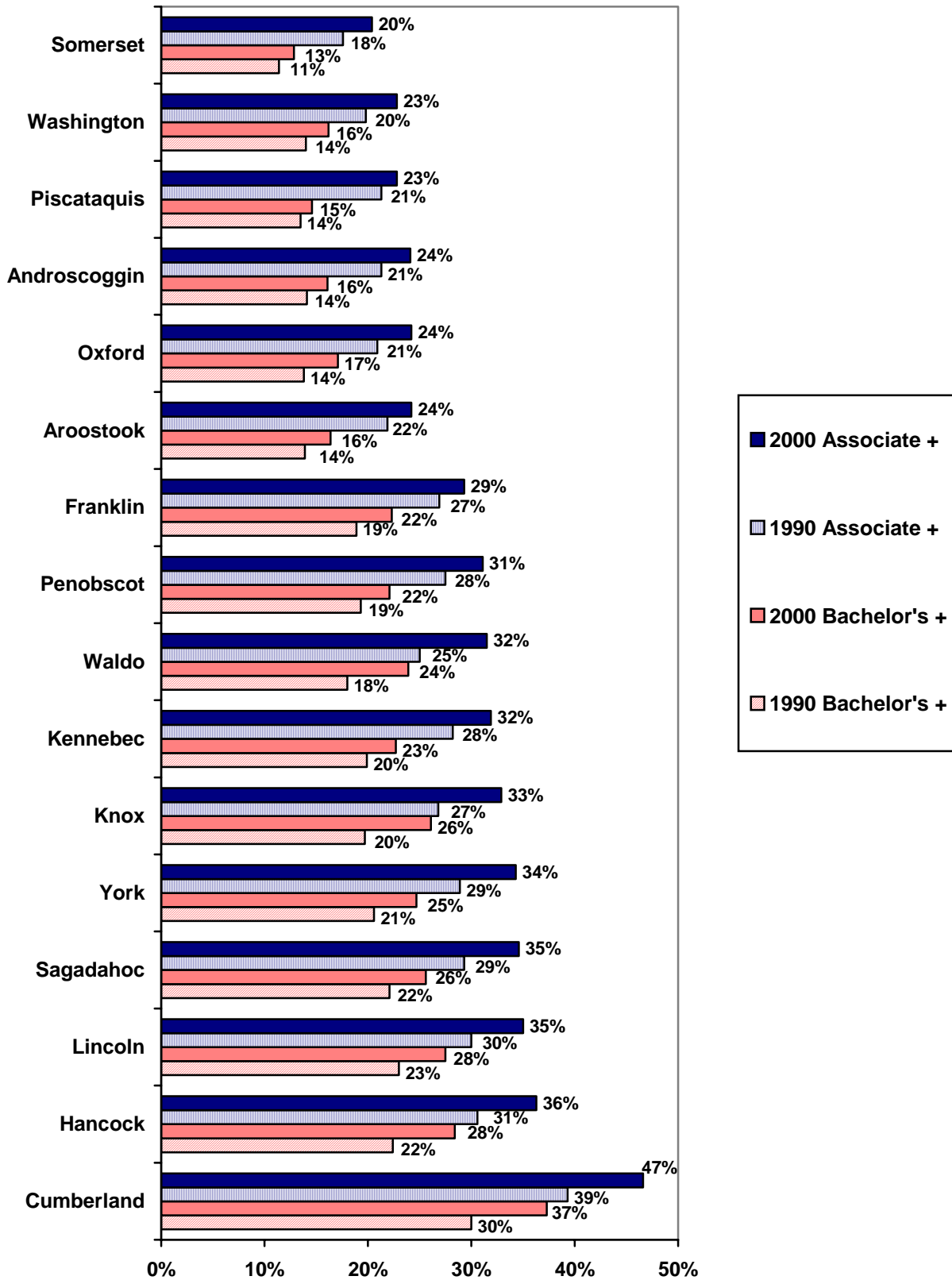
### Maine Working-Age Adults' Educational Attainment by Gender, 2000



### 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. (The Census Bureau does not provide annual estimates for Maine's counties except Cumberland County, so the 2000 data are the latest available.) 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.

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



## II. DO MORE MAINE PEOPLE VALUE POSTSECONDARY EDUCATION?

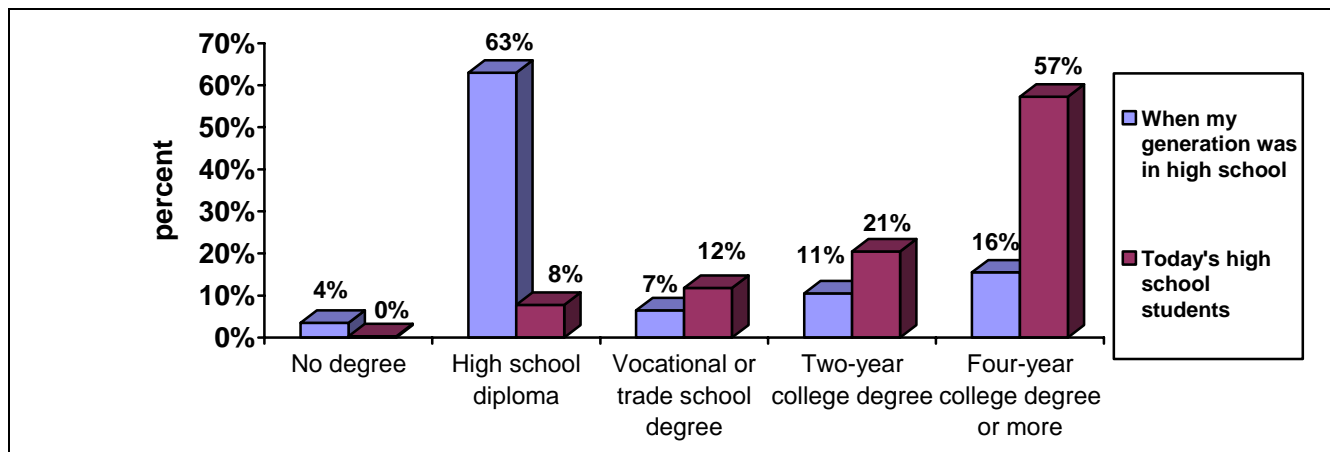
Public opinion about the importance of college affects the higher education environment in terms of both the level of public investment in higher education and expectations about college passed on to students. Maine adults were surveyed recently about key attitudes toward college.

### 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.

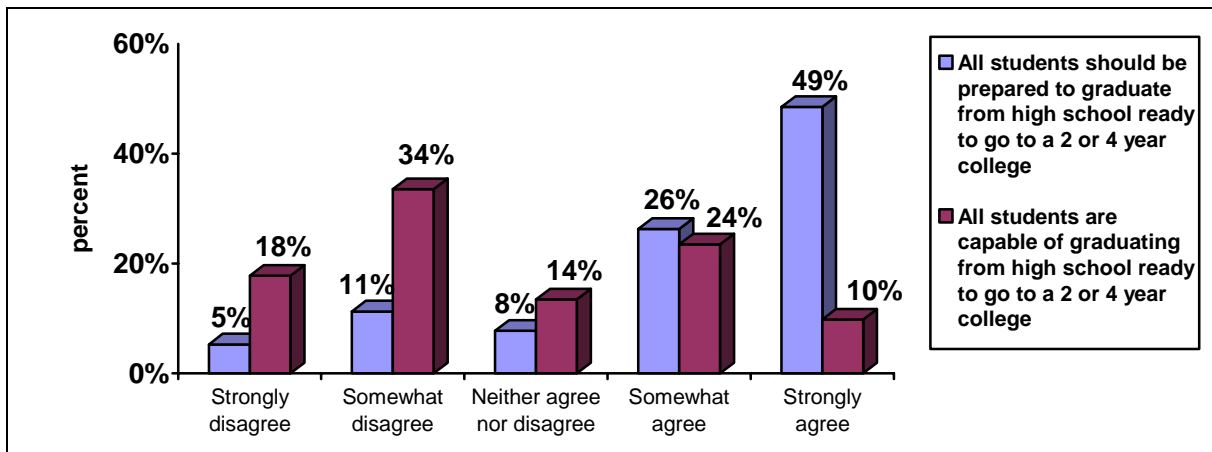
## Indicator 3: All Students College-Ready

### 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 a recent survey of Maine adults gauged whether public opinion supports this goal.

Three-quarters (75%) of respondents 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. Fewer Maine adults, 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



The more education respondents have completed, the less likely they were to agree that all students should be prepared to graduate from high school ready for college. While 85% of respondents who have not completed any education beyond high school agreed with the statement, only 77% of those with some college or a two-year degree agreed, and even fewer four-year college graduates (62%) agreed that all students should be prepared to graduate from high school ready to go to 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, 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 students who enter college. We do not include indicators of college readiness among adults without a college degree, for lack of data.

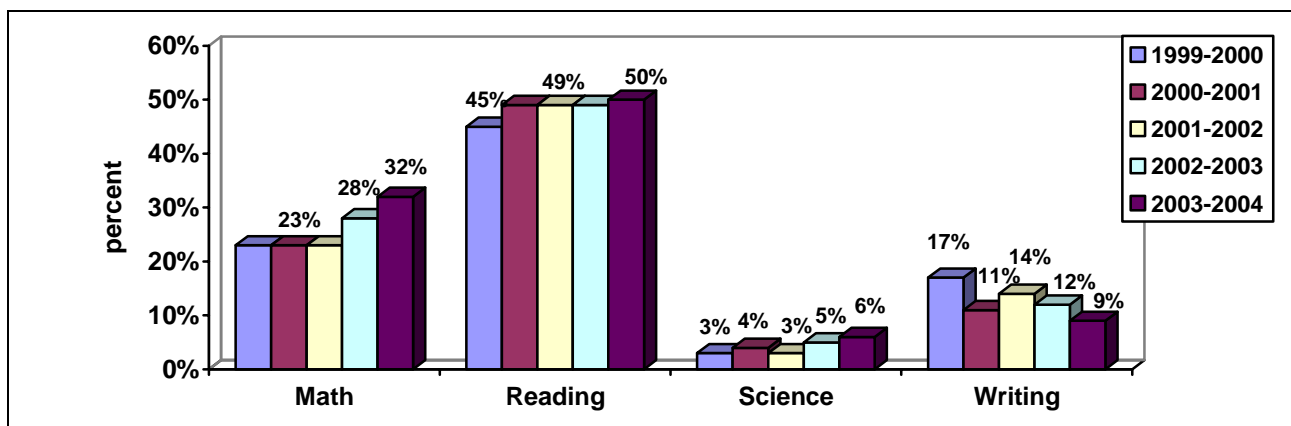
#### Indicator 4: Student Performance on Assessment Tests

##### Overview:

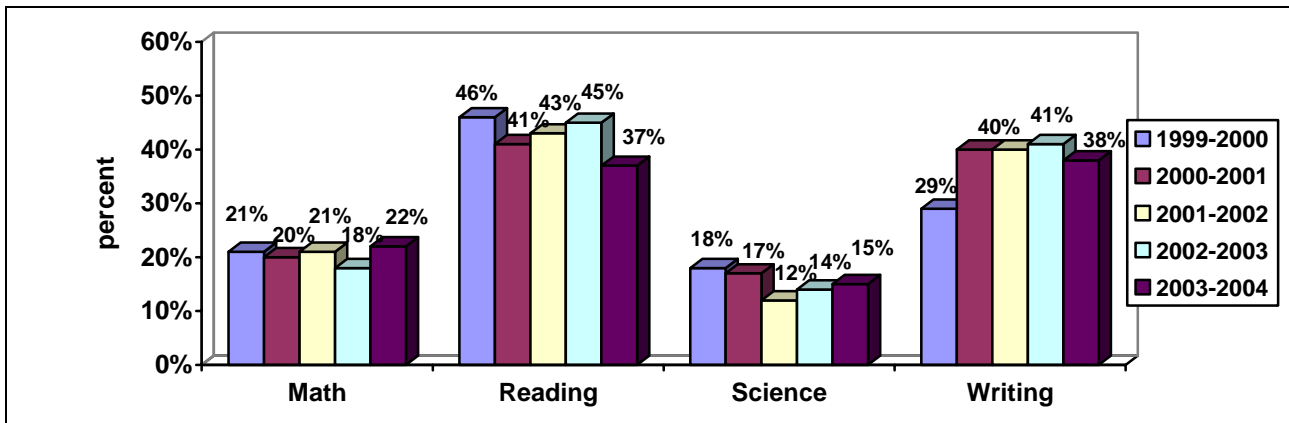
Since 1999, Maine Educational Assessment (MEA) tests have been administered every year to all students in grades 4, 8, and 11. MEAs measure student progress toward achieving the standards of the Maine Learning Results, the educational standards for students in grades Pre-K to 12 adopted by the Legislature 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 meet or exceed the MEA standards in reading and writing than in math and science. Fourth-graders are significantly less likely to meet the MEA standards in science and writing than are 8<sup>th</sup>- and 11<sup>th</sup>-graders. Statewide, scores have remained relatively stable for the past five years, as shown in the following three charts.

