# The Economic Impact of Illinois Community Colleges A Report to the Illinois Community College Board May 2007 By The Center for Governmental Studies Northern Illinois University



The **Economic Impact of Illinois Community Colleges** report was prepared by the Center for Governmental Studies at Northern Illinois University (NIU) under agreement with the Illinois Community College Board (ICCB). Questions and inquiries regarding the contents of this report may be directed to Diana L. Robinson at NIU (815/753-0955) or Scott Parke at ICCB (217/785-0154).

The findings and conclusions presented in this report are those of the NIU project team alone and do not necessarily reflect the views, opinions, or policies of the officers and/or trustees of Northern Illinois University nor those of the employees, officers, and/or trustees of the Illinois Community College System.



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### A. Introduction

Illinois' 48 community colleges contribute to the vitality of their regions and the state in many ways: educationally, culturally, recreationally, civically, and economically. Perhaps the least measured and understood of these are the economic contributions. Consider that:

- Illinois community colleges add skills to our workforce and boost the competitiveness of our businesses.
- Illinois community college graduates generate billions of dollars in local, state, and federal tax revenues.
- An Illinois community college education increases earnings for workers. By completing courses, students gain skills that contribute to higher earnings and graduates enjoy even higher returns.
- As major employers and business entities, Illinois community colleges generate billions of dollars in local sales and wages and more than 55,000 jobs.

This economic impact study was commissioned by the Illinois Community College Board (ICCB) to better understand the return from investing in Illinois' community colleges. The research and analysis were conducted by the Center for Governmental Studies (CGS) at Northern Illinois University. Three primary sources of data were used:

- 1. college-level financial, student, and economic development data collected by ICCB,
- 2. employment, student, and visitor data available from the individual colleges that were collected through an online survey developed by CGS, and
- Unemployment Insurance wage record data collected by the Illinois Department of Employment Security.

Three major analyses were conducted using these data. One examined community college student enrollment and completion data over a 10-year period to understand the changes that have occurred in the system over the past decade. A second analysis matched earnings data available through the Illinois Department of Employment Security with students who graduated or otherwise left the Illinois community college system for two full consecutive semesters. The third analysis estimated the effects of Illinois community expenditures and jobs on the statewide and local economies using economic modeling software.

A summary of key findings is presented in the next section followed by the detailed study results. These address the characteristics of Illinois community college students taking credit courses, student economic outcomes, estimated tax revenues paid by Illinois community college students, community college market penetration, and the economic impact of Illinois community colleges. Student-related characteristics used throughout this report, such as "completer," "enrollee," and "disadvantaged," are consistent with definitions in ICCB's Management Information System Manual.

Tables and charts are used throughout the body of the report to graphically depict trends and characteristics. These graphics are supported by data presented in the report appendices. It is important to note that the numbers in the appendix tables reflect unduplicated counts of student enrollees and completers and include adult education and English as a Second Language (ESL) students. As a result, they may vary from totals in previously published ICCB reports that represent unduplicated counts of enrollments and duplicated counts of graduates who complete multiple certificates or degrees in the same fiscal year.



### **B.** Highlights of Significant Findings

Illinois community colleges serve three integral educational purposes: they strengthen individuals' foundational academic skills, they offer occupation-specific education and training, and they prepare students for transfer to four-year post-secondary institutions. These activities represent significant economic contributions by increasing workers' earnings and generating additional tax revenues. Moreover, community colleges are generally among the largest employers in the area where they are located and generate substantial additional economic benefits for their communities through local expenditures and employment impacts.

This economic impact analysis of the Illinois Community College System considers changes in student characteristics over a 10-year period, student outcomes, tax revenues generated, market penetration, and economic impacts. Following are a number of significant findings from the analysis.

## Illinois community colleges add skills to our workforce and boost the competitiveness of our businesses.

- Eight out of 10 Illinois employers (81.2%) hired a community college student at some point over the past 10 years.
- Three out of 10 Illinois workers (29.5%) participated in credit courses at an Illinois community college during the past 10 years.
- Statewide, there was a 62.9% increase in students who completed an Illinois community college program from 1996 to 2006. The four occupational program areas with the largest completer earnings gains per credit hour were Protective Services, Construction Trades, Health Professions and Related Sciences, and Precision Production Trades.
- The percentage of Illinois community college enrollees intending to prepare for college transfer increased from 25.8% to 32.9% between 1996 and 2006.

# Illinois community college graduates generate billions of dollars in local, state, and federal tax revenues.

- Illinois community college students who attended school in 1995 paid an estimated \$3.3 billion in state taxes and \$12.8 billion in federal taxes between 1996 and 2005.
- Illinois community college students who graduated in 1995 paid an estimated \$168 million in state taxes and \$650 million in federal taxes over the next 10 years.
- More than 9 out of 10 Illinois community college graduates remain in Illinois after completing college and contribute to the state's economy.

### An Illinois community college education increases earnings for workers.

 On average, all students who completed their Illinois community college education in FY05 and worked year-round saw a 31% increase in earnings over their pre-enrollment wages.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This figure measures the change in earnings between pre-enrollment and post-completion and represents graduates and individuals who did not re-enroll in FY06.



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- Students who complete their program of study realize even greater benefits. A 25-year-old Illinois community college program graduate can expect a total lifetime earnings gain of \$541,115. This is 55% more than the projected total lifetime earnings of \$1.2 million if they had not completed an Illinois community college program.<sup>2</sup>
- Illinois community college graduates employed full-time averaged \$32,369 in annual earnings after completing their programs of study.<sup>3</sup> This represents about 250% of the state's minimum wage.

As major employers and business entities, Illinois community colleges generate billions of dollars in local sales and wages and more than 55,000 jobs.

- In FY05, Illinois community colleges directly employed 13,840 full-time and 19,397 part-time staff with a total payroll of \$1.1 billion.
- In addition to wages and salaries, Illinois community colleges reported \$464 million in operating and capital expenditures. These monies produced an estimated \$332 million in output for a total economic impact of \$796 million and an estimated additional 8,683 jobs.
- The total economic output of the community colleges on the Illinois economy in FY05 was estimated at \$2.55 billion and 55,407 jobs.

A majority of Illinois community college have increased enrollments by almost one-third over the past 10 years and completion rates by 70 percent.

- Between 1996 and 2006, two out of every three Illinois community colleges increased enrollments at a rate averaging 32.0%.
- Illinois community college students completing their course of study during this period increased at 85% of the colleges by an average of 70.3%.

Illinois community colleges are responding to the state's changing demographics and educational needs.

- The most significant demographic changes in enrolling students over the 1996 2006 period included increases in the number of students 19 years old and younger, Hispanic students, students with limited English proficiency, students with both an economic and academic disadvantage, and students in correctional institutions.
- More enrolling students are preparing for college transfer while fewer are preparing for a job.
   Baccalaureate/ transfer instruction continues to represent the largest number of enrollments and more students are enrolling in health-related programs and basic skills-building courses.
- Completing students were more likely to be an ethnic/racial minority, come from a background with limited English, and be in ESL and basic skills programs.
- Fewer completing students are pursuing a certificate or degree and the largest percentage remains in career and technical instruction.

<sup>&</sup>lt;sup>3</sup> This includes graduates reporting four continuous quarters of full-time earnings above minimum wage.



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<sup>&</sup>lt;sup>2</sup> Assumes an annual average salary of \$32,639 over 30 years with annual increases of 3%.

### C. Illinois Community College Student Economic Outcomes

This section examines the economic outcomes for students who have left the Illinois community college system. The source of community college student employment and earnings data is the Unemployment Insurance (UI) wage record data reported by Illinois employers for each of their employees. UI data are collected on a quarterly basis by the Illinois Department of Employment Security (IDES) and maintained in a data warehouse by the Center for Governmental Studies at NIU. This comprehensive employment data source is estimated to cover 96 percent of total wage and salary civilian jobs.<sup>4</sup> Limitations of the UI wage records are that they contain neither the number of hours worked by participants nor the position they held.

