



# JOBS AND OPPORTUNITY: The Power and Potential of Maine's Community Colleges



## REPORT OF THE GOVERNOR'S COMMUNITY COLLEGE ADVISORY COUNCIL



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## ACKNOWLEDGEMENTS

The work of the Governor’s Community College Advisory Council has involved a great many individuals who have contributed significant amounts of time, thought, and expertise to helping ensure that Maine’s community colleges are prepared to meet the state’s education and workforce needs.

We are deeply grateful to Governor Baldacci for leading the effort to establish Maine’s community colleges in 2003 and—having laid that groundwork—for recognizing the need to ensure the colleges’ ability to meet their mission of providing broad and affordable access to higher education for Maine citizens and a skilled workforce for the state’s economy.

The Governor’s Community College Advisory Council was comprised of leaders from the private sector, organized labor, and economic development. This group of talented Mainers brought to their meetings enormous reserves of energy and enthusiasm for building a better Maine. They also shared a firm belief that educational and economic opportunities are inextricably linked.

We would like to thank all those who shared their expertise and experiences with the Advisory Council. Their presentations helped shape this report and our final recommendations. In addition, this report has been informed by the work of a number of individuals and organizations committed to improving Maine’s economy and its educational systems. Those individuals and organizations are listed on page vi of this report.

The Council also wishes to thank Helen Pelletier, writer and research consultant, who prepared this report. We appreciate her skills and careful diligence in reviewing extensive research, presentations, and dialogue to so ably reflect the Council’s sentiments.

We are also grateful to Alice Kirkpatrick, Ellyn Chase, and other members of the MCCS staff who provided ongoing support to the Advisory Council.

Last, but certainly not least, we thank Dr. John Fitzsimmons, president of the MCCS, for his strong vision, leadership, and advocacy. He has guided the System through a period of remarkable change and progress over the past 16 years, and he has assembled a strong team of leaders who share his commitment to providing educational opportunity to the people of Maine. We deeply appreciate their dedication to the community colleges and to our state.



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## EXECUTIVE SUMMARY

Maine's community colleges and its predecessors were created to respond to dramatic changes in the state's economy and in the lives of its people.

The state's first vocational technical institute was established in 1946 to confront the challenges posed by an economy in transition from wartime to peace. Forty years later, as technology reshaped the workplace, the institutes became technical colleges. In 2003, the technical colleges were changed to community colleges to help address Maine's persistently low college-going rates and to ensure broad access to college for all those in Maine who aspired to it.

In 2006, as Maine continues to undergo a dramatic transformation to a knowledge-based economy, the community colleges have become a crucial part of Maine's educational continuum—a starting place for those who historically have not gone on to college but now view higher education as a necessity and a vital source of skilled workers for Maine's evolving industries.

An economy fueled by technology and information demands a highly skilled and educated workforce. Higher education, once required by relatively few in our state, is now nearly essential for success in Maine's workplace. But almost two-thirds of Maine adults—some 455,000 working age individuals—do not hold a college degree. And approximately 50 percent of the state's high school graduates—some 7,000 young people—leave high school with no immediate plans to enroll in college. They enter a changed and changing world of work with limited options and little hope for a secure and prosperous future—an alarming prospect for them and for the state.

While Maine's economy is changing at a rapid pace, Maine's workforce is not. The state's population is growing slowly, getting older, and remaining relatively homogeneous. An estimated 80 percent of those who will be working in Maine a decade from now are already on the job. Many of them entered a world of work that required a different set of skills than those demanded by the current economy.

In order to compete, Maine must dramatically increase the educational attainment levels of its citizens. Already, many of Maine's core industries face significant shortages of skilled workers, a shortage that is slowing the growth of the state's economy and dimming its prospects for the future. This skills gap also means Mainers are seeing thousands of good jobs pass them by.

Maine's community colleges have the potential—if not the current capacity—to bridge these large and troubling gaps. By offering an affordable and accessible gateway to higher education for thousands of low- and moderate-income Maine people, the community colleges have experienced dramatic growth in just three years. Clearly, Maine people—buffeted by job losses and the realities of a changing economy—recognize that they must upgrade their skills in order to find good paying, reliable work.

But that growth has brought the colleges to a critical juncture: nearing or exceeding capacity in many of their most popular programs; straining facilities and services; and struggling to meet the demand of many key Maine industries for skilled workers.

Like the state's economy, Maine's community colleges are at a major crossroads, poised for growth but lacking critically important resources to realize their full potential.

Recognizing the importance of the community colleges to Maine's economy and to the future prosperity of Maine citizens, Governor Baldacci called for the appointment of an independent Advisory Council of state leaders to examine future workforce and educational demands and the capacity of the community colleges to meet those demands.

Among the key findings of the Governor's Community College Advisory Council:

“Higher education is now nearly essential for success in Maine's workplace. But almost two-thirds of Maine adults—455,000 individuals—do not hold a college degree, and some 7,000 young people leave high school each year with no immediate plans to enroll in college.”

**■ Maine has a shortage of skilled workers in virtually every major industry.** Maine’s community colleges—and other schools in the state offering similar programs—are training only about one-third of the skilled workers needed to meet the anticipated employment needs of many of Maine’s largest industries through the year 2012. In 2006 alone, Maine’s economy is projected to be short 4,200 workers with the kind of skills acquired at the community college level. At a median wage of \$32,000, this represents approximately \$134 million in annual wages. For Maine companies, this translates into lost business opportunities, higher operating costs, and stalled economic growth. For Maine people, it means missed job opportunities and the lost wages associated with good-paying jobs. This skilled worker shortage is having an impact on industries key to Maine’s economy and quality of life, among them health care, business, hospitality, security, and construction.

**■ Maine’s community college system has reached capacity.**

In just three years, enrollment at Maine’s community colleges has grown by 42 percent—an additional 3,162 more college students—while state funding has increased just 5.7 percent and staffing levels have remained flat. The colleges are at or near capacity in many of their programs, services, and facilities, at a time when a wave of new students is expected to land at their doors. Currently, Maine is able to enroll only about 1 percent of its population in its community colleges, making it the smallest community college system in the nation and well below the national average of 3 percent. Maine’s low college-going rates are due in large part to the small size of its community colleges.

**■ Student demand for access to the community colleges will grow dramatically.**

Student trends indicate that Maine’s community colleges will continue to experience dramatic increases in demand for its programs and services. This demand will be fueled by greater numbers of high school graduates seeking higher education—the result of statewide college readiness and early college efforts; more working and displaced adults turning to college to upgrade or retool their skills; efforts by Maine’s adult education system to help thousands more adult learners transition into college; and a strategic decision by Maine’s university system to refocus its mission and reduce associate degree offerings. Maine’s community colleges must be prepared for this influx or risk creating a new barrier—a roadblock to college—for these students.

**■ Maine can shape its own economic future by aligning economic and workforce development.**

Maine is making major investments in research and development and in other strategies to expand Maine’s economy, yet many core industries and those targeted for growth already face worker shortages. The state’s efforts will be hindered if the workforce side of the equation is not addressed. Strategic investments in a high-skilled workforce are critical to business expansion and central to the success of R&D efforts.

**■ Maine’s community colleges deliver a high return on investment.**

Ninety-five percent of MCCS graduates are placed in jobs or continue their education after graduating from one of the System’s seven colleges. Of those who enter the workforce, 96 percent find jobs in Maine. Several comprehensive analyses have found that taxpayers see their investment in community college students returned, within seven to ten years of graduation through the increased income and sales tax revenues generated by graduates.

“Ninety-five percent of MCCS graduates are placed in jobs or continue their education after graduating from one of the System’s seven colleges. Of those who enter the workforce, 96 percent find jobs in Maine.”

## Recommendations

In light of these findings, the Governor's Community College Advisory Council recommends that the State commit to a goal of achieving the national average in community college enrollment—30,000 credit students (from 12,500 today)—within ten years.

To achieve that goal, the Council recommends:

1. **A \$20.3 million initial State investment, for 4,000 additional college students.**

This initial investment of \$20.3 million beginning in FY2008/09 would enable the community colleges to make a significant step toward the goal of 30,000 credit students. These funds would support an additional 4,000 community college students—for a total of 16,500 credit students—and allow investments in the following priorities recommended by the Council:

