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# Indicators of Progress

**Maine's Higher Education  
Attainment Goal:**

**Exceeding the New England Average  
of Adults with Degrees by 2020**



**MAINE COMPACT FOR HIGHER EDUCATION**

Prepared for the Compact by Lisa Plimpton, Director of Research, Mitchell Institute

Manuela Ekowo and Leah Greenberg, Bowdoin College





# Indicators of Progress

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↑ Since 2000, key indicators show positive progress in support of increasing educational attainment.  
↓ Since 2000, key indicators suggest movement away from improved educational attainment.  
↔ Since 2000, key indicators have not changed or progress is mixed.

# Introduction

The purpose of this report is to assess progress toward achieving the Compact's goal: the proportion of Maine's workers who have earned a college degree or postsecondary certificate will exceed the New England average by 2020. Our specific target is to increase the percentage of Maine's working-age population (ages 24-65) with an associate, bachelor's, or graduate degree from 39% today to 56% by 2020. This will require an additional 40,000 degree-holders above projections. The Compact uses the word 'college' to include postsecondary educational credentials, including non-degree professional certificates and associate, bachelors and graduate degrees.

This goal is important to Maine because of the strong link between economic strength and educational attainment. Earnings among workers with a college education are significantly higher than for those with only high school diplomas, and their unemployment rate is much lower. Over the coming decade, employer demand for workers with at least some postsecondary education is projected to grow about seven times faster than for those with a high school diploma or less.<sup>1</sup>

This report provides a framework to inform the decisions of policymakers, business people, community leaders, and educators. We worked with a group of experts to select key indicators that influence progress toward this goal and to identify the most reliable data sources for each indicator. Each year, we update the report with the most recent data available. Where available, data from the year 2000 are used as the basis for comparison in determining whether progress has been made. Likewise, wherever possible, we use the New England average as a point of comparison.

This year's report finds positive progress on the Compact goal and nine of the fourteen indicators, a negative trend on three indicators, and lack of progress on two indicators. Maine is moving in the right direction in terms of preparing more young people for college. Postsecondary enrollments are increasing among Maine's young people, but not for adults over the age of 24. College affordability in Maine is of particular concern—college costs and student borrowing have increased substantially. The benefits of postsecondary education continue to increase. The bottom line: Maine is making progress on higher education attainment, but that momentum needs to pick up speed if we are to meet the Compact's goal by 2020, as shown in the first chart on the next page.

The Compact has produced this report, formerly titled *Indicators of Higher Education Attainment in Maine*, annually since August 2005. Founded in 2003 by the Maine Development Foundation and the Maine Community Foundation, the Compact is a business-led non-profit organization whose mission is to dramatically increase postsecondary education attainment. The funding for this report comes from the Compact and the Nellie Mae Education Foundation. The Mitchell Institute has prepared the report for the Compact each year. We encourage your reactions and suggestions. The report is available on the Compact's website, [www.collegeforME.com](http://www.collegeforME.com). For more information, contact Henry Bourgeois, Compact Executive Director, at [henryb@mdf.org](mailto:henryb@mdf.org) or 207.347.8638.

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<sup>1</sup> Help Wanted: Projections of Jobs and Education Requirements through 2018, Georgetown University Center on Education and the Workforce, <http://cew.georgetown.edu>.

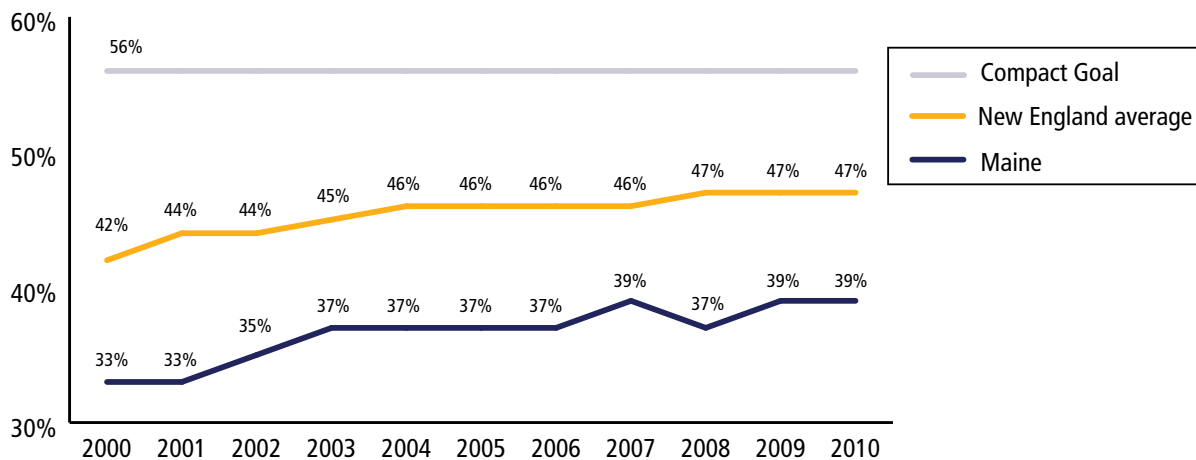
## THE GOAL

# Proportion of Working-Age Adults with College Degrees will Exceed the New England Average by 2020



*The proportion of Maine adults with an associate or higher degree was 39% in 2010, up by six percentage points from 33% in 2000. In New England, this proportion has increased by five percentage points, from 42% in 2000 to 47% in 2010.*

## WORKING-AGE ADULTS WITH A COLLEGE DEGREE: MAINE AND NEW ENGLAND



Source: U.S. Census Bureau, Decennial Census (2000) and American Community Survey (2001-2009)

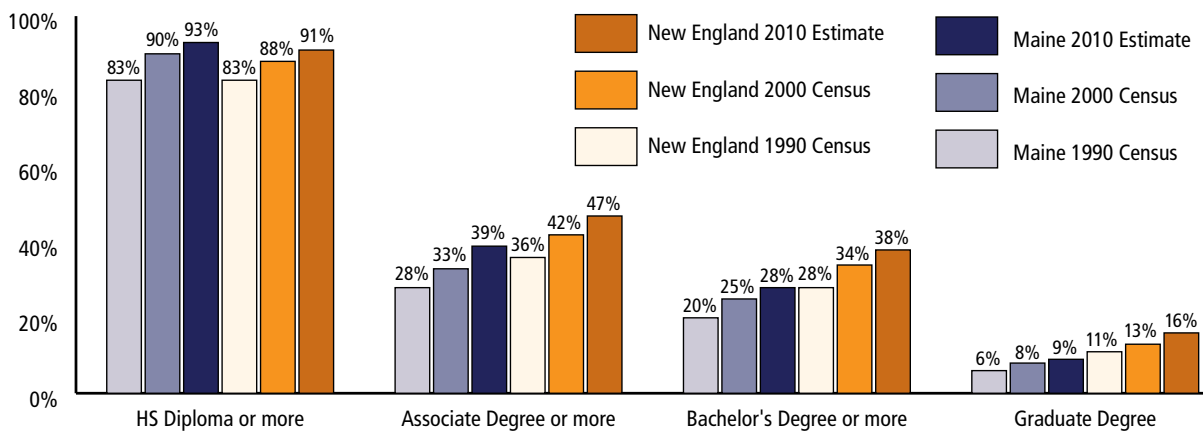
U.S. Census Bureau estimates for 2010, the latest currently available, indicate that 39% of Mainers ages 25-64 have an associate, bachelor's, or advanced degree, compared with 47% of working-age adults in New England. Maine's figure increased from 37% in 2008 to 39% in 2009 and 2010. Comprehensive data on non-degree certificates are not available.

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

national initiatives as the Lumina Foundation for Education’s Big Goal—to increase the proportion of Americans with a degree or credential to 60% by 2025.

Maine compares favorably with New England in terms of its working-age population with high school diplomas (93% compared with 91%), but our proportion of working-age adults with postsecondary degrees at all levels significantly lags behind the New England averages (see the following chart). In fact, Maine has the lowest proportion of adults with postsecondary degrees of any New England state. Since 2000, however, postsecondary educational attainment has grown faster in Maine than in New England as a whole—18% compared with 12%.

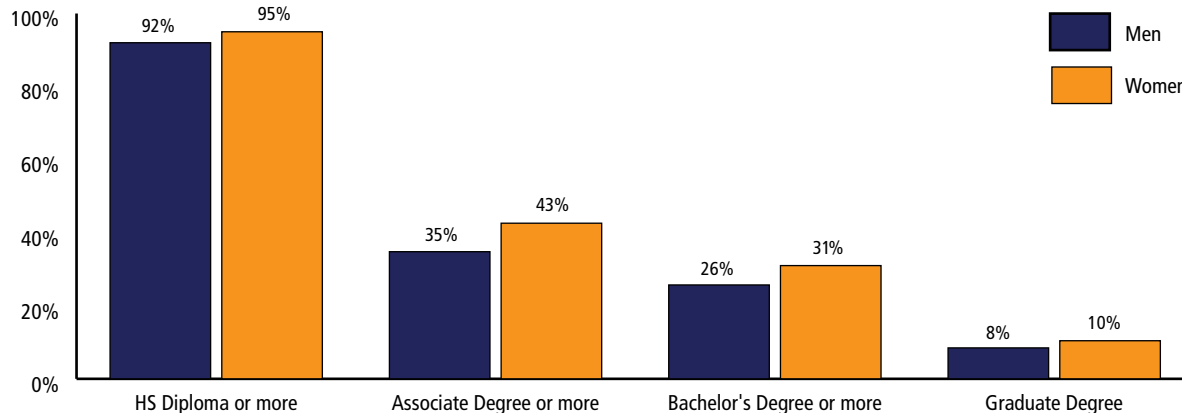
### EDUCATIONAL ATTAINMENT OF WORKING-AGE ADULTS (AGES 25-64)



Source: U.S. Census Bureau, Decennial Census (1990 and 2000) and American Community Survey (2009)

Among working-age adults in Maine, women’s educational attainment is higher than men’s at all levels (see the following chart). In 2010, an estimated 43% of Maine women had earned an associate degree or more, compared with 35% of men.