The initial focus is on the percentage of completers who are identified as employed in the first or second full post-completion quarter<sup>5</sup>. Figure 1 displays employment rates of ICCB students who complete at least one credit hour program for each year from 1995 to 2005. Over this period there has been a decline in the employment rate from 77.1% in 1995 to 69.3% in 2005. However, at least part of this decline may be due to the increase in the percentage of students who continue their education. Although data for the complete time series were not available for this analysis, the results from the Postsecondary Perkins performance indicators from 1999 to 2005 show that the percentage of students who continued their education but were unemployed grew from 6.7% to 8.6%.

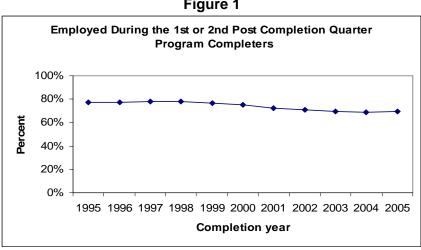


Figure 1

Figure 2 displays the average annual post-completion earnings for three groups of employed program completers from 1995 to 2005. The first group is the set of all completers. The average annual post-completion earnings of this group rose from \$12,397 to \$15,147. The issue with examining the earnings of all completers is that many may be part-time or part-year employees. For a more complete picture, earnings gains were isolated for program completers that worked in each of the four post-program quarters (full-year) and those that worked each of the quarters at an earnings level that was above minimum wage for 30 hours per week (fulltime). Those identified as full-year workers had earnings of \$19,167 in 1995 and \$26,005 in 2005, a 35.7% increase. The group identified as full-time, full-year in 1995 had earnings of \$26,113 and in 2005 earned \$32,639 in 2005, an increase of 25.0%.

The 1st full post completion quarter is the first full quarter after the completion of the program. This is to avoid using wages that were earned while the student was in the program.



<sup>&</sup>lt;sup>4</sup> See http://lehd.dsd.census.gov/led/library/techpapers/tp-2002-16.pdf. Examples of employment not covered by UI laws include self employment and some agricultural and domestic work.

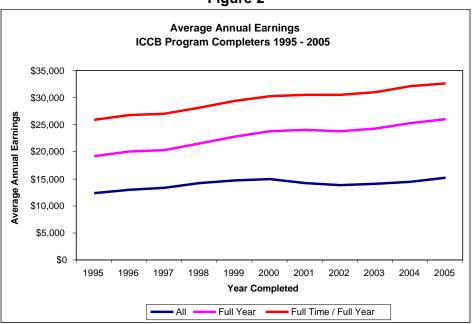


Figure 2

This analysis illustrates the difficulty in examining employment and earnings outcomes with UI quarterly wage data. The UI data include any earnings provided to the employee by employer. This could result from full-time/partial quarter, full quarter/part-time employment, etc.

Another method of examining the post-completion earnings of community college students is to track the earning of a specific cohort of completers over time. For this analysis, the average annual earnings of all 1996 completers were tracked over a 10-year period (see Figure 3). The results indicate that the former students' earnings continued to increase through this period with the largest increases occurring in the years immediately after program completion. These increased earnings compound and accrue over a working lifetime.

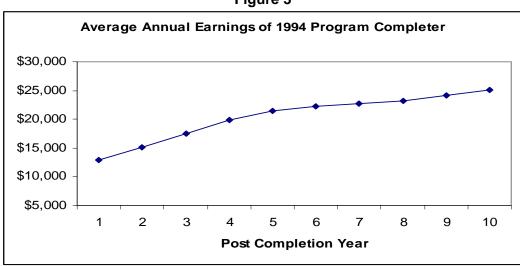


Figure 3

One of the major advantages of using longitudinal UI wage data is the possibility of examining pre-enrollment and post-completion wages. The major difficulty in performing such an analysis is identifying the appropriate pre-enrollment period. Since community college students vary in their course-taking behavior (they can attend classes full-time, part-time, or intermittently), identifying the entry date for a student in a program can be challenging. The approach taken for this study was to examine each of the years prior to the date of program completion. If there were no earned hours during a given year, the enrollment date was set to the first day of the semester in which credit hours were earned.<sup>6</sup>

Once the enrollment date for each completer was determined, UI earnings for the four full preenrollment quarters were used to produce an annual pre-enrollment earnings amount. Similarly, UI earnings for the four full post-completion quarters were used to determine the annual postcompletion earnings. The results obtained for all program completers from 1998 to 2004 are displayed in Figure 4.

The average pre-enrollment to post-completion earnings gain over the eight-year period from 1998 to 2005 was \$6,073 dollars<sup>7</sup>. This translates to a \$3.34 per hour increase in earnings assuming full-time, full-year employment (\$6,073 / {52 weeks x 35 hours}). The trend indicates a decline in earnings gains from 1999 to 2002 with a resurgence in earnings gains beginning in 2003. This period of decline brackets the 2001 economic recession.<sup>8</sup>

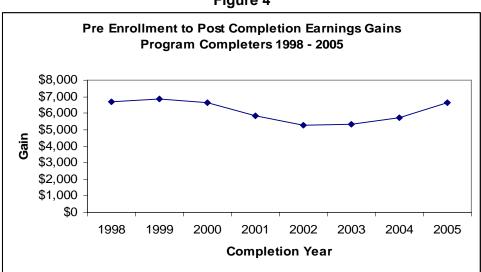


Figure 4

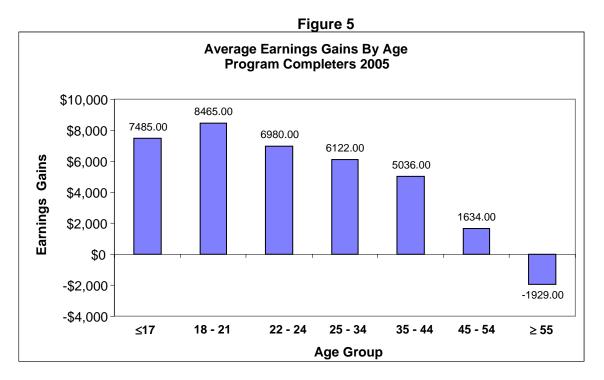
The data show that the earning gains vary by the students' age. Figure 5 illustrates by age grouping the earnings gains of community college students who completed a program in 2005. The younger age groups experience the greatest wage gain, with those in the 18 - 21 age group experiencing the greatest gains (\$8,465). However, beginning with the 22 - 24 age group, the gains begin to decline to the point where there is a net earnings loss for the 55 and older group.

<sup>&</sup>lt;sup>8</sup> National Bureau of Economic Research, "Business Cycle Expansions and Contractions," downloaded from http://www.nber.org/cycles.htm on April 31, 2007

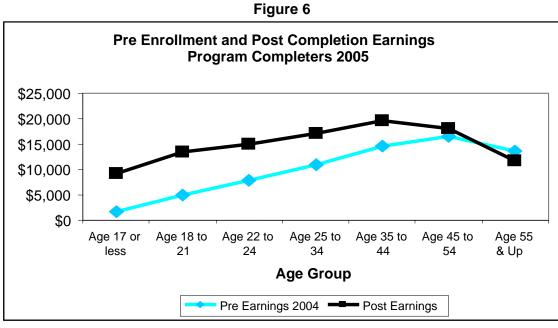


<sup>&</sup>lt;sup>6</sup> For example, if a student completed a program in 2004, the procedure was to look at the credit hours earned in 2003, 2002, etc.. If no credit hours were earned in 2002, then the start date of the earliest semester in which credits were earned was defined as the enrollment date.

<sup>&</sup>lt;sup>7</sup> The data series ends in 2005 due to the lack of a full year of post completion data and begins in 1998 to the lack of hours earned by semester for the earlier completion cohorts.