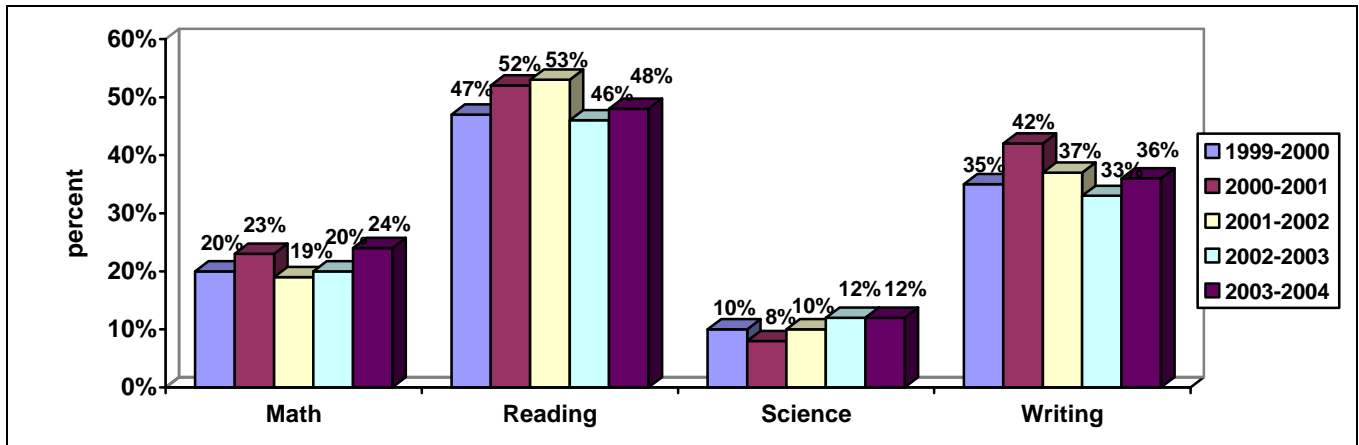
Maine 4<sup>th</sup> Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend



**Maine 8<sup>th</sup> Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend**

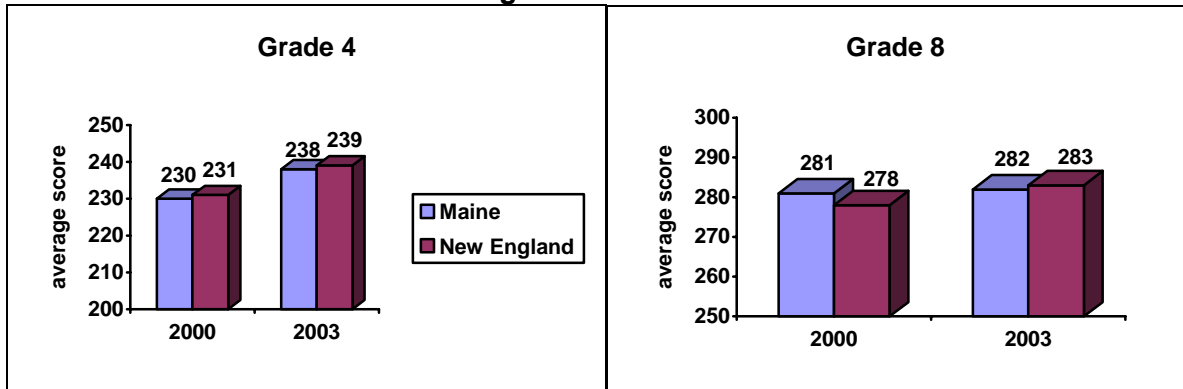


**Maine 11<sup>th</sup> Graders Meeting or Exceeding MEA Standards in Four Subject Areas, Five-Year Trend**



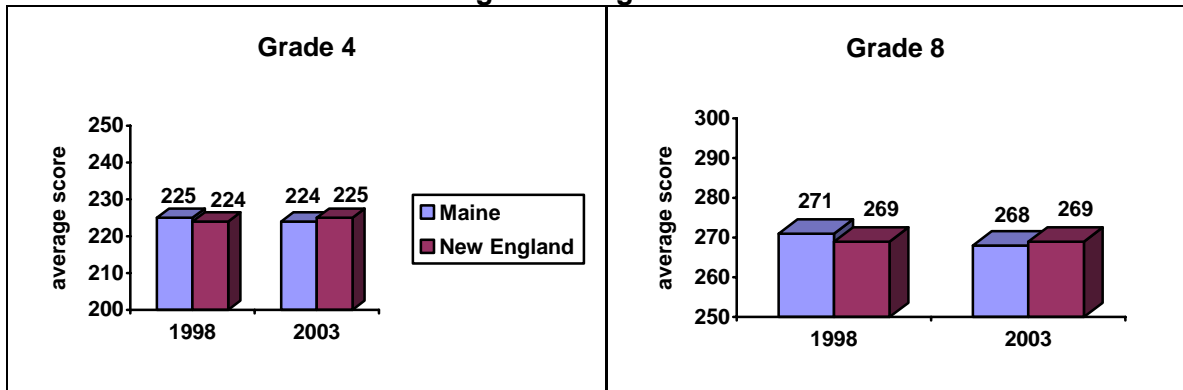
While the MEA is unique to Maine, the National Assessment of Educational Progress (NAEP) assesses what America's students know and can do in various subject areas, and is also designed to give results for individual states. Representative samples of 4<sup>th</sup> and 8<sup>th</sup> grade students in each participating state are tested in several subject areas in alternating years. The following charts show the results for Maine and New England as a whole in reading and math. Maine students' scores are quite close to those of the average New England student.

### NAEP Average Math Scores



Note: New Hampshire did not participate in 2000.

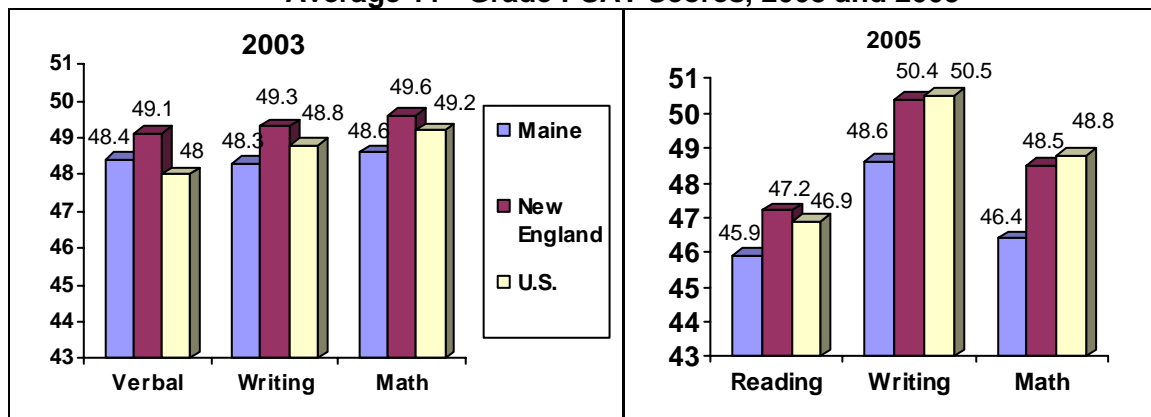
### NAEP Average Reading Scores



Note: Vermont did not participate in 1998.

The Maine Department of Education will replace the MEA for 11th graders with the SAT, a college readiness and aptitude test, beginning in 2006. Currently, all 10<sup>th</sup> graders in Maine have the opportunity to take the Preliminary SAT (PSAT), and about 60% of 11<sup>th</sup> graders take the PSAT. Average PSAT scores for Maine 11<sup>th</sup> graders are generally lower than both the New England and U.S. averages, as shown in the following charts.

### Average 11<sup>th</sup> Grade PSAT Scores, 2003 and 2005



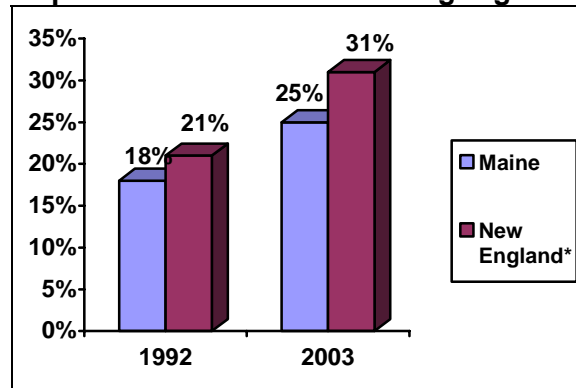


## Indicator 5: Middle and High School Math Courses

### 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. One-quarter of Maine 8<sup>th</sup>-graders reported that they were taking Algebra 1 in 2003, compared with 31% of their New England peers, as shown in the following chart. Further, the proportion of 8<sup>th</sup>-graders in New England taking Algebra 1 grew by ten percentage points, or 48%, from 1992 to 2003, compared with an increase of only seven percentage points, or 39%, in Maine.

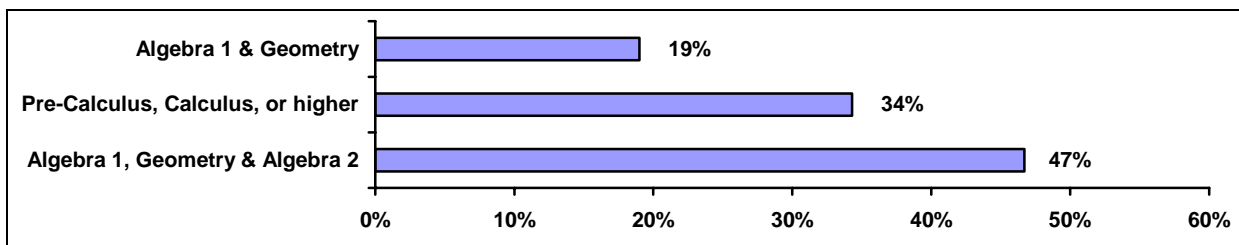
**Proportion of 8<sup>th</sup>-Graders Taking Algebra 1**



\*unweighted average

Each year, several background questions are asked on the Maine Educational Assessment (MEA) tests. In 2004, 11<sup>th</sup> 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 11<sup>th</sup> 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 pre-calculus) 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**