### MAINE WORKING-AGE ADULTS’ EDUCATIONAL ATTAINMENT BY GENDER, 2010

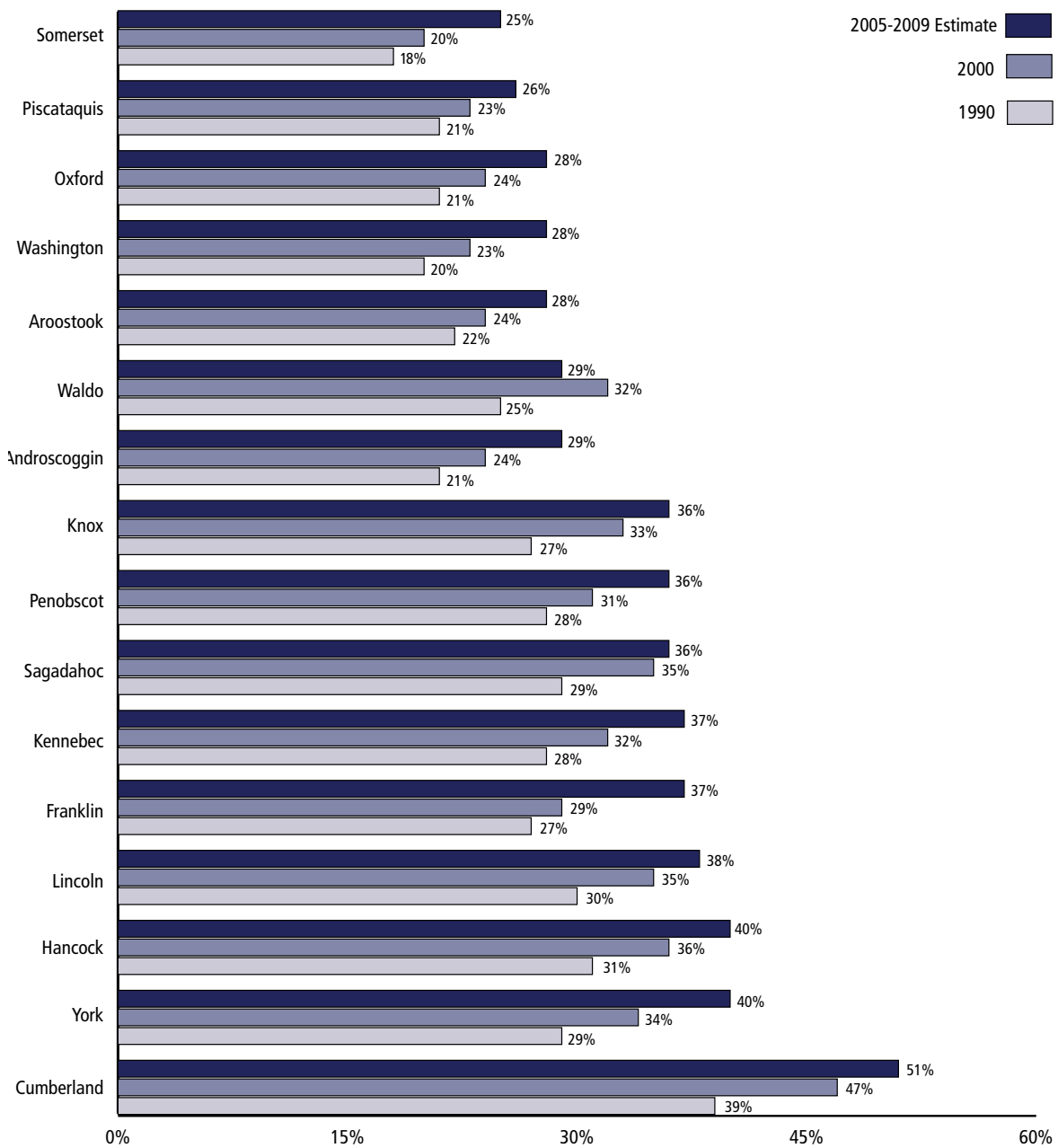


Source: U.S. Census Bureau, American Community Survey

### Regional Variation

Educational attainment in Maine's 16 counties varies widely. The following chart includes 1990 and 2000 Census figures as well as more recent five-year Census Bureau estimates (2005-2009)—the most recent data available for all 16 counties—showing significant growth in college attainment throughout Maine during the past two decades.

### COLLEGE DEGREE ATTAINMENT (ASSOCIATE AND HIGHER) AMONG THE WORKING AGE POPULATION (AGES 25-64)



Source: U.S. Census Bureau, Decennial Census (1990 and 2000) and American Community Survey (2005-2009)

# Are More Maine People Ready for Postsecondary Education?

There are many measures of progress toward readiness for college among current elementary and secondary students. This section includes data on elementary, middle, and high school students' performance on assessment tests; Advanced Placement and Early College courses in high school; and on-time high school graduation. Remedial college course-taking is an indicator of the preparedness of entering college students.

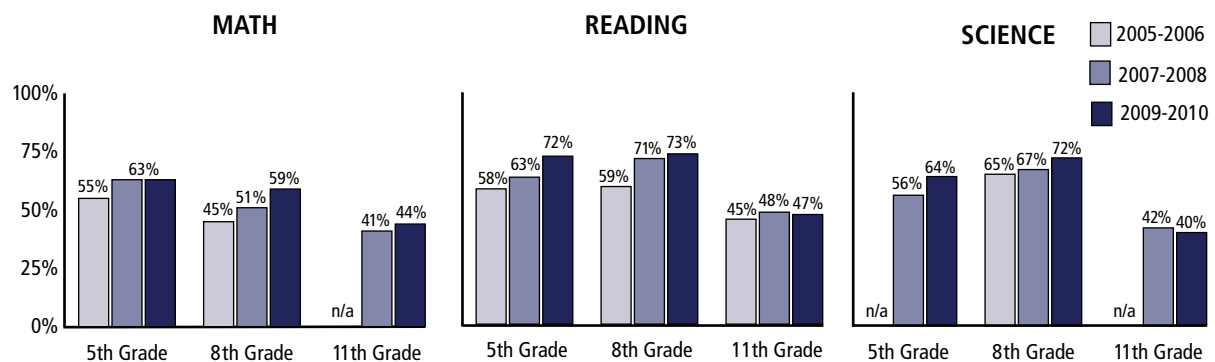
## INDICATOR 1

### Student Performance on Assessment Tests



*Growing majorities of Maine 5th- and 8th-graders have met or exceeded state learning standards each year since testing began in 2005. Among Maine 11th-graders, however, a minority meets the state standards, and average PSAT scores are lower than the U.S. and New England averages.*

#### PROPORTION OF MAINE TEST-TAKERS MEETING OR EXCEEDING MEA STANDARDS



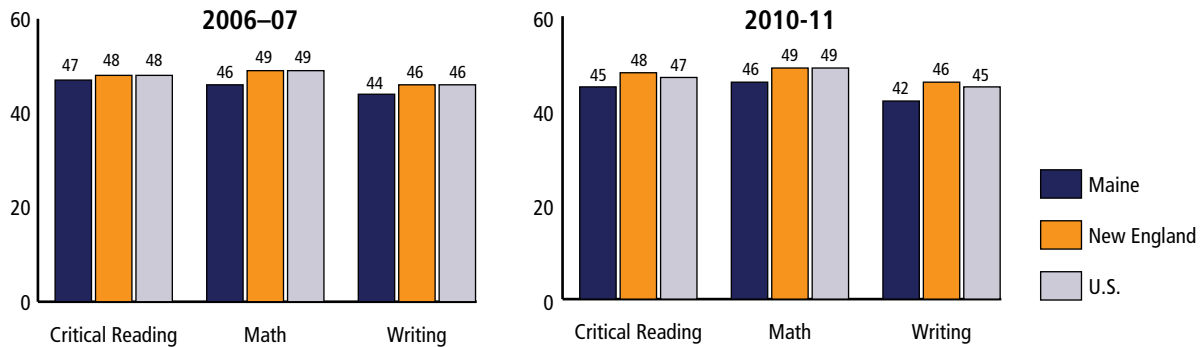
\*5th-graders were not tested in science until 2008-2009. Data shown are for 2008-2009 and 2009-2010.  
Source: Maine Department of Education



Assessment testing of elementary and secondary students in Maine public schools has evolved considerably in recent years. Beginning in 1999, Maine Educational Assessment (MEA) tests were administered each year to all students in grades 4, 8, and 11. In 2006, the Maine Department of Education redesigned the MEA to better gauge student progress toward the *Maine Learning Results*, as recommended by the federal *No Child Left Behind Act*. In 2009-2010, Maine schools began using the New England Common Assessment Program (NECAP) tests for grades 3 through 8. Since 2006, Maine has used the College Board’s SAT test—now with a state-developed math extension and science section—as its Maine High School Assessment (MHSA) .

The preceding charts show the proportions of 5th-, 8th-, and 11th-grade students who met or exceeded the standards every other year since 2005-2006 (the tests used in earlier years did not yield comparable data). For the most part, a majority of 5th- and 8th-graders meets or exceeds the standards in all three testing areas each year, and these proportions have increased significantly. Among 11th-graders, however, a minority meets or exceeds the standards. Reading is generally the strongest area of student achievement, and math is the weakest.

**AVERAGE 11TH GRADE PSAT SCORES, 2006-07 AND 2010-11**



Source: College Board, PSAT Data and Reports

The Preliminary SAT (PSAT), scored on a scale of 20 to 80, gives an indication of how Maine high school students compare with their peers around the country. The preceding charts show that Maine 11th-graders score lower, on average, than do college-bound 11th-graders in New England and the nation.<sup>2</sup> While the New England and U.S. average PSAT scores have remained virtually the same since 2006-2007, Maine’s average scores in critical reading and writing have dropped by several points, while math scores have remained static.

<sup>2</sup> One reason for this is that virtually all high school students in Maine take the PSAT, while smaller proportions of students—more likely to be “college-bound”—in the rest of New England (roughly 75%) and the U.S. (45%)—take the test.

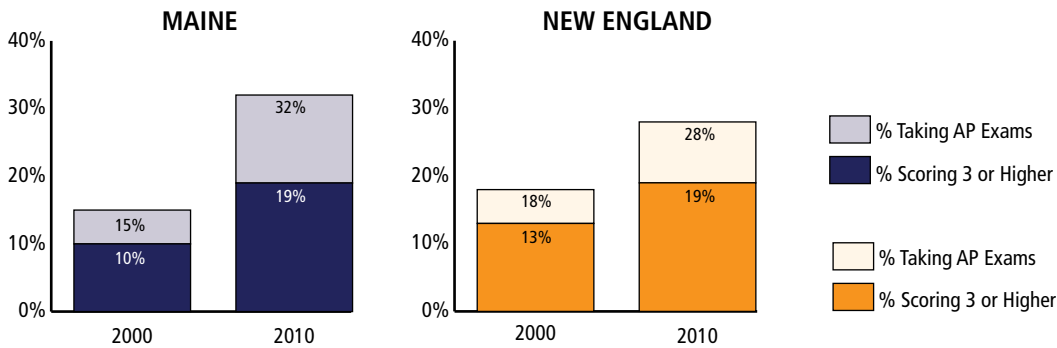
## INDICATOR 2

# Advanced Placement and Early College Courses



*Between 2000 and 2010, Maine surpassed the New England average for the proportion of high school seniors taking AP Exams, more than doubling from 15% to 32%. Over the past five years, enrollment in early college courses by Maine high school students increased by 75%.*

