

# MASSACHUSETTS COMMUNITY COLLEGES

*A Smart Investment*



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This report analyzes the economic impact of Massachusetts Community Colleges on students and on the Massachusetts economy. The analysis of economic benefits to individual students is from a study of the economic impact of Massachusetts Community Colleges by Ed Moscovitch of Cape Ann Economics. During the spring of 2002, a questionnaire was sent to the 15 Community Colleges to collect data necessary to ascertain the economic impact of a Community College education. These findings come from a database created by combining enrollment data with financial aid records; it includes information from 9 of the 15 Massachusetts Community Colleges. In all, this database includes enrollment data for almost 68,000 students and financial aid information for some 17,000 students. The analysis of the impact of the Community Colleges on the economy of the Commonwealth is from an analysis of college budgets, grants and contracts by the Executive Office. The report demonstrates that the education provided at the Community College level is critical for the long-term self-sufficiency of the student and for the development of a skilled workforce, which is necessary for the long-term health and economic growth of the Commonwealth.

## Executive Summary

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The Community Colleges are the largest and fastest growing segment of public higher education in Massachusetts. Community Colleges serve over 200,000 students annually, with 115,000 students in credit courses and 90,000 students in non-credit courses. Community College students represent over 43% of the students in the public higher education system.

The Community Colleges are also an essential part of the workforce development environment in Massachusetts, providing over 5,000 workforce development courses each year for Massachusetts business and industry. Increasingly, Massachusetts students and employers turn to the Community Colleges for education, workforce development, career training and lifelong learning.

National studies show that earning an associate degree greatly increases earnings potential. These studies further show that as the earnings potential of the student increases, there are regional and local economic benefits, a broad collection of social benefits and a return to taxpayers.

This is the first time that a study has been done in Massachusetts to identify the benefits of a Community College education to students and to the Commonwealth. This study uses data specific to Massachusetts in order to quantify the impact of a Community College education on personal earnings, tax revenues, as well as state and local economies.

### Benefits to Students

The greatest benefit of a Massachusetts Community College education to students is the increase in their earnings potential. The increased earnings potential begins immediately after graduation, continues throughout the working life of the student and leads to economic self-sufficiency.

- A comparison of potential earnings with and without a Community College degree indicates that a Massachusetts Community College education more than doubles the full-time annual earnings potential of Community College graduates - from \$21,200 to \$42,600.

- Over the course of a student's working life, the increase in earnings attributable to a Community College education is \$330,000.

- Community Colleges serve students with many academic and economic challenges who might not otherwise have access to higher education. Community Colleges offer students a solid set of academic, career and technology skills that open doors to career growth and lifelong learning.

## Benefits to the Commonwealth

The greatest benefit of Community Colleges to the Commonwealth's economy is the increase in both personal income and the taxes resulting from the increased earnings of Community College students. Further, the state benefits from the economic growth and additional tax revenues from the economic activity of the Community Colleges.

- Nine out of ten Community College graduates live and work in Massachusetts, contributing to the overall economy and the tax base of the Commonwealth.

- Community College graduates earn \$21,400 more in personal income and therefore pay \$1,449 more annually in state taxes than those with no post-secondary education. Over the 30-year working life of the students educated in FY 2001 at Community Colleges, the Commonwealth can expect \$25.2 million in additional tax revenues.

- The personal income gain for Massachusetts residents educated at the Community Colleges in FY 2001 results in \$373 million in additional personal income.

- Among all former students who attended Community Colleges and who are still living and working in the Commonwealth, Community College education translates into \$7.6 billion in increased personal income per year.

- Spending by colleges and students stimulates economic activity. The total expenditures of the Community Colleges in FY 2001 were approximately \$600 million. This includes direct state support of \$404 million, \$115 million in tuition and fees revenue, \$56 million in federal financial aid and \$28 million from grants and contracts. Through an economic multiplier effect and through the additional spending of students, visitors and others, the colleges generate millions more in economic activity.

The state's support of Community Colleges is a smart investment that in economic terms alone pays a good return.

## The Massachusetts Community Colleges: Benefits to Students and the Commonwealth

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*The Community Colleges are an essential part of the higher education and workforce development environment in Massachusetts, serving over 200,000 students in credit and non-credit courses, and providing over 5,000 workforce development courses to Massachusetts employers.*

The Community Colleges are the largest and fastest growing segment of public higher education in Massachusetts. Community Colleges serve over 200,000 students annually in credit and non-credit courses, with 115,000 students in credit courses and 90,000 students in non-credit courses. Community College students represent over 43% of the students in the public higher education system. Two-thirds of Massachusetts students who go to college in-state choose a public college or university, with four out of 10 Massachusetts students who go to college in-state choosing a Community College.

The Community Colleges are also an essential part of the workforce development environment in Massachusetts, providing over 5,000 workforce development courses each year for Massachusetts business and industry. Increasingly, Massachusetts students and employers turn to the Community Colleges for education, workforce development, career training and lifelong learning.

National studies show that earning an associate degree greatly increases earnings potential beginning immediately after graduation and leads to economic self-sufficiency. These studies further show that as the earnings potential of the student increases, there are regional and local economic benefits, a broad collection of social benefits and a return to taxpayers for their support of Community Colleges.