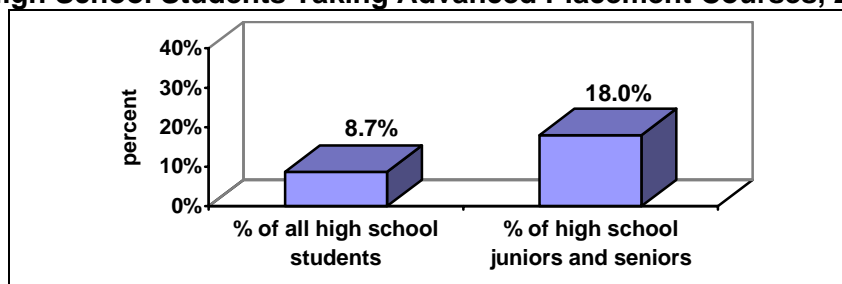


## Indicator 6: Advanced Placement Courses and Exams

### Overview:

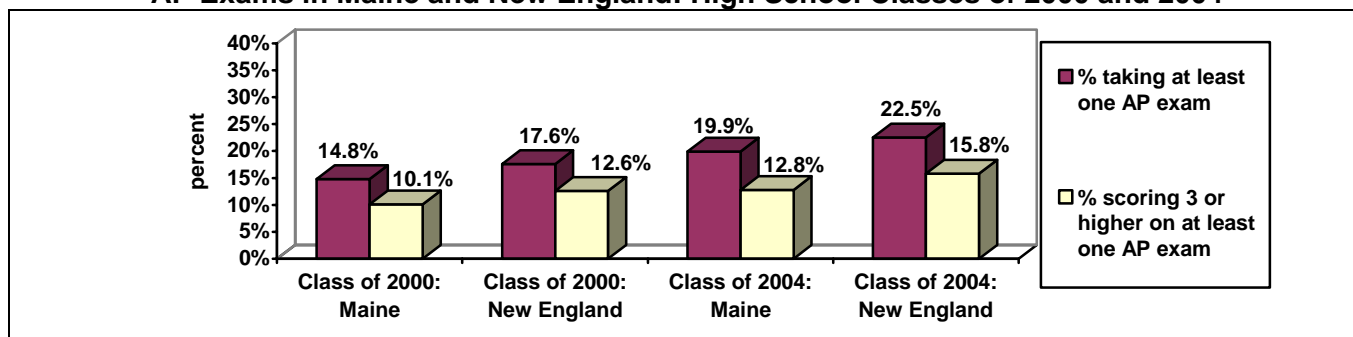
Advanced Placement (AP) courses are high school courses designed to provide college-level learning experiences. A rigorous academic experience in high school is the most powerful predictor of college degree completion, and participation and success in AP courses is one measure of the level of academic 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 2004-2005 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. The number of students per school taking AP courses ranged from one to 200, and the median number was 43. The total number of Maine students taking at least one AP course was 5,288—8.7% of all high school students or 18.0% of juniors and seniors at responding schools. Regionally, the proportion of juniors and seniors taking AP courses in 2004-2005 ranged from a low of 7.9% in Somerset County to a high of 24.7% in Piscataquis County.

**Maine High School Students Taking Advanced Placement Courses, 2004-2005**



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 20% of the class of 2004, as shown in the table below. In New England, 18% of the class of 2000 and 23% of the class of 2004 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 nearly 13% of the class of 2004 in Maine, and from 13% of the class of 2000 to 16% of the class of 2004 in New England.

**AP Exams in Maine and New England: High School Classes of 2000 and 2004**



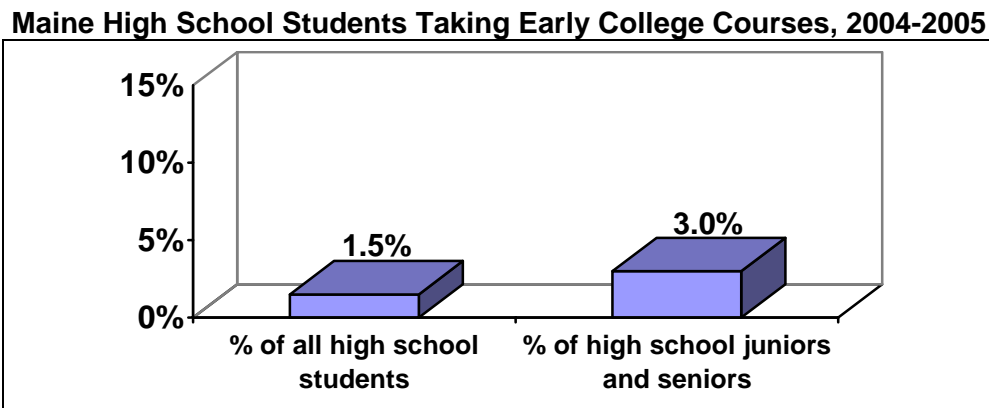
## Indicator 7: Early College Courses

### 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 40 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.

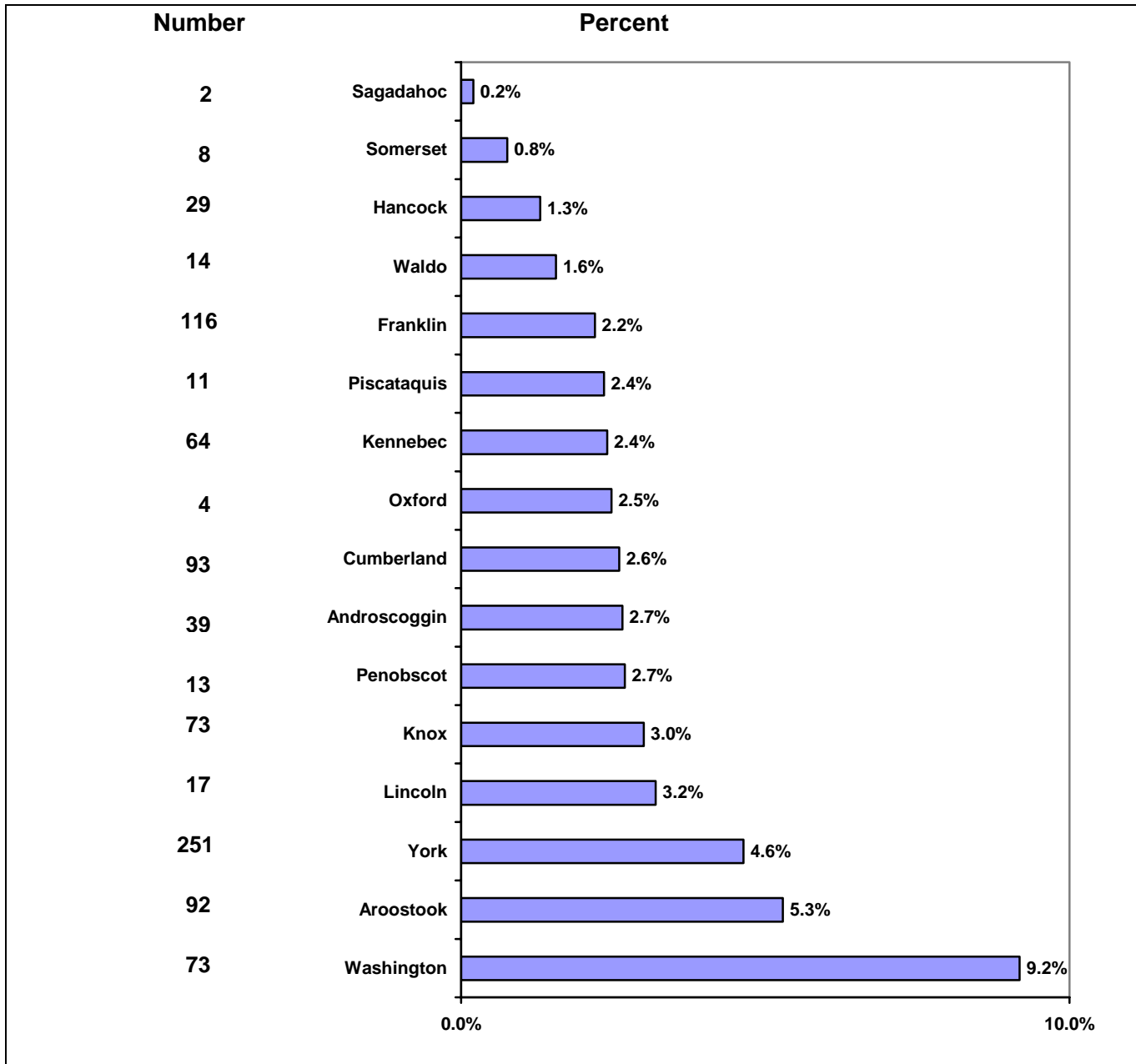
More than three-quarters (77%) of Maine’s public high schools reported that they had students taking early college courses during the 2004-2005 school year. The number of students taking early college courses ranged from one to 74 per school, and the median number was four students. The total number of Maine students taking at least one early college course was 892—1.5% of all high school students or 3.0% of juniors and seniors at responding schools.



**Regional Analysis:**

The number of high school students taking early college courses in 2004-2005 as a proportion of all high school juniors and seniors ranged from less than one percent in Sagadahoc and Somerset Counties to 9.2% in Washington County. As shown in the following chart, five counties—Washington, Aroostook, York, Lincoln, and Knox—had higher proportions than the statewide average. Overall, the proportions of students taking early college courses are quite low.

**Number and Percent of 11<sup>th</sup>- and 12<sup>th</sup>-Graders Taking Early College Courses by County, 2004-2005**

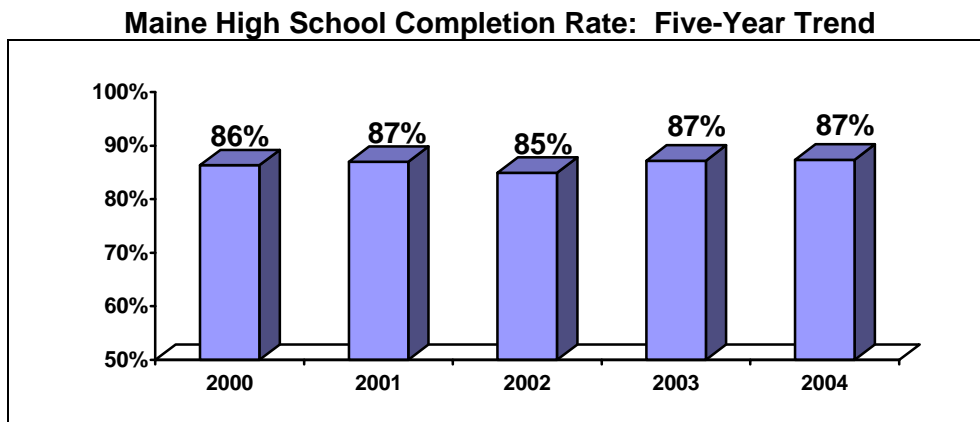


## Indicator 8: High School Completion

### Overview:

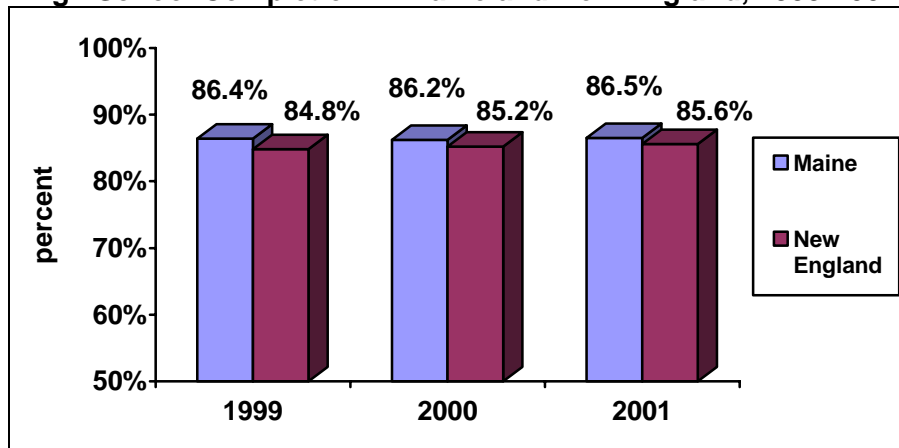
High school graduation is a critical step in preparing Maine students to move on to college. This indicator presents high school completion data as reported by high schools to the Maine Department of Education. Maine, along with 46 other states, recently agreed to implement a high-quality, comparable high school graduation measure. These data will be available beginning with the class of 2006. Currently, not all students who enter high school in ninth grade are counted in the graduation rate, some dropouts may be counted more than once, and some students who do not earn diplomas are counted as high school completers.

The data we have currently indicate that the proportion of Maine students who complete high school has remained between 85% and 87% for the past five years, as shown below. 13,219 students graduated in the class of 2004, for a completion rate of 87.4%. That year, the completion rate for male students, 85.8%, was slightly lower than for female students, 89.0%. This gap was roughly the same in 2000, when 88.7% of female students and 84.5% of male students graduated.



The high school completion rate in Maine slightly exceeds that of New England as a whole, as shown in the following chart. These data are from the U.S. Department of Education, and its estimate of high school completion in Maine differs slightly from the figures reported by the Maine Department of Education shown above.