### AP EXAMS IN MAINE AND NEW ENGLAND: HIGH SCHOOL CLASSES OF 2000 AND 2010

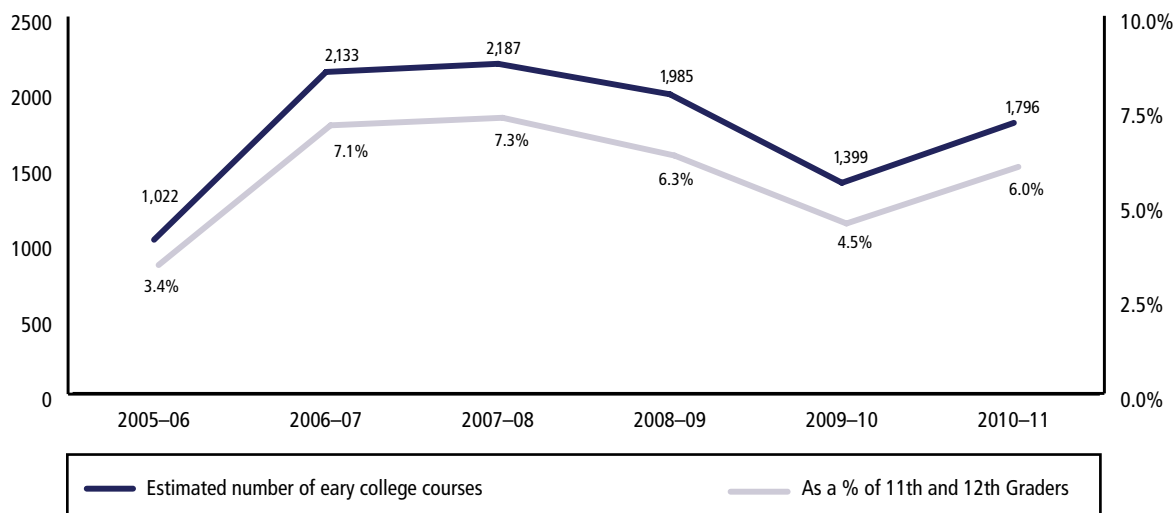


Source: College Board, AP Data and Reports

Advanced Placement (AP) courses are high school courses designed to provide college-level learning experiences. In most Maine high schools, some students also have the opportunity to take college courses for dual college and high school credit. A rigorous academic experience in high school is the most powerful predictor of college degree completion, and participation and success in AP and early college courses is one measure of the level of academic rigor to which Maine high school students have access.

The College Board administers AP exams in 34 subject areas. 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 on a five-point scale. AP exams are optional, and not all students who take an AP course sit for the exam. During the previous decade, the percentage of Maine high school seniors taking at least one AP exam has grown to surpass the New England average, more than doubling from 15% of the class of 2000 to 32% of the class of 2010. New England's proportion grew from 18% to 28% over the same period. The proportion of students achieving a score of three or higher on at least one AP exam grew from 10% of the class of 2000 to 19% of the class of 2010 in Maine, and from 13% to 19% in New England (see the preceding chart).

## MAINE PUBLIC HIGH SCHOOL STUDENTS' EARLY COLLEGE COURSE-TAKING



Sources: Maine Department of Education; Mitchell Institute surveys of high schools (2006, 2009, 2011)

“Early college”—also called dual enrollment or dual credit—courses differ from AP in that students who pass the courses automatically earn college credit. Some early college courses are offered at high schools or online, but in most cases students take courses on college campuses side-by-side with college students. Particularly for students with uncertain aspirations, participating in early college courses may increase the likelihood that they will enroll and remain in college.

A 2009 survey found that 95% of Maine’s public high schools allow their students to take college courses for dual credit, up from 73% in 2006. In 2011, Maine schools reported that their students took a total of 1,796 dual credit early college courses in 2010-11, up from 1,022 courses in 2005-06. As a proportion of high school juniors and seniors, this represents an increase from 3.4% in 2005-06 to 6.0% in 2010-11 (see the preceding chart). Comparable data for New England and the U.S. are not available. Jobs for the Future, a national organization with expertise in early college, suggests that states that make expanding early college a priority set a five-year goal of involving 25% of 11th- and 12th-graders in early college courses.

### INDICATOR 3

## High School Graduation



*The on-time graduation rate from Maine public high schools increased from 80.4% in 2009 to 82.4% in 2010.*

County	High School Graduation Rate (%)	
	2009	2010
Androscoggin	72.6	72.8
Lincoln	82.6	75.7
Oxford	76.6	78.4
Kennebec	80.3	79.8
Piscataquis	80.6	80.1
Penobscot	76.7	80.6
Washington	83.2	81.0
Hancock	77.4	82.6
Sagadahoc	81.6	83.3
York	82.2	83.3
Knox	81.3	83.6
Waldo	81.2	83.9
Somerset	81.1	84.4
Aroostook	84.0	85.0
Cumberland	83.5	85.3
Franklin	84.3	89.0
<b>Maine</b>	<b>80.4</b>	<b>82.4</b>

Source: Maine Department of Education

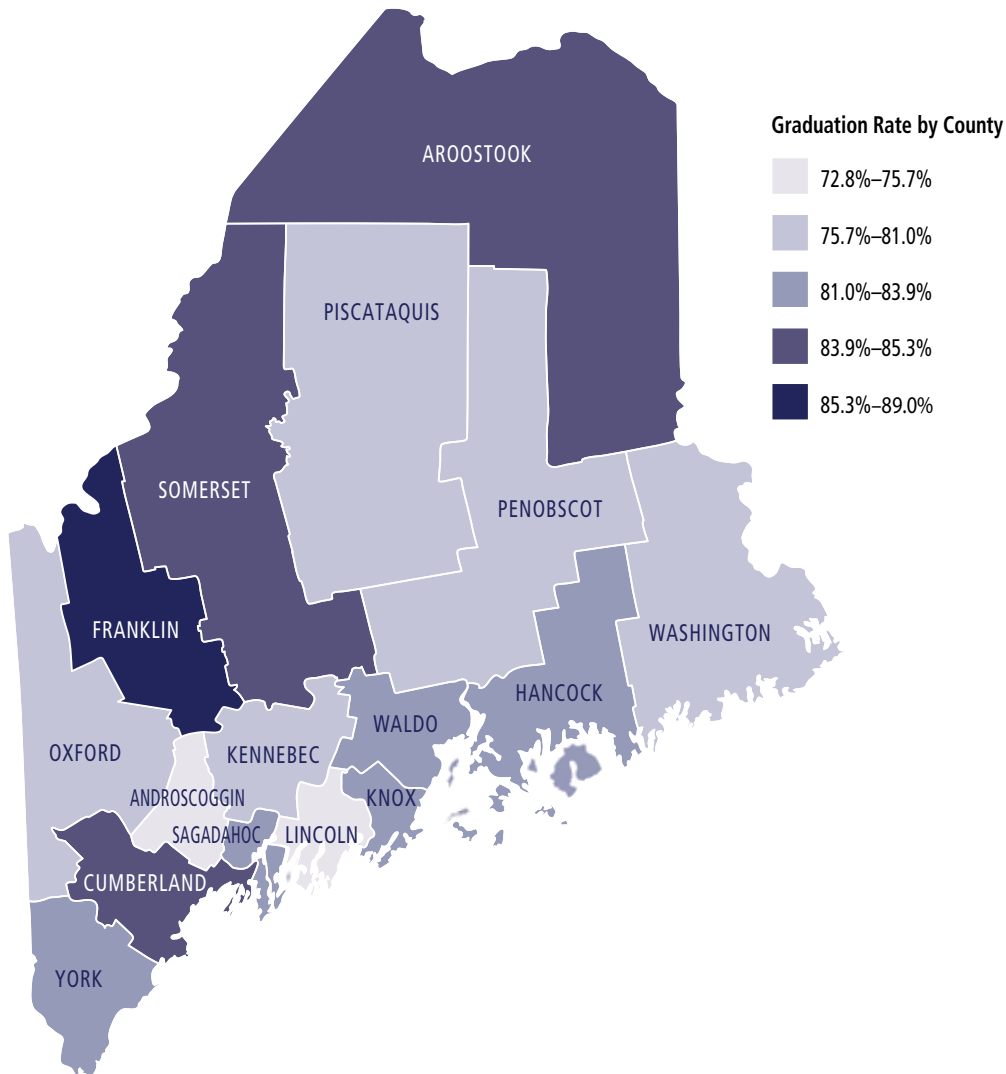
High school graduation is a critical step in preparing Maine students to move on to college. In 2009, the Maine Department of Education began calculating cohort-based, four-year high school graduation rates for each Maine high school. This method counts only students who graduate within four years of entering 9th grade, and also accounts for students who transfer in and out during those four years. The statewide average high school graduation rate for 2010 is 82.4%, up from 80.4% in 2009. Directly comparable data are not available for earlier years, but estimates suggest that the proportion of Maine students completing high school on time ranged from 78% to 82% during the past decade.

Going forward, states will be federally required to calculate and report graduation statistics comparable with Maine's new data, but these data are not yet available for all the New England states. The National Center for Higher Education Management Systems, however, provides recent high school completion estimates allowing comparisons among states. Rather than tracking a cohort of students, this source simply divides the number of high school graduates by the number of entering 9th-graders four years earlier. For 2008 (the latest year available), Maine's estimated public high school graduation rate of 78.7% was slightly higher than the New England average, 77.8%.

### Regional Variation

There is considerable variation in high school graduation rates among Maine's counties. In 2010, graduation rates ranged from 72.8% in Androscoggin County to 89.0% in Franklin County (see the preceding table and the following map). Four counties—Androscoggin, Kennebec, Oxford and Lincoln—have graduation rates below 80%. Three counties—Aroostook, Cumberland, and Franklin—have graduation rates at or above 85%.

## 2010 PUBLIC HIGH SCHOOL GRADUATION RATES IN MAINE'S COUNTIES



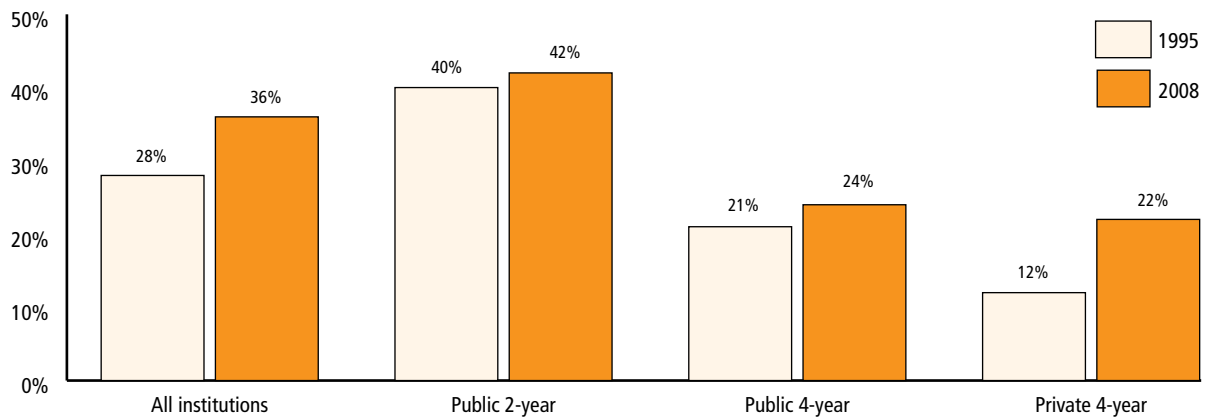
### INDICATOR 4

## Remedial College Courses



*18% of first-time students entering the University of Maine System took remedial courses in 2011, down from 25% in 2007. At Maine Community College System campuses, 51% of entering students in 2010 and 47% in 2009 took at least one remedial college course.*

## ENTERING FRESHMEN IN U.S. INSTITUTIONS TAKING REMEDIAL COURSES, BY INSTITUTION TYPE



Source: National Center for Education Statistics

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

Nationally, about three-quarters of degree-granting colleges offer remedial courses. The percentage of entering college freshmen taking at least one remedial course increased from 28% in 1995 to 36% in 2008. Students entering two-year public institutions are more likely to take remedial courses than are students entering four-year institutions (see the preceding chart).