To gain insight into this issue, the average pre-enrollment earnings were plotted against the post-completion earnings for the 2005 program completers (see Figure 6). Both the preenrollment and post-completion earnings increase up to the 35 - 44 age group. At that point, pre-enrollment earnings continue to increase for one more age group and then decline for the 55 and older group. On the other hand, the post-completion earnings begin to decline with the 45 - 54 group and then drop more sharply for the 55 and older group. This pattern is evident in every completer cohort and highlights the difficulty that older workers have in recouping previous wages even when additional education is obtained. Among displaced workers it is common to see a wage recovery of 85% of pre-layoff earnings following job loss and retraining.





Changes in pre-employment to post-completion earnings are also affected by the instructional program a student completes. Figure 7 displays the earning changes by the Classification of Instructional Program (CIP). A substantial range in earnings gains is apparent across CIPs. Students who completed a program in protective services, construction trades, health and related sciences, and engineering-related technologies all experienced gains of more than \$10,000. By contrast, students who completed programs in education and transportation and materials moving had gains of less than \$3000.

Course Completion Returns/Gains Per Credit Hours Earned. Obtaining a degree or certificate is a goal for many, but not all, students. In fact, there is economic value added by a community college education even when a degree or certificate is not obtained. Thus, a second approach toward examining student outcomes focuses on the gains per credit hours earned. However, in expanding the analysis to include students who exited community college without obtaining a degree or certificate, the challenge becomes identifying a valid exit date. This was accomplished by reversing the procedure that was used to identify the enrollment data. After excluding students who completed a program from the database, the two consecutive years of program enrollments beginning with the 1994 were examined. If there were no credit hours earned in 1994 but were credit hours earned in 1995, we established the enrollment date as 1995. Once this entrance cohort was established, the enrollment records were tracked in subsequent year. If a student was found to have no earned hours on year t+1 but did earn credit hours in year t, their exit date was defined as the last day of the semester in which they earned credit hours in year t.

<sup>&</sup>lt;sup>9</sup> Although NIU had access to 1994 enrollment records, the 1993 records needed to determine if an enrollment began in 1994 were not available.



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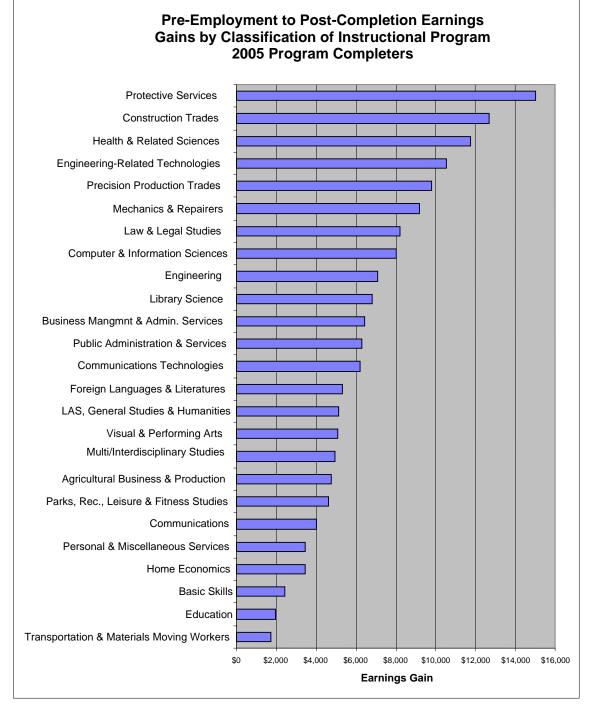


Figure 7

Figure 8 displays the results for 2005 exiters and completers. The average gain for all exiters/completers is \$3,782 which translates to \$226 per credit hour.



Figure 8
Earnings Gain and Average Gain Per Credit Hour
PY2005 Exiters (Completers and Non-Completers)

Completer Type 2005	Average Earnings Gain	Average Gain Per Credit Hour
Completer	\$6,628	\$168
Non Completer Exiter	\$3,207	\$264
Total	\$3,782	\$226

An interesting anomaly appears when comparing the results for those who complete programs and those who exit without completing. While the earnings gains are much higher for the completer group, 207% of the gain experienced by non-exiting completers, the average gain per credit hour earned is higher, 157%, for the non- exiting completers than it is for the completers.

This situation is further highlighted when we examine the earning gain and gains per credit hour by the number of credit hours earned. The results displayed in Figure 9 show that while there is a strong positive relationship between the number of credit hours earned and earnings gains, as the number of credit hours increases the average gain per credit hour decreases. Further exploration of the contributing factors could involve the actual pre-program earning (absolute dollar amount), age, and workforce experience of the exiters versus the completers. For example, a mid-career professional engaged in skill upgrading could see greater returns than someone who is initially entering the workforce. The chosen field of endeavor also influences outcomes.

Figure 9
Earnings Gain and Average Gain Per Credit Hour by Earned Credit Hour Groups
PY2005 Exiters (Completers and Non-Completers)

Earned Credit Hours	Total Number of Exiters	Average Earnings Gains	Average Earnings Gain Per Credit Hour
Total	332,921	\$3,782	\$226
Missing	26,836	\$8,115	\$105
.5 to 04 CTE	134,663	\$2,699	\$1,200
05 to 09	64,466	\$3,043	\$435
10 to 14	28,779	\$3,680	\$309
15 to 19	19,876	\$3,739	\$223
20 to 24	13,444	\$4,583	\$207
25 to 29	9,789	\$4,270	\$158
30 to 34	8,476	\$4,878	\$153
35 to 39	6,477	\$5,330	\$144
40 to 44	5,712	\$5,549	\$132
45 to 49	4,915	\$6,113	\$130
50 to 54	4,417	\$6,177	\$119
55 to 59	4,139	\$6,576	\$115
60 and up	932	\$6,538	\$109



The average earnings gain per credit hour also varies by the Classification of Instructional Program at completion (See Figure 10), the Program Classification System at completion (see Figure 11), and Degree Type at completion (see Figure 12). The four program areas that produce the greatest gains per credit hour are Protective Services, Construction Trades, Health Professions and Related Services, and Precision Production Trades.

Those with the lowest gains per credit hour are Education, Visual and Performing Arts, Personal and Miscellaneous Studies, and Multi/Interdisciplinary Studies.

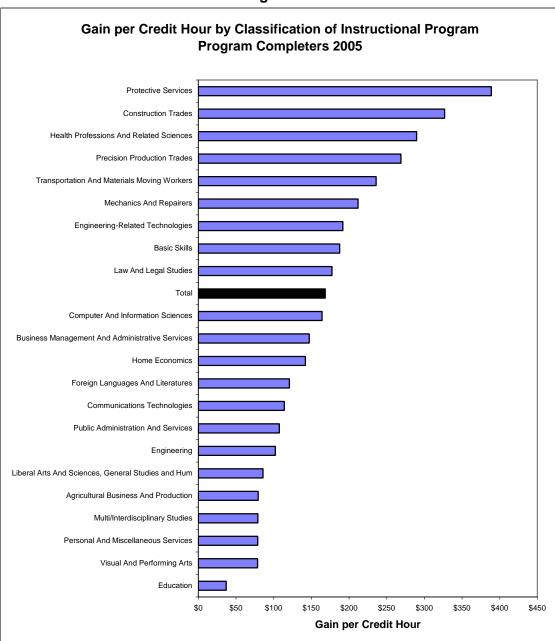


Figure 10



One of the more surprising results regarding the average gains per credit hour concerned the results by Program Classification Structure. Adult Secondary Education, English as a Second Language and Adult Basic Education had higher than average earnings gains per credit hour. Figure 11 illustrates these earnings gains by program classification.