This is the first time that a study has been done in Massachusetts to identify the benefits of a Community College education to students and to the Commonwealth. The study uses data specific to Massachusetts to quantify the impact of a Community College education on personal earnings, tax revenues, as well as state and local economies. The study also includes information about the challenges facing the Community College student population and how Community Colleges meet the needs of these students.

### **Community Colleges and Economic Development**

The Massachusetts Community Colleges have an impact on all sectors of the economy. The Community Colleges offer associate degree and certificate programs in areas ranging from business, computer science, engineering technology, health care and human services to liberal arts and science. The Community Colleges also offer specialized workforce development programs tailored to the needs of Massachusetts employers, including a wide range of courses on topics such as English for Speakers of Other Languages, Adult Basic Education, Computer Skills and Entrepreneurship. Community Colleges are structured to respond to the needs of the Commonwealth and its communities, and readily add new programs and courses to meet local needs.

## Massachusetts Community Colleges – Benefits to Students

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*The Massachusetts Community Colleges serve a diverse set of students, including many immigrant and low-income students.*

The most tangible benefit of a Community College education to students is the increase in their earnings potential. National studies show that earning an associate degree has a major impact on earnings potential – beginning immediately after graduation and continuing for years after.

Studies of the Massachusetts economy show that it is increasingly important for all residents of the Commonwealth to attain some form of post-secondary education and training in order to achieve long-term financial self-sufficiency and to attain the skills demanded by the new economy.

Through collaboration with business and industry, involvement with the community and connections to a national network of Community College educators, the Massachusetts Community Colleges have expertise in providing students with a solid set of academic, career and technology skills that offer opportunities both for immediate and long-term career growth and lifelong learning.

### Earnings With and Without Community College Education

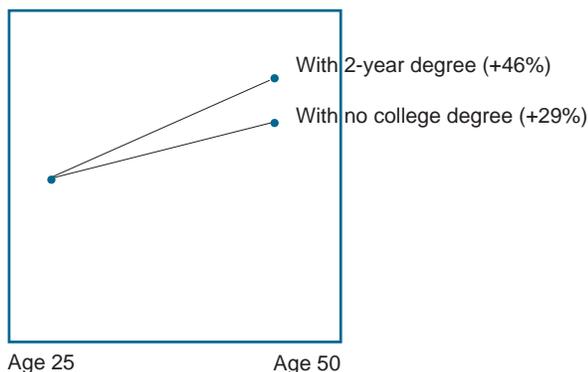
The Massachusetts Community College student population is an economically, culturally and academically diverse population. Over one-quarter of students are ethnic minorities. Most Community College students are the first in their family to pursue higher education. For this population, Community Colleges are particularly important for opening doors to career and educational opportunities.

Based on a recent analysis of financial aid information, the average annual earnings of financially independent Community College students was about \$13,600. The *Faces of the Future* survey of Community College students shows that the typical working student is working 28.5 hours per week. The full-year, full-time earnings potential of working students, then, is estimated at \$17,800.<sup>1</sup>

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<sup>1</sup>The "Faces of the Future" surveys done at Northern Essex and North Shore colleges show that the average student works 28.6 hours a week. This is 76% of a full-time workweek of 37.5 hours (7.5 hours a day). All of the earnings data is necessarily for financial aid recipients alone.

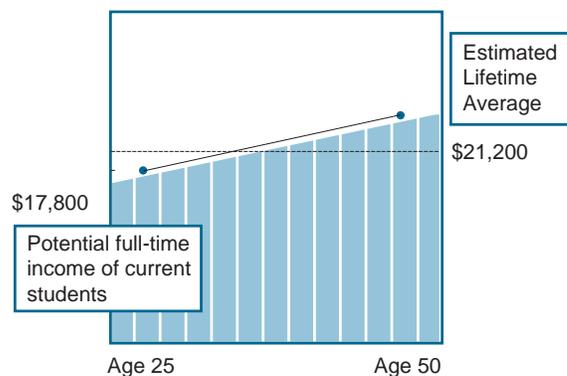
## How Earnings Rise with Age Based on U.S. Census Data



Of course, even without college education, the earnings of these individuals would rise slightly, as they grow older. However, this is far less true than for college graduates. The U.S. Census Bureau's Current Population Survey shows that earnings of 50-year-old high school graduates are 29% higher than earnings of 25-year-olds with the same education. This compares with 46% for Community College graduates.

*The potential average earnings of the population of students entering the Community Colleges - without a college education - would be \$21,200.*

## Annual Earnings No College Education



Based on this analysis, average lifetime earnings for high school graduates would be 19% higher than earnings at age 25. Therefore, without college, the average annual lifetime earnings of the students entering the Community Colleges - without a college education - would be approximately \$21,200.<sup>2</sup>

<sup>2</sup> Because the Community College students are relatively young, they would enjoy some increase in earnings even in the absence of further education. Measured over a lifetime, this increase is 19%. Data are from the [Synthetic Estimates of Work-Life Earnings by Educational Attainment, Sex, Work Experience, and Age](#), based on 1997-1999 Work Experience data from the Current Population Survey.

This lifetime earnings estimate is lower than the Census Bureau figures for average earnings of individuals with a high school degree or less. Because this population faces many academic, language and economic challenges, it is likely that their potential earnings would be lower than those of others who did not study past high school.