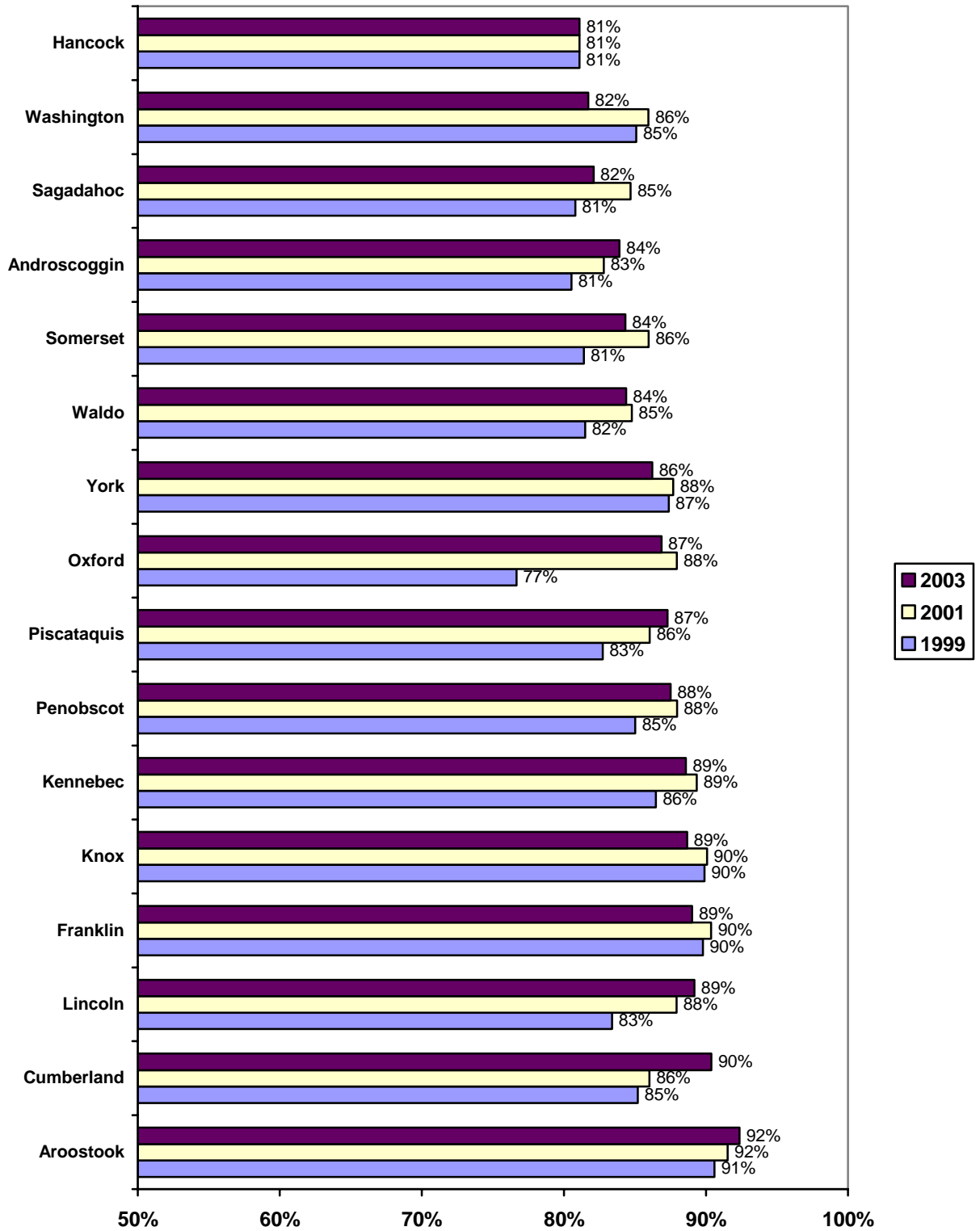
**High School Completion in Maine and New England, 1999-2001**



**Regional Analysis:**

As shown on the next page, the completion rate for the high school class of 2003 ranged from 81% in Hancock County to 92% in Aroostook County. Eight counties—Aroostook, Cumberland, Lincoln, Franklin, Knox, Kennebec, Penobscot, and Piscataquis—had higher completion rates than the statewide average. Ten counties—Androscoggin, Aroostook, Cumberland, Kennebec, Lincoln, Oxford, Penobscot, Piscataquis, Somerset, and Waldo—have seen net increases in their high school completion rates over the past five years. Only Washington County has experienced a sustained decline in high school completion since 1999, from a high of 86% in 2001 to 82% in 2003.

### High School Completion Rate by County



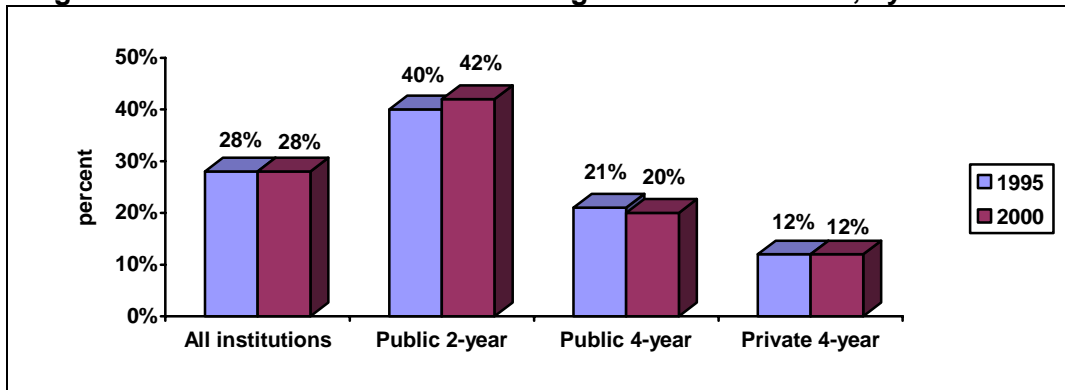
## Indicator 9: Remedial College Courses

### 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. We were not able to access statewide data on remedial course-taking in Maine.

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





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

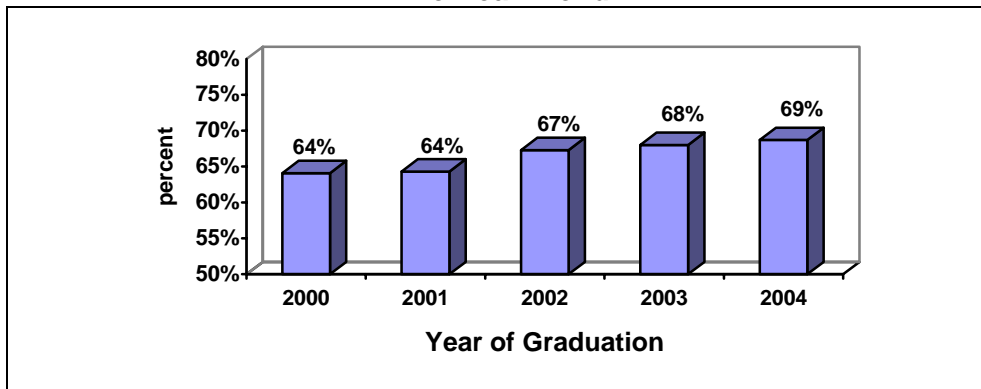
This section looks at the proportion of recent high school graduates intending to enter college and the proportion that actually enroll, Maine adults enrolled in postsecondary education, overall enrollment in Maine colleges, and the number of degrees earned in Maine.

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

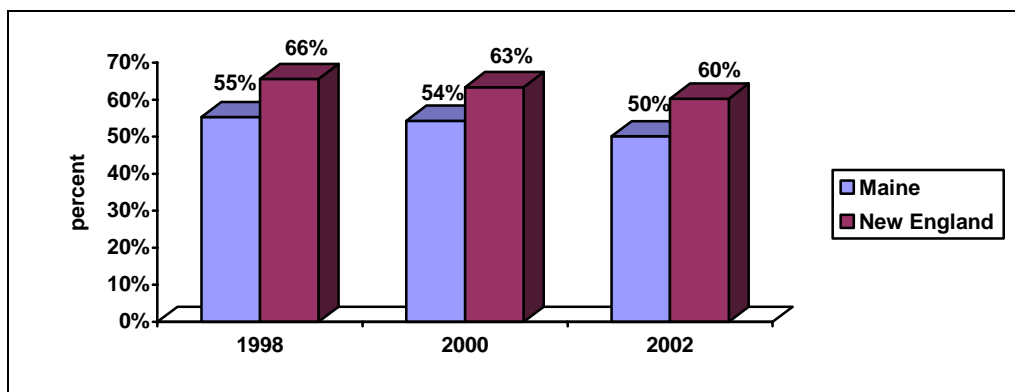
#### Overview:

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 five percentage points since 2001, as shown below. The overall rate among 2004 graduates was 69%.

Maine High School Graduates Intending to Enroll in Postsecondary Education, Five-Year Trend



High School Graduates Enrolling in Degree-Granting Colleges, 1998-2002

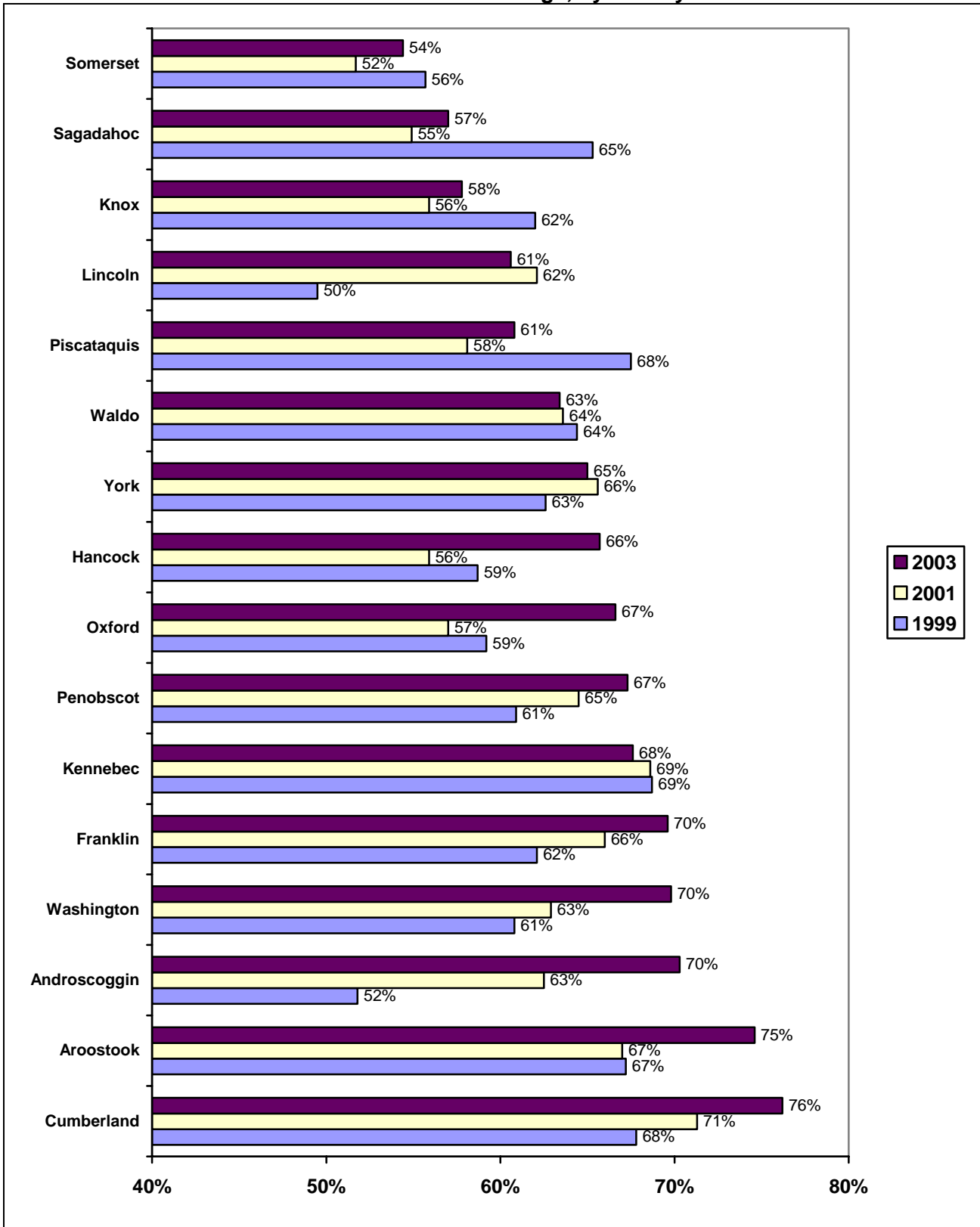


Despite a relatively high rate of high school completion in Maine and increasing proportions of high school graduates expressing intentions to enroll in college, actual college enrollment among recent high school graduates has not risen since 1998. Between 2000 and 2002, intent to enroll in college increased by three percentage points, while actual enrollment dropped by four percentage points. Actual college enrollment data for 2004 will help to determine whether actual enrollment is, in fact, declining. While the college enrollment rate in New England also declined between 1998 and 2002, the overall rate of continuation on to college in New England is significantly higher than in Maine. In 2002, the New England proportion of 60% was a full ten percentage points higher than Maine's 50%. Please note that postsecondary institutions report the numbers of entering students (first-time freshmen) who completed high school within the past 12 months and their state of residence to the federal government, and we use these figures to calculate the actual enrollment in college of Maine's recent high school graduates. These data do not include students who take a year or more off between high school and college.