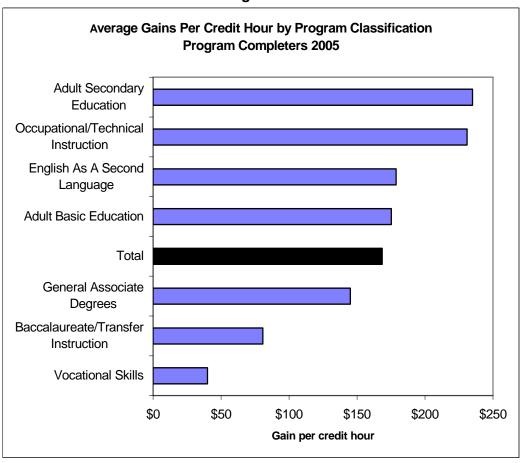


Figure 11

When average gains by credit hour are examined by completion degree, four types of degrees/certificate have above average gains: career certificates of less than 30 hours, Associate in Applied Science, Basic Skills, and career certificates of 30 hours or more. The lowest average gain per credit hour was for the Associate's Degree in Fine Arts. Data on earnings gains by degree are presented in Figure 12.

Total lifetime earnings gains were estimated two ways. Both approaches used the preenrollment and post-completion average annual earnings of 22 to 25-year-old completers as a base. The first approach takes the difference of the pre-enrollment and post-completion earnings to produce an average pre/post earnings gain and multiplies that gain by the expected working life of the 25 year-old (40 years). This approach yielded a total lifetime earnings gain of \$275,155.



The second approach was similar except that both the pre-enrollment and post-completion earnings were assumed to increase at an annual percentage gain of 3 percent. This approach yielded a total expected lifetime earnings gain for a 25 year-old program completer of \$541,115.

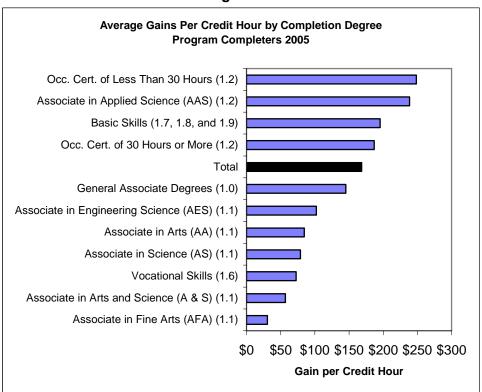


Figure 12

### D. Illinois Community College Student-Generated Tax Revenues

In this section, the amount of tax dollars contributed by Illinois community college students to the federal and state tax base over a period of 10 years is estimated. Separate estimates are produced for students who were enrolled in a community college during 1995 and for the subset of those students who completed programs in 1995.

For these analyses, the annual total Unemployment Insurance earnings were obtained for each student enrolled in an Illinois community college in 1995 for each year from 1996 to 2005. Federal taxes were estimated by applying the average marginal tax rate for a given year to the earnings for that year. State taxes were estimated by first subtracting the standard deduction for an individual from the annual earnings (\$1,000), and then applying the 3% Illinois state tax rate to the result. Although this is a simplistic approach for estimating tax revenues in both cases, given the limitations of available data, it may be used to reasonably approximate the magnitude of taxes paid by this cohort of Illinois community college students. The results of this analysis are presented in Figure 13.



# Figure 13 Estimated Federal and State Tax Revenue Paid 1996-2005 1995 Enrollees and Completers

1995 Cohort	Federal Taxes	State Taxes	
Enrollees	\$12,807,915,940	\$3,331,251,319	
Completers	\$650,429,319	\$168,221,630	

Source: Illinois Department of Employment Security UI wage data, ICCB student data, National Bureau of Economic Research, "U.S. Federal and State Marginal Income Tax Rates," http://www.nber.org/~taxsim/marginal-tax-rates/plusstate.html

It is estimated that \$12.8 billion in federal taxes was generated between 1996 and 2005 by students who attended Illinois community colleges in 1995. Of that total, about 5.1% was contributed by students who completed in 1995. Similarly, of the estimated \$3.3 billion in state tax dollars generated by 1995 enrollees, a similar percentage or \$168 million would have been generated by 1995 completers.

### E. Market Penetration

Market penetration of Illinois' community colleges may be measured in two different and complementary ways. One is to determine the number of employees in the workforce that have attended an Illinois community college. To this end a database was compiled that contained an unduplicated list of all workers who had wages reported to the Unemployment Insurance system during 1995. Next, a second database was compiled of all students (again unduplicated) who earned credit hours between 1994 and 2005. The two databases were merged to determine the percentage of all workers in 1995 who had received some education or training in the community college system between 1994 and 2005. The result was a determination that 29.5% of all workers in 2005 had attended an Illinois community college during the previous 10 years.

The other method of determining community college market penetration is to estimate the number of Illinois employers who have hired a former Illinois community college student. To obtain this number the unduplicated database of students who earned credit hours from 1994 to 2005 was merged with a database of all reported UI wage records from the same period of time. This produced a list of all employers who had hired an Illinois community college student from 1994 to 2005. This list of employers was then merged with a database of employers who reported wages during the first quarter of 2006. The result indicated that over 80% of employers who reported wages in the first quarter of 2006 (81.2%) had hired a community college student at some point in the previous 10 years.

### F. Illinois Community College Economic Impacts

Illinois' 48 community colleges are important sources of expenditures and employment for the communities and regions they serve. As part of their day-to-day operations, each college purchases goods and services, many of them from the local economy. They also pay their employees, who in turn spend their wages and salaries in the local economy. Additionally, the community colleges invest in site improvements, remodeling, and new construction that generate additional expenditures and jobs.

Any change in economic activity, such as the purchase of a commodity or a service, has direct, indirect, and induced effects. For example, when a community college hires a local printer to produce its catalogues and brochures, these orders contribute directly to the income of the local



printing industry. The printers' employees spend at least some of their income locally, and these purchases, induced by the college's initial purchase, contribute to the employment and the income of other local industries and services. The printers spend part of their income from the community college's orders on the supplies that they need to run their businesses. To the extent that these purchases are local, they contribute to the incomes of employees in other industries, who in turn spend their incomes on still other goods and services with these effects again induced by the college's initial purchase.

IMPLAN Pro economic modeling software was used to produce estimates of the direct, indirect, and induced economic impacts of Illinois community colleges. **Direct impacts** are simply the set of expenditures or employment applied to the predictive model for impact analysis. **Indirect impacts** are then derived as additional effects caused by industries purchasing from other industries. **Induced impacts** take into account the spending in the local economy of the new income generated by the new employment produced from the impact.

Taken together, direct, indirect, and induced expenditures directly attributable to Illinois community college activities in fiscal year 2005 exceeded \$2.5 billion in output and an estimated 55,407 jobs. Summary data are provided in Figures 14 and 15.

Figure 14
Summary of the Illinois Community Colleges' Economic Impact
Expenditures - FY2005

	Operational Expenditures	Employee Expenditures	Capital Expenditures	Total
Direct Effects	\$314,633,067	\$1,123,563,148	\$149,397,677	\$1,587,593,892
Indirect Effects	\$88,409,836	\$289,128,108	\$53,195,446	\$430,733,390
Induced Effects	\$97,311,965	\$342,294,047	\$93,269,397	\$532,875,409
Total	\$500,354,868	\$1,754,985,303	\$295,862,520	\$2,551,202,691

Source: Individual Illinois community college data, ICCB, IMPLAN Pro

Figure 15
Summary of the Illinois Community Colleges' Economic Impact
Employment - FY2005

	Operational Expenditures	Employee Expenditures	Capital Expenditures	Total
Direct Effects	33,237	8,119	1565	42,921
Indirect Effects	5,783	2,127	452	8,362
Induced Effects	n/a	3,241	883	4,124
Total	39,020	13,487	2,900	55,407

Source: Individual Illinois community college data, ICCB, IMPLAN Pro

**Operational Expenditures.** Data provided by the individual community colleges to the Illinois Community College Board (excluding wages, salaries, and capital costs) identified \$314,633,067 in operating expenditures during fiscal year 2005. These are the outside services and supplies required in the daily operations of the colleges. This spending translates to approximately 5,783 additional Illinois jobs and, as these expenditures churn through local



economies, they induce another \$97 million in output. These impacts are summarized below in Figure 16.