In Maine, 18% of first-time students entering the University of Maine System took remedial courses in 2011, down from 25% in 2007. The University System reports that it has been working for several years to revise some introductory courses, so that remedial material is included at the beginning of an otherwise college-level course, rather than offered as a stand-alone remedial course. This allows students to earn college credit in the same semester that they complete necessary remedial work, and to progress more quickly toward a degree. At Maine Community College System campuses, 51% of entering students in 2010 and 47% in 2009 took at least one remedial college course.

# Are More Maine People Enrolling in Postsecondary Education and Graduating?

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

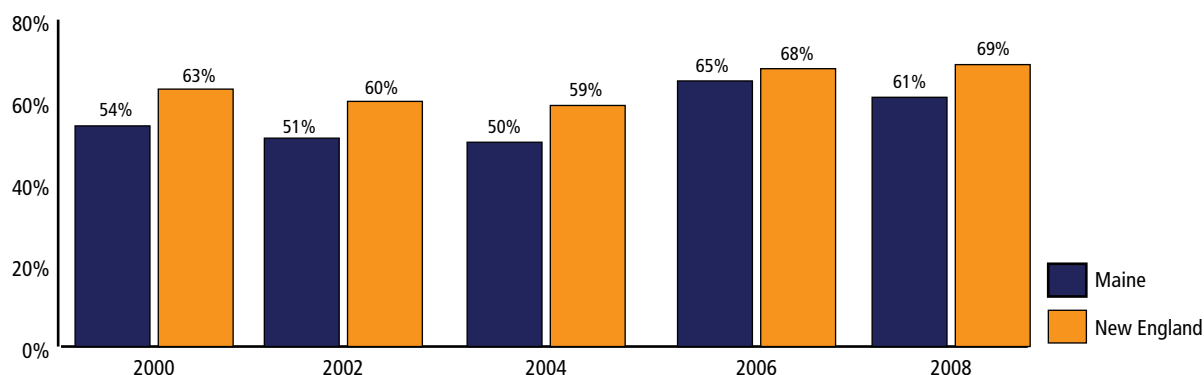
## INDICATOR 5

### Recent High School Graduates Enrolling in College



*Between 2000 and 2008, college matriculation among recent Maine high school graduates increased from 54% to 61%.*

#### HIGH SCHOOL GRADUATES ENROLLING IN DEGREE-GRANTING COLLEGES, 1998-2008

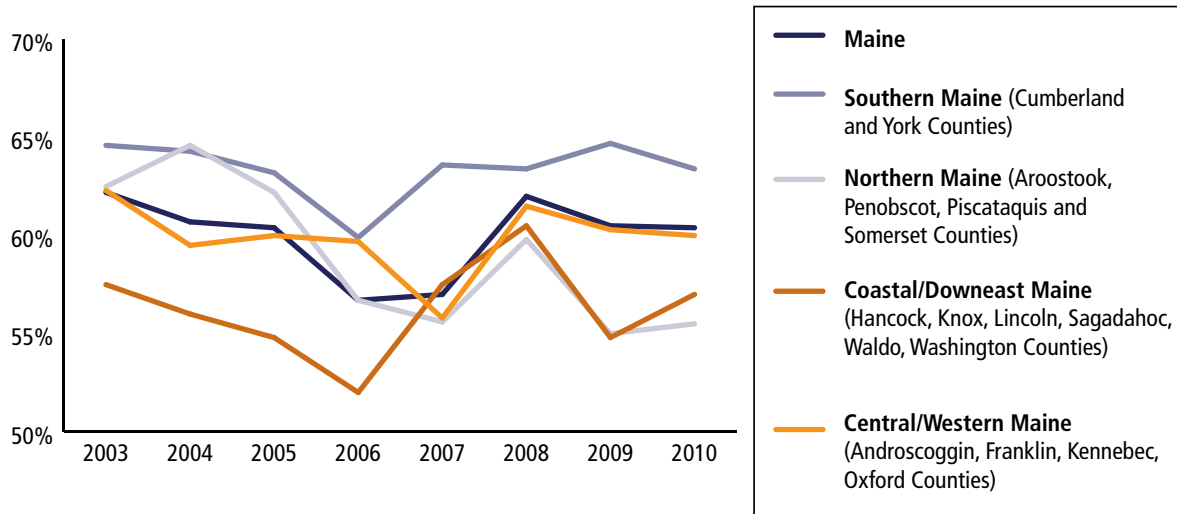


Source: National Center for Higher Education Management Systems

College enrollment the fall after high school graduation dropped in both Maine and New England from 2000 to 2004, then increased significantly in 2006. These data show that Maine trails New England on this measure—61% of 2008 graduates in Maine enrolled in college in the fall, compared with a New England average of 69% (see the preceding chart).

## Regional Variation

### RECENT HIGH SCHOOL GRADUATES' COLLEGE ENROLLMENT BY MAINE REGION



Source: Mitchell Institute calculations using National Student Clearinghouse data

In order to compare Maine regions, we use a different data set that includes only a sample of public school graduates and measures college enrollment within a full year after high school graduation. These data indicate that college enrollment among Maine's recent high school graduates declined to a low of 57% in 2006, then rebounded to 62% in 2008. These data estimate that for the Maine public high school graduating classes of both 2009 and 2010, about 60% enrolled in college within one year after graduation. College enrollment rates of public high school graduates vary among four regions of Maine, with Northern and Coastal/Downeast Maine having the lowest rates. Central/Western Maine is just below the state average, and high school graduates from Southern Maine enroll in college at the highest rate (see the preceding chart).

## INDICATOR 6

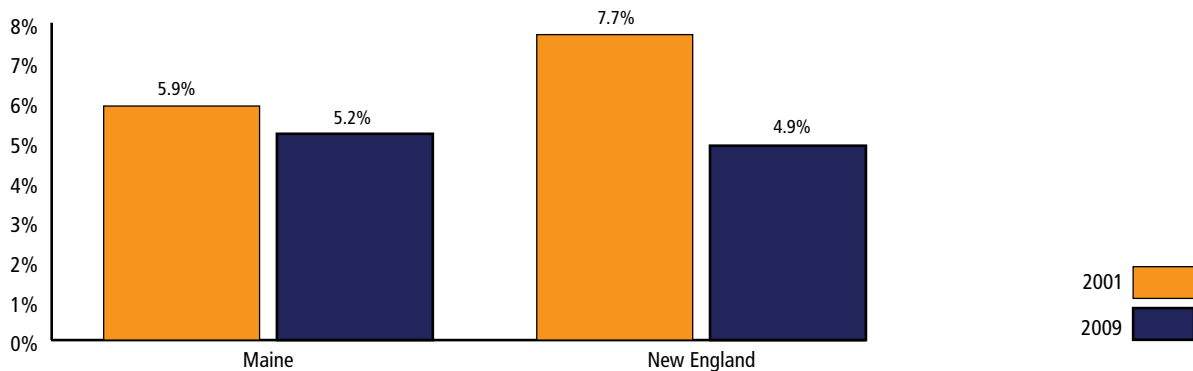
### Adults Enrolled in Postsecondary Education



*From 2001 to 2009, the proportion of Maine adults enrolled in college dropped from 5.9% to 5.2%.*



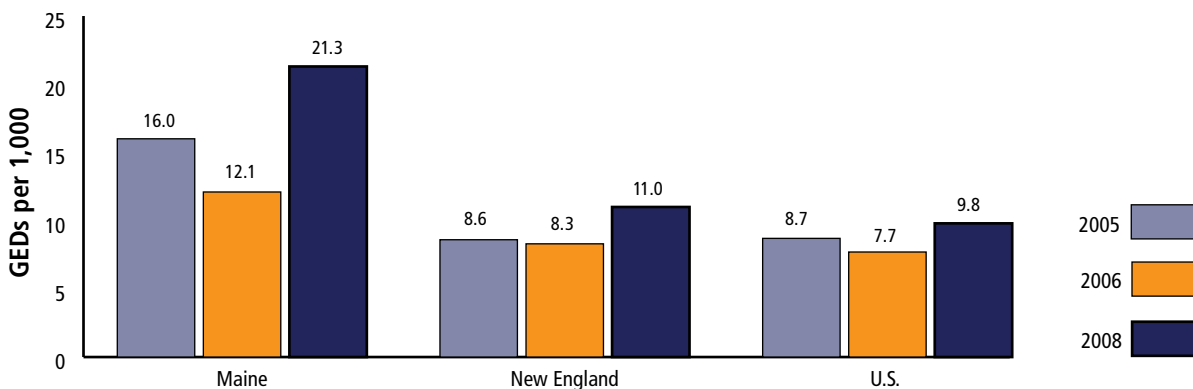
## PROPORTION OF ADULTS (AGES 25-49) ENROLLED IN UNDERGRADUATE COLLEGE EDUCATION



Source: National Center for Higher Education Management Systems

The other indicators in this section all examine people of traditional college age (roughly 18 to 23). Adult or non-traditional students, defined as those aged 24 and older, are also an important population in Maine, both because we have an adult population with relatively low rates of college degree attainment, and because our numbers of traditional-age high school graduates are predicted to decline in the coming years. Between 2001 and 2009, the proportion of Maine adults enrolled in college (associate or bachelor’s degree programs) decreased from 5.9% to 5.2%. In New England, adult college enrollment decreased even more, from 7.7% to 4.9% during the same time period.

## GEDS AWARDED TO ADULTS (AGES 25-49) PER 1,000 WITH NO HIGH SCHOOL DIPLOMA



Source: National Center for Higher Education Management Systems

In order to enroll in college, adults without a high school diploma must first complete a high school credential. In 2008, 26,385 Mainers between the ages of 25 and 49 had not received a high school diploma, and of these, 562 (2.1%) received general equivalency diplomas (GEDs). As shown above, Maine adults without a high school diploma are earning GEDs at a significantly higher rate than are their counterparts in New England and the U.S. as a whole.