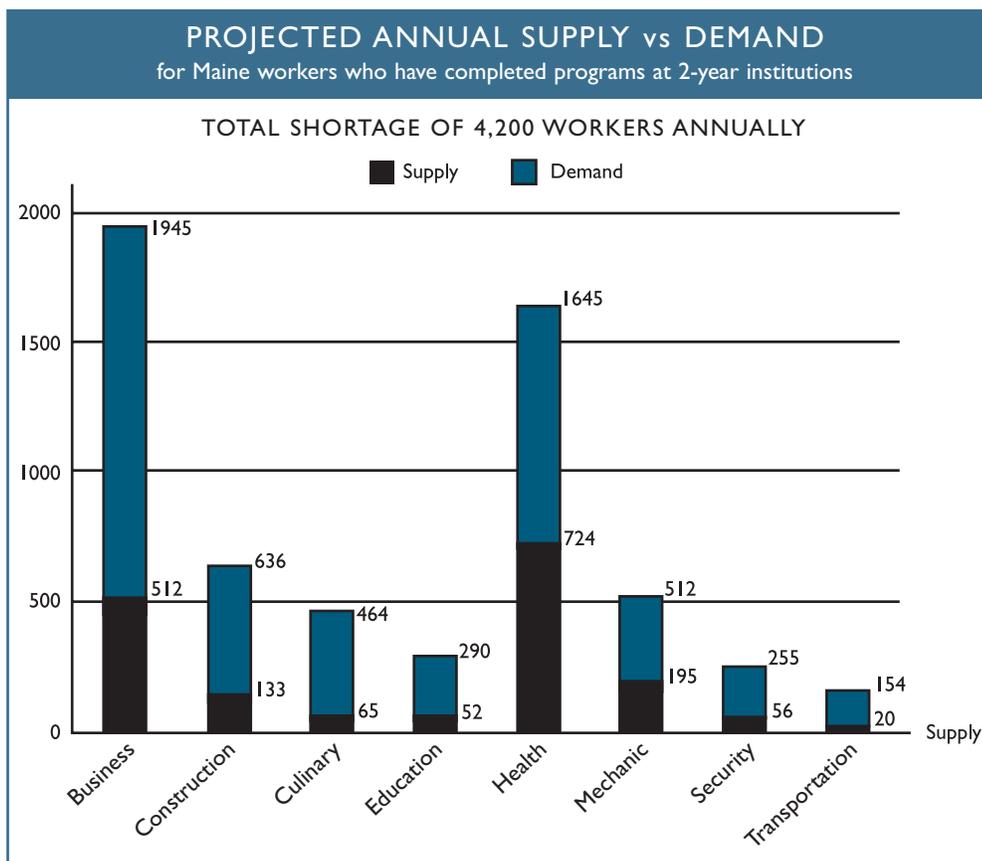
- a. **Support occupational and transfer mission of the M CCS.** The Advisory Council recognizes and stresses the importance of providing comprehensive programming that provides broad access to college for students with diverse needs and aspirations. At the same time, the Council wishes to emphasize the importance of the unique workforce mission of the System and the fact that Maine employers are dependent on that mission. Because the M CCS is the sole provider of a majority of the occupational programs available in the state and because these programs are, by their nature, more costly to operate and maintain, the Council stresses the importance of adequate State funding to support occupational programs, to ensure an ample supply of skilled workers for Maine's economy.
- b. **Ensure affordable access.** Finances are the number one barrier to college, and reducing barriers is at the heart of the community college mission. Keeping Maine's community college tuition affordable for low- and moderate-income citizens and increasing funds available for scholarships must be a top priority.
- c. **Provide convenient geographic access.** Bringing community college offerings to regions without reasonable access is crucial to helping more working adults access college. The System should broaden its outreach and—where possible—pursue opportunities to share facilities with its partners.
- d. **Help more high school students go to college.** The System's Early College for ME program should be made available to every public high school in the state to help Maine achieve its goal of sending at least 70 percent of high school graduates to college. This innovative program has a proven track record and can help raise the educational bar for future generations.

The Maine Community College System can be—must be—a major catalyst in helping the state address dramatic changes in the economy and in the individual lives of Maine citizens.

e. **Bring customized training to more Maine employers and expand offerings to support entrepreneurship.** MCCS customized training should be made available to more Maine businesses in order to fuel business growth and job creation. This should include an expansion of the Maine Quality Centers program which has helped companies all over the state expand their operations in Maine. It should also include continued growth in the courses and services offered to small business owners and entrepreneurs.

2. **A major capital improvements bond issue to update and expand facilities.**

To accommodate current and future growth and ensure a high quality learning environment for students, the Council recommends a major capital improvements bond issue be put forward to the people of Maine in the fall of 2007. The bond issue should include funds to update and maximize the use of current facilities and, where necessary, add new facilities to accommodate enrollment growth—for an amount to be determined by the Maine Community College System Board of Trustees.



Source: MCCS Gap Analysis, 2006.

## PRESENTERS

The following individuals shared their expertise with the Advisory Council. Their presentations and insight helped shape this report.

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## CONTRIBUTORS

This report has also been informed by the work of a number of individuals and organizations committed to improving Maine's economy and its educational systems. Among those whose work is cited here:

Laurie Lachance and the Maine Development Foundation  
The Maine Compact for Higher Education  
The Maine State Planning Office  
The Maine Department of Education  
The Maine Department of Labor

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## INTRODUCTION

In 2003, Maine became the 48th state in the nation to establish a community college system, one designed to build on the strengths of its predecessors, the state's vocational technical institutes and technical colleges.

By endorsing the vision of its leaders and establishing an affordable and accessible community college system, Governor John Baldacci and Maine's 121st Legislature recognized that such a system was essential to ensuring a prosperous future for Maine. They were convinced that a community college system had the potential to help turn around the state's persistently low college participation rate, offer Maine's citizens opportunities to prepare for the new jobs of the state's rapidly changing economy, and provide skilled workers for Maine business and industry.

### If you build it, they will come

The vision of those who established the Maine Community College System (MCCS) has proved remarkably accurate.

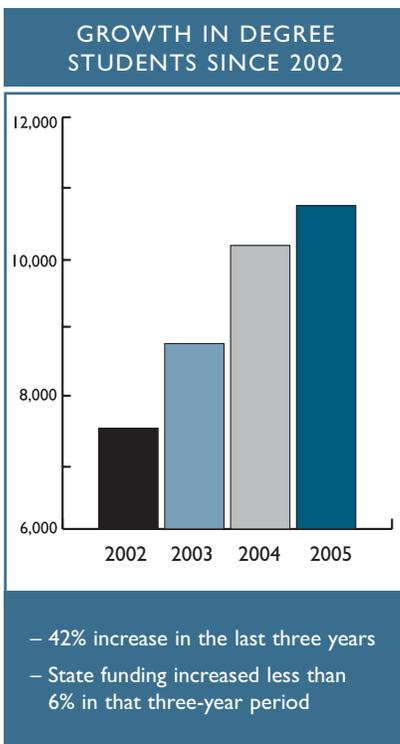
Offered an affordable, accessible, and convenient gateway to higher education, Maine citizens have seized the opportunity to obtain new skills and build a more secure future. Since the community colleges were established:

- Enrollment of degree students has increased 42 percent to 10,680 in 2005.
- The number of students enrolling directly from high school has increased 50 percent, to 1,881 in the fall of 2005.
- Over 2,000 community college transfer students were enrolled in one of Maine's public universities in 2005, a 25 percent increase in three years. Almost overnight, the state's community colleges have come to be perceived as an affordable, accessible bridge to a four-year baccalaureate degree.
- Demand for the System's occupational programs—those that prepare community college students for immediate employment in Maine's workforce—has grown by 18 percent in three years.

The importance of all of this growth? More Maine people with the skills they need to compete for good jobs with good benefits; more skilled Maine workers to address existing worker shortages in many of the state's core industries and to fuel business expansion; and an expanded tax base.

### With growth has come challenges

Although the dramatic growth of Maine's community colleges has resulted in important gains for the state and its citizens, the growth has not been without challenges. Established in 2003, as the state struggled to emerge from the 2001 recession, Maine's community colleges have received few new dollars to fund this rapid expansion; in fact, state funding for the System has increased by only 5.7 percent while enrollment has jumped 42 percent.



The implications are significant:

- Full-time staffing levels have remained virtually unchanged. The same number of staff are educating and supporting some 3,000 additional students. If those students were located on one campus, it would be the third largest college in Maine.<sup>1</sup> As a result, many of the programs offered by the MCCS are now at or near capacity, with little room for additional students. And the System’s ability to provide academic support services to its students—many of whom enter college needing some level of support—has been stretched thin.
- The System’s physical capacity has also been strained. When it was established in 2003, the community college system projected that it would be able to accommodate some 10,000 degree-seeking students by 2010, an increase of 2,500 students. By the fall of 2005, the colleges had already enrolled 10,680 students. These additional students have placed new demands on classrooms, libraries, science and technology laboratories, and other facilities. At the same time, the campuses face approximately \$50 million in “mandatory and essential” repairs and improvements needed for existing facilities.<sup>2</sup>

Maine’s community colleges—off to a remarkably promising start—are already at a critical juncture: nearing or exceeding capacity in many of their most popular programs, straining facilities and the ability of staff to deliver high quality programs and services, and struggling to meet the demand of many key Maine industries for skilled workers.

## A call to action

Aware of these challenges and of Maine’s critical need for a strong community college system, Governor Baldacci called upon the MCCS in February 2006 to appoint an independent Advisory Council of leaders from the private sector, organized labor, and economic development to analyze Maine’s current and future workforce needs and how Maine’s community colleges could be best prepared to meet them. As part of its charge, the Governor’s Community College Advisory Council was asked to:

- Analyze current and future student demand for MCCS programs and services;
- Analyze current and future workforce needs of major industry sectors and the capacity of the community colleges to meet those needs;
- Examine the community colleges’ role in the state’s economic development and job creation efforts; and
- Review the goals of other education partners to ensure that the Advisory Council’s findings support and complement the work of those partners.

The Advisory Council met five times, in day-long meetings, between March and July 2006. The meetings included presentations by industry representatives; government leaders including the state economist and the commissioners of education and economic and community development; the chancellor of the University of Maine System; MCCS staff; and others.<sup>3</sup> In addition, the Advisory Council’s work was supported by research conducted by MCCS staff and by Strategic Marketing Services of Portland.<sup>4</sup>

The result of this work is the report before you, containing findings and recommendations for the Governor and MCCS Board of Trustees on how Maine can strengthen its community colleges and, in the process, the future economic prosperity of the state.

“Many of the programs offered by the MCCS are now at or near capacity, with little room for additional students.”

# THE MAINE COMMUNITY COLLEGE SYSTEM: AN OVERVIEW

“Community colleges provide a critical entry point to higher education and economic opportunity for Maine citizens, many of whom have never considered higher education a viable option.”

The foundation of Maine's community colleges was laid 60 years ago when the economies of both Maine and the nation were struggling to make the transition from war to peace.

Thanks to the GI Bill of Rights—which was designed to ward off widespread unemployment and postwar depression—the Maine legislature in 1946 established the Maine Vocational Institute (soon after changed to the Maine Vocational Technical Institute or MVTI) in Augusta, enabling returning Maine veterans to acquire the occupational skills they needed to reenter the workforce.

Both the GI Bill and the creation of MVTI were investments that paid remarkable dividends. The GI Bill enabled millions of veterans to receive educational benefits that would otherwise have been unavailable to them. As a result, the number of degrees awarded by U.S. colleges and universities more than doubled between 1940 and 1950.

In Maine, the MVTI soon moved to larger facilities at Fort Preble in South Portland, the current home of Southern Maine Community College. As Maine business and industry came to view the school as a reliable source of skilled workers, the demand for similar workforce training in other parts of the state resulted in rapid expansion. By 1969, five additional VTI's had been established, those presently in Presque Isle, Auburn, Bangor, Calais, and Fairfield.<sup>5</sup> In 1994, the legislature established the seventh technical college, to provide increased educational opportunities in York County, the second most populous county in the state.