### **Regional Analysis:**

The chart on the next page shows the proportion of 2003 high school graduates planning to enroll in postsecondary education—including two- and four-year college degree programs—ranged from 54% in Somerset County to 76% in Cumberland County. Five counties had higher proportions than the statewide average, including two of the most rural, Aroostook and Washington Counties. Nine counties—Androscoggin, Aroostook, Cumberland, Franklin, Hancock, Lincoln, Oxford, Penobscot, and Washington—have seen increases in students planning to enroll in postsecondary degree programs greater than the statewide average over the past five years. Two counties—Piscataquis and Sagadahoc—have experienced significant declines since 1999 in the proportion of high school graduates intending to enroll in postsecondary education.

### Intent to Enroll in College, by County

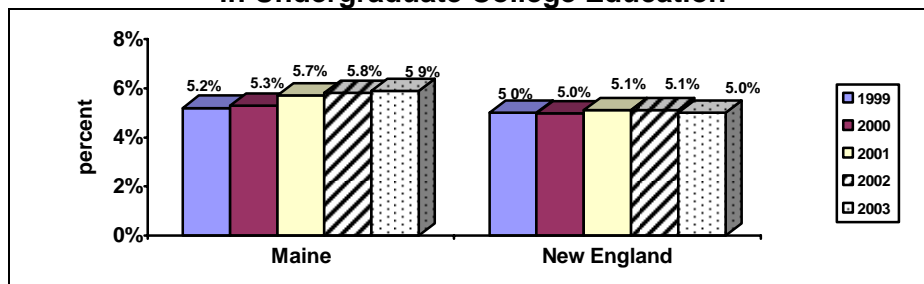


# Indicator 11: Adults Enrolled in Postsecondary Education

## 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 2003, the proportion of Maine adults enrolled part-time in college increased from 5.2% to 5.9%. In New England, adult college enrollment remained at roughly 5.0% during the same time period.

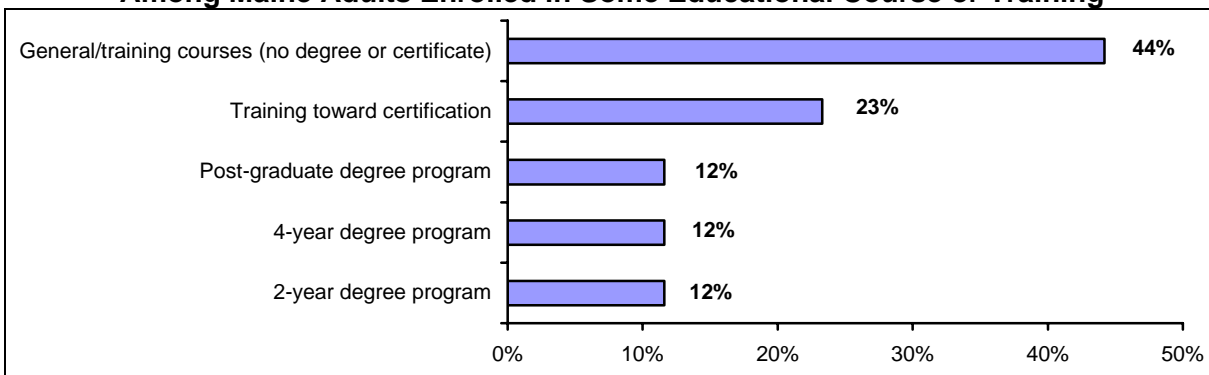
**Proportion of Adults (Ages 25-44) Enrolled Part-Time in Undergraduate College Education**



In order to enroll in college, adults without a high school diploma must complete a high school credential. In 2002, 88,000 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 recent 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.

**Type of Education or Training Among Maine Adults Enrolled in Some Educational Course or Training**

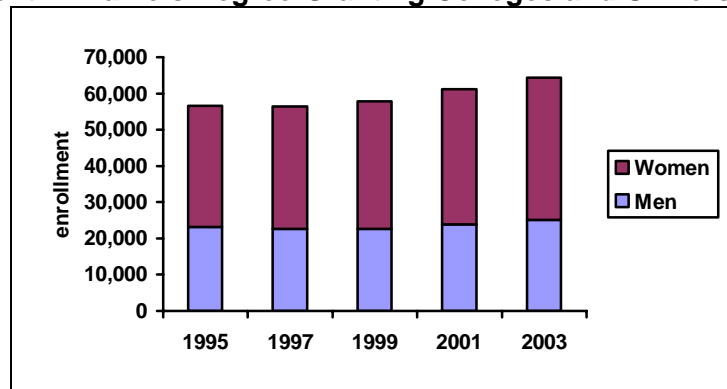


## Indicator 12: College Enrollment

### Overview:

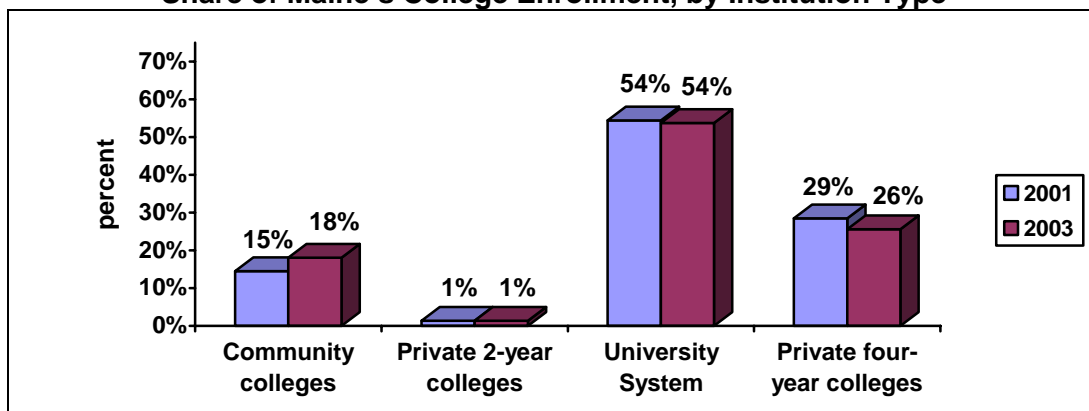
The number of students enrolled in Maine's colleges and universities is a key indicator of the scope of higher education in our state. The figures in the chart below include full-time and part-time students at both the undergraduate and graduate levels. Between 1995 and 2003, enrollment grew by nearly 14%, or more than 7,500 students. The latest student enrollment figures indicate that 64,623 students were enrolled in Maine's degree-granting institutions in the fall of 2003. From 1995 to 2003, the share of women enrolled in Maine's colleges and universities grew from 59% to 61%.

**Total Enrollment in Maine's Degree-Granting Colleges and Universities, 1995-2003**



The University of Maine System enrolls more than half (54%) of Maine's college students (see below). Over the past several years, the Maine Community College System has increased its share of Maine's college students from 15% to 18%. The share of Maine students attending private four-year colleges has dropped from 29% to 26%.

**Share of Maine's College Enrollment, by Institution Type**



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**

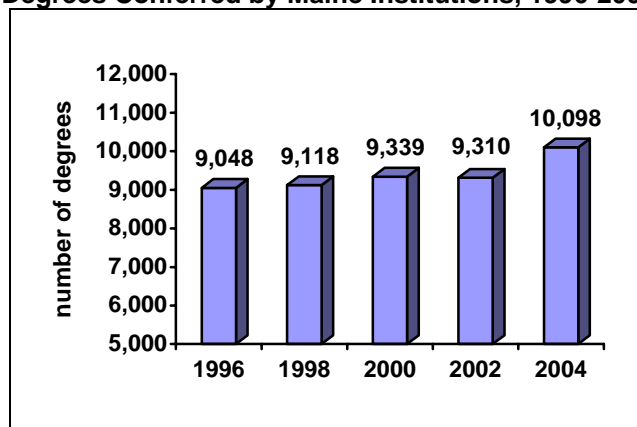
College	2001		2003	
	Part-time	Full-time	Part-time	Full-time
<b><u>Community Colleges</u></b>				
Central Maine Community College	810	625	994	858
Eastern Maine Community College	933	663	1,147	932
Kennebec Valley Community College	874	381	1,193	574
Northern Maine Community College	332	551	372	641
Southern Maine Community College	1,385	1,086	1,785	1,720
Washington County Community College	56	216	78	339
York County Community College	584	247	621	304
<b>Total</b>	<b>4,974</b>	<b>3,796</b>	<b>6,190</b>	<b>5,368</b>
	<b>8,770 (51% female)</b>		<b>11,558 (54% female)</b>	
<b><u>Private 2-year Colleges</u></b>				
Andover College	16	505	14	550
Beal College	83	221	121	224
<b>Total</b>	<b>825 (74% female)</b>		<b>909 (77% female)</b>	
<b><u>Public 4-Year Colleges &amp; Universities</u></b>				
Maine Maritime Academy	<b>19</b>	<b>708</b>	<b>13</b>	<b>748</b>
<b><u>University of Maine System</u></b>				
University of Maine	2,857	7,841	2,789	8,433
University of Maine at Augusta	4,099	1,476	4,243	1,688
University of Maine at Farmington	340	2,095	320	2,111
University of Maine at Fort Kent	305	592	265	668
University of Maine at Machias	475	542	736	577
University of Maine at Presque Isle	414	953	467	1,079
University of Southern Maine	5,592	5,374	5,136	5,871
<b>UMS Subtotal</b>	<b>14,082</b>	<b>18,873</b>	<b>13,956</b>	<b>20,427</b>
<b>Total</b>	<b>32,955 (62% female)</b>		<b>34,383 (62% female)</b>	
<b><u>Private 4-Year Colleges</u></b>				
Bates College	0	1,767	0	1,746
Bowdoin College	14	1,621	7	1,640
Colby College	1	1,808	0	1,768
College of the Atlantic	9	262	25	273
Husson College	905	959	857	1,193
Maine College of Art	35	400	44	433
New England School of Communications	1	102	6	136
St. Joseph's College	4,107	1,163	2,663	1,060
Thomas College	310	469	281	548
Unity College	21	480	14	474
University of New England	706	2,131	1,036	2,156
<b>Total</b>	<b>6,109</b>	<b>11,162</b>	<b>4,933</b>	<b>11,427</b>
	<b>17,271 (63% female)</b>		<b>16,360 (61% female)</b>	
<b>Grand Total</b>	<b>60,548 (61% female)</b>		<b>63,971 (61% female)</b>	

## Indicator 13: Degree Completion

### Overview:

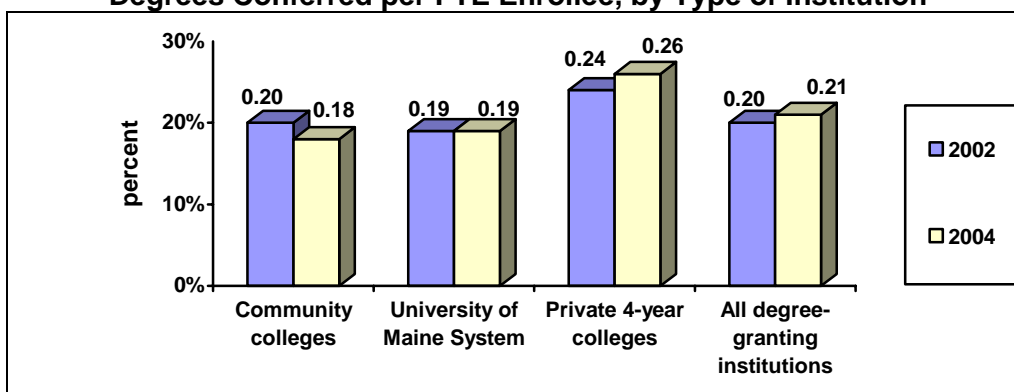
The total number of degrees awarded by Maine colleges and universities is one factor in determining educational attainment in the state. The figures presented in the chart below include associate, bachelor's, graduate, and professional degrees. Maine institutions awarded more than 10,000 degrees in 2004, 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.