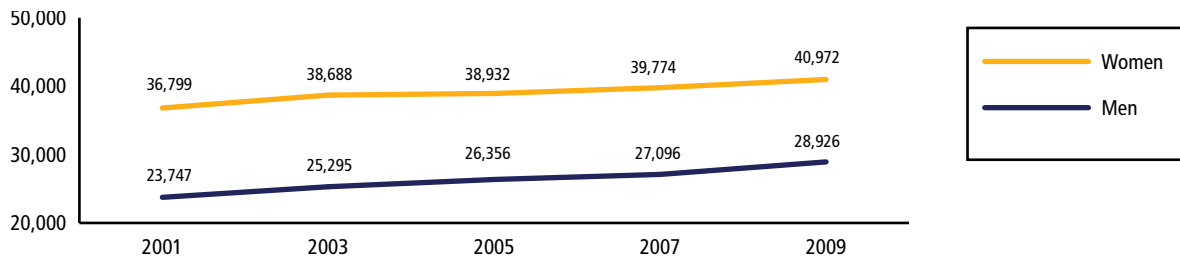
## INDICATOR 7

# Total College Enrollment



*From 2001 to 2009, total enrollment in degree-granting postsecondary institutions in Maine increased by 15%, from just over 60,000 to nearly 70,000 students.*

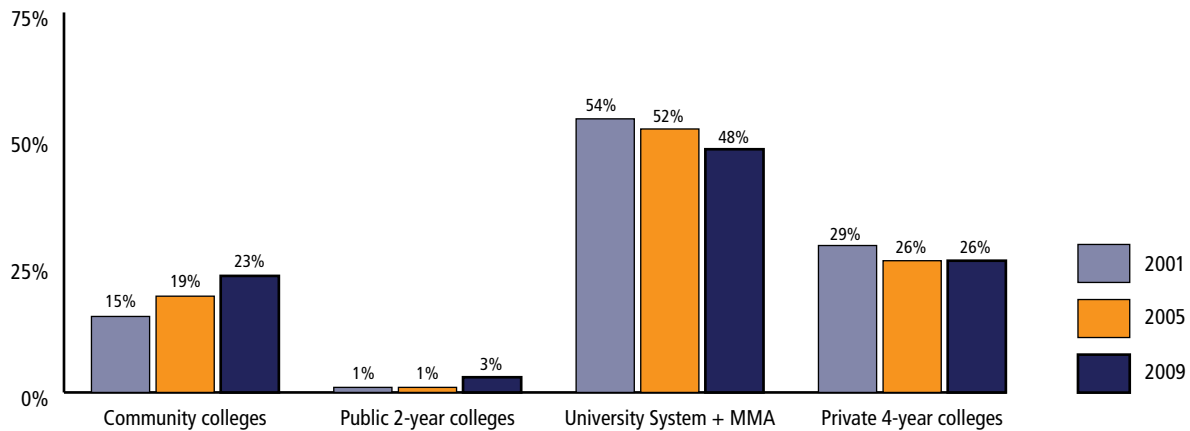
### TOTAL ENROLLMENT IN MAINE'S DEGREE-GRANTING COLLEGES AND UNIVERSITIES, 2001-2009



Source: National Center for Education Statistics

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 2001 and 2009, enrollment grew by 15% or 9,350 students. The latest student enrollment figures indicate that 69,898 students were enrolled in Maine's degree-granting institutions in the fall of 2009. As shown in the chart above, the gender breakdown of college enrollment in Maine is about 60% women and 40% men.

## PERCENT ENROLLMENT BY COLLEGE TYPE



Source: National Center for Education Statistics

The University of Maine System enrolls almost half (48%) of Maine’s college students, although the proportion has been decreasing since 2001. The Maine Community College System’s share of Maine college students has increased from 15% to 23% in the same time period, and the share of Maine students attending private four-year colleges has dropped from 29% to 26% (see the preceding chart).

The following table shows part-time and full-time enrollment figures for each of Maine’s colleges and universities, along with first-time full-time enrollment—traditional college freshmen—and the number of degrees granted in 2001 and 2009. Community colleges tend to enroll more part-time than full-time students, while full-time students outnumber part-timers at four-year public universities. At the private four-year colleges, full-time students now outnumber part-time students by more than four to one.

## TOTAL ENROLLMENT AT MAINE DEGREE-GRANTING COLLEGES AND UNIVERSITIES

COLLEGE	2001			2009		
	Part/Full Time	First Time Full Time	Degrees Granted	Part/Full Time	First Time Full Time	Degrees Granted
<b>Community Colleges</b>						
Central Maine	810/625	312	212	1,377/1,343	483	318
Eastern Maine	933/663	299	194	911/1,188	385	351
Kennebec Valley	874/381	130	221	1,568/730	210	400
Northern Maine	332/551	208	150	395/734	196	201
Southern Maine	1,385/1,086	392	445	3,268/2,993	1,069	607
Washington County	56/216	107	60	70/304	191	160
York County	584/247	41	68	848/510	137	68
<b>Community College System Total</b>	<b>4,974/3,796</b>			<b>8,437/7,802</b>		
	<b>8,770</b>	<b>1,489</b>	<b>1,350</b>	<b>16,239</b>	<b>2,671</b>	<b>2,105</b>
<b>Private 2-Year Colleges</b>						
Kaplan University	16/505	91	226	1,147/398	N/A	279
Beal College	83/221	57	114	185/320	N/A	119
<b>Private 2-Year College Total</b>	<b>825</b>	<b>148</b>	<b>340</b>	<b>2,050</b>	<b>N/A</b>	<b>398</b>
<b>Public 4-Year Universities</b>						
Maine Maritime Academy	19/708	146	125	6/933	303	162
<b>University of Maine System</b>						
University of Maine	2,857/7,841	1,567	1,694	2,659/9,235	1,717	2,070
UMaine at Augusta	4,099/1,476	318	495	3,355/1,699	308	539
UMaine at Farmington	340/2,095	479	381	287/2,074	487	457
UMaine at Fort Kent	305/592	99	273	549/577	118	234
UMaine at Machias	475/542	155	118	512/452	100	82
UMaine at Presque Isle	414/953	216	270	523/913	178	308
University of Southern Maine	5,592/5,374	932	1,409	4,026/5,629	892	1,699
<b>UMaine System Subtotal</b>	<b>14,082/18,873</b>	<b>3,766</b>	<b>4,640</b>	<b>11,911/20,579</b>	<b>3,800</b>	<b>5,389</b>
<b>Public 4-Year University Total</b>	<b>32,955</b>	<b>3,912</b>	<b>4,765</b>	<b>33,429</b>	<b>4,103</b>	<b>5,551</b>
<b>Private 4-Year Colleges</b>						
Bates College	0/1,767	582	435	0/1,738	469	472
Bowdoin College	14/1,621	452	428	6/1,771	493	451
Colby College	1/1,808	488	468	0/1,838	480	508
College of the Atlantic	9/262	69	74	24/317	76	75
Husson College	905/959	274	367	774/2,107	534	513
Maine College of Art	35/400	100	68	9/316	69	93
New England School of Comm.	1/102	102	38	27/472	139	43
Saint Joseph's College of Maine	4,107/1,163	315	7	1,600/1,127	269	484
Thomas College	310/469	174	178	327/670	211	185
Unity College	21/480	135	98	10/554	169	89
University of New England	706/2,131	321	672	643/3,850	607	1,104
<b>Private 4-year College Total</b>	<b>6,109/11,162</b>			<b>3,420/14,760</b>		
	<b>17,271</b>	<b>3,012</b>	<b>2,833</b>	<b>18,180</b>	<b>3,516</b>	<b>4,017</b>
<b>GRAND TOTAL</b>	<b>60,548</b>	<b>8,561</b>	<b>9,288</b>	<b>69,898</b>	<b>10,290</b>	<b>12,071</b>

Source: National Center for Education Statistics

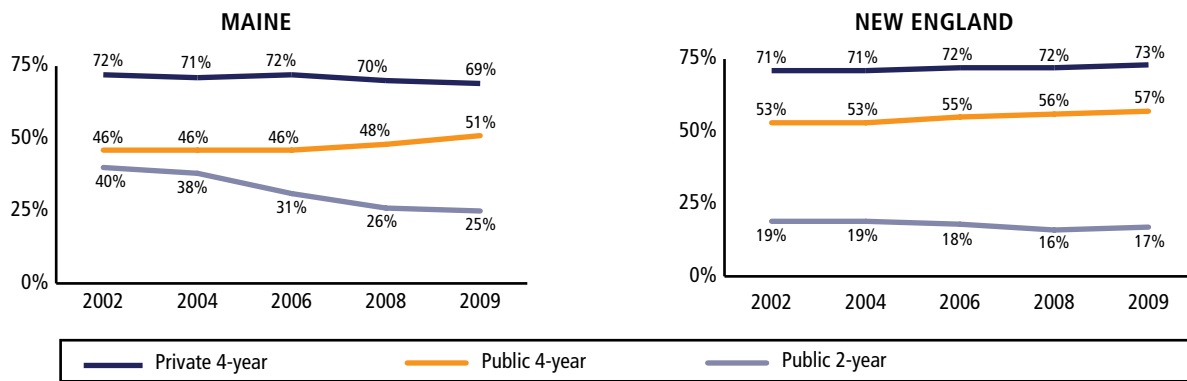
**INDICATOR 8**

# Degree Completion



*Since 2002, graduation within 150% of normal program time has increased slightly at public four-year institutions but declined significantly at community colleges in Maine.*

**GRADUATION RATES BY INSTITUTION TYPE, 2002-2009**



Source: National Center for Education Statistics, IPEDS Data Center

The college graduation rate is defined here as the percentage of entering full-time undergraduate students who complete an associate degree within three years or a bachelor’s degree within six years at the same institution in which they initially enrolled. The data available for this indicator are incomplete in that they do not include part-time students, and 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.

By this measure, the graduation rate at Maine’s public two-year colleges—down from 40% in 2002 to 25% in 2009—is significantly higher than the New England average, although this gap has been decreasing since 2002. Public two-year colleges in Maine took on an expanded transfer mission in 2003, when they transitioned from technical to community colleges. In 2009, for example, 17% of their full-time students transferred before completing a degree, a factor which contributes to a lower graduation rate.

The graduation rate at Maine’s public four-year universities—up from 46% in 2002 to 51% in 2009—is lower than the New England average, which is now 57%. Private colleges and universities in Maine and New England have similar graduation rates, though Maine’s rate has declined and New England’s has improved slightly since 2002.

# Is Maine Postsecondary Education More Affordable?

As measures of college affordability in Maine, we look at the cost of college, state investments in higher education and in grant aid to students, and student borrowing for college.