Figure 16
Illinois Community Colleges Operational Expenditures
Output and Employment Impacts – FY2005

	Direct	Indirect	Induced	Total
Output	\$314,633,067	\$88,409,836	\$97,311,965	\$500,354,868
Employment	33,237*	5,783	n/a**	39,020

\*Actual full- and part-time employees

**Employee Expenditures.** Illinois community colleges directly employ 13,840 full-time employees and 19,397 part-time employees. Average salaries for each of four employee classifications were used to estimate total earnings for both full-time and part-time employees. Following the U.S. Bureau of Labor Statistics guidelines for Illinois, it was assumed that an average of 80.3% of gross pay was available for consumption. This figure was used to calculate total employee expenditures (direct effects) and resulted in \$568,968,431 for FY05 for full-time employees and \$554,594,717 for part-time employees, or a total exceeding \$1.1 billion. This economic activity generated an estimated additional 8,119 employees in Illinois in industries that support consumer expenditures such as food service, general retail, hospitals, and wholesale trade.

In addition to these direct economic impacts, the salaries of full- and part-time community college employees will generate an additional \$289 million and 2,127 jobs in indirect impacts. Induced impacts of \$342 million and 3,241 jobs are estimated to result from additional local spending of new employment income. A summary of the direct, indirect, and induced output and employment impacts for Illinois community college employees is presented in Figure 17.

Figure 17
Illinois Community Colleges Employee Expenditures
Output and Employment Impacts – FY2005

Cathat and Employment impacts 1 12000				
	Direct	Indirect	Induced	Total
Full-Time Employees				
<ul><li>Output</li></ul>	\$568,968,431	\$145,649,522	\$171,586,817	\$886,204,770
<ul><li>Employment</li></ul>	4,081	1,072	1,625	6,778
Part-Time Employees				
<ul><li>Output</li></ul>	\$554,594,717	\$143,478,586	\$170,707,230	\$868,780,533
<ul><li>Employment</li></ul>	4,038	1,055	1,616	6,709
All Employees				
<ul><li>Output</li></ul>	\$1,123,563,148	\$289,128,108	\$342,294,047	\$1,754,985,303
<ul> <li>Employment</li> </ul>	8,119	2,127	3,241	13,487
Source: Individual Illinois community college survey data, ICCB college audit data, IMPLAN Pro				

Community college employees residing outside Illinois were excluded from the total employee expenditures.



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<sup>\*\*</sup>Induced impacts are captured in employee expenditures described in the next section Source: Individual Illinois community college data, ICCB, IMPLAN Pro

Capital Expenditures. In addition to the economic activity generated by the Illinois community colleges' operating and employee expenditures, the colleges' capital development projects also contribute significantly to local economies. Since FY2000, Illinois community colleges have invested \$855,645,386 in capital projects in the 39 districts. These expenditures have generated an estimated \$838,848,142 in indirect and induced output for a total impact of \$1,694,493,528. These expenditures also generated an estimated 16,611 jobs for construction workers. For FY05 alone, the total direct, indirect, and induced impact of Illinois community college capital projects was an estimated \$295,862,520 and short-term employment for an estimated 2,900 workers.

### G. Workforce Development Impacts<sup>11</sup>

In FY05, the Illinois Community College Board provided over \$3.3 million in workforce preparation grant funds to every community college district in the state. These funds were used to support a Business and Industry Center at each community college that provided nine types of employment, training and business services:

- Contract and customized job training
- Entrepreneurship seminars and workshops
- Counseling and management assistance
- Contract procurement assistance
- Public training
- Employment and training services for unemployed or underemployed workers
- Business attraction, retention and expansion
- Distance learning and continuous improvement
- Other workforce development activities and partnerships.

The Illinois Community Colleges reported providing services to 12,353 businesses and organizations during FY05 that resulted in the start-up of 514 companies, the expansion of 275 companies, and the retention of 1,234 companies. These performance outcomes resulted in the creation of 5,043 jobs and the retention of another 19,120 jobs throughout Illinois.

### H. Characteristics of Illinois Community College Students

Illinois' community college system consists of 48 colleges and the East St. Louis Community College Center in 39 community college districts (see Figure 18). As the third largest community college system in the nation, Illinois community colleges serve nearly one million Illinois residents each year in credit and noncredit courses and offer education and training in over 240 different occupations.

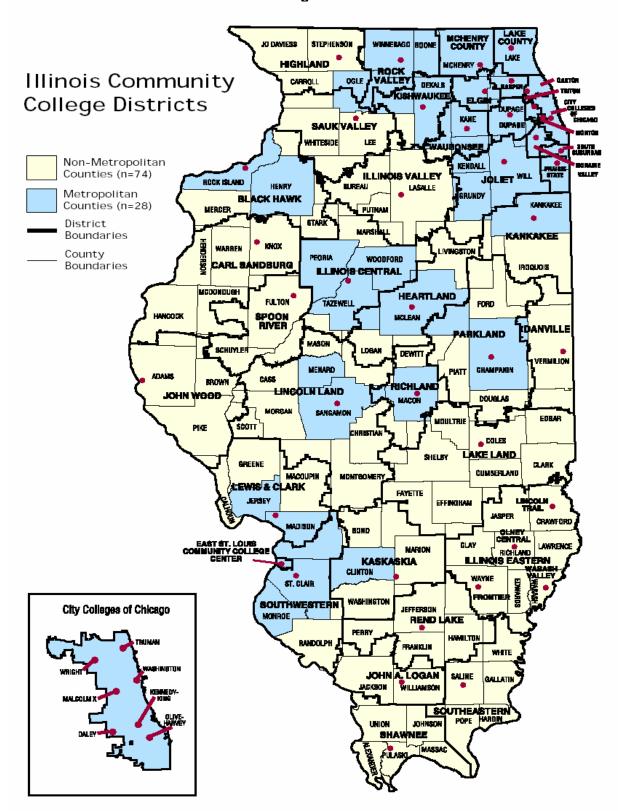
To provide a context for understanding the economic impacts of the Illinois' community colleges, an analysis of student characteristics and program enrollment and completion between 1996 and 2006 for credit classes was undertaken. Graphic representations of the data are selectively incorporated into this section and the corresponding data tables are provided in Appendix A. While not the primary focus of this report, it is nonetheless useful to identify significant changes in the student population that occurred over this 10-year period.

<sup>&</sup>lt;sup>11</sup> Information in this section was taken from the Illinois Community College Board's *Workforce Development Grant Report, Business and Industry Services, Fiscal Year 2005.* 



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Figure 18





This section highlights the noteworthy changes over this period in enrollments and completions in credit courses for 14 characteristics of Illinois community college students. These include:

- 1. Total enrollments and completions
- 2. Age
- 3. Race and ethnicity
- 4. Gender
- 5. Students with disabilities
- 6. Limited English-speaking students
- 7. Disadvantaged status

- 8. Highest grade at enrollment
- 9. Residence
- 10. Student intent
- 11. Educational objective
- 12. Program classification
- 13. Instructional program
- 14. Degree

In reviewing these enrollment and completion trends, it is important to keep in mind the distinction between these two groups of students. **Enrollments** are not first-time entrants into the community college system. Rather, they are all students who have taken one or more courses and earned academic credit in a given year. Some have taken courses in the previous year and others will take courses in subsequent years. Enrollments reflect a point-in-time figure of active students in the year under consideration.

**Completers** are students who have completed a course of study and have earned either a certificate or degree in a given year. For short-term certificates, these students may have been enrolled for a single year, the time necessary to earn that certificate. Other completers may have been enrolled in previous years and still others may enroll in the future to take additional courses after finishing an initial program. Completers received a certificate or degree in the year under consideration.

1. <u>Total Enrollments and Completions</u>. Overall, there was a very small gain of 5,068 in community college enrollments in credit courses, from 675,554 in 1996 to 680,622 in 2006, or a 0.75% increase. Despite this small statewide enrollment increase, at the college level there have been significant changes. Of the 48 colleges, 33 experienced increases in their enrollments ranging from 1.2% to 92.0% and an average of 32.0%. The remaining 15 colleges have seen decreased enrollments ranging between -54.5% and -1.6% and averaging -24.4%.