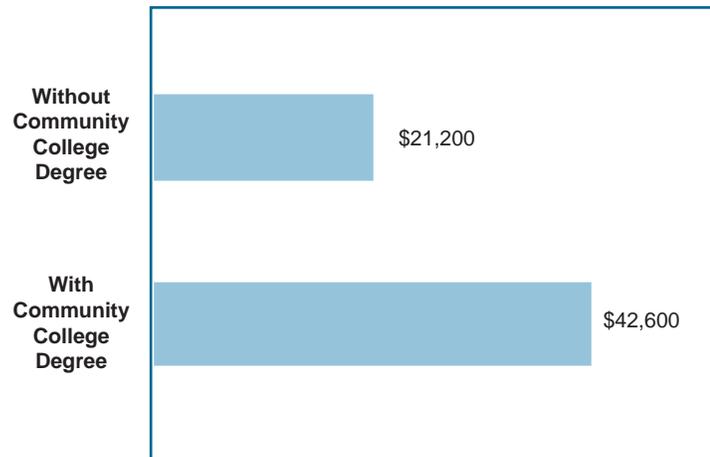
<b>A Comparison of Estimated Annual Earnings Absent a College Education</b>	
Average current earnings (Earnings of financially-independent financial aid recipients)	\$13,600
Hours per week (Based on survey)	28.5
<b>Potential Full time Earnings</b> ( $\$13,600 / 28.5 * 37.5$ )	\$17,800
<b>Estimated Average Lifetime Earnings</b> (projection based on CPS data, average lifetime earnings for non-college graduates are 19% more than earnings in mid-20s)	\$21,200
<b>Estimated Annual Earnings of Community Colleges Graduates</b>	
Average earnings of Community College graduates in Massachusetts (based on CPS Data)	\$42,600

*Massachusetts data shows that the average annual earnings of Community College graduates is \$42,600, double the potential earnings without a college degree.*

Data from the Current Population Survey shows that Community College graduates in Massachusetts earn an average of \$42,600 a year.<sup>3</sup> Thus, a Community College education doubles earnings potential from \$21,200 to \$42,600, an increase of \$21,400 annually.

### Comparison of Annual Earnings With and Without Community College Degree

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<sup>3</sup> Data is from the Current Population Survey, and reflects earnings in the period 1998 - 2000. A special tabulation was done by the Massachusetts Institute for Social and Economic Research for the Board of Higher Education. Cited in Massachusetts Higher Public Education: A Shrewd Investment with Significant Returns, Stephen P. Coelen et. al., University of Massachusetts at Amherst and Elaine Smith, Board of Higher Education, January 2002.

## Benefits to the Commonwealth - Increased Personal Income and Revenues

*Over the course of a student's working life, the increase in earnings attributable to a Community College education is \$330,000.*

The benefits of a college education to individual students are both financial and non-financial. Education opens the doors to higher earnings: the estimated \$21,400 per year gain in average lifetime earnings translates to \$330,000 over a 30-year career. Education also opens the doors to opportunities for better job stability and to jobs with employee benefits, including health insurance. This in turn contributes to economic self-sufficiency, better physical health and greater social and emotional well-being.

The benefits to the Commonwealth are also both financial and non-financial. Benefits that are hard to quantify include improved health, improved social stability and a stronger, better educated workforce. Direct financial benefits include increased personal income and increased tax revenues.

In order to further understand how the \$21,400 annual income gain for the typical graduate translates into an impact on the economy as a whole, the income gain per credit hour was calculated, and then this figure was used to determine the total income gain associated with that year.

A typical student takes 67 credit hours to obtain a degree, including both remedial and college-level courses. This means that the annual income gain works out to \$322 per year of increased income for each credit hour earned. This increase begins a year or two after the end of the school year and continues throughout the active career of the students involved.

Earnings Gain -- Per Credit Hour	
Difference in Annual Earnings (\$42,600 vs. \$21,200)	<b>\$21,400</b>
Credits earned <i>(typical Community College graduate, including remedial courses)</i>	<b>67</b>
Annual Earnings Gain Per Credit Hour	<b>\$322</b>

*The personal income gain of Massachusetts residents educated at the Community Colleges in FY 2001 results in \$373 million in additional personal income per year.*

*Among all former students who attended Community Colleges and who are still living and working in the Commonwealth, Community College education translates into \$7.6 billion in increased personal income per year.*

During FY 2001, Community College students earned 1.4 million credit hours; so the future aggregate income gains for the Commonwealth associated with the education delivered in FY 2001 will be \$373 million per year (adjusted for migration).<sup>4</sup>

To calculate the impact of the colleges on today's economy, we must look at the increased earnings of all of today's workers who studied at the colleges at some point in their lives. This would mean all of those who have studied at the colleges since the system began in the 1970s. College enrollment has roughly doubled over this period, rising from a full-time-equivalent enrollment of 24,000 in FY1974 to 46,000 in FY 2001. On average, enrollment over the period has been roughly 68% of current-year levels. The impact on today's economy is \$7.6 billion in additional personal income per year. Absent the contribution of the Community Colleges, today's Massachusetts economy would be smaller by \$7.6 billion - roughly 3% of Massachusetts personal income.