## INDICATOR 9

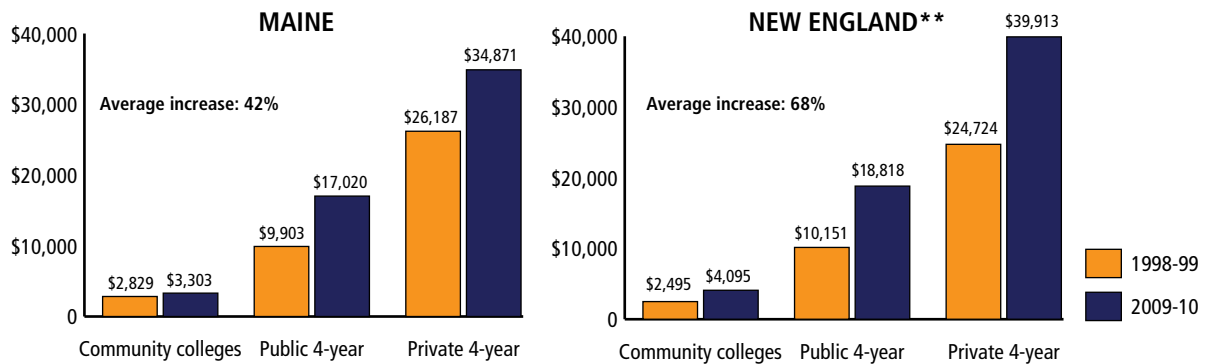
### Cost of College



*From the late 1990s to 2009-2010, the average increase in college costs in Maine was 42%, faster than the growth in financial aid or family resources.*

#### INCREASE IN COLLEGE COST (TUITION, FEES, ROOM AND BOARD\*)

BY INSTITUTION TYPE, 1998-99 TO 2009-10



\*tuition and fees only for community colleges \*\*unweighted averages

Source: National Center for Education Statistics

College cost is a key indicator of the affordability of higher education. The cost of college has increased steadily over the past decade. In Maine, the average increase in college costs from 1998-99 to 2009-10 was 42%, compared with 68% in New England as a whole (see the preceding charts). Financial aid has also increased during this time period, but the average amount of aid per full-time equivalent (FTE) student for 2009-2010 is \$12,894, covering only about 37% of private four-year college costs and about three-fourths of public four-year college costs (College Board, 2010). As Maine's per capita income was only \$37,300 in 2010 compared to the New England average of \$45,300 (Bureau of Economic Analysis, 2010), college costs represent a higher proportion of income for Maine families than for their New England counterparts.

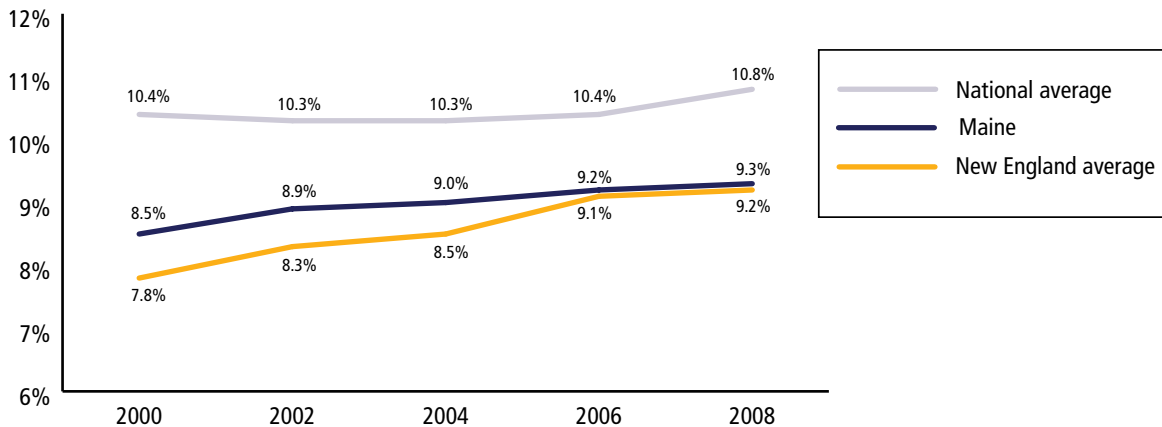
**INDICATOR 10**

## State Contributions to Higher Education Institutions and State Grant Aid



*Higher education expenditures as a proportion of Maine's state budget increased from 8.5% in 2000 to 9.3% in 2008, and state grant aid per full-time college student rose from \$314 to \$347.*

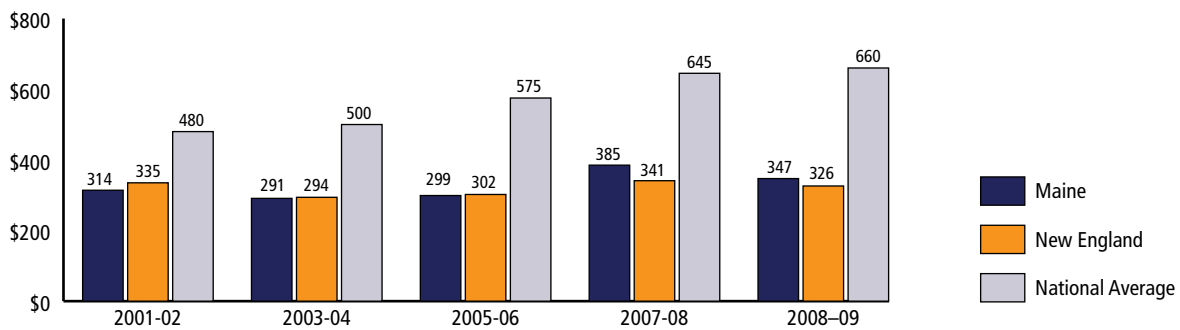
### HIGHER EDUCATION EXPENDITURES AS A PERCENTAGE OF STATE BUDGETS, 2000-2008



Source: U.S. Census Bureau

The state government’s contribution to higher education is measured here as a percentage of total state expenditures. This is a key indicator of the state’s commitment to higher education. Higher education expenditures include all costs associated with public degree-granting institutions of higher education (community colleges, universities, etc.) except for agricultural extension services.<sup>3</sup> In Maine, the state government’s contribution to higher education as a percentage of total expenditures has increased from 8.5% in 2000 to 9.3% in 2008. Higher education expenditures in Maine in 2008 were \$761.4 million, and the state budget was \$8.151 billion. Maine’s contribution in 2008 was just above the New England average of 9.2%. Both Maine and New England have significantly lower higher education expenditures as a percentage of total state expenditures than the national average of 10.8% (see chart above).

### STATE GRANT AID PER FULL-TIME UNDERGRADUATE STUDENT



Source: National Association of State Student Grant & Aid Programs

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 grant aid—subsidies that students do not have to pay back. Maine provides just under \$18 million in grant aid each year to undergraduate students, which was about \$347 per full-time equivalent (FTE) undergraduate student enrolled in 2008-2009, up from \$314 in 2001-2002. The New England average decreased slightly from \$335 in 2001-2002 to \$326 in 2008-2009, but enough to fall below Maine’s figure of \$347. The national average is significantly higher and has been growing steadily, reaching \$660 per FTE student in 2008-2009 (see the preceding chart).

<sup>3</sup> These figures do not include bonded indebtedness for higher education (e.g., capital investments).



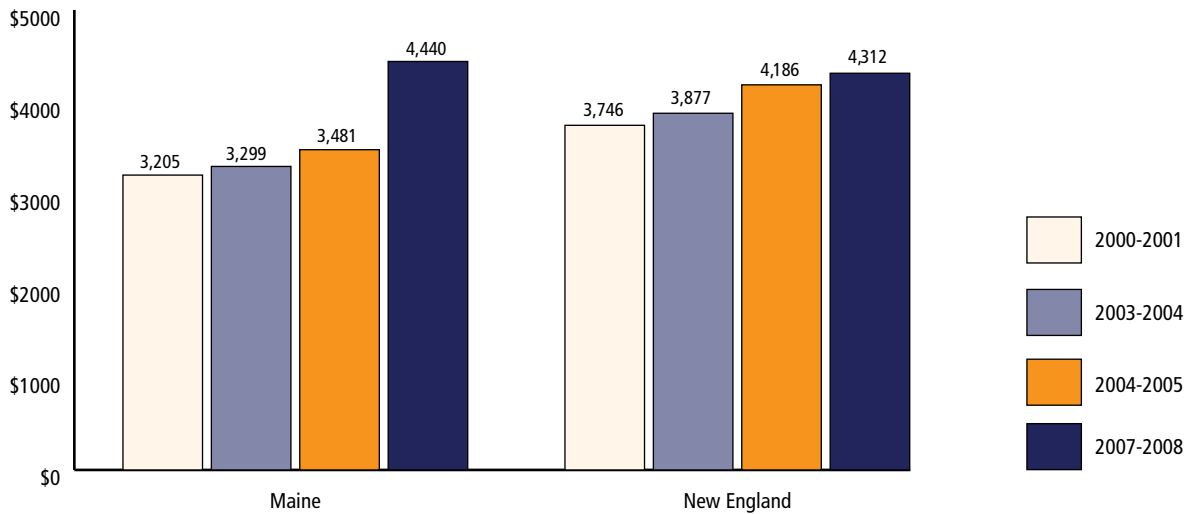
## INDICATOR 11

# Student Borrowing



Maine college students borrowed \$4,440 on average for one year of college in 2007-2008, up nearly 40% from the 2000-2001 average of \$3,205.

### AVERAGE AMOUNT STUDENTS BORROWED FOR ONE YEAR OF COLLEGE



Source: National Center for Public Policy and Higher Education


Another indicator of the affordability of higher education is the amount of debt students must incur in order to pay college expenses. This indicator looks at the average amount that undergraduate students at two-year and four-year colleges borrow each year. The average Maine undergraduate student now takes out over \$4,400 each year in student loans. Since 2000, average annual student borrowing in Maine has increased by nearly 40%, from \$3,205 to \$4,440. The New England average increased by about 15%—from \$3,746 to \$4,312—in the same time period. For the 2007-2008 school year, the average Maine student borrowed \$128 more than the average New England student.

# 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 of those with and without college degrees, unemployment rates by level of education, and other projected benefits of meeting the Compact's goal, such as more civic involvement and lower poverty and incarceration rates.