By contrast, there has been a 62.9% increase in students who completed their program of study during this same period. Of Illinois' 48 community colleges, 41 displayed increases in program completers ranging from 4.5% to 292.0% with an average increase of 70.3%. Of the seven colleges experiencing a decrease in the number of program completers, the range was smaller: -1.6% to -32.1% and an average decrease of -15.9% from 1996 to 2006.

 Age. More students are currently enrolling in community college directly after high school than their 1996 counterparts. Although the average age declined only slightly from 29.9 years of age to 29.2, the percentage of enrollees aged 19 or less increased from 22.3% to 26.4% of the total.<sup>12</sup> Figure 19 illustrates the percent change in enrollees by age grouping.

<sup>&</sup>lt;sup>12</sup> These percentages excluded 18,856 individuals for whom age information was missing. This group represented 2.8% of all 1996 enrollees.



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**Program Enrollments** Age at Enrollment: 1996 & 2006 30 25 Percent 20 15 10 5 0 Age 20 to Age 25 to Age 35 to Age 45 to Age 55 Age 19 or less 24 34 54 and up **Age Group** ■ Percent 1996 ■ Percent 2006

Figure 19

The age profile of students who completed their program of study did not change appreciably over this period. The average age at program completion changed only slightly from 28.4 to 29.0 years from 1996 to 2006. As indicated in Figure 20, the largest age cohort of completers was 20-24 at 32% followed by 25-34 at 25%. Completers under 19 years of age and between 35 and 44 declined slightly and more individuals in the age groups of 45 and over completed in 2006 than in 1996.

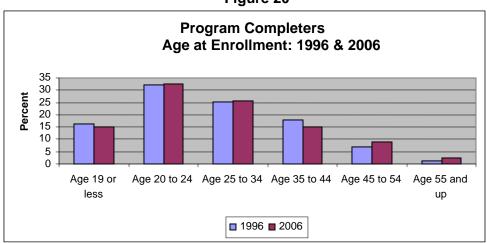


Figure 20

3. Race and Ethnicity. Higher percentages of Hispanics are enrolling in Illinois community colleges. In 1996 there were 83,713 Hispanic enrollees representing 12.7% of the total. By 2006 that number had increased by 22.7% to 102,687 and represented 15.5% of all enrollees. White enrollees decreased by 2.4 percentage points over this period. Figure 21 depicts these changes.



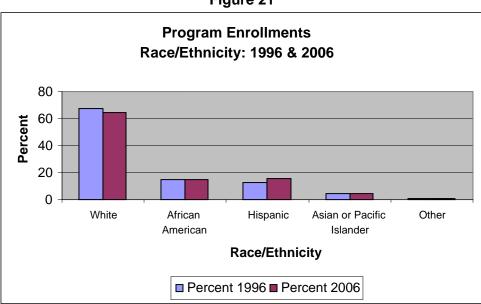


Figure 21

As illustrated in Figure 22, the percentage of program completers who were white has decreased while the percentage of all minority groups has increased, particularly Hispanics. Hispanics represented 14.7% of all completers and African-Americans represented 14.0% (compared to 14.6% of all enrollees).

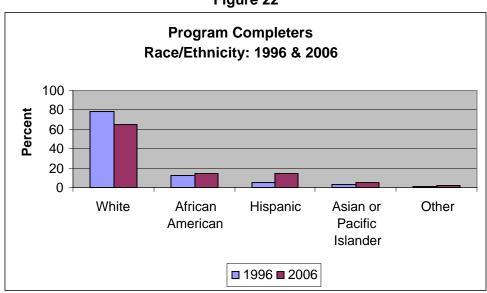


Figure 22

4. <u>Gender</u>. Females enroll at higher rates than males in Illinois community colleges. For both 1996 and 2006 women comprised 55% of all enrollees. Females make up an even higher percentage of program completers: 62% in 1996 and 59% in 2006.



- 5. <u>Students with Disabilities</u>. Individuals reporting a disability at the time of enrollment remained relatively constant at 1.7% of all enrolled community college students in 2006, a 0.1% increase over 1996. In 2006 1.9% of all completers reported a disability.
- 6. <u>Limited English-Speaking Students</u>. The percentage of individuals who enrolled with limited English-speaking ability has more than doubled from 1996 to 2006 with an increase from 4.8% to 10.9% of all enrollees. This represents an additional 40,536 students. Illinois community college program completers with limited English also increased significantly but represented smaller percentages of the total at 1.3% in 1996 and 8.9% in 2006.
- 7. <u>Disadvantaged Students</u>. Approximately 40% of Illinois community college enrollees reported an academic and/or economic disadvantage, a proportion that has remained unchanged from 1996 to 2006. Academically disadvantaged enrollees make up the largest segment of this group but have decreased from 27.4% to 23.6%. Individuals who are both academically and economically disadvantaged increased from 8.3% in 1996 to 11.5% in 2006. Figure 23 presents this information graphically.

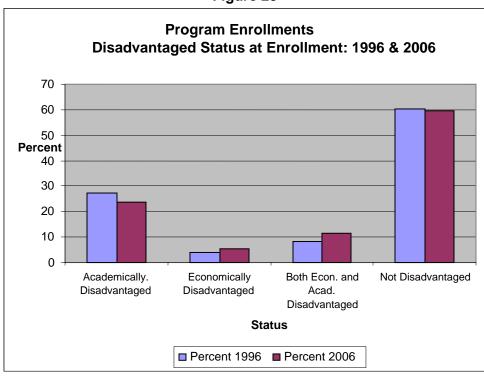


Figure 23

The percentage distribution of Illinois community college completers by disadvantaged status is presented in Figure 24. Completers with some type of disadvantage represented slightly more than one out of three students: 37.5% of the total in 1996 and 35.1% in 2006. Academically disadvantaged completers made up the largest group and experienced a small percentage decrease between 1996 and 2006.



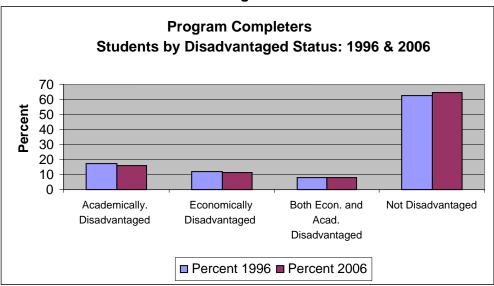


Figure 24

8. <u>Highest Grade Completed at Enrollment</u>. For enrollees for whom a specific level of education was indicated, the percentage with a post-secondary credential (i.e., associate degree, master's degree, doctorate degree, certificate, or first professional degree) increased from 22.0% in 1996 to 38.2% in 2006. Figure 25 illustrates the percentage of enrollees by highest grade completed.

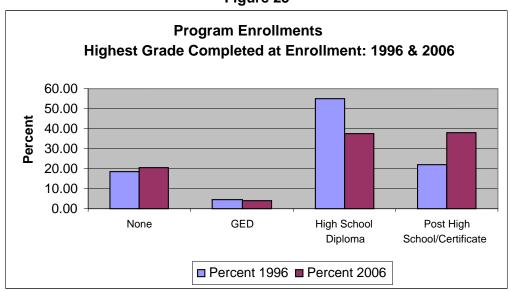


Figure 25

Completers with a post-secondary credential increased from 36.4% of all completers in 1996 to 47.0% in 2006. As evident in Figure 26, a commensurate decrease occurred in completers with a high school diploma at enrollment from 48.5% to 32.9%.