<b>Benefits to the Commonwealth</b>	
Total additional personal income of current students (Based on 1.4 million credits earned in 2001 x \$322 per credit; adjusted for migration)	<b>\$373 million per year</b>
Total additional personal income of former students (Based on 30 year history of Community Colleges)	<b>\$7.6 billion per year</b>

Total state taxes in Massachusetts amount to 6.8% of personal income. Based on this tax rate, the \$21,400 income gain for each graduate results in \$1,449 per year in additional taxes paid by each former student working in the state. Applying this rate to the \$373 million total increased earnings for FY 2001 students (adjusted for out-migration), we can expect \$25.2 million annually in additional tax revenues over the 30-year working lives of these students.

<sup>4</sup> These calculations are taken from a special analysis of 1990 Census migration data prepared by Roy Williams of the Massachusetts Institute for Social and Economic Research. In calculating the impact on the state as a whole, we have to adjust for the fact that some Community College graduates will leave the state. The number of Community College graduates leaving the state is lower than the number for those with 4-year or advanced graduate degrees. For example, 11.4% of associate degree holders between the ages of 30-34 in 1985 had left the state five years later. The comparable percentages for 4-year graduates and advanced degree holders were 17.9% and 29.7%. Looking at migration patterns for associate degree holders of all working ages, 87% will still be in Massachusetts. The overall long-term income gain to the state will therefore be \$373 million per year.

*The state tax revenue generated by the increased personal income of FY 2001 students is \$25.2 million per year or \$1,449 per student. Among former students, the increased tax revenue is \$513 million per year.*

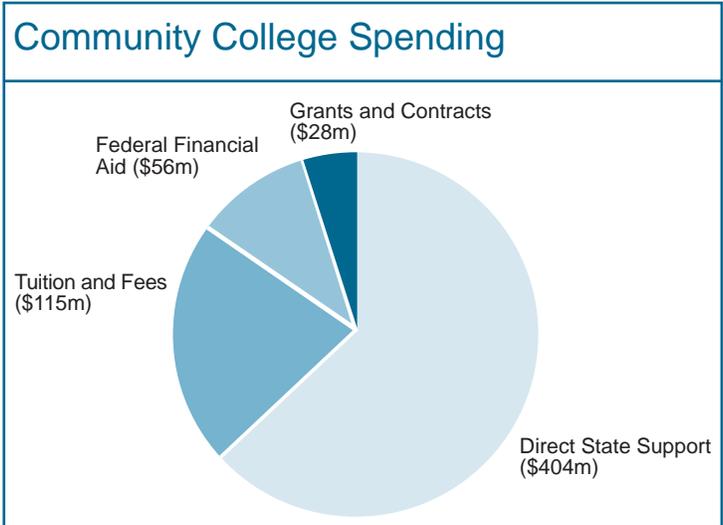
The state taxes associated with the \$7.6 billion increased personal income of former students amount to \$513 million per year, well above the current annual investment by the Commonwealth to the Community Colleges.

<b>Increased Revenue</b>	
Additional state taxes paid per student per year as result of increased earnings (all state taxes add to approximately 6.8% of personal income)	<b>\$1,449</b>
Total additional tax revenue from \$373 million in additional earnings of current students	<b>\$25.2 million per year</b>
Additional tax revenue from \$7.6 billion in additional earnings of all former students still living and working in Massachusetts	<b>\$513 million per year</b>

# Impact of Community College Expenditures on the State and Local Economy

The state appropriation for the Community Colleges in FY 2001 was \$239 million. When scholarships, health insurance for college employees, retirement costs and other indirect costs are figured in, it is estimated that total state expenditures for the Community

Colleges are \$404 million. In addition, the colleges generate \$56 million in federal funds, \$115 million in tuition and fees, and \$28 million from grants, contracts and other enterprises such as employer-funded training programs. Massachusetts Community College expenditures from all revenue sources totaled almost \$600 million in FY 2001.



Community College expenditures have a significant impact, particularly on the economy of the colleges' host communities. Assuming a spending multiplier of 2:1, each dollar of direct spending by the Community Colleges generates an additional two dollars of economic activity in the local or regional economy.

*Community College expenditures multiply through the state and local economy, creating additional spending, jobs and income.*

## How a spending multiplier works

**Example:** A business contracts with the local Community College for a computer training seminar for its employees (instead of contracting with an out-of-state provider). With the money from this contract, the college pays an instructor to teach the seminar, pays the college staff who maintain the computer network, pays a local vendor to provide needed software and pays a local printer to produce materials for the seminar. The instructor, staff, software vendor and printer spend some portion of this income. They buy printing supplies, eat lunch at the local restaurant, have their house painted, buy books at the downtown bookstore. Their spending again multiplies through the economy.

Economists estimate a "multiplier effect" for any new state or local spending. Assuming that a certain percentage of income is spent outside the local economy and a certain percentage is saved, \$1 in spending is believed to generate at least \$2 more in new economic activity.

While the \$404 million in state appropriation is not "new" to the Massachusetts economy, the other elements of the Community College budgets including tuition and fees, federal funds, and grants and contracts represent new revenues that might not otherwise have been spent in Massachusetts. These funds, plus the resulting 2:1 multiplier effect, create economic activity that benefits the state, regional and local economies and generates at least \$388 million in spending.