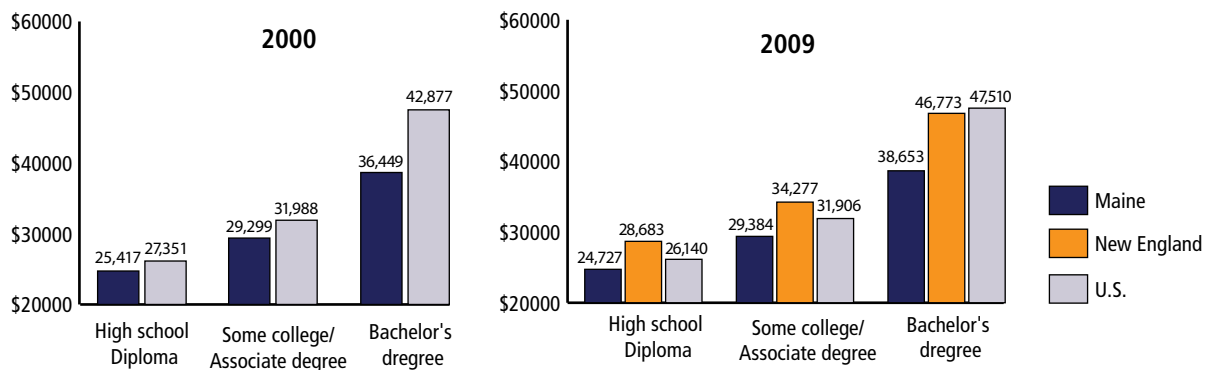
## INDICATOR 12

### Earnings and Income by Education Level



*Between 2000 and 2009, average annual earnings of Maine workers with bachelor's degrees increased by 6%, while earnings remained stable for those with some college. Workers with only a high school diploma experienced a 3% drop in average annual earnings.*

#### ANNUAL EARNINGS OF FULL-TIME WORKING ADULTS, 2000 AND 2009



Notes: Figures are not adjusted for inflation; New England average not available for 2000.  
Sources: Maine Department of Labor, U.S. Census Bureau

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 hourly wage

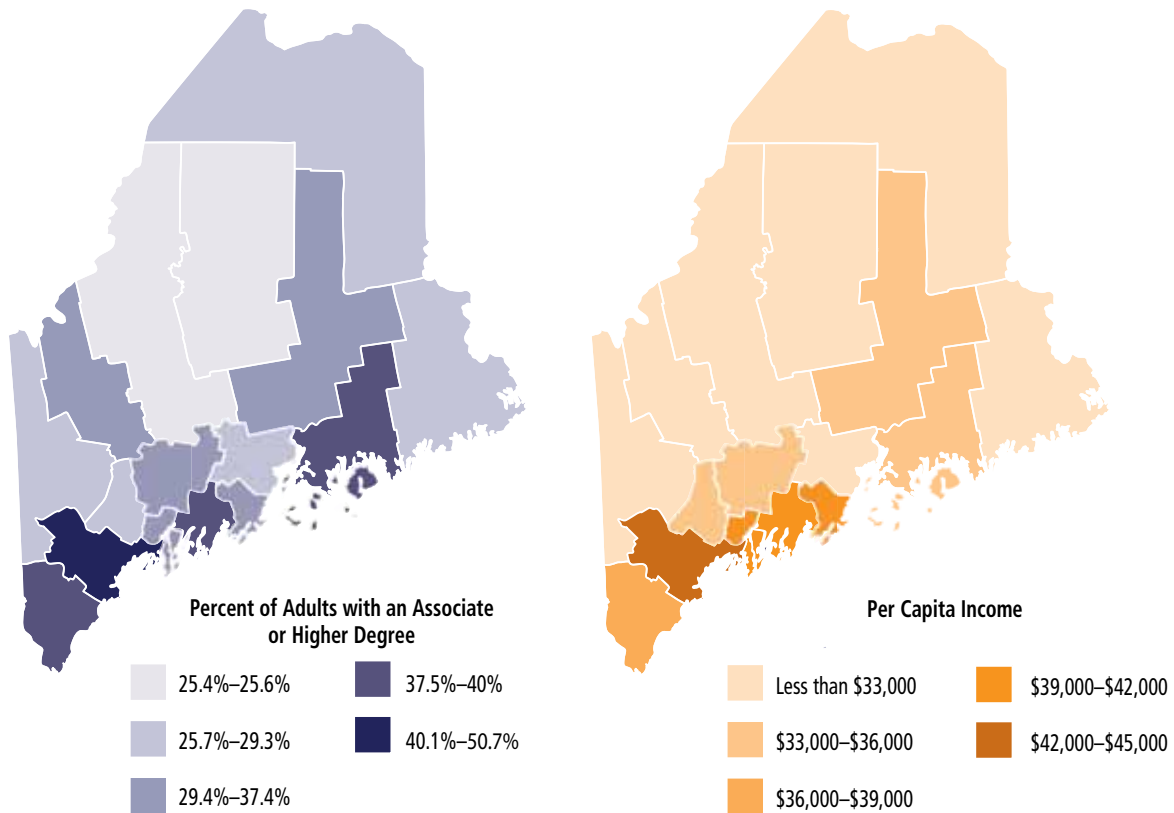
premium for Maine workers who have an associate degree or higher. In 2009, workers with an associate degree earned \$10.29 (or 38%) more per hour than those with postsecondary vocational training, and \$15.09 (56%) more per hour than those with only short-term on-the-job training.

Similarly, annual earnings of full-time workers increase significantly with each successive level of educational attainment. In Maine, workers with some college now earn 19% more per year than those with a high school diploma, and workers with bachelor’s degrees earn 56% more than those with only a high school diploma. The increase in annual earnings over the past decade is greater for workers with postsecondary education. This demonstrates a return on an investment in education and declining earning power among those with no college education.

**Regional Variation**

Comparing educational attainment with per capita income in Maine’s counties reflects a national trend of higher incomes in communities with higher proportions of college-educated adults. The strong relationship between educational attainment and per capita income is illustrated in the maps below. For 2005-2009, Cumberland County had the highest proportion of working-age adults with an associate degree or higher—50.7%—and also the highest per capita income, \$44,533. Franklin, Oxford, and Somerset were the only counties with per capita incomes less than \$30,000, and Oxford and Somerset also had low percentages of educational attainment—27.8% and 25.4%.


**EDUCATIONAL ATTAINMENT (PERCENT OF ADULTS AGES 25-64 WITH AN ASSOCIATE DEGREE OR HIGHER) AND PER CAPITA INCOME IN MAINE’S COUNTIES**



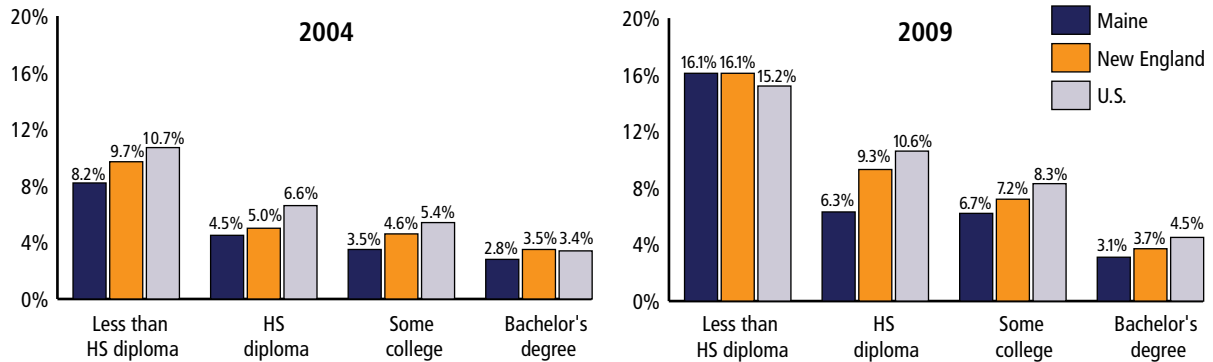
Likewise, educational attainment and per-capita income across the New England states are strongly correlated (see maps on the back cover). As of 2010, Maine has the lowest per-capita income—\$37,300—in the region, and also the lowest rate of college degree attainment—39%.

**INDICATOR 13**

## Unemployment by Education Level

 *Between 2004 and 2009, the unemployment rate of Maine workers with less than a high school diploma nearly doubled, while those with bachelor's degrees saw the lowest increase in unemployment (about 10%).*

### UNEMPLOYMENT RATE BY EDUCATIONAL ATTAINMENT



Source: US Census Bureau

Unemployment rates are another indicator of the demand for higher education in the labor market. This indicator looks at unemployment among adults ages 25 to 64. Unemployment drops with each successive level of educational attainment, as illustrated in the charts above. In Maine, unemployment among workers with less than a high school diploma has almost doubled—from 8.2% to 16.1%—between 2004 and 2009, while those with bachelor's degree saw the smallest increase in unemployment. Maine has significantly lower unemployment than the New England and U.S. averages among workers with a high school diploma or higher; however, Maine workers with less than a high school diploma now have a rate of unemployment equal to or higher than that of their national and New England counterparts.

## INDICATOR 14

# Other Benefits of Higher Education



*If Maine were to achieve the Compact's goal, the poverty rate would drop by a full percentage point, incarceration would drop by 15%, and voter participation would increase by 7%.*

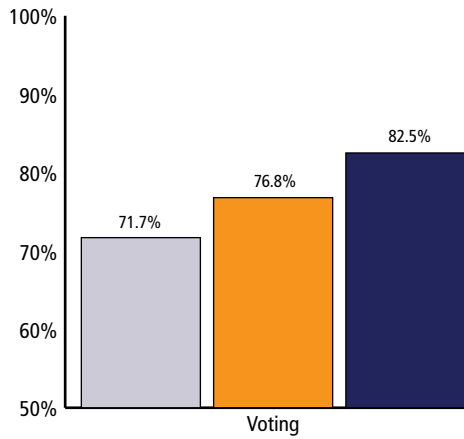
Beyond the purely economic benefits to individuals who earn a college degree and communities with more highly educated residents, there are many social benefits associated with higher education. While some of these advantages derive from the better employment opportunities—with higher pay and more benefits—that college graduates have relative to those without a college degree, others result from things like decision-making skills students learn in college and social relationships they form. Many of the private benefits of higher education—such as better health and civic engagement—also benefit communities, states, and the nation.

The following charts use a new tool from the United Way and the American Human Development Project that predicts how a variety of indicators would change if 56% of Maine adults attained a college degree (the Compact's goal), or if 100% of Maine adults were to attain a college degree.

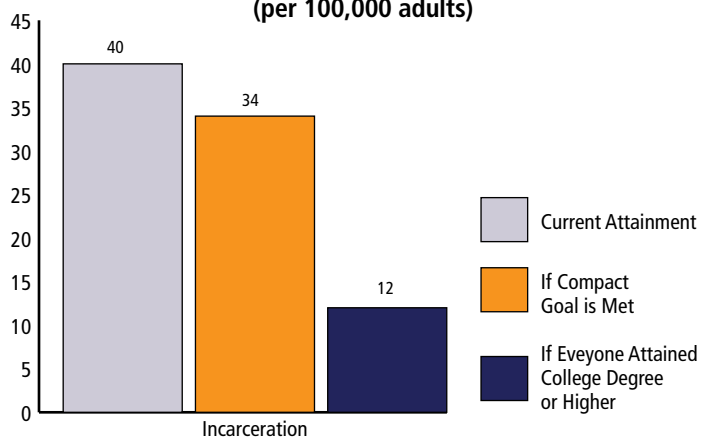
## SOCIAL BENEFITS OF INCREASING EDUCATIONAL ATTAINMENT IN MAINE



### CHANGE IN VOTER PARTICIPATION



### CHANGE IN INCARCERATION (per 100,000 adults)



Source: United Way Common Good Forecaster

## APPENDIX

# Data Sources

### The Goal: Working-Age Adults with College Degrees will Exceed the New England Average

1990 and 2000 figures are from the decennial U.S. Census. Data for 2005 through 2010 are estimates from the U.S. Census Bureau's American Community Survey. See [www.census.gov](http://www.census.gov).