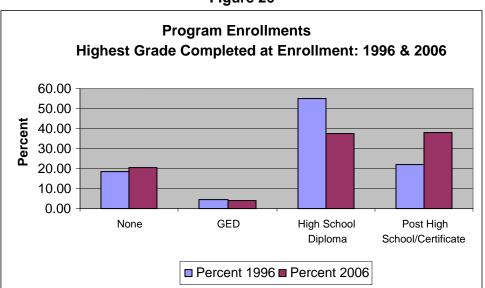


Figure 26

9. Residence. Although the vast majority of students resided in-district at the time of enrollment (86.2% in 1996 and 83.3% in 2006), the percentage from out-of-district grew during this period from 12.8 to 14.7. The most dramatic proportionate increase was in correctional institutions, which experienced a 90.9% increase in enrollments from 6,583 to 12,567 to represent 1.9% of all enrolled students in 2006.

Students residing in correctional institutions represented 3.1% of all completers in 1996 and 3.7% in 2006. While out-of-district completers also increased over this period, they only reached 11.9% of the total in 2006.

10. <u>Student Intent</u>. In 1996 similar percentages of community college enrollees who indicated their educational goal were either preparing for a job after school (24.4%) or preparing for college transfer (25.8%). By 2006 a divergence emerged with 32.9% indicating that they intended to transfer to a four-year college and 19.7% preparing for a job. Although enrollees preparing for the GED or improving their basic skills decreased by 3.4 percentage points between 1996 and 2006, these students still comprised 16.2% of all Illinois community college enrollees or 91,492 individuals in 2006. Figure 27 presents student intent data for individuals enrolled in 1996 and 2006.

Completions were highest in 1996 for students who were preparing for a job after community college (41.6%) followed by students preparing for college transfer (35.4%). As evident in Figure 28, this situation reversed in 2006 as students preparing for jobs decreased to 30.1% of all completers and college transfers dropped slightly to 33.0%. The percentage of completers preparing for the GED or to improve basic skills increased from 6.7% to 14.7% during this period.



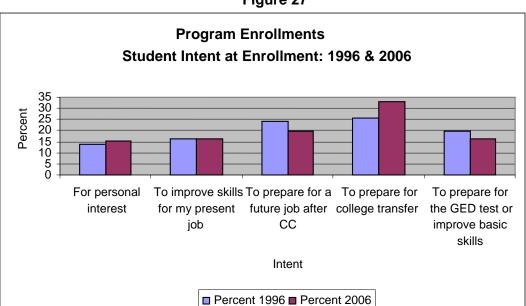
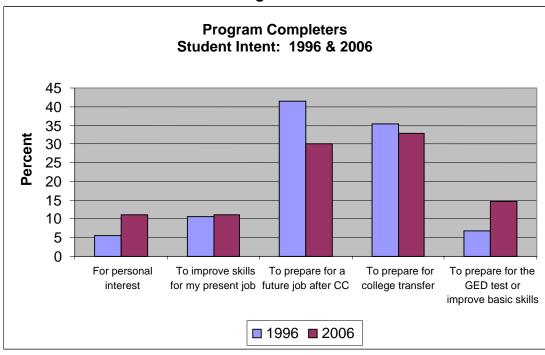


Figure 27

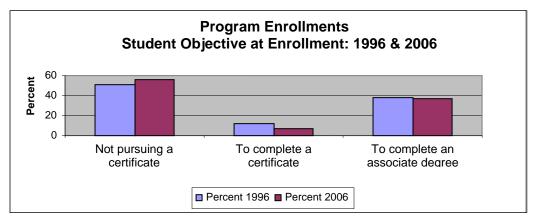




11. <u>Educational Objective</u>. As evident in Figure 29, the percentage of enrollees who were not pursuing a certificate or associate's degree increased from 50.9% in 1996 to 56.0% in 2006. Students enrolling to complete an associate's degree decreased only slightly from 37.5% to 36.5% over this period.

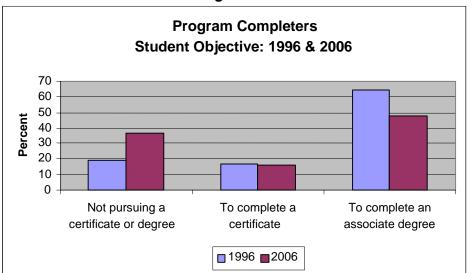


Figure 29



Students pursuing an associate's degree made up the largest percentage of total completers in both 1996 and 2006, although this figure decreased significantly. Figure 30 illustrates that over one-third of program completers (36.3%) in 2006 indicated they did not enter college to pursue a degree or certificate compared to 18.9% of program completers in 1996.

Figure 30



12. <u>Program Classification</u>. Between 1996 and 2006 the top programs in terms of total overall enrollments have remained baccalaureate/transfer, occupational/technical instruction, and vocational skills. These three programs represented 80.0% of all enrollments in 1996 and 77.2% in 2006. However, consistent with the increase in enrollees with limited English speaking ability, during this period the fourth largest program has changed from Adult Basic Instruction (ABE) in 1996 to English as a Second Language (ESL) in 2006. This represents a shift in ABE enrollments from 10.1% in 1996 to 3.9% in 2006 and an increase in ESL from 0.6% to 9.7%. Figure 31 presents these data.



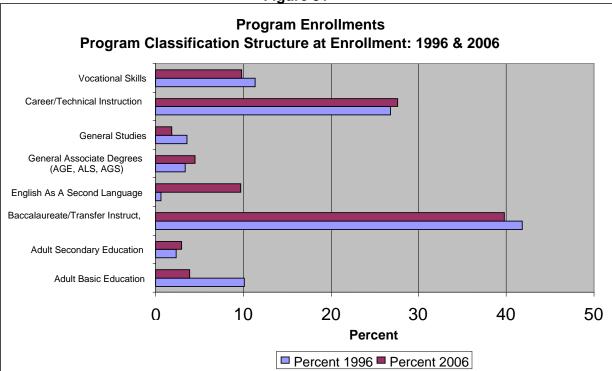


Figure 31

As evident in Figure 32, in both 1996 and 2006, career and technical instruction was selected by the largest percentage (55%) of program completers. The second highest percentage of program completers is in baccalaureate/transfer programs, but this number declined from 36.5% to 26.3%. Third highest is ESL which grew from less than 0.1% in 1996 to 7.7% in 2006.



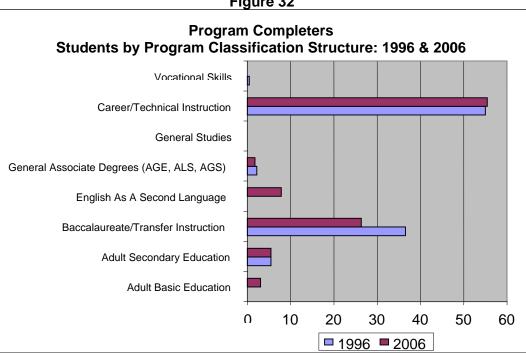


Figure 32

- 13. Instructional Program. Using the national Classification of Instructional Programs (CIP) typology at the two-digit level, students enrolling in an Illinois community college may select from 35 programs of instruction. Overall, the general pattern of enrollments remained stable from 1996 to 2006. Five broad CIPs represented 81% of the 1996 and 2006 enrollments:
  - Liberal Arts and Sciences, General Studies and Humanities
  - Basic Skills
  - Business Management and Administrative Services
  - Health Professions and Related Sciences
  - Multi/Interdisciplinary Studies

As portrayed in Figure 33, the most significant changes were increases in the percentage of students enrolling in health-related professions (8.0% to 11.2%) and basic skills (17.4% to 19.6%) and declines in business-related (10.2% to 7.1%) and liberal arts and sciences program (37.8% to 35.6%) enrollments.