**Degrees Conferred by Maine Institutions, 1996-2004**



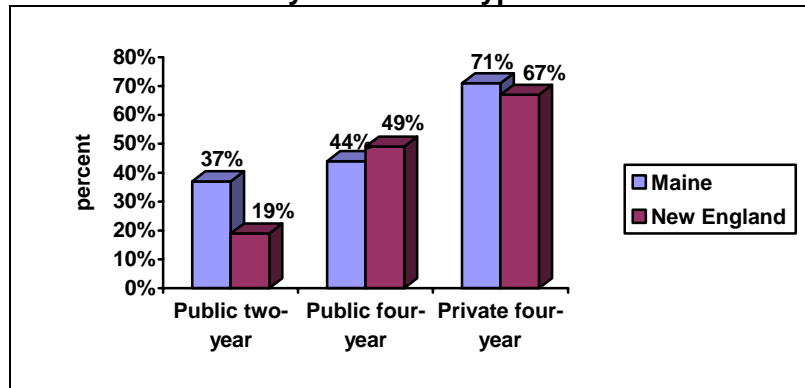
The number of degrees conferred per full-time equivalent (FTE) student enrolled is one measure of degree completion. The number of degrees conferred per FTE enrollee in Maine institutions has been about 0.20 for the past several years, meaning that one degree is conferred for about every five full-time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

**Degrees Conferred per FTE Enrollee, by Type of Institution**



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; 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 chart, Maine's graduation rate at public two-year colleges is nearly twice that of New England as a whole, and the graduation rate at Maine's private four-year colleges and universities is slightly higher than in New England. The graduation rate at Maine's public four-year colleges and universities is five percentage points below the New England average.

**2003 Graduation Rates by Institution Type: Maine and New England**



Both indicators above 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?

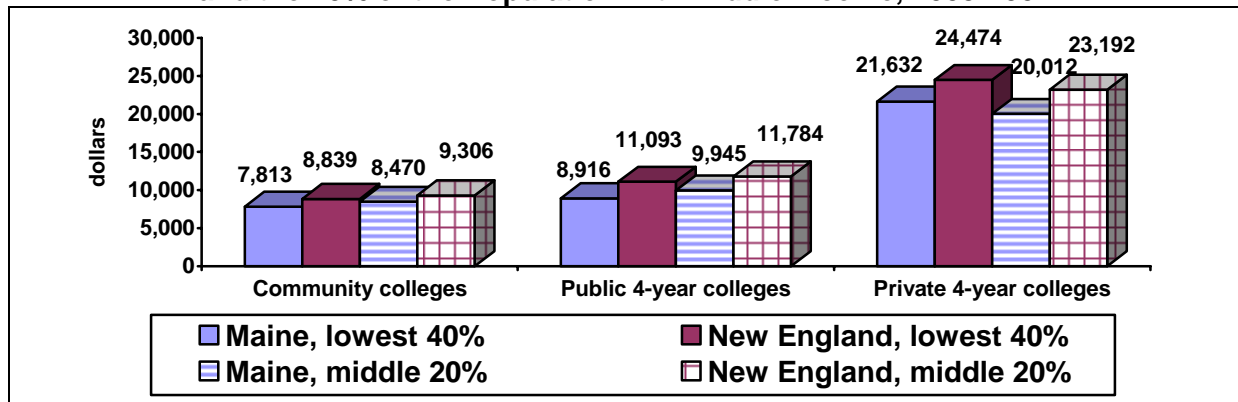
As measures of college affordability in Maine, we look at the cost of college (both the net cost and the cost as a proportion of income for lower- and middle-income Maine families), state investments in higher education and in grant aid to students, student borrowing for college, and employer support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

### Indicator 14: Cost of College

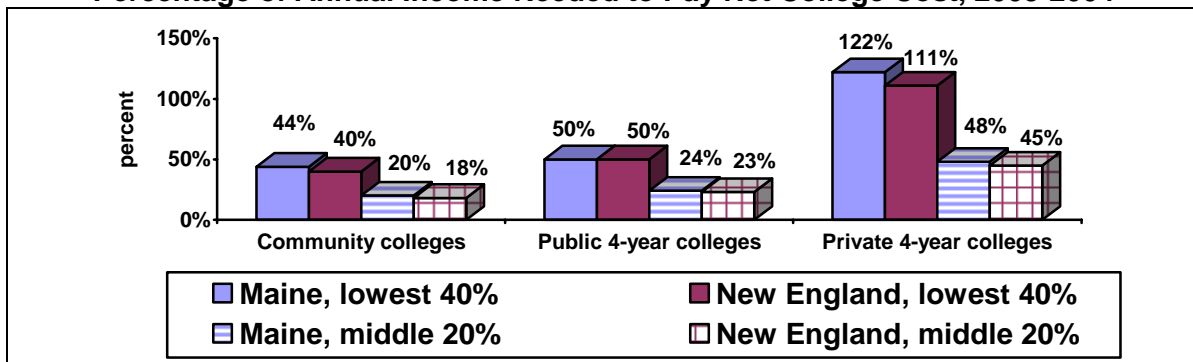
#### Overview:

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 \$17,798 and \$41,600 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.

**Net College Cost for the 40% of the Population with the Lowest Family Income and the 20% of the Population with Middle Income, 2003-2004**



**Percentage of Annual Income Needed to Pay Net College Cost, 2003-2004**



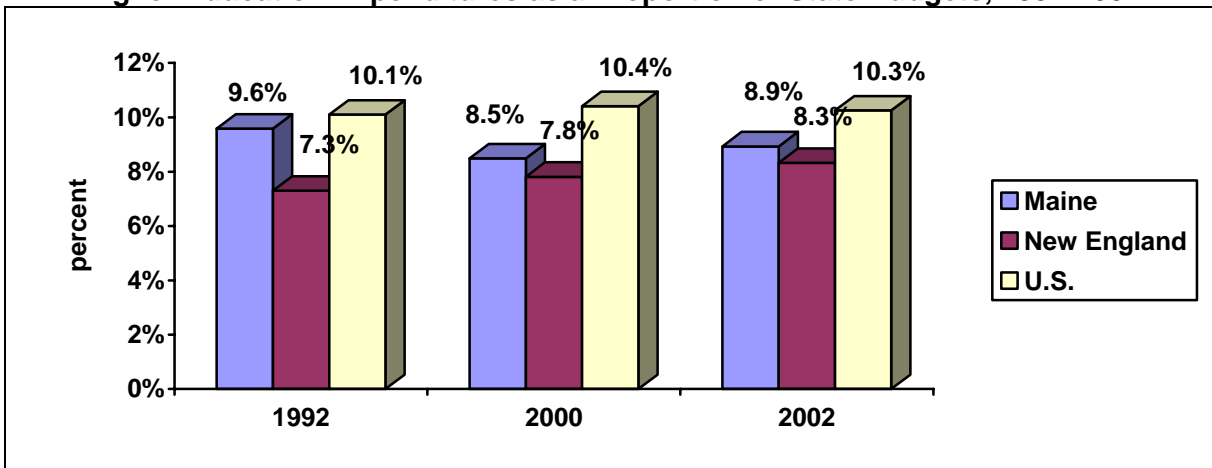
While net college costs are slightly lower for low-income than for middle-income Maine families, those costs represent at least twice the share of annual income for lower income families compared with middle income families (see previous charts). Compared with unweighted New England averages, net college costs in Maine are lower in all the categories. However, Maine families must pay a higher proportion of their incomes than the average for all 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 2002. Higher education expenditures in Maine in 2002 were \$559.3 million, 8.9% of the total state budget of \$6.265 billion. This level of expenditure translates to about \$11,960 per full-time equivalent Maine college student. As a percentage of total state expenditures, Maine's contribution to higher education is slightly higher than the average for New England, although this gap has been closing since 1992. Maine's contribution in 2002—8.9%—is slightly higher than the New England average of 8.3%, but is significantly lower than the national average of 10.3%.

Higher Education Expenditures as a Proportion of State Budgets, 1992-2002

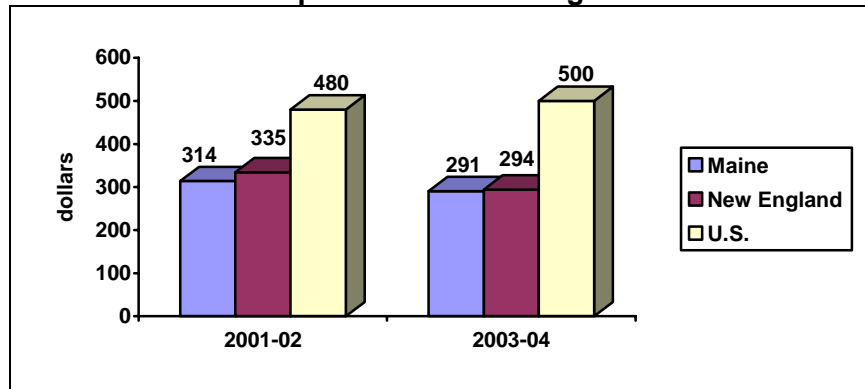


## Indicator 16: State Grant Aid

### 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 more than \$12 million in grant aid each year to undergraduate students, which was about \$290 per full-time equivalent (FTE) undergraduate student enrolled in 2003-2004 and about \$315 in 2001-2002. The New England average is slightly higher than this, at about \$295 in 2003-2004 and \$335 in 2001-2002. Nationally, the amount of grant aid states provide to undergraduates is much higher, at about \$500 per FTE student. Nationwide, the amount of state grant aid per FTE undergraduate student increased from 2001-2002 to 2003-2004, while it fell both in Maine and in New England (see chart and table below).

**State Grant Aid per Full-time Undergraduate Student**



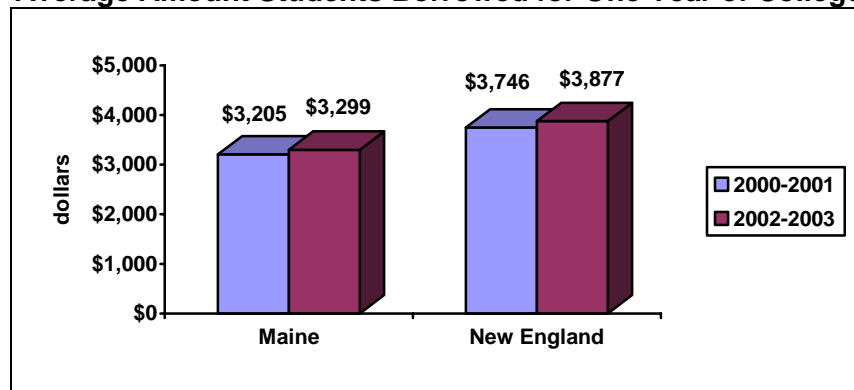
	2001-2002		2003-2004	
	Undergraduate Grant Aid	Grant Aid per FTE student	Undergraduate Grant Aid	Grant Aid per FTE student
<b>Maine</b>	\$12,021,000	314.06	\$12,562,000	290.94
<b>New England</b>	\$196,584,000	334.60	\$165,814,000	294.39
<b>United States</b>	\$5,034,648,000	480.10	\$5,719,842,000	500.16

## 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 \$3,200 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 \$3,299 (see chart below). This translates into roughly \$6,500 for two years of college or \$13,000 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 2002-2003 school year, Maine students borrowed \$578 less, on average, than the average for New England students.