## An ongoing evolution

The colleges have evolved in significant ways over the past 60 years in response to dramatic shifts in the state's economy and to the individual needs of Maine citizens.

In 1989, Maine's legislature voted to convert the vocational technical institutes to technical colleges. In doing so, the legislature sought to clarify the post-secondary missions of the institutions and to recognize that economic forces were transforming the state's workplace, demanding increased skill levels and education.

In 2003, largely in response to Maine's persistently low college-going rates, the legislature voted to broaden the mission of the colleges. In that year, the technical colleges became community colleges, designed to provide an affordable, accessible college option that would enable more Maine citizens to prepare for high-skill careers or transfer to four-year colleges and universities.

Today, the community colleges are designed to provide a critical entry point to higher education and economic opportunity for Maine citizens, many of whom have never considered higher education a viable option.

The System currently serves over 20,000 credit and non-credit students each year; more than 97 percent of them Maine residents. It offers more than 300 associate degree, certificate, and diploma options. A majority of its core occupational programs are the only ones of their kind offered in Maine, and many of the state's employers are dependent upon the System's seven colleges to provide highly skilled workers.

## Maine's community colleges play a unique role in higher education

Maine's community colleges share a fundamental and unique mission: to provide broad and affordable access to higher education for Maine citizens and a skilled workforce for the state's economy.

As the System has evolved from vocational technical institutes to technical colleges to community colleges, it has remained true to that mission. Today, 95 percent of MCCA graduates are placed in jobs or continue their education after graduating from one of the System's seven colleges. Of those who enter the workforce, 96 percent find jobs in Maine, providing Maine business and industry with the skilled workers they need to expand and prosper.

The students who enroll in Maine's community college come from diverse academic and socioeconomic backgrounds, and they come to the colleges for a host of reasons. While some come with prior college experience and even with college degrees, many others who rely on the community colleges face significant barriers to enrolling in higher education.

The average age of an MCCA student is 27, and many are workers who have been displaced from a job. Most are low- or moderate-income, and a good number work more than one job. Some are the first in their family to attend college. Some are GED recipients, the graduates of adult education programs. Some will graduate from high school without a strong sense of their ability to be successful in college. Others are the single parents of small children. Some are immigrants, for whom English is not their first language.

For a great many Maine people, finding the time, money, confidence, and support they need to enroll in higher education can be difficult and discouraging. And for many, the state's seven community colleges make it possible to access higher education.

Maine's community colleges are meant to offer a diverse population the programs and services they need to enter and be successful in higher education and the workplace. To that end, the System is designed to provide post-secondary educational options that are affordable, accessible, and responsive—to both the people of Maine and to the state's economy. These attributes—affordability, accessibility, responsiveness—are at the heart of the System's mission.

### Affordability

Maine's community colleges offer the lowest college tuition in the state: \$78 per credit hour, making the average annual tuition and fees for a student attending one of the seven colleges \$2,800 in 2006/07. Even at this price, 78 percent of full-time MCCA students receive financial aid, an indication that the majority of students who turn to Maine's community colleges are low- to moderate-income and depend on the System's low tuition to make college possible. Average tuition and fees for Maine's university system—the next most affordable option—are approximately twice those of the state's community colleges.

### Accessibility

Maine's community colleges are designed to be accessible for those in all parts of the state and for those needing support to be successful in higher education.

Ninety-two percent of Maine's population lives within 25 miles of one of the community colleges or their eight off-campus centers. These locations—which include higher education centers in communities from Bath to East Millinocket to Houlton—make it possible for those already in the workforce to upgrade their skills. At Southern Maine Community College, which has doubled its enrollment in just the past three years, 23 percent of students take courses at off-campus sites or through distance learning.

“Our company would not exist if the state's community colleges didn't exist. Every single person in our shop is a graduate of a Maine community college.”

~ Bruce Tisdale

President, Mountain Machine Works, and Member, Governor's Community College Advisory Council  
Auburn

“Maine’s community colleges offer the lowest college tuition in the state: \$78 per credit hour, making the average annual tuition and fees for a student attending one of the seven colleges \$2,800 in 2006/07.”

The distances that many students must travel to attend one of Maine’s community colleges are not always measured in miles. Many need some degree of support to undertake the journey to and through higher education, and so the colleges offer academic support services, remedial courses, child care facilities, financial aid, counseling, and courses that are offered at times and locations that meet the needs of those juggling both family and work commitments.

Since becoming community colleges, the System has developed targeted programs designed to offer a variety of students clear pathways to higher education.

**High School to College.** To help Maine high school students who have traditionally not gone to college make the transition to higher education, the MCCS has established the Early College for ME program. Designed for students who are undecided about college but have the potential to succeed in higher education, the program offers support and advising, early testing for college readiness, college courses for high school seniors, and scholarships to the community colleges. Of the ECforME students who entered college in the fall of 2003 and 2004, 71 percent were still enrolled, had graduated, or had transferred to a four-year degree as of June 2005. By 2008, the program aims to offer its services to all publicly funded secondary schools in Maine and to serve some 2,000 students each year, up to 1,000 of whom will be enrolled in one of the seven community colleges.

**Bridges to the baccalaureate.** In three years, the number of MCCS transfer students enrolled in the university system has increased 25 percent, to 2,100. To build on this success, the MCCS and the university system have created AdvantageU. This new program guarantees admission to one of the state’s seven public universities for those who complete an associate degree in liberal studies at a Maine community college. By building on strong transfer agreements that exist between the two systems, AdvantageU is expected to further increase the number of community college students continuing their education at a Maine university.

**Partnerships with adult education.** The community colleges work in close partnership with adult education programs across the state to ensure that adult learners—among them GED recipients and a growing number of adults for whom English is not their first language—have the skills and support they need to succeed in higher education. By aligning their resources and expertise, the community colleges and the adult education community are working to build an effective and cost-efficient pathway to college for adults who need additional preparatory work in order to enter and be successful in college.

### Responsiveness

In the same way that Maine’s community colleges are designed to respond to the needs of a diverse student body, they also are structured to respond to the needs of business and industry.

Founded to provide occupational education and training to Maine citizens, the System remains focused on that goal. More than two-thirds of its degree students are enrolled in its career and technical programs, which are designed to meet the specific needs of both local and regional economies as well as the state’s overall economy. These programs are developed in consultation with local employers and are adapted, on a regular basis, to meet changing industry needs and workforce demands. Just recently the System has added or expanded programs in education, automotive, machine tool, and adventure tourism. And partnerships with the health care industry, along with special funding from the State, have made it possible for the System to expand nursing and other allied health programs across the state.

Through its Business and Industry Divisions, the colleges offer customized education and training each year to thousands of employees at companies across the state. Last year, the seven colleges served over 130 employers, enabling them to upgrade the skills of nearly 4,000 employees.

The MCCC Maine Quality Centers offer customized training for new and expanding businesses, at no cost to either the employer or trainees. Designed as an economic development incentive, the Quality Centers program has funded projects at some 200 Maine businesses to assist them in hiring and training qualified workers. These services have resulted in an estimated 10,600 new full-time jobs across the state with an average hourly wage of \$10.91 plus benefits. The program has helped Maine businesses expand in all of Maine's 16 counties and has an estimated return on investment of just 12 months.

If Darlene Foster were a student at NMCC today (see profile on pg. 8), she would not be alone in her desire to strike out on her own. A recent MCCC survey of working age adults who do not have a college degree found that a quarter of them were very interested in starting their own business. And many current MCCC students share this interest. In response, and to help fuel small business development, the community colleges have expanded their entrepreneurial courses and services, offering classes in small business development and management along with campus-based business incubators.

In short, Maine's community colleges are uniquely positioned to meet the needs of Maine citizens and Maine businesses. They have enormous potential—much of it not yet realized—to provide educational opportunities to thousands of Mainers who do not yet have a college degree and to help Maine's economy build and retain quality jobs.

“Founded to provide occupational education and training to Maine citizens, the System remains focused on that goal. More than two-thirds of its degree students are enrolled in its career and technical programs.”

## TRACY HALL

### From high school to college with support and encouragement



*Tracy plans to graduate with a bachelor's degree from UMA in the spring of 2007, just four years after she started at CMCC.*

Tracy Hall is a determined young woman. While a student at Lisbon High School, she enrolled in the early childhood occupations program at Lewiston Regional Technical Center. From an early age, she knew she wanted to work with children. And in spite of a mild case of cerebral palsy that has caused her some learning disabilities, she also knew that she wanted to go to college. She just wasn't quite sure how to do that.

In high school, Tracy was selected to participate in the MCCC Early College for ME program, which provided assistance with college and financial aid applications and helped her, as she says, “narrow down my choices.”

With a \$1,000 scholarship from the Early College for ME program, Tracy enrolled at Central Maine Community College in the fall of 2003 to study early childhood education. “I loved it,” she says of the college, citing a supportive staff and small campus atmosphere. By the time she graduated with an associate degree two and a half years later, Tracy had been elected treasurer of the student senate. Working with a learning consultant and academic advisor at CMCC, she had also been successful in transferring her CMCC credits to the University of Maine at Augusta, where she is now enrolled full time, studying mental health and human services.

Tracy plans to graduate with a bachelor's degree from the university in the spring of 2007, just four years after she started at CMCC. She is the first in her family to complete a college degree, and she is looking forward to a career as a counselor or behavior specialist, . . . in Maine, where all of her proud family resides.

## DARLENE FOSTER

## The benefits of “educating a local person”



*I came out of school with an education that allowed me to go to work in my community and have an income that allowed me to contribute substantially to my family. It changed our lifestyle.*

Darlene Foster's story begins like a lot of other stories. Fresh out of high school she enrolled in college. But she was, as she describes it, “young, immature, and undirected,” and she “fell in love, got married, left school, and had a couple of kids.”

As a young mother working as a receptionist in a health care facility, she started to find direction. Inspired by a young nurse who worked in the same facility, she enrolled in the licensed practical nurse program at what was then Northern Maine Vocational Technical Institute.

It was a strain financially, she recalls, “but I came out of school with an education that allowed me to go to work in my community and have an income that allowed me to contribute substantially to my family. It changed our lifestyle.” And her degree would change her life and the lives of many others in Aroostook County.