*At least \$388 million in spending is newly generated and/or kept in the state.*

<b>Community College Spending Multiplier Effect</b>			
	Spending	Comment	With Multiplier Effect (X 2)
Direct State Support	\$404 m	The state appropriation to Community Colleges is spent in communities throughout the Commonwealth.	<b>\$808 m</b>
Tuition and Fees	\$115 m	Community College students and their families spend \$115 million in tuition and fees.	<b>\$230 m</b>
Federal Financial Aid	\$56 m	Community College attendance brings \$56 million of federal financial aid into the Commonwealth.	<b>\$102 m</b>
Grants and Contracts	\$28 m	Through the Community Colleges, \$28 million in business and government grants and contracts are awarded within Massachusetts.	<b>\$56 m</b>

Beyond the direct college expenditures, each Community College has an economic impact through additional student spending and visitor spending. Students contribute to the local and state economy by spending on goods and services beyond tuition and fees, including books, food, student activities and more. Visitors also spend money when they come to campuses for special events, conferences or to visit students, faculty and staff.

## Meeting the Needs of the Massachusetts Community College Student Population

*Community Colleges expand access to higher education by serving an academically, economically and culturally diverse student population, including working adults who have families to support and need conveniently scheduled, close-to-home college classes.*

Behind the overall economic impact of the Community Colleges is the individual impact that the Community Colleges have on their very diverse population of students. The Massachusetts Community Colleges serve older adults as well as traditional-age students, with more than half of all Community College students age 25 and older. Many students are working adults who wish to acquire skills needed to advance on a career ladder. Over one-quarter of students are ethnic minorities and one in 10 students are English language learners. Most are the first in their family to pursue higher education.

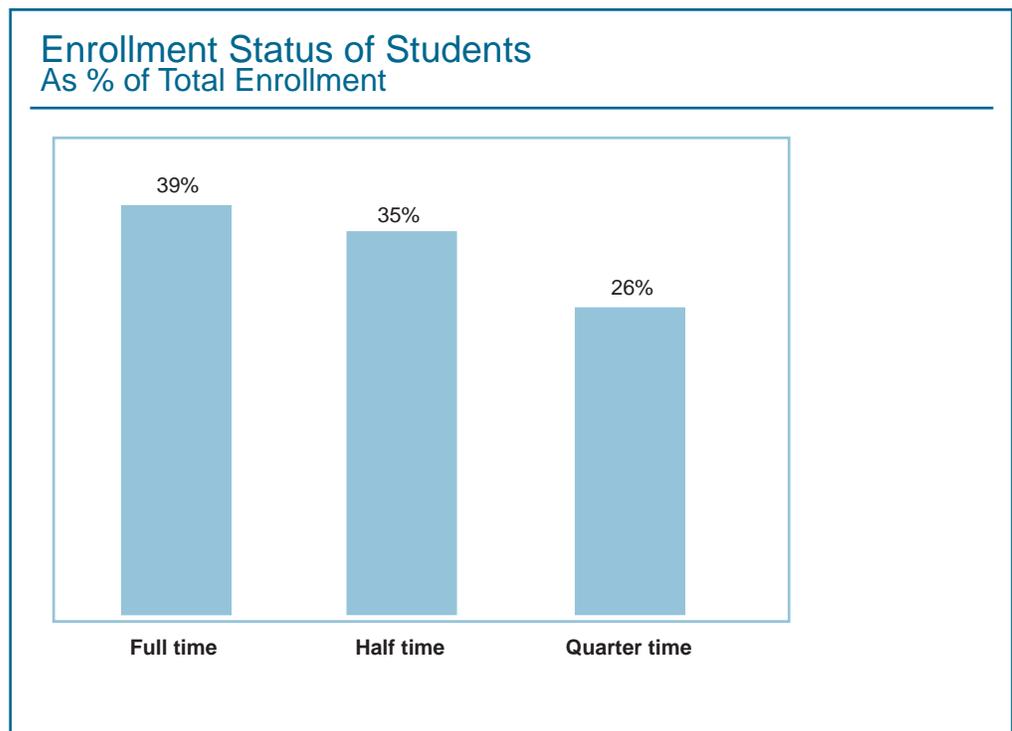
Community College students have diverse educational goals. Some attend to take one or two courses in order to acquire skills needed to enter the workforce or upgrade their skills. Others enroll to earn associate degrees or to transfer to 4-year institutions. It is not unusual for Community College students to "stop out" for a semester or two when family or job responsibilities change. Some working adults who take one course a semester may require six, seven or even 10 years to complete their degree.

The Community Colleges provide a wide variety of courses in math, health sciences and technology, and the liberal arts, and all have honors programs, internship programs and community service learning opportunities that provide challenge and enrichment to students.

### Enrollment Status and Age

In order to better understand the Community College population, students are identified by enrollment status. Students are characterized as full time, half time or quarter time.

*Community Colleges support the needs of students through flexible scheduling: 39% of students attend full time, 35% attend half time, and 26% attend quarter time.*