**Average Amount Students Borrowed for One Year of College**

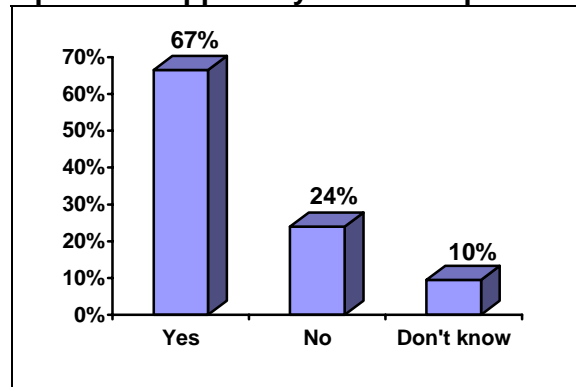


## Indicator 18: Employer Support for Education

### Overview:

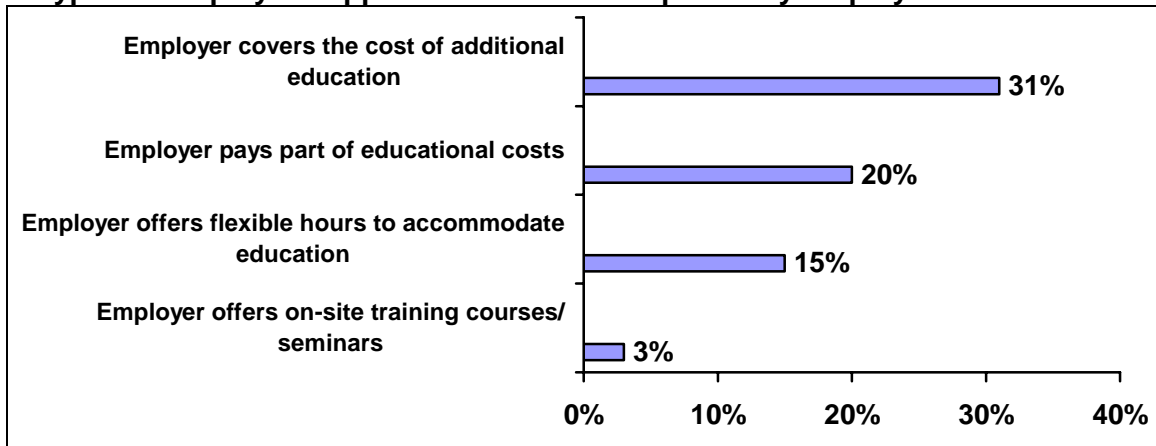
Particularly for adults wishing to further their education, employers can be a key source of financial support. A November 2005 survey of Maine adults asked several questions about the types of support employers provide for education. Of 400 adults polled, 221 (55%) reported that they were currently 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.

### Types of Employer Support for Education Reported by Employed Maine Adults



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

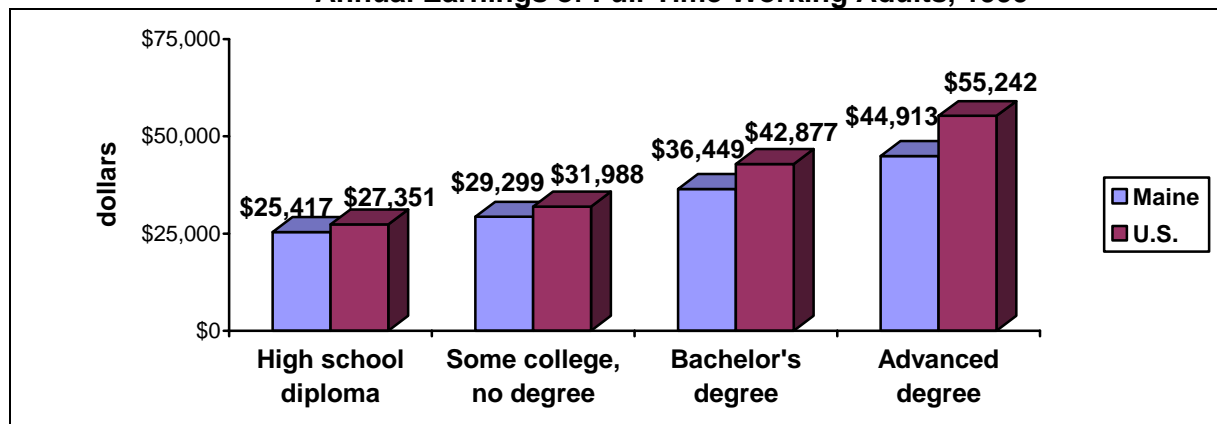
Besides the inherent value of higher education, there are economic and other benefits, both to the individuals who earn degrees and to the communities in which they live. We look at earnings and income of Maine people with college degrees, unemployment rates by level of education, and other benefits 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 chart below). In Maine, workers with some college earn 15% more per year than those with a high school diploma, and workers with bachelor's degrees earn 43% more than those with only a high school diploma (see chart below).

Annual Earnings of Full-Time Working Adults, 1999



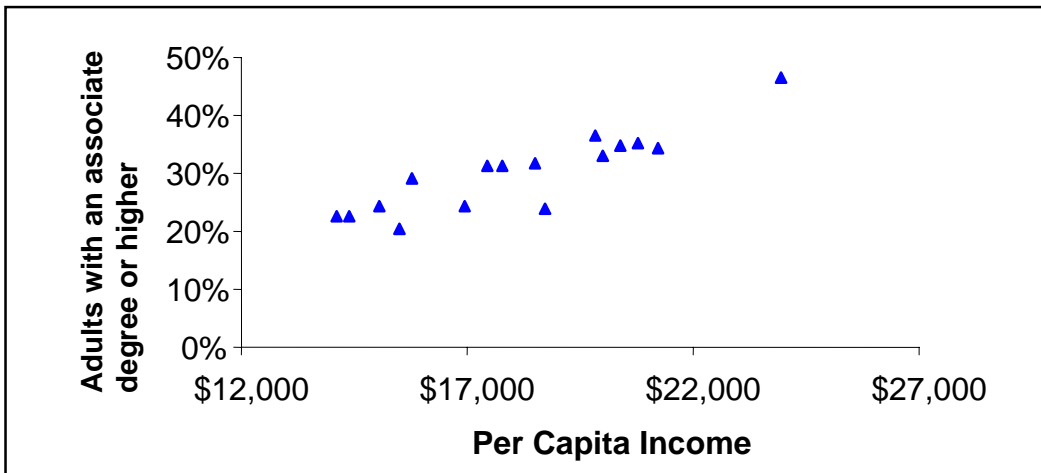
#### Regional Analysis

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**

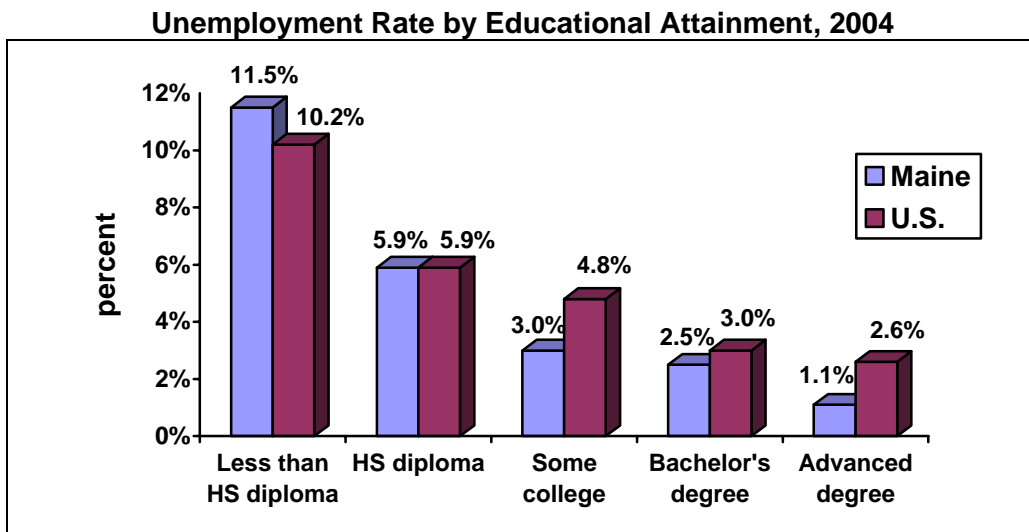




## Indicator 20: Unemployment by Education Level

### 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—5.9% compared with 2.5%. 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.

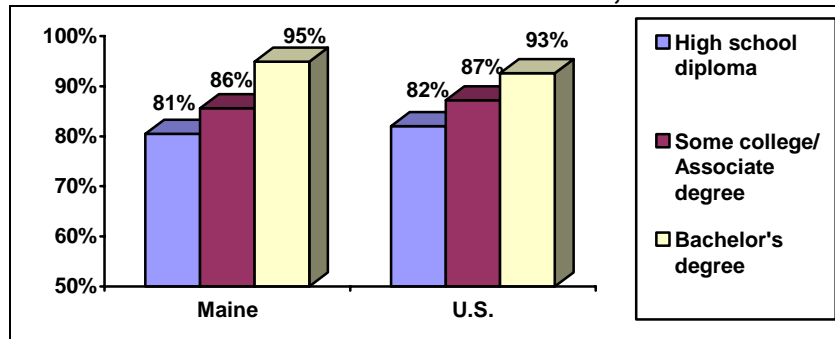


## Indicator 21: Other Benefits of Higher Education

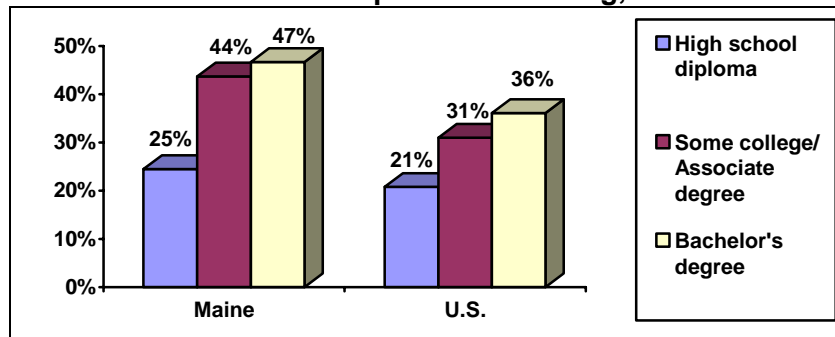
### Overview:

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.