Soon after graduating from NMVTI, Darlene enrolled at the University of Maine at Presque Isle and became a registered nurse. She worked as a nurse for the next 15 years, the last five in a home health agency—the only one in Aroostook County.

In 1995, she and another nurse decided to strike out on their own. There was, as she says, a great need for home care services in Aroostook County and no choice for patients.

Today, Professional Home Nursing provides home health care services to all of Aroostook County and has an annual payroll of more than \$800,000. The company has 20 full- and part-time employees, most of them health care professionals: nurses, physical therapists, and occupational therapists. Over the years, significant numbers of Darlene's staff have been graduates of Northern Maine Community College's nursing programs. And NMCC students frequently rotate through her agency to gain clinical experience.

Darlene is grateful for the solid foundation she received at NMVTI. It was, she says, “a small, demanding program that developed in the students a strong ethical basis for the delivery of care.” And, she adds, it was affordable and “offered an education in something that was really needed in this community.” As she says, “It was educating a local person who stayed,” and made a difference.

## CONTEXT AND CHALLENGES

### The Changing Face of Maine

#### An Economy in Transition

Perhaps more than any other state in the nation, Maine has been defined by its abundant natural resources. For centuries, our economy was shaped by our forests, rivers, and coastline and by the manufacturing industries fueled by those resources. What we were—a state of paper makers and textile workers, lobstermen and lumberjacks—has so profoundly shaped how we perceive ourselves that it is often difficult to comprehend that this is no longer who we are.

In 1950, one of every two jobs in Maine was a manufacturing job. Textile mills and shoe shops employed thousands of workers in Sanford and Lewiston and Waterville. By the 1960's Maine's paper mills—from East Millinocket to Madawaska to Bucksport—had made Maine the nation's leading paper producing state.

But in the 1960's, some of the mill jobs began to migrate out of Maine, to other parts of the country that were more centrally located or where operating expenses were lower. Over the past forty years, the state has continued to lose manufacturing jobs, most recently to Asia and Latin America and other parts of the world where the cost of labor is significantly less.<sup>6</sup>

Fifty years ago, half of the jobs in this state were manufacturing jobs.<sup>7</sup> Today, only about 10 percent of Maine people work in manufacturing. Between January 2000 and March of 2006, 25,000 Maine workers filed unemployment claims, the result of some 250 mass layoffs, many of them in manufacturing.<sup>8</sup> Some of those lost jobs were physically difficult, dangerous, and low wage, but thousands more of them paid well and provided excellent benefits and job security. And a great many of them required little in the way of formal education.

The majority of Maine's traditional manufacturing jobs are gone and are unlikely ever to return. With them has gone the ability of many Maine people to build a secure future, one constructed on hard work—and relatively little formal education.

#### Maine's New Economy

Maine—like the nation—continues to undergo a transition to a service- and knowledge-based economy. This shift presents enormous challenges and significant opportunities—both for individual workers and for Maine's economy as a whole. For those with few skills and little training, service sector jobs can be low wage with few, if any, benefits. However, for higher skilled workers, the opportunities are considerable.

Recognizing the need to target those industries with the greatest potential for producing high skill, high wage jobs, the state's economic development strategy seeks to support both evolving and emerging areas of Maine's economy that enjoy—or could enjoy—a competitive advantage. These include mature Maine industries such as forest products and marine related activities, evolving industries such as health care, and emerging industries, among them biotechnology, biomedical research, and financial services.

Strategic investments in research and development (R&D) are central to the state's efforts in these areas. Through the Maine Technology Institute and the University of Maine's Office of Research and Economic Development and in partnership with many private employers, Maine has supported R&D aimed at assisting mature industries in developing new products, technologies, and processes. At the same time, it has promoted R&D efforts targeted to new and innovative sectors of the economy such as composite materials and digital information.

“Between January 2000 and March of 2006, 25,000 Maine workers filed unemployment claims, the result of some 250 mass layoffs, many of them in manufacturing.”

“More than 2/3rds of the new jobs being created in our economy are in occupations that require some kind of post-secondary education... Some of the strongest demand is for workers with two-year degrees in specialized fields from community colleges.”

~ Elaine Chao  
U.S. Secretary of Labor  
May 31, 2006

The evolution of Maine's economy does not mean the end of many mature Maine industries. It will, however, mean a significant transformation of them—one that is already well underway. Nowhere is this more evident than in manufacturing. In spite of the dramatic job losses the state has experienced in its paper, textile, and shoe industries, manufacturing remains an important part of Maine's economy, providing more than 60,000 jobs in 2005.

But as with the rest of the economy, the good jobs that exist in manufacturing are, increasingly, jobs that require significant skill levels and training. While traditional manufacturing jobs are disappearing, displacing thousands of Maine workers each year, other areas of the industry—among them biotechnology, precision metalwork, and wood composites—have potential for significant growth. Some would be experiencing even more robust growth if there were more skilled workers available to employers.

### The Common Denominator: Skilled Workers

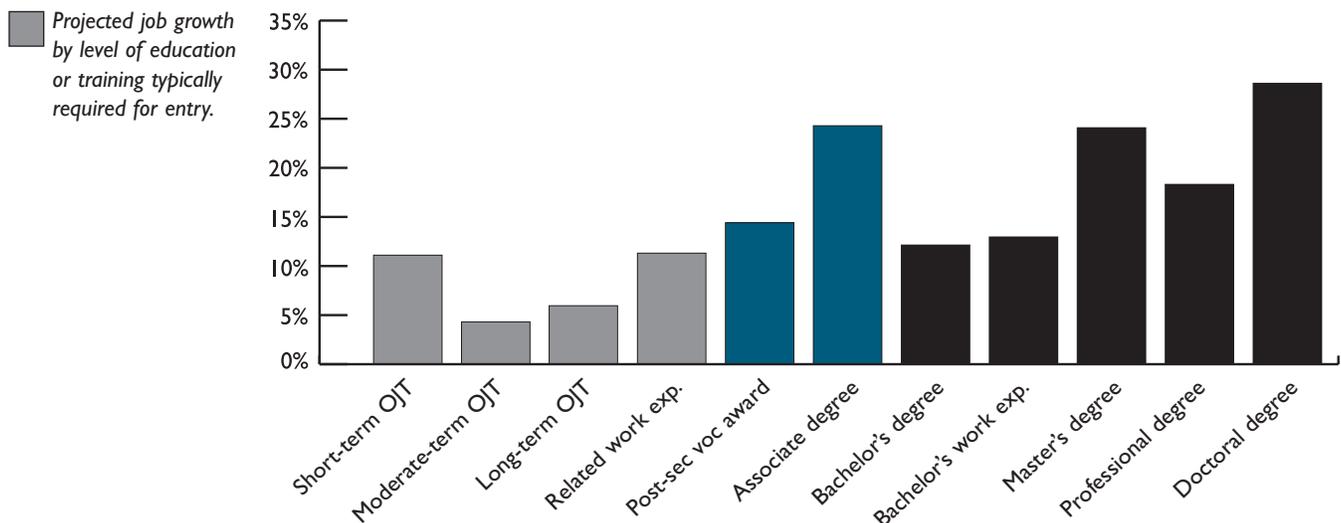
It is easy to believe that many of the jobs in a service- and knowledge-based economy of the future will require high skill levels. The majority of jobs in growing industries such as health care, education, financial services, and biotechnology require trained professionals to do the work. It is also likely that many of the jobs that emerge from investments in research and development will be skilled ones.

But as is true in manufacturing, jobs in the most traditional of trades—construction, boat building, heating and plumbing—have become far more complex in recent years. Many of these jobs now rely on cutting-edge technology to get the work done, and on workers with the skills to use that technology and to adapt continually to new work processes.

This shift toward higher skilled labor has already occurred in Maine's economy. According to the Maine Department of Labor, the number of jobs in occupations requiring some form of post-secondary education or training is expected to rise by 16 percent between 2002 and 2012, while the number not requiring education beyond high school is expected to increase by only eight percent.<sup>9</sup>

The impact of this shift is being felt by employers across the state. While the demand for skilled workers exists, a ready supply does not. In fact, the Maine Chamber of Commerce reported in 2004 that nearly 50 percent of its members were having a difficult time finding skilled workers. A recent analysis by the MCCS identified a projected annual shortage of more than 4,200 workers trained at the community college level. At a median wage of

**JOB GROWTH IN MAINE**  
is expected to be fastest among occupations requiring post-secondary education.



(OJT – On the Job Training) Source: Maine Department of Labor, Labor Market Information Services

\$32,000, this represents approximately \$134 million in annual wages, and over a ten-year period adds up to a shortage of tens of thousands of jobs.\* For Maine companies, this lack of skilled workers translates into lost business opportunities, higher operating costs, and stalled economic growth. It also means that companies must look beyond Maine's borders for skilled labor. For Maine people, the result is missed job opportunities and the lost wages associated with good-paying jobs.

The MCCC analysis found that its colleges—and other schools in the state offering similar programs—are likely to train only about one-third of the workers needed to meet the skilled employment needs of many of Maine's largest industries through the year 2012. These industries include some with significant potential for growth and the ability to have an impact on our quality of life, among them health care, business, hospitality, security, and construction.

The analysis found that Maine's economy is likely to produce more than 6,500 openings each year for workers with a certificate, diploma, or associate degree. But the MCCC—which awards more than 70 percent of these credentials—together with other schools will not be able to meet the demand for these workers and will be able to train only about 2,300 graduates in these fields. As the MCCC analysis notes: "Assuming no significant changes in conditions or performance, a gap of 4,234 openings will occur annually until some part of this equation changes."

**“Maine’s economy is likely to produce more than 6,500 openings each year for workers with a certificate, diploma, or associate degree, but Maine’s colleges will be able to train only about 2,300 graduates in these fields.”**

## AN INDUSTRY PROSPECTIVE

Presentation to Governor's Community College Advisory Council, April 3, 2006.



Since 1995, Maine has added 10,000 new construction jobs; that's a total of 31,000 construction jobs or about 5.5 percent of the total employment in Maine. The Department of Labor projects that between 2002 and 2012 construction will see a job growth of 2.6 percent, or about 130 jobs per year. But the real news is the number of workers needed to replace the workers leaving the workforce: projected to be 750 per year.