Data on certificate attainment are not currently available.

### Indicator 1: Student Performance on Assessment Tests

Maine Educational Assessment (MEA) and Maine High School Assessment (MHSA) scores are published annually on the DOE's website: [www.maine.gov/education/mea/edmea.htm](http://www.maine.gov/education/mea/edmea.htm); [www.maine.gov/education/necap/results.html](http://www.maine.gov/education/necap/results.html); [www.maine.gov/education/mhsa/school\\_reports.htm](http://www.maine.gov/education/mhsa/school_reports.htm)

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

### Indicator 2: Advanced Placement and Early College Courses

The College Board, *Advanced Placement Report to the Nation* 2000 and 2010, <http://professionals.collegeboard.com/data-reports-research/ap>.

Maine Department of Education, *Maine's High School Aspirations Program, Enrollment Data, 2007-2010* editions, prepared by Donna Weeks.

Mitchell Institute estimates collected from Maine high schools. See *Early College Policies and Participation at Maine High Schools*, March 2011 at [www.mitchellinstitute.org](http://www.mitchellinstitute.org).

### Indicator 3: High School Graduation

Maine Department of Education: <http://www.maine.gov/education/gradrates/index.html>.

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

### Indicator 4: Remedial College Courses

1995 figures from *Postsecondary Remedial Education*, Education Indicators for the White House, Social Statistics Briefing Room at <http://nces.ed.gov/ssbr/pages/remediated.asp?IndID=16>. 2008 figures from *Condition of Education* report at <http://nces.ed.gov/programs/coe/tables/table-rmc-1.asp>.

University of Maine System figures for 2007 and 2011 are from James Breece, Vice Chancellor of Academic Affairs. Maine Community College System figures for 2009 and 2010 are from Jean Mattimore, MCCS Center for Career Development.

### Indicator 5: Recent High School Graduates Enrolling in College

For the New England comparison, data are from NCHEMS at [www.higheredinfo.org](http://www.higheredinfo.org).

In-state regional college enrollment data are from the Mitchell Institute's college enrollment data set, aggregated from graduate data provided annually by 65 of Maine's 130 public high schools and enrollment reports from the National Student Clearinghouse's StudentTracker service. See *From High School to College: Removing Barriers for Maine Students* at [www.mitchellinstitute.org](http://www.mitchellinstitute.org).

### Indicator 6: Adults Enrolled in Postsecondary Education

NCHEMS at [www.higheredinfo.org](http://www.higheredinfo.org)

#### **Indicator 7: Total College Enrollment**

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

#### **Indicator 8: Degree Completion**

National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) Data Center at <http://nces.ed.gov/ipeds/datacenter>.

#### **Indicator 9: Cost of College**

Data on college costs 1998 to 2010 come from the U.S. Department of Education's *Digest of Education Statistics*. See <http://nces.ed.gov/programs/digest>.

Financial aid trend information is from the College Board, *Trends in Student Aid 2009*, [www.collegeboard.com/trends](http://www.collegeboard.com/trends).

#### **Indicator 10: State Contributions to Higher Education Institutions and Student Grant Aid**

State contribution to higher education institutions data are from the U.S. Census Bureau's annual survey of state and local government finances: <http://www.census.gov/govs/estimate/>

State grant aid data are from the National Association of State Student Grant and Aid Programs (NASSGAP) annual survey reports at [www.nassgap.org](http://www.nassgap.org).

#### **Indicator 11: Student Borrowing**

NCHEMS at [www.higheredinfo.org](http://www.higheredinfo.org)

#### **Indicator 12: Earnings and Income by Education Level**

Hourly wage data are from *Maine Employment Outlook to 2018*, August 2010, <http://www.maine.gov/labor/cwri/oes.html>.

Annual earnings data for 2000 are from the Maine Department of Labor at [www.maine.gov/labor/cwri/publications/pdf/EducationUnemploymentEarnings.pdf](http://www.maine.gov/labor/cwri/publications/pdf/EducationUnemploymentEarnings.pdf).

2009 data are from the Census Bureau's American Community Survey.

For educational attainment by county, see *The Goal* section on previous page. Per capita income estimates for 2009 are from the U.S. Census at [www.census.gov](http://www.census.gov) and for 2010 are from the interactive tables from the Bureau of Economic Analysis at [http://www.bea.gov/iTable/index\\_regional.cfm](http://www.bea.gov/iTable/index_regional.cfm).

#### **Indicator 13: Unemployment by Education Level**

U.S. Census Bureau, American Community Survey.

#### **Indicator 14: Other Benefits of Higher Education**

United Way Common Good Forecaster: <http://www.measureofamerica.org/%20forecaster>



# Maine Compact for Higher Education— Fact Sheet

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. For decades, Maine has had the lowest per capita income of any state in the region, and the lowest education attainment level. We know 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. In response to this critical issue, the Maine Community Foundation and the Maine Development Foundation created the Maine Compact for Higher Education in 2003 to dramatically increase Maine’s educational attainment levels. The Compact recently completed a strategic plan, and recommitted to its core mission. One of the Compact’s priorities continues to be administration of the Alfond Scholarship Foundation to support the Harold Alfond College Challenge program.

**Vision:** Maine’s workers are among the best educated and highly skilled in America.

**Core beliefs:** Education achievement is the catalyst and foundation for individual opportunity, sustainable economic growth, and a high quality of life.

Earning a college degree is a right and responsibility of all Maine people.

**Mission:** The Compact’s mission is to champion higher education attainment.

**Goal:** The proportion of Maine’s workers who have earned a college degree or postsecondary certificate will exceed the New England average by 2020. Our specific target is to increase the percentage of Maine’s working-age population (ages 24-65) with an associate, bachelor’s, or graduate degree from 39% today to 56% by 2020—this will require an additional 40,000 degree-holders above projections. The Compact uses the word ‘college’ to include postsecondary educational credentials, including non-degree professional certificates and associate, bachelor’s and graduate degrees.

**Strategies:** are to engage the business community, advocate for strategic investments in higher education, and support programs of innovation and excellence.

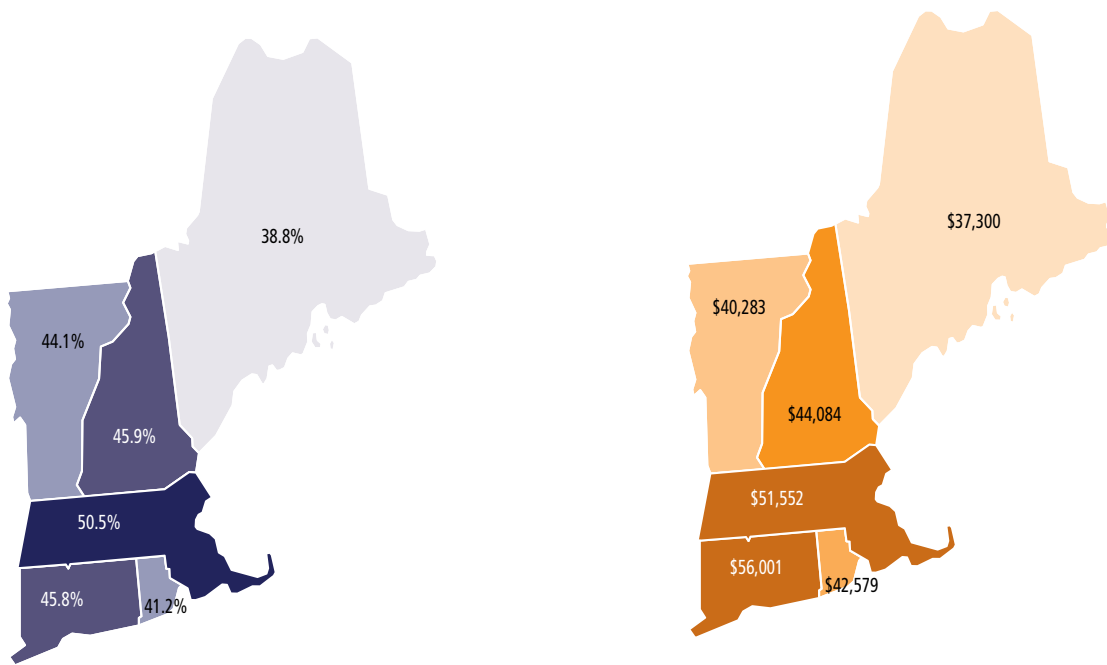
**Organization:** The Compact’s board of directors is composed of business leaders and education stakeholders from throughout the state. Joseph Foley, senior vice president and chief marketing officer of Unum, is chair of the Board of Directors. The Compact is an independent, non-profit corporation with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

# Acknowledgements

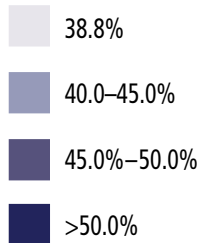
We thank James Breece of the University of Maine System and Jean Mattimore of the Maine Community College System for their valuable suggestions for reformatting this year's report. Thanks for their advice and sharing of data for earlier versions of the report to the Maine Department of Labor, Martha Johnston of the Finance Authority of Maine, Meredith Jones of the Maine Community Foundation, Laurie Lachance of the Maine Development Foundation, Harry Osgood and Donna Weeks of the Maine Department of Education, David Silvernail of the University of Southern Maine, and Philip Trostel of the University of Maine. Thanks to Colleen Quint of the Mitchell Institute for valuable suggestions on earlier drafts of this report, and to Dianne Heino of the Maine Development Foundation for editing the final report each year. Thanks to Mitchell Institute interns Lauren Dupee, Alison Ruane, Sophie Springer, Elaine Tsai, Emily Walker, and Aisha Woodward for their work on earlier editions of this report. Thanks to Emily Brackett and Visible Logic for the design.



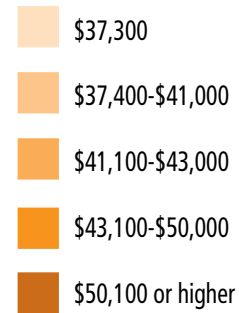
**EDUCATIONAL ATTAINMENT (PERCENT OF ADULTS AGES 25-64 WITH AN ASSOCIATE DEGREE OR HIGHER) AND PER-CAPITA INCOME IN NEW ENGLAND STATES, 2010**



**% With Associate Degree or Higher**



**Per Capita Income**



**MAINE COMPACT FOR HIGHER EDUCATION**

15 Monument Square, Portland, Maine 04101  
 207-347-8638    [www.collegeforME.com](http://www.collegeforME.com)

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