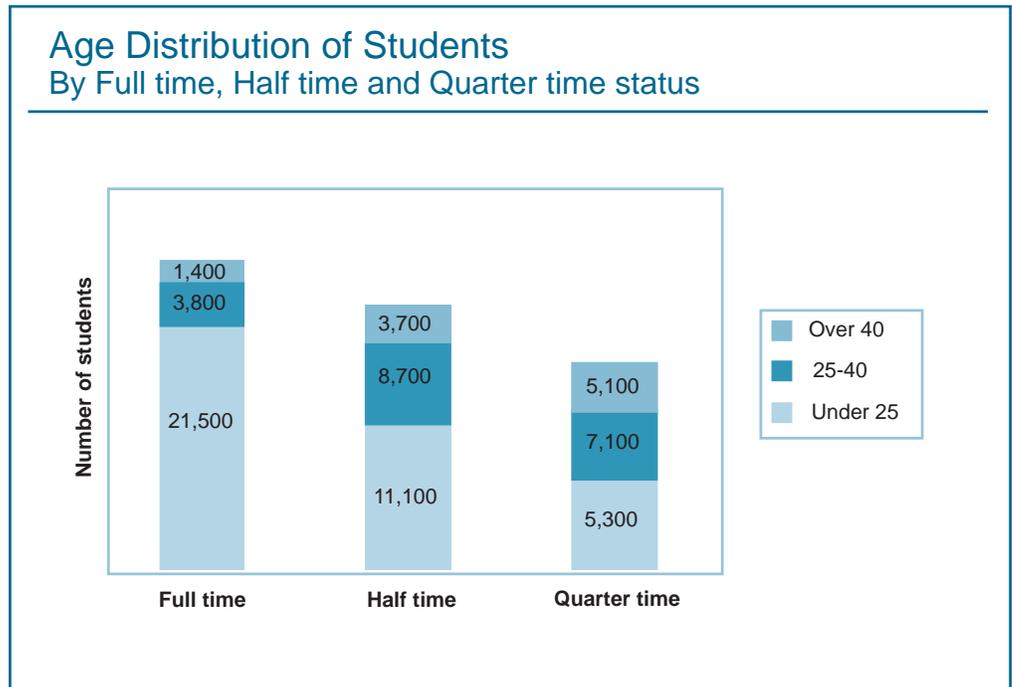


Enrollment data from the fall semester of 2001 shows that:

- 39% of Community College students are full-time students - students who take four courses or more per semester.
- 35% of Community College students are half-time students - students who take two or three courses per semester.
- 26% of Community College students are quarter-time students - students taking one course per semester.

The average age of Community College students is 28, but this average doesn't tell the whole story. The age distribution of Community College students varies dramatically by enrollment status.

*The average age of Community College students is 28. Full-time students tend to be the youngest group, while quarter-time students tend to be the oldest group.*



Full-time students tend to be relatively young, usually in the traditional college student age group of 18-25. Among full-time students, 21,500 (80%) are under 25 years old.

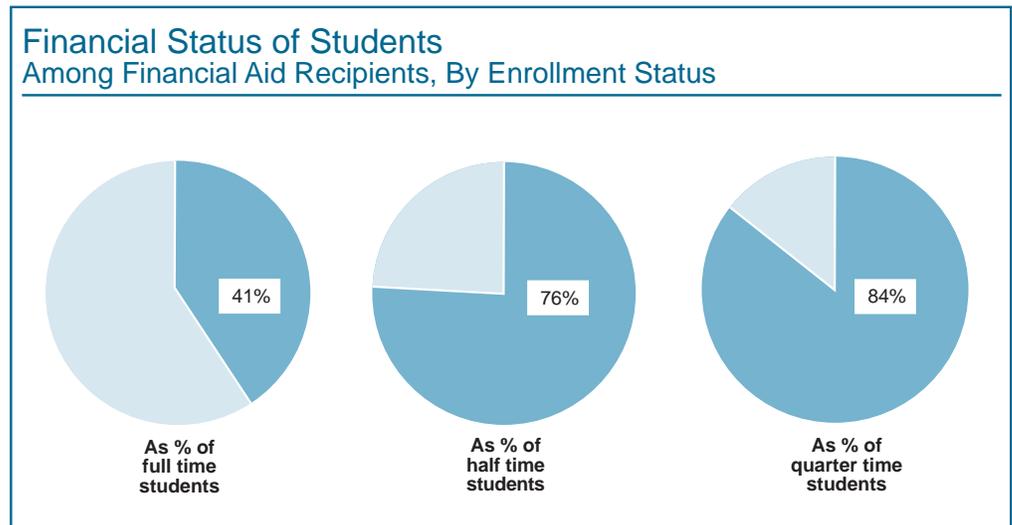
Half-time students tend to be older than full-time students. More than 50% of this group is age 25 or over, and one in six is over 40.

Quarter-time students are the oldest group of students. Only 30% of quarter-time students are 25 and under and 30% are over 40.

Many Community College students are financially self-supporting: 84% of quarter-time students, 76% of half-time students, and 41% of full-time students are financially independent.

## Financial Status

Particularly among part-time students, the majority of Community College students are financially independent of their parents. Community College financial aid records show that 76% of half-time and 84% of quarter-time students are financially independent. Even among full-time students, who are generally younger than part-time students, 41% are financially independent.



## Family and Household Income

The incomes of Community College students and their parents tend to be low. Community College students are more likely than students at the state's public colleges and universities to need financial aid assistance and federal Pell grants.

According to financial aid records, the average family income of the parents who are helping support their children as they attend the Community Colleges is \$36,200. The earnings of individual parents are somewhat less, since this average includes two-earner families.

The 60% of financial aid recipients who are financially independent have average household incomes of \$18,600. This salary includes the earnings of the students' spouses if any. Based on a recent analysis, the average annual earnings of individual students was about \$13,600.

Community Colleges serve many low-income students. Students enrolled in the Massachusetts Community Colleges receive \$34 million in annual Pell grants. Approximately 20,600 Community College students received Pell grants in 2000, accounting for 56% of all public college Pell recipients in Massachusetts.