The average age of a construction worker in Maine is around 48, which is a reflection of our state's aging population. So we need to retain those aging construction workers already in the workforce and attract new people to the industry to compensate for the anticipated retirements.

Construction employment continues to be a growth area for the economy, but attracting and retaining skilled workers is a challenge for our industry. Adding to the challenges is the fact that today's construction jobs are much more demanding than they were a generation ago. Today's and tomorrow's workers are expected to have state-of-the-art skills and to be knowledgeable about safety requirements, building code requirements, up-to-date electronics, and to be computer literate—both in terms of being able to use computer-operated equipment and to communicate and manage through the use of technology in the field. Success in construction careers, as with many other industries, depends on access to ongoing skills training, especially in the soft skills of communication and leadership.

~ Jeffrey Ohler

President, Associated Constructors of Maine  
President, H.E. Callahan Construction Company  
Auburn

\*The full MCCC analysis is available on the website of the Maine Community College System: [www.mccc.me.edu](http://www.mccc.me.edu). A summary is included in the appendix to this report.

Maine's health care system offers a case in point. Already taxed by a serious shortage of qualified workers, the industry expects to see dramatic increases in demand for registered nurses, licensed practical nurses, and medical assistants and other paraprofessionals. Maine's community colleges are one of the state's top producers of health care workers. In fact, each year the System graduates about one third of all new registered nurses in the state. But last year, the System received nearly 1,800 more applicants for its health programs than it could enroll.

The student and employer demand exists for these programs—and for many others. The capacity to meet the demand does not.

## The unchanging face of Maine

### Demographic Trends and Realities

Although Maine's economy continues to change at a rapid pace, Maine's workforce does not. The state's population is growing slowly, getting older, and remaining relatively homogeneous. These trends pose a series of pressing challenges for the state.

Over the next 25 years Maine's population is projected to grow about 10 percent, while the U.S. population as a whole will grow about 30 percent. According to one estimate, this means that 80 percent of those who will be working in Maine a decade from now are already on the job.<sup>10</sup> Many of them entered a workforce that required a different set of skills than those demanded by the current economy.

Although Maine's population is projected to grow very slowly in the coming years, it will age rapidly. Maine's median age is 40,<sup>11</sup> making it the oldest state in the nation as measured by median age.<sup>12</sup> By 2030, one in four Mainers will be 65 or older.<sup>13</sup> And, as a result of Maine's low birth rate, the number of high school graduates is expected to continue to decline over the next decade.<sup>14</sup>

This means that a large segment of Maine's population will leave the workforce in the next two decades and that there will be few new workers to take their place, grow the economy, attract new business, and provide the services and supports an aging population will require.

### The Maine Skill Set

The work ethic of Maine's people is well known and well deserved. For generations, Maine employers have been quick to praise their workers' productivity and dedication. But in an economy based increasingly on technology and information, hard work alone is no longer enough to ensure long-term prosperity—for individuals or for the economy. Education is increasingly essential, and in this regard, Maine people lag behind the competition.

Today, just 37 percent of Maine people between the ages of 25 and 64 hold an associate, bachelors, or advanced degree, compared with the New England average of 46 percent.<sup>15</sup>

In 2004, only 49 percent of Maine students enrolled in college within 12 months of graduating from high school, the lowest college going rate in New England and a decline of 5 percent between 2000 and 2004.<sup>16</sup> This means that each year, some 7,000 young Maine people leave high school and enter the world of work with limited options and little hope for a secure and prosperous future—an alarming prospect for them and for the state.

“If the team we're fielding today is the team we'll be fielding tomorrow, if we're not expecting many new players, then to compete successfully we must fundamentally upgrade the skill level and educational attainment of every member of our team.”

~ Laurie Lachance  
President, Maine  
Development  
Foundation

## RICH TECHNOLOGY INTERNATIONAL

A whole new world for Maine manufacturing



*We have community college graduates who are now lead supervisors and engineers. We're able to offer a very promising career path.*

When Yvon Richard started Rich Tool & Die in Scarborough in 1960, the small manufacturing company employed fewer than a dozen workers.

Although the company now employs 99 people, the number of tool and die makers employed by the firm has decreased dramatically in recent years, from 28 to 8. According to Allen Estes, the company's president and a 1968 graduate of Southern Maine Vocational Technical Institute, most of the tool and die work has gone overseas, much of it to Eastern Europe. "We can't compete in that arena any more," he says. He notes that the skill level in a country like Hungary is high and wages are a fraction of what they are in the U.S.

In order for the company to grow and prosper, Estes has made enormous investments in sophisticated, high-end equipment and technologies and has carved out a very specific niche for the firm. "We're a one-stop shop for companies that require certain specialized processes, especially in the machining of super alloys," he explains. "We're the only ones doing this type of work."

To reflect its growing involvement in the global economy and its heavy reliance on labor saving technology, the company has recently changed its name. Today, Rich

Technology International's employees require a sophisticated skill set to produce—among other products—turbine nozzles and blades for power plants around the world. And thanks to a new contract with General Electric, RTI is once again expanding its workforce.

But where those skilled workers will come from is of significant concern to Estes. He estimates that the company has hired between 8 and 10 Maine community college graduates over the past four years. "We'd take 20 today," he says. According to Estes, there's enormous competition for graduates of the community colleges' machine tool and integrated manufacturing programs. Estes ticks off other Maine firms and their current hiring needs. One firm needs 90 people. Another one is looking for 20. "I'd guess that the community colleges are only able to meet about 5 percent of the need right now."

"There's a concept that this work is dark, dirty, and dingy. But our facility is big, modern, and air conditioned, and just about everyone on the floor is running a computer." And, he notes, there are significant opportunities for career growth. "We have community college graduates who are now lead supervisors and engineers. We're able to offer a very promising career path."

“Economic and demographic trends combined with the state’s persistently low college going rate are already having a profound, and profoundly negative, impact on the lives of thousands of Maine people who are struggling to stay afloat in a changed economy.”

At a time when most of the best jobs in Maine require advanced training, boys and men across the state are turning away from higher education. Thirty years ago, men made up 55 percent of students enrolled in the University of Maine System. In the fall of 2005, only 38 percent of its students were male. On average, just 40 percent of 11th-grade boys in Maine met or exceeded standards on standardized tests in 2003–2004, compared with 57 percent of girls.<sup>17</sup>

Boys are not the only group to lag behind their peers. Many individuals who will need to continue their education after high school in order to secure well paying jobs—those who might not have traditionally gone on to college—are likely to need remedial assistance and academic support services once they step on campus. Nationally, 28 percent of those who entered college in 2000 took at least one remedial course. For students entering two-year public institutions that year, the percent was considerably higher; some 42 percent enrolled in at least one remedial course.<sup>18</sup>

### The Implications

Economic, financial, and cultural factors have all contributed to Maine’s persistently low college participation rate. When the state’s economy was sustained by its natural resources and manufacturing base, many Maine people were able to find decent work that did not require education and training beyond high school. But as several disturbing statistics

## CARL FISHER

### Bouncing around and finally landing



*My quality of life has improved greatly thanks to my experiences at SMCC.*

After Carl Fisher graduated from Thornton Academy in Saco in 1993, he left Maine to attend art school in Atlanta. He stayed for a year, decided art school wasn’t where he wanted to be, and returned to Maine. “I figured I could work and get by,” he says of that decision.

Over the next decade, Carl married, had a daughter, now 6, and, as he says, “bounced around.” For a number of years he drove a cab in Portland. Occasionally he worked as a cook in area restaurants. After ten years of bouncing from one job to the next, he decided he needed to make a change.

In the fall of 2004, Carl enrolled full time in Southern Maine Community College’s architectural and engineering design program. He graduated two years later, with an associate degree and a job as a mechanical designer for Neill and Gunter, an international engineering firm with operations in Scarborough.

A week after earning his degree, Carl was on the job, one that offers solid benefits and the opportunity for career advancement. In late May, as he and his wife waited for the arrival of their second child, he reflected on his journey: “My quality of life has improved greatly thanks to my experiences at SMCC. I feel like I’m in a really good place.”

indicate, that is simply no longer the case. In the current economy, the correlation between an individual's education attainment and his or her level of income is dramatic, compelling, and deeply troubling.

- ☀️ The unemployment rate for Maine workers with only a high school diploma is more than a third higher than for those with some college or an associate degree.<sup>19</sup>
- ☀️ The median household income in 1999 for a high school graduate in this country was \$42,995, for an associate degree it was \$56,602, and for someone with a bachelor's degree it was \$76,059.<sup>20</sup>
- ☀️ The implications of this wage differential are evident throughout Maine. Cumberland County, with the highest proportion of working-age adults who hold at least an associate degree, has the highest per capita income in the state. Washington and Piscataquis Counties have the state's lowest per capita income and, along with Somerset County, the lowest educational attainment.<sup>21</sup>

The burdens and challenges faced every day by individuals who have low skills and little education are also apparent throughout Maine.

- ☀️ Between 2002 and 2004, the percentage of Maine people living in poverty increased to 12.2 percent, up from 10.3 percent in the previous three-year period.<sup>22</sup>
- ☀️ Nearly 8 percent of all Maine workers hold two or more jobs, a rate higher than the national average of 5.4 percent and an indication that too many Mainers are unable to find work that allows them to make ends meet.<sup>23</sup> And this rate appears to be increasing for those with little education. According to a recent survey of working age adults in Maine who do not hold a college degree, 15.8 percent held at least two jobs, more than double the percentage of those who responded to a similar survey in 2001.<sup>24</sup>
- ☀️ In recent years, the average income of the richest 20 percent of families in Maine was \$103,785; the average income for the poorest 20 percent was \$15,975. Over the past 20 years, this income gap between the rich and poor in Maine has increased by 38 percent.<sup>25</sup>

Clearly, economic and demographic trends combined with the state's persistently low college going rate are already having a profound, and profoundly negative, impact on the lives of thousands of Maine people who are struggling to stay afloat in a changed economy. These challenges will only become more daunting and destructive if we do not face them head on.

“Maine people—buffeted by job losses and the realities of a changing economy—recognize that they must upgrade their skills and improve their education in order to find good paying, reliable work.”