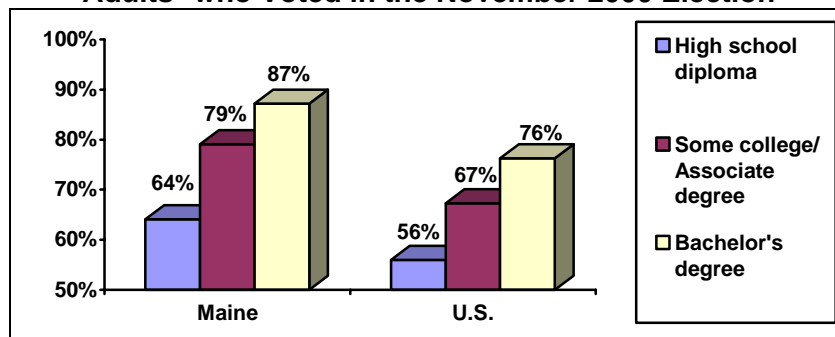
**Adults\* in Good or Better Health, 2004**



**Adults\* who Report Volunteering, 2004**



**Adults\* who Voted in the November 2000 Election**



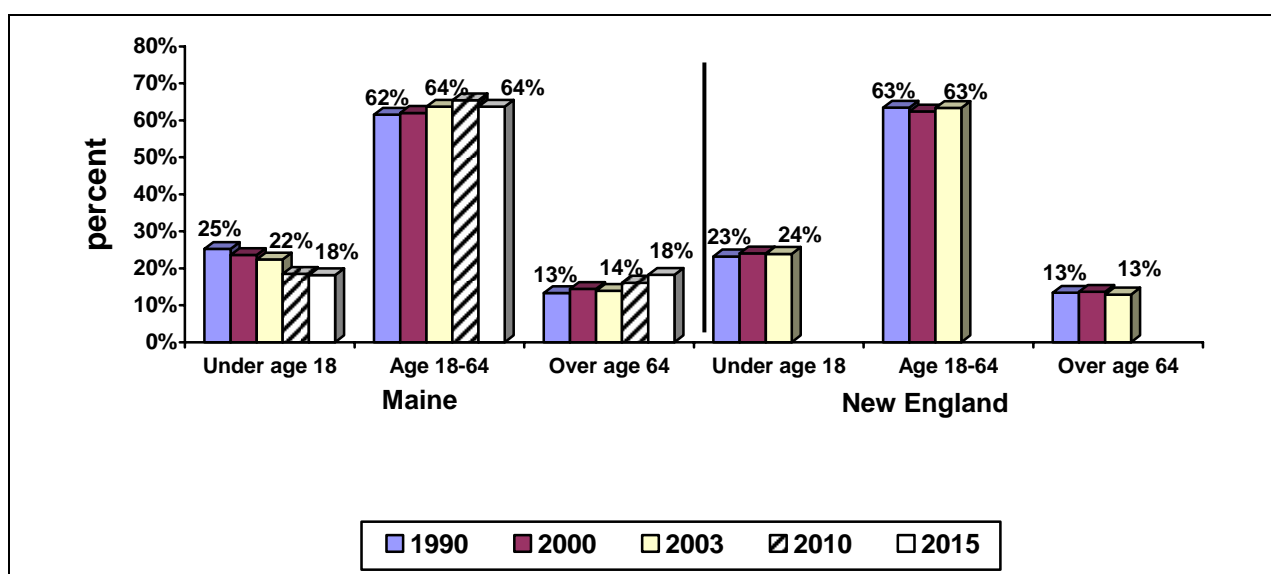
\*Age 25 and older

## 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 2003). 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, 1990-2003**



Maine Population	1990	2000	2003*	2010 <sup>†</sup>	2015 <sup>†</sup>
Under age 18	309,002	301,238	284,956	253,960	257,025
Age 18-64	755,553	790,283	809,019	897,285	904,010
Over age 64	163,373	183,402	176,627	220,850	258,465
<b>Total</b>	<b>1,227,928</b>	<b>1,274,923</b>	<b>1,270,602</b>	<b>1,372,095</b>	<b>1,419,500</b>

\* U.S. Census Bureau estimates

<sup>†</sup> 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 2000, while the population in its northernmost county, Aroostook, declined the most. In addition to York County, two coastal counties, Lincoln and Hancock, saw population growth of more than 10% between 1990 and 2000. In five counties—Androscoggin, Aroostook, Penobscot, Piscataquis, and Washington—the population declined between 1990 and 2000.

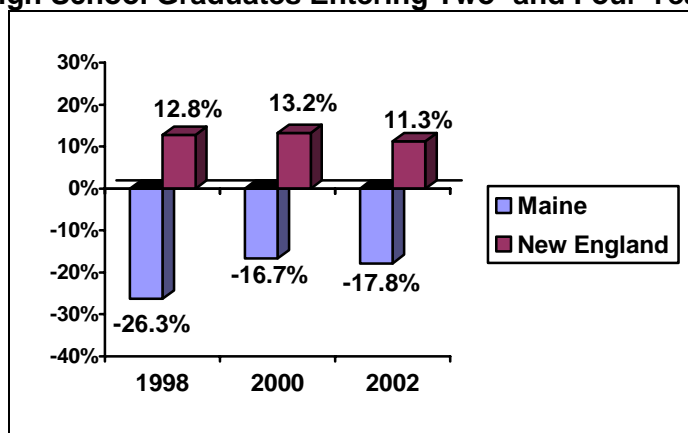
### Population of Maine's Counties, 1990 and 2000

County	Population		% Change, 1990-2000
	1990	2000	
York	164,587	186,742	13.5%
Lincoln	30,357	33,616	10.7%
Hancock	46,948	51,791	10.3%
Waldo	33,018	36,280	9.9%
Cumberland	243,135	265,612	9.2%
Knox	36,310	39,618	9.1%
Sagadahoc	33,535	35,214	5.0%
Oxford	52,602	54,755	4.1%
Somerset	49,767	50,888	2.3%
Franklin	29,008	29,467	1.6%
Kennebec	115,904	117,114	1.0%
Penobscot	146,601	144,919	-1.1%
Androscoggin	105,259	103,793	-1.4%
Washington	35,308	33,941	-3.9%
Piscataquis	18,653	17,235	-7.6%
Aroostook	86,936	73,938	-15.0%

### 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 2002, more than 3,100 of these Maine students left the state for college, while only 2,200 students from other states entered Maine colleges, a net out-migration rate of about 18%. For comparison, the average for all New England states was an in-migration rate of 11.3%.

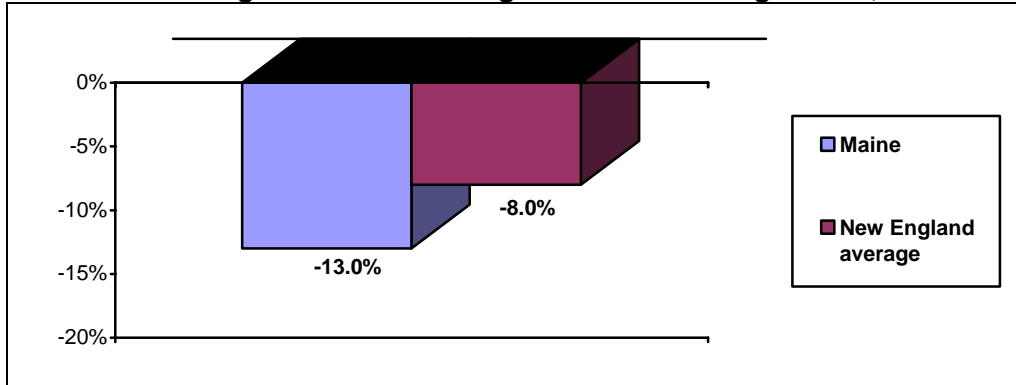
### Net Migration of High School Graduates Entering Two- and Four-Year Degree Programs



## 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.

**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%

\*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 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 2001-2004 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](http://www.census.gov).

### **Indicators 2 and 3: Education Level Needed for Success and All Students College-Ready**

November 2005 survey of Maine adults conducted by Strategic Marketing Services/Pan Atlantic Consultants for the Steering Committee of the Maine Readiness Campaign.

### **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](http://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 [www.collegeboard.com/researchdocs/2004\\_psat.html](http://www.collegeboard.com/researchdocs/2004_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 8<sup>th</sup>-graders taking Algebra 1 come from NAEP and are available from Achieve, Inc. at [www.achieve.org/achieve.nsf/StateProfiles?openform](http://www.achieve.org/achieve.nsf/StateProfiles?openform)

### **Indicator 6: Advanced Placement Courses and Exams**

Data on students taking AP courses in 2004-2005 were reported to the Mitchell Institute by 87% of Maine's public high schools in January 2005. Data on AP exams are from the College Board's *Advanced Placement Report to the Nation 2005* ([apcentral.collegeboard.com](http://apcentral.collegeboard.com)). Data on high school enrollments are for 2003-2004, reported by the Maine Department of Education (see [www.state.me.us/education/enroll/fall/fallbyschool.htm](http://www.state.me.us/education/enroll/fall/fallbyschool.htm)).

### **Indicator 7: Early College Courses**

Data on students taking early college courses in 2004-2005 were reported to the Mitchell Institute by 87% of Maine's public high schools in January 2005.

### **Indicator 8: High School Completion**

The figures 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](http://www.maine.gov/education/enroll/grads/comprate/comprate.htm).

For the New England comparison, data are from the NCES Common Core of Data. Please note that New Hampshire is not included in the New England average because it did not report four consecutive years of dropout data. See <http://nces.ed.gov/ccd/>.

### **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>

### **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](http://www.maine.gov/education/enroll/grads/gradspost.htm).

Data on student enrollment in college are from the NCES IPEDS. See *Enrollment in Postsecondary Institutions, Fall 2002 and Financial Statistics, Fiscal Year 2002* at [www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005168](http://www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005168). Data on public high school graduates are from NCES' Common Core of Data (see <http://nces.ed.gov/ccd/>) and estimates of private high school graduates are from NCES' *Digest of Education Statistics 2000 and 2002* (<http://nces.ed.gov/programs/digest>). Please note that private high school graduate estimates for 2002 are imputed based on the 1997 and 1999 figures (the two most recent years available).

### **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](http://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**

2003 enrollment data, and 2001 and 2003 figures for individual institutions, 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](http://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 a New England Board of Higher Education analysis of U.S. Department of Education data presented in its journal *Connection*, Spring 2005, "Trends & Indicators in Higher Education 2005."

**Indicator 14: Cost of College**

These figures were calculated by the National Center for Public Policy and Higher Education for its report *Measuring Up 2004: 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](http://www.census.gov/govs/www/estimate.html)

**Indicator 16: State Grant Aid**

National Association of State Student Grant and Aid Programs (NASSGAP) 33<sup>rd</sup> and 35<sup>th</sup> annual survey reports at [www.nassgap.org](http://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 2004: 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>

**Indicator 18: Employer Support for Education**

Strategic Marketing Services survey referenced in Indicators 2 & 3.

**Indicator 19: Earnings and Income by Education Level**

Annual earnings data are from "The Relationship between Education and Unemployment and Earnings," [www.maine.gov/labor/lmis/pdf/EducationUnemploymentEarnings.pdf](http://www.maine.gov/labor/lmis/pdf/EducationUnemploymentEarnings.pdf), based on U.S. Census data. Hourly wage data are from *Maine Employment Outlook 2002-2012*, December 2004 at [www.maine.gov/labor/lmis/pdf/MaineEmploymentOutlook.pdf](http://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](http://www.census.gov).

**Indicator 20: Unemployment by Education Level**

U.S. Census Bureau, Current Population Survey, March 2004 Supplement.

**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](http://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. 2003 data are estimates based on the 2003 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](http://www.state.me.us/spo/economics/economics/forecasts.php).

Data on student migration are from NCES IPEDS. See *Enrollment in Postsecondary Institutions, Fall 2002* and *Financial Statistics, Fiscal Year 2002* at [www.nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005168](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.

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](http://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](http://www.maine.gov/governor/baldacci/news/events/Realize!/issue_papers/index.htm)

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For help in obtaining data we thank Philip Trostel of the University of Maine; Dana Duncan, Brud Maxcy, and Harry Osgood of the Maine Department of Education; Glenn Mills of the Maine Department of Labor; and Patrick O'Regan, the Compact's College Transition consultant. Thanks to Colleen Quint of the Mitchell Institute for valuable suggestions on earlier drafts of this report. Finally, thanks to Dianne Heino of the Maine Development Foundation for editing the final report.

Any mistakes are those of the author.

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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](http://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 21<sup>st</sup> 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.

**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 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.

**Organization.** 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 Committee engages an executive director and consultants to support the Board's mission. The Compact is organized as a non-profit corporation and is seeking IRS 501c3 status. Joseph Foley, senior vice president of UnumProvident, is chair of the Board of Directors.

**Funding.** The Compact is funded through grants received by the Maine Community Foundation from the Great Maine Schools Project of the Mitchell Institute, Libra Foundation, Maine Community Foundation, Maine Educational Loan Authority, MELMAC Education Foundation, TD Banknorth, N.A., and UnumProvident. The Compact's *CollegeforME* campaign is funded by Joseph F. Boulous, Cianbro Corporation, and Verizon Communications. A grant from the Lumina Foundation for Education supports the College Transitions and Early College programs. A Ford Foundation grant supports the Employer Initiative.



MAINE COMPACT FOR HIGHER EDUCATION

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