<b>Family and Student Income Financial Aid Recipients</b>			
	Student Income	Household Income <i>(Financially independent students)</i>	Family Income <i>(Financially independent students)</i>
Among students who are financially dependent on parents	\$7,200 *	-	\$36,200
Among students who are financially independent	\$13,600 *	\$18,600 **	-
* Among those who are employed ** Includes earnings of spouses or other household members, if any			

The fact that Community Colleges serve a financially disadvantaged population is further reflected in the percentage of students receiving federal financial aid through Pell grants. Pell grants are an important source of college financial aid which, when combined with other state and local sources, help make it possible for low-income students to attend college. Pell grants are not given automatically to the states; rather, they are given to any financially (and academically) eligible student. Pell grants are awarded to 18.8% of Community College students, versus only 11.5% of students at the state colleges and universities.

Students enrolled in the Massachusetts Community Colleges receive \$34 million in annual Pell grants. Approximately 20,600 Community College students received Pell grants in 2000, accounting for 56% of all public college Pell recipients in Massachusetts.

*The majority of Massachusetts Community College students work. Of those who are attending college full time, 86% are employed. Of those who are attending college half time or quarter time, 90% are employed.*

### Employment Status

The majority of Massachusetts Community College students work. Of those who are attending college full time, 86% are employed. Of those who are attending college half time or quarter time, 90% are employed. Both financially dependent and financially independent students are likely to be employed, with the financially independent students likely to be working more hours.

Student Employment by Financial Status			
	Percent Employed	Average Earnings	Hours Per Week
Among students who are financially dependent on parents	78%	\$7,200	15 hours per week
Among students who are financially independent	89%	\$13,600	28.5 hours per week

Student Employment by Enrollment Status			
	Percent Employed	Average Earnings	Hours Per Week
Full-time students	86%	-	-
Half-time and quarter-time students	90%	-	-

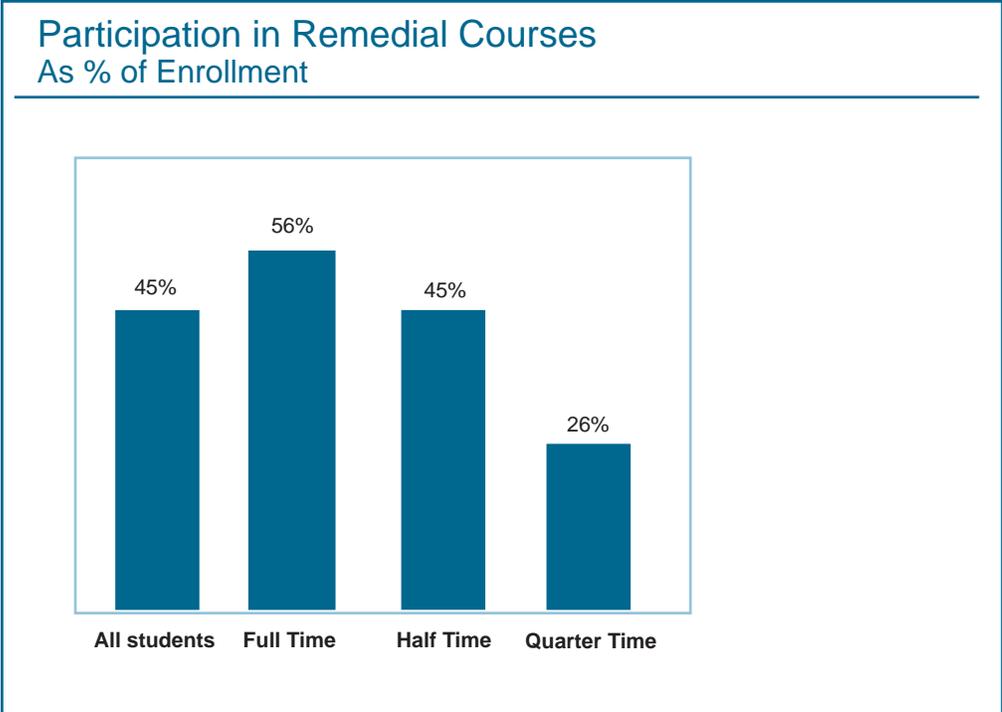
These figures suggest that among the 41% of full-time students who are financially independent of their parents, most are working. Unless they have spouses who support the household, they are probably working close to full time while also studying full time.

This represents a major commitment by these students. Since they are working close to full time and studying full time, the importance of the close-to-home education offered by the Community Colleges is clear.

45% of students participate in remedial courses prior to enrolling in collegiate level courses.

### Academic Status

In Massachusetts, 45% of students need remedial courses prior to enrolling in collegiate level courses. The rates are highest among full-time students, who tend to be younger, and lowest among quarter-time students, who tend to be much older. Both minority and non-minority students are likely to participate in remedial courses, with 45% of non-minority and 50% of minority students requiring remedial courses. 29% of the minority students and 5% of the non-minority students in the Community Colleges are English language learners, and require ESL courses as well as additional remedial courses.



Students most often need remediation for mathematics, with 37% of students needing help in this area before taking college-level courses. Half of these - 19% of all students - have needed help not just with algebra or trigonometry, but also with basic arithmetic.