# MAINE MUST BUILD A BIGGER BRIDGE

## THE DEMAND

IS GROWING FOR ACCESS TO COMMUNITY COLLEGES

### ADULT WORKFORCE

- 55,000 “very interested” in college
- A shared goal: An additional 40,000 degree holders by 2020

### HIGH SCHOOL GRADUATES

- 70% of high school seniors say they intend to enroll in college; only about 50% do.
- A shared goal: Increase college going rate from 50% to 70% by end of decade

### UMS ASSOCIATE DEGREE STUDENTS

- Phasing out of some 2-year programs



## THE BENEFITS

TO MAINE ARE NUMEROUS

- **More skilled workers** to fill current shortages
- **A more highly skilled workforce** to fuel economic growth
- **More transfer students** to earn baccalaureate degrees
- **More entrepreneurs** to start new businesses
- **Higher incomes,** lower unemployment, increased tax base, improved quality of life

Many in Maine recognize that the economic and demographic forces that are reshaping Maine will have a long-lasting impact on the state's future. They also recognize the vital importance of higher education in helping the state confront these challenges. Maine's community colleges will need to play a critical role in helping Maine achieve these ambitious goals. And they will need to be able to serve many more people for the vision to become a reality.

- Governor Baldacci has set a statewide goal of increasing the college going rate of high school graduates from 50 to 70 percent by the end of this decade.
- The Maine Compact for Higher Education seeks to increase the number of working-age degree holders in Maine to 56 percent (the New England average) by 2020, an additional 40,000 degree holders beyond current projections.

■ Maine's 120 adult education programs help nearly 3,000 people earn high school credentials each year; only 500 of those currently go on to college. The adult education community has set a goal of helping 10,000 Maine adults enroll in college over the next 10 years.

■ In its Strategic Plan, the University of Maine System has refocused its mission on baccalaureate programs and advanced degrees, with a plan to phase out many associate degree programs. In addition, UMS has set a transfer goal of 3,500 community college students transferring into the Universities within the next few years.

■ Maine's Department of Education is working to implement major reforms at the high school level to ensure that every graduating senior is college ready.

# OPPORTUNITIES

## The new economic imperative

As Maine's economy continues to undergo dramatic change, education has become an economic imperative, one as critical to the state's future prosperity as the competitiveness of its tax structure and the depth of its investments in research and development.

In order to compete in this new economy, to attract new jobs and make it possible for existing businesses to expand, Maine must address the gaps that exist in the skill levels of its workforce. An estimated 455,000 working age adults in Maine do not hold a college degree,<sup>26</sup> and each year, an additional 7,000 young adults leave high school with no immediate plans to enroll in college. For a great many of these individuals, lacking training and education, the changing economy holds few opportunities.

At the same time, the state confronts skilled worker shortages in many of its core industries, and many of the growth industries targeted by the state will require workers with significant levels of education. Lacking a supply of such workers, opportunities and prosperity will surely go elsewhere.

With adequate State funding, Maine's community colleges have the potential to bridge these large and troubling gaps.

The need for such bridges is great. So, too, is the demand.

### The Need is Clear

Maine people—buffeted by job losses and the realities of a changing economy—recognize that they must upgrade their skills and improve their education in order to find good paying, reliable work.

Working age adults in Maine who lack a college degree demonstrate a clear understanding of the benefits to be derived from higher education and of the careers most in demand in the current economy. When asked to identify the most important benefits of having a college degree, respondents to a recent survey placed better pay and better jobs at the top of the list. And when asked to name the areas of study they were most interested in pursuing, the results looked remarkably like a list of the fastest growing jobs in the state's economy, among them: health care, education, business, and computer technology.<sup>27</sup>

In the three years since the state's community colleges were established, providing them with an affordable and accessible means of upgrading their education, Mainers have begun to act on this new understanding.

### The Demand is Strong and Growing

The number of students enrolled in MCCS degree programs has increased 42 percent in three years. These students have been drawn to all areas of the System's offerings:

- Enrollment in career and technical programs has grown 18 percent in three years, to a total of 7,215;
- Enrollment in trade programs has increased 25 percent since 1999;
- Enrollment in liberal/general studies has soared 148 percent, to 3,465 students; and
- 40 percent of students who begin as liberal studies majors transfer to an occupational program.

“Since the community colleges were established three years ago, the number of high school graduates enrolling in the seven colleges has increased 50 percent.”

In many ways, the current demand is just the tip of the iceberg. Behind the more than 12,000 Maine students taking credit courses at the community colleges are tens of thousands more with a strong interest in and need for higher education.

In a recent MCCS survey of working age adults who lack a college degree, 60 percent expressed some interest in pursuing a college degree, and 20 percent of that group, about 55,000 Maine adults, indicated a very strong interest. In all, the survey found that an estimated 273,000 Maine adults who do not have a college degree have some interest in college. Roughly 57 percent of them—representing approximately 155,000 individuals—indicate that, if they were to go to college, they would likely go within two years.\*

At the same time, significant numbers of high school graduates have begun to view the community colleges as a pathway to career training and higher education. Since the community colleges were established three years ago, the number of high school graduates enrolling in the seven colleges has increased 50 percent. The System's Early College for ME program—along with other state and local initiatives aimed at supporting high school students' transition to college—are likely to result in many more high school students coming to the community colleges.

Finally, the University of Maine System has announced its intention to phase out many of its associate degree programs, a move that will enable it and the MCCS to clarify and focus on their core missions. It is a move that will likely result in a shift of some of the university's 2,500 associate degree students to the community college system.

### MCCS Can Bridge the Gaps

Clearly, there is enormous demand and need for more Maine people to enroll in higher education. Tens of thousands of our citizens—young adults leaving high school and those already in the workforce—recognize the tremendous importance of a college degree to their economic and personal well being and want to take advantage of the opportunities that exist in today's economy.

But the vast majority of these individuals will encounter significant barriers along the road to higher education. Because of Maine's persistently low college going rate, many are the first in their family to attempt college. Lacking academic credentials, they are more likely to be low or moderate income. Many work full time, some more than one job. Many have families, and a significant number are single parents.

It is no surprise then that when working age Maine adults without a college degree were recently asked what would make it easier to go to college, nearly nine in ten cited "low cost of college" and 85 percent said "financial aid." A majority of respondents also stressed that convenient location (78 percent) and convenient schedule (64 percent) would make a difference.

A great many Maine people will be best suited to begin higher education at one of Maine's community colleges, given the relatively low cost of these institutions and the academic support, occupational and career programs, convenience, and transfer options they offer.

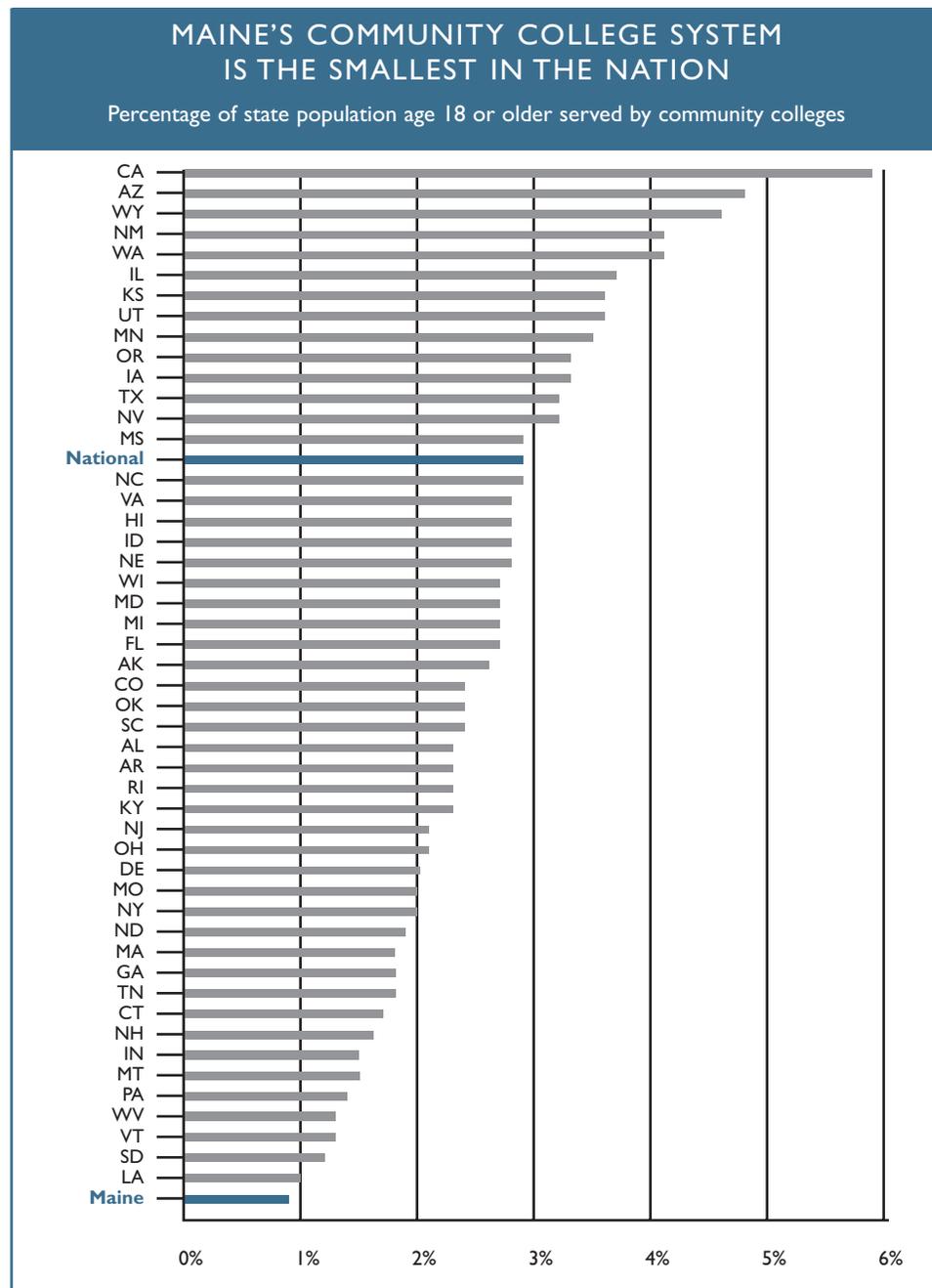
### But the Capacity is Limited

Maine's community colleges are designed to provide both broad access to higher education and a skilled workforce for the state's economy. In Maine today, the need and the demand for the unique offerings of Maine's community colleges are great—and they are growing rapidly. But the System's capacity to bridge the skilled worker gaps that exist in Maine's changing economy and to offer thousands more Mainers much needed pathways to higher education and prosperity are already severely strained.

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\* From *Survey of Maine Citizens Who Have Not Attained a College Degree*. Strategic Marketing Services, April 2006. Prepared for MCCS. A summary of survey findings is available at [www.mccs.me.edu](http://www.mccs.me.edu).

Currently, Maine's community colleges are able to serve about 1 percent of the state's population age 18 or older, a smaller percentage than any other community college system in the country. In some states, as many as six percent of the population is enrolled in community colleges. If Maine were simply at the national average of 3 percent, 30,000 credit students would be enrolled in our community colleges each year, well more than twice the 12,473 credit students currently enrolled.<sup>28</sup>



At present, Maine's community colleges only have the capacity to enroll about 1% of the state's population, making the System the smallest in the nation.

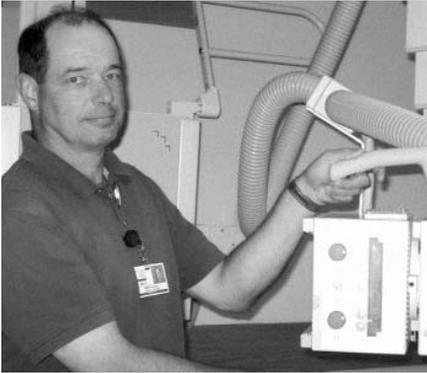
Source: NCES (2004e, 2004h), MCCS Fall Enrollment, US Census Bureau.

Nationwide, 46 percent of all college undergraduates are enrolled in community colleges.<sup>29</sup> In Maine, even with the dramatic growth we have realized in recent years, only 18 percent of the state's college students are enrolled in the community college system.

The small size of Maine's community college system, coupled with the increasing demand for its offerings from both individuals and businesses, mean that Maine lacks the capacity to respond effectively to a changing economy and its challenges.

## BILLY ROBINSON

## Starting over at 50



*I used to tell my kids that going to school was easy. I had to eat my own words.*

One year out of high school, Billy Robinson started a family and went to work at the Great Northern Paper (GNP) mill in Millinocket. Twenty-nine years and four months later (he remembers precisely), he was laid off when the company declared bankruptcy.

Billy is from tiny Benedicta, 45 minutes north of Millinocket. Between them, he and his wife have six children. One of more than 1,100 workers laid off from GNP in January 2003, the future was, as he says in his understated way, “kind of scary.”

Offered financial assistance to cover two years of schooling through the federal Trade Adjustment Assistance program, Billy enrolled in Eastern Maine Community College’s medical radiography program. For two years, he drove an hour and 15 minutes twice a day between Benedicta and Bangor.

Billy says the experience of returning to school after nearly 30 years was 10 times harder than he expected. “I used to tell my kids that going to school was easy. I had to eat my own words.” He says the support he received from both faculty and staff at EMCC had a lot to do with his ability to complete his associate degree in two years.

Today, Billy Robinson drives 45 minutes north to his full-time job at Houlton Regional Hospital, where he is a medical radiographer. He says he misses the mill, both the people and the work. “It was a good life.” But he is quick to add that he enjoys the work that he is doing now. “I get to meet—and hopefully help—an awful lot of people. That’s very uplifting much of the time.” He pauses for a moment and then he adds, “I’d say I’ve had the best of both worlds.”

The need to increase the System’s capacity to address these growing demands is being felt in both liberal/general studies programs and in programs designed to prepare students for immediate entry into the workforce. These occupational programs, many of them available only at the community colleges, are, by their very nature, more costly to operate and maintain. As demand for them continues to grow, so will the need for additional State support in order to ensure an ample supply of skilled workers for Maine’s economy.

### **Investments in the state’s community colleges are sound investments in the future prosperity of Maine.**

In order to remain competitive in a rapidly changing economy, Maine must make far greater investments in its community colleges.

Faced with the realities of a highly competitive global economy, many states have sought to align their education, workforce, and economic development strategies and have made major investments in their community colleges. These strategies have been bolstered by research that confirms the importance of education to a thriving economy and that demonstrates that as the educational attainment of a population increases, so do growth rates in both per capita income and employment.<sup>30</sup>

The returns on public investments in education in general and in community colleges in particular go far beyond individual gains in income, although those gains are significant. The median annual wage for Maine workers who have completed occupational programs at 2-year institutions is estimated to be \$32,614 in 2006.<sup>31</sup>

In addition, according to several comprehensive analyses in other states, taxpayers see their investment in community college students returned, in full, within seven to ten years of graduation through the increased income and sales tax revenues generated by those

graduates and reduced demand for social services. And the returns do not end there. In addition to paying well, many of these jobs provide generous benefits to the employee—benefits that include health care coverage, retirement, and tuition reimbursement. Taken together, these benefits and higher wages do much to fuel the state’s economy. And they address many of the issues that are of greatest concern to Maine people by helping to ensure a growing economy, an expanded tax base, greater access to health care, and improved educational opportunities.

### A Caution

It is important to note that tuition dollars cannot cover the costs of these investments. Although Maine’s community colleges are significantly more affordable than other colleges and universities in the state, they are not inexpensive for many of the students they are designed to serve, the vast majority of whom are low or moderate income. In fact, even at \$2,800 a year in tuition and fees, more than 75 percent of the System’s full-time students receive some form of financial aid.<sup>32</sup> And the MCCS survey of working age adults found that two-thirds of respondents said that—more than anything else—the “cost of college” was a significant factor preventing them from attaining a college degree.

The System attributes at least part of its recent growth to a six-year freeze on tuition that ended in 2005. By holding the line on tuition, the System was able to make it possible for more students to enroll on a full-time basis and to enable part-time students to afford additional courses each semester. In spite of this progress, the cost remains relatively high. According to the College Board, Maine’s costs are the sixth highest in the nation for two-year public colleges.<sup>33</sup>

Over the past twenty years, as the percentage of the System’s budget funded by State appropriation has dropped from 66 percent to 43 percent, the System has had to rely on revenue from tuition and fees to fund an increasing portion of its budget. Going forward, the ability of Maine’s community colleges to minimize the barriers that keep individuals from accessing higher education—including the number one barrier: the cost of college—will be dependent on increased financial support from the State.

### An Opportunity Lost or Gained

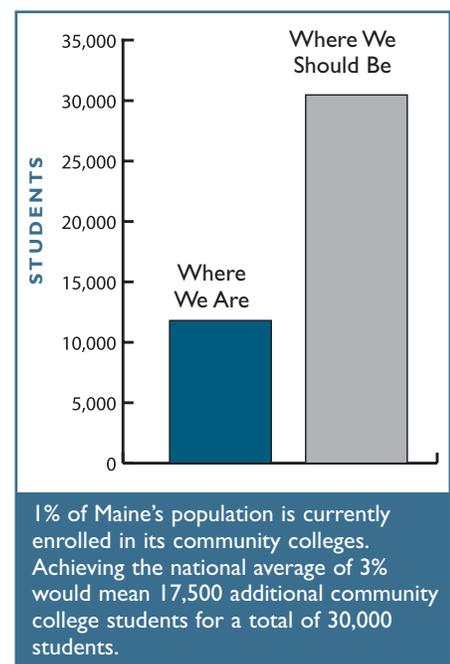
Maine’s community colleges play a critical and growing role in the state’s ability to offer educational and economic opportunity to the people of Maine.

But Maine’s community colleges are already at a critical juncture. Having experienced dramatic growth over the past three years, they are nearing or exceeding capacity in many of their programs and struggling to meet industry demands for skilled workers.

If Maine does not seize the opportunity to build on the early and impressive gains already realized by the community colleges, the state will likely face serious, long-term consequences. Failure to act will mean that Maine’s economy—lacking skilled workers—will be greatly hampered in its ability to compete for and create good jobs with good benefits. And Maine people will continue to struggle to make ends meet in a changed and changing economy. The likely result will be an economy that is able to generate little, if any growth; a smaller tax base and higher taxes; fewer people with employer sponsored access to health care; and few promising opportunities for Maine’s young people.

Maine must recognize the tremendous potential of its community colleges to prepare its citizens and its economy for a future that is already proving to be dramatically different from its past. Strategic investments in Maine’s community colleges—ones that enable the institutions to maintain and expand their programs and that open wide the doors to higher education—will reap tremendous dividends: for the state and its economy,...and for each Maine citizen who strives to build a more secure future.

“The ability of Maine’s community colleges to minimize the barriers that keep individuals from accessing higher education—including the number one barrier: the cost of college—will be dependent on increased financial support from the State.”



# KEY FINDINGS AND RECOMMENDATIONS

## Key findings

Maine's community colleges and its predecessors were created to respond to dramatic changes in the state's economy and in the lives of its people.

The state's first vocational technical institute was established in 1946 to confront the challenges posed by an economy in transition from wartime to peace. Forty years later, as technology reshaped the workplace, the institutes became technical colleges. In 2003, the technical colleges were changed to community colleges to help address Maine's persistently low college-going rates and to ensure broad access to college for all those in Maine who aspired to it.

In 2006, as Maine continues to undergo a dramatic transformation to a knowledge-based economy, the community colleges have become a crucial part of Maine's educational continuum—a starting place for those who historically have not gone on to college, but now view higher education as a necessity and a vital source of skilled workers for Maine's evolving industries.

An economy fueled by technology and information demands a highly skilled and educated workforce. Higher education, once required by relatively few in our state, is now nearly essential for success in Maine's workplace. But almost two-thirds of Maine adults—some 455,000 working age individuals—do not hold a college degree. And approximately 50 percent of the state's high school graduates—some 7,000 young people—leave high school with no immediate plans to enroll in college. They enter a changed and changing world of work with limited options and little hope for a secure and prosperous future—an alarming prospect for them and for the state.