Students Taking Remedial Courses	As % of total enrollment
Any remedial course	45%
Math	37%
* Higher-level math (trigonometry, algebra, etc.) only	18%
* Arithmetic	19%
Reading	16%
Writing	22%

The Community Colleges provide assessment and remedial courses to students in math, reading and writing in order to prepare them for the challenges of college-level work.

Throughout the country, remedial education is one of the most important programs Community Colleges offer. National studies show that students who succeed in remedial courses do as well in standard college classes as those who began without deficiencies. One-sixth earn academic and associate and bachelor's degrees and one-third earn occupational degrees and certificates. Ten years after beginning remedial courses, 98 percent are employed. Nearly two-thirds are in new careers in the areas of greatest growth. Half are continuing their education.<sup>5</sup>

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<sup>5</sup> Cited in *YES We CAN! - A Community College Guide For Developing America's Underprepared*, Robert H. McCabe, League for Innovation in the Community Colleges, American Association of Community Colleges, 2003.

## Community Colleges: A Smart Investment for the Commonwealth

*The Massachusetts Community Colleges provide an outstanding return on investment to the Commonwealth - producing substantial gains in personal income tax and increased tax revenues, as well as a stronger workforce and improved quality of life.*

This analysis demonstrates that Massachusetts Community Colleges provide a strong return on the Commonwealth's investment.

### Meeting the needs of the Community College population

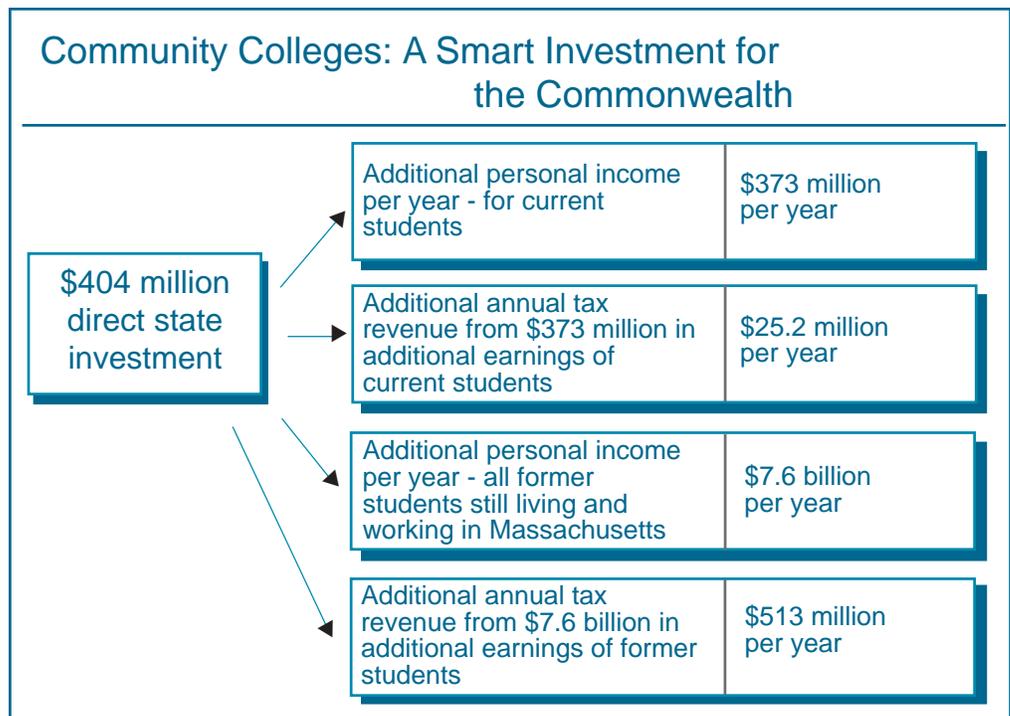
■ Community Colleges serve an academically, economically and culturally diverse student population. The Community Colleges expand access to higher education by offering open enrollment, convenient locations, affordable tuition, access to financial aid and access to remedial courses.

■ A Community College education enhances lifetime earnings, with estimated annual earnings doubling, from \$21,200 to \$42,600.

### Personal income gains and state tax revenues:

■ \$404 million in direct state spending today will generate \$373 million per year in increased personal income and \$25.2 million per year in increased state tax revenues in the future. This \$373 million in increased personal income represents an outstanding 92% return on the state's investment of \$404 million.

■ Because of past expenditures by the Community Colleges, former students still living and working in the Commonwealth earn an additional \$7.6 billion per year and pay an additional \$513 million in state taxes.



## The impact of college expenditures on the local and state economy

- \$404 million in direct state spending is combined with \$115 in tuition and fees, \$56 million in federal funds and \$28 million in grants and contracts, resulting in total college expenditures of approximately \$600 million. Through a multiplier effect, this spending generates additional local and state spending, including spending that might not otherwise have occurred.

- In addition to the benefits of direct expenditures by the colleges, student and visitor spending also enhances the local and regional economies.

The Massachusetts Community Colleges are a smart investment for the Commonwealth - producing substantial gains in personal income and increased tax revenues, as well as a stronger workforce and improved quality of life.

The education provided by the Community Colleges is critical for building economic self-sufficiency and for developing the skilled workforce which is necessary for the long-term health and economic growth of the Commonwealth.

For more information about the Community Colleges, contact the Massachusetts Community Colleges Executive Office at 617-542-2911 or visit the website at [www.masscc.org](http://www.masscc.org).



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