While Maine's economy is changing at a rapid pace, Maine's workforce is not. The state's population is growing slowly, getting older, and remaining relatively homogeneous. An estimated 80 percent of those who will be working in Maine a decade from now are already on the job. Many of them entered a world of work that required a different set of skills than those demanded by the current economy.

In order to compete, Maine must dramatically increase the educational attainment levels of its citizens. Already, many of Maine's core industries face significant shortages of skilled workers, a shortage that is slowing the growth of the state's economy and dimming its prospects for the future. This skills gap also means Mainers are seeing thousands of good jobs pass them by.

Maine's community colleges have the potential—if not the current capacity—to bridge these large and troubling gaps. By offering an affordable and accessible gateway to higher education for thousands of low- and moderate-income Maine people, the community colleges have experienced dramatic growth in just three years. Clearly, Maine people—buffeted by job losses and the realities of a changing economy—recognize that they must upgrade their skills in order to find good paying, reliable work.

But that growth has brought the colleges to a critical juncture: nearing or exceeding capacity in many of their most popular programs; straining facilities and services; and struggling to meet the demand of many key Maine industries for skilled workers.

“Like the state's economy, Maine's community colleges are at a major crossroads, poised for growth but lacking critically important resources to realize their full potential.”

Like the state's economy, Maine's community colleges are at a major crossroads, poised for growth but lacking critically important resources to realize their full potential.

Recognizing the importance of the community colleges to Maine's economy and to the future prosperity of Maine citizens, Governor Baldacci called for the appointment of an independent Advisory Council of state leaders to examine future workforce and educational demands and the capacity of the community colleges to meet those demands.

Among the key findings of the Governor's Community College Advisory Council:

**☀️ Maine has a shortage of skilled workers in virtually every major industry.** Maine's community colleges—and other schools in the state offering similar programs—are training only about one-third of the skilled workers needed to meet the anticipated employment needs of many of Maine's largest industries through the year 2012. In 2006 alone, Maine's economy is projected to be short 4,200 workers with the kind of skills acquired at the community college level. At a median wage of \$32,000, this represents approximately \$134 million in annual wages. For Maine companies, this translates into lost business opportunities, higher operating costs, and stalled economic growth. For Maine people, it means missed job opportunities and the lost wages associated with good-paying jobs. This skilled worker shortage is having an impact on industries key to Maine's economy and quality of life, among them health care, business, hospitality, security, and construction.

**☀️ Maine's community college system has reached capacity.**

In just three years, enrollment at Maine's community colleges has grown by 42 percent—an additional 3,162 more college students—while state funding has increased just 5.7 percent and staffing levels have remained flat. The colleges are at or near capacity in many of their programs, services, and facilities, at a time when a wave of new students is expected to land at their doors. Currently, Maine is able to enroll only about 1 percent of its population in its community colleges, making it the smallest community college system in the nation and well below the national average of 3 percent. Maine's low college-going rates are due in large part to the small size of its community colleges.

**☀️ Student demand for access to the community colleges will grow dramatically.** Student trends indicate that Maine's community colleges will continue to experience dramatic increases in demand for its programs and services. This demand will be fueled by greater numbers of high school graduates seeking higher education—the result of statewide college readiness and early college efforts; more working and displaced adults turning to college to upgrade or retool their skills; efforts by Maine's adult edu-

“In just three years, enrollment at Maine's community colleges has grown by 42 percent while state funding has increased just 5.7 percent and staffing levels have remained flat.”

cation system to help thousands more adult learners transition into college; and a strategic decision by Maine's university system to refocus its mission and reduce associate degree offerings. Maine's community colleges must be prepared for this influx or risk creating a new barrier—a roadblock to college—for these students.

**■ Maine can shape its own economic future by aligning economic and workforce development.** Maine is making major investments in research and development and in other strategies to expand Maine's economy, yet many core industries and those targeted for growth already face worker shortages. The state's efforts will be hindered if the workforce side of the equation is not addressed. Strategic investments in a high-skilled workforce are critical to business expansion and job creation and central to the success of R&D efforts.

**■ Maine's community colleges deliver a high return on investment.** Ninety-five percent of MCCS graduates are placed in jobs or continue their education after graduating from one of the System's seven colleges. Of those who enter the workforce, 96 percent find jobs in Maine. According to several comprehensive analyses in other states, taxpayers see their investment in community college students returned, in full, within seven to ten years of graduation through the increased income and sales tax revenues generated by graduates.

The Maine Community College System can be—must be—a major catalyst in helping the state address dramatic changes in the economy and in the individual lives of Maine citizens.

“Ninety-five percent of MCCS graduates are placed in jobs or continue their education after graduating from one of the System's seven colleges.”

## Recommendations

In light of these findings, the Governor's Community College Advisory Council recommends that the State commit to a goal of achieving the national average in community college enrollment—30,000 credit students (from 12,500 today)—within ten years.

To achieve that goal, the Council recommends:

1. **A \$20.3 million initial State investment, for 4,000 additional college students.**

This initial investment of \$20.3 million beginning in FY2008/09 would enable the community colleges to make a significant step toward the goal of 30,000 credit students. These funds would support an additional 4,000 community college students—for a total of 16,500 credit students—and allow investments in the following priorities recommended by the Council:

- a. **Support occupational *and* transfer mission of the MCCS.** The Advisory Council recognizes and stresses the importance of providing comprehensive programming that provides broad access to college for students with diverse

needs and aspirations. At the same time, the Council wishes to emphasize the importance of the unique workforce mission of the System and the fact that Maine employers are dependent on that mission. Because the MCCA is the sole provider of a majority of the occupational programs available in the state and because these programs are, by their nature, more costly to operate and maintain, the Council stresses the importance of adequate State funding to support occupational programs, to ensure an ample supply of skilled workers for Maine's economy.

- b. **Ensure affordable access.** Finances are the number one barrier to college, and reducing barriers is at the heart of the community college mission. Keeping Maine's community college tuition affordable for low- and moderate-income citizens and increasing funds available for scholarships must be a top priority.
  - c. **Provide convenient geographic access.** Bringing community college offerings to regions without reasonable access is crucial to helping more working adults access college. The System should broaden its outreach and—where possible—pursue opportunities to co-locate with its partners.
  - d. **Help more high school students go to college.** The System's Early College for ME program should be made available to every public high school in the state to help Maine achieve its goal of sending at least 70 percent of high school graduates to college. This innovative program has a proven track record and can help raise the educational bar for future generations.
  - e. **Bring customized training to more Maine employers and expand offerings to support entrepreneurship.** MCCA customized training should be made available to more Maine businesses in order to fuel business growth and job creation. This should include an expansion of the Maine Quality Centers program which has helped companies all over the state expand their operations in Maine. It should also include continued growth in the courses and services offered to small business owners and entrepreneurs.
2. **A major capital improvements bond issue to update and expand facilities.**

To accommodate current and future growth and ensure a high quality learning environment for students, the Council recommends a major capital improvements bond issue be put forward to the people of Maine in the fall of 2007. The bond issue should include funds to update and maximize the use of current facilities and, where necessary, add new facilities to accommodate enrollment growth—for an amount to be determined by the Maine Community College System Board of Trustees.

“The Maine Community College System can be—must be—a major catalyst in helping the state address dramatic changes in the economy and in the individual lives of Maine citizens.”

## APPENDIX

### Statewide Skilled Worker Demand vs. Supply of Post-Secondary Graduates: Gap Analysis

One of the tasks of the Governor's Community College Advisory Council was to conduct a gap analysis of the workforce needs of major industry sectors and the capacity of the community colleges to meet employers' needs for workers educated at the community college level. The analysis, conducted by Jim McGowan, State Director of the MCCS Maine Quality Centers, revealed significant current and future gaps between the demand for these skilled workers and the supply. As McGowan notes: "Assuming no significant changes in conditions or performance, a gap of 4,234 openings will occur annually until some part of this equation changes."

The following table summarizes the findings of the analysis. The complete analysis is available on-line at [www.mccs.me.edu](http://www.mccs.me.edu).

| MAINE WORKFORCE GAPS  |                 |                  |              |
|---|-----------------|------------------|--------------|
| Demand vs. supply of skilled workers who have completed programs at 2-year institutions |                 |                  |              |
| Educational Program Areas   | Total graduates | Projected demand | Difference   |
| Agriculture, agriculture operations, & related sciences                                 | 16              | 33               | 17           |
| Natural resources and conservation  | 34              | 1                | (33)         |
| Communications technologies/ technicians & support services                             | 29              | 67               | 38           |
| Computer/information sciences & support services  | 65              | 76               | 11           |
| Personal & culinary services  | 65              | 464              | 399          |
| Education   | 52              | 290              | 238          |
| Engineering technologies/ technicians   | 162             | 167              | 5            |
| Family & consumer sciences/ human sciences  | 58              | 0                | (58)         |
| Legal professions and studies   | 6               | 23               | 17           |
| Biological & biomedical sciences  | 4               | 1                | (3)          |
| Parks, recreation, leisure, & fitness studies   | 7               | 29               | 22           |
| Science technologies/technicians  | 3               | 23               | 20           |
| Security & protective services  | 56              | 255              | 199          |
| Construction trades   | 133             | 636              | 503          |
| Mechanic & repair technologies/ technicians   | 195             | 512              | 317          |
| Precision production  | 107             | 189              | 82           |
| Transportation & materials moving   | 20              | 154              | 134          |
| Visual and performing arts  | 43              | 15               | (28)         |
| Health profession & related clinical sciences   | 724             | 1645             | 921          |
| Business, management, marketing, & related support services                             | 512             | 1945             | 1433         |
| <b>Totals</b>   | <b>2,291</b>    | <b>6,525</b>     | <b>4,234</b> |

The analysis included Maine's seven community colleges plus an additional 12 institutions within the state that offer similar associate degree, diploma, or certificate programs. Of the 2,291 graduates from the 100 different programs included in the analysis, 71 percent received their education at one of the state's community colleges. The MCCS analysis is based on workforce projections by the U.S. Bureau of Labor Statistics and the Maine Department of Labor for the period 2002–2012.

## ENDNOTES

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2. Based on definitions from Maine's Bureau of General Services.
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