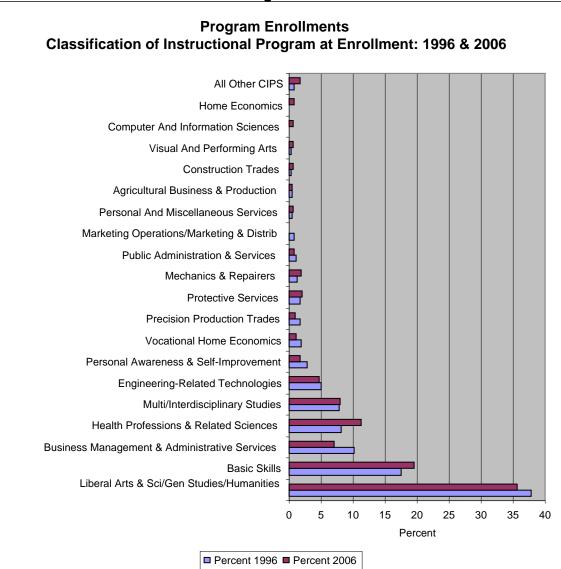


Figure 33

Completer data reveal the same top five CIPs but the rank order differs. Liberal Arts and Sciences had the largest percentage of completers in 1996 at 25.9% but was eclipsed by Health Professions and Related Sciences in 2006 at 24.2%. Basic Skills programs saw an increase from 6.0% to 16.5% and Transportation and Materials Moving increased by 1,043% to make up 3.8% of all completers in 2006. Many of Illinois community colleges participated in the State's Critical Skill Shortages Initiative that identified transportation/distribution/logistics as one of the occupational targets. Programs with the largest decreases in their percentage of all completers included Multi/Interdisciplinary Studies, Business Management and Administrative Services, and Precision Production Trades. Figure 34 illustrates these data.



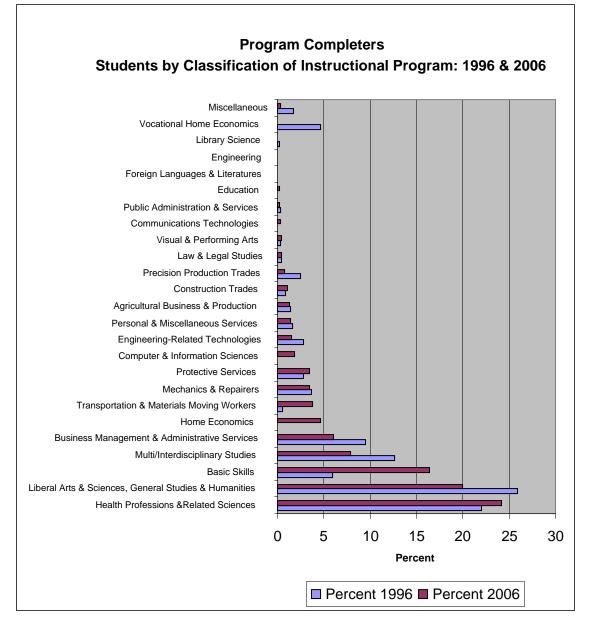


Figure 34

14. <u>Degrees and Certificates</u>. Overall, the number of degrees and certificates awarded by community colleges increased by 20,612 or 62.9% between1996 (32,786) and 2006 (53,398). Certificate completion growth outpaced degree completion growth. The percentage of program completers earning a career certificate of less than 30 hours showed the greatest increase from 1996 to 2006 (16.0% to 29.6%) followed by Basic Skills program credentials (5.8% to 16.3%). Three associate degree programs in science, arts, and applied science experienced declines over this period. The Associate in Applied Science degree saw the greatest decrease of 11.2 percentage points followed by the Associate in Arts (-5.8 percentage points) and Associate in Science (-4.7 percentage points). Figure 35 shows these changes over the 10-year period.



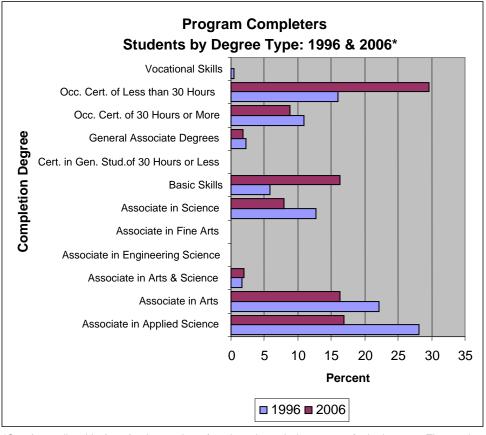


Figure 35



<sup>\*</sup>See Appendix table A-25 for the number of students in each degree type for both years. The numbers for Certificate in General Studies of 30 Hours or Less, Associate in Fine Arts, and Associate in Arts and Science were too small to appear as bars in this figure.

## Appendix A Student Enrollment and Completion Data: 1996 & 2006

## Table A-1 Percent Employed During the 1<sup>st</sup> & 2<sup>nd</sup> Post-Completion Quarter Program Completers 1995 – 2005

	Year										
	1995	1996	1997	1998	1999	2000	2001	2003	2003	2004	2005
Empl. Rate	77.06	77.58	78.10	78.04	76.65	75.43	72.23	71.05	69.53	68.95	69.26

Table A-2
Average Annual Earnings of Program Completers: 1995 – 2005

Towns of						Year					
Type of Employment	1995	1996	1997	1998	1999	2000	2001	2003	2003	2004	2005
All Employment	\$12,375	\$12,979	\$13,273	\$14,211	\$14,648	\$14,915	\$14,255	\$13,872	\$14,026	\$14,397	\$15,147
Full Year	\$19,167	\$19,996	\$20,247	\$21,604	\$22,786	\$23,733	\$24,003	\$23,778	\$24,300	\$25,307	\$26,005
Full Time / Full Year	\$25,920	\$26,731	\$26,985	\$28,194	\$29,360	\$30,233	\$30,474	\$30,463	\$31,051	\$32,105	\$32,639

Table A-3
Average Annual Earnings for Program Completers 1995

	Post Program Year									
	1	1 2 3 4 5 6 7 8 9 10								
Aver. Annual	nual									
Earnings	\$12,979	\$15,055	\$17,574	\$19,862	\$21,514	\$22,314	\$22,796	\$23,179	\$24,186	\$25,070

Table A-4
Pre-Enrollment and Post-Completion Earnings for Program Completers 2005\*

Age Category	Pre-Enrollment Earnings	Post Completion Earnings
Age 17 or less	\$1,781	\$9,266
Age 18 to 21	\$5,068	\$13,533
Age 22 to 24	\$7,957	\$14,937
Age 25 to 34	\$10,911	\$17,033
Age 35 to 44	\$14,652	\$19,688
Age 35 to 54	\$16,461	\$18,095
Age 55 & up	\$13,643	\$11,714

<sup>\*</sup>Earnings were computed for 56,034 program completers.



Table A- 5
Pre-Enrollment and Post-Completion Earnings Gains
Program Completers by Classification of Instructional Program - 2005

Classification of Instructional Program	Students	Pre- Enrollment Earnings	Post- Completion Earnings	Earnings Gains
Transportation & Materials Moving Workers	2,987	\$9,489	\$11,221	\$1,732
Education	82	\$9,004	\$10,972	\$1,968
Basic Skills	10,302	\$6,836	\$9,258	\$2,422
Home Economics	2,579	\$7,973	\$11,436	\$3,463
Personal & Miscellaneous Services	774	\$5,701	\$9,171	\$3,470
Communications	34	\$9,800	\$13,810	\$4,010
Parks, Rec., Leisure & Fitness Studies	50	\$9,843	\$14,474	\$4,631
Agricultural Business & Production	659	\$7,612	\$12,353	\$4,741
Multi/Interdisciplinary Studies	4,093	\$6,079	\$11,035	\$4,956
Visual & Performing Arts	244	\$7,140	\$12,237	\$5,097
LAS, General Studies & Humanities	10,536	\$6,706	\$11,822	\$5,116
Foreign Languages & Literatures	79	\$8,076	\$13,397	\$5,321
Communications Technologies	208	\$8,118	\$14,322	\$6,204
Public Administration & Services	119	\$7,915	\$14,216	\$6,301
Business Management & Admin. Services	3,259	\$12,820	\$19,265	\$6,445
Library Science	46	\$12,136	\$18,969	\$6,833
Engineering	83	\$5,943	\$13,035	\$7,092
Computer & Information Sciences	1,349	\$14,037	\$22,076	\$8,039
Law & Legal Studies	231	\$11,404	\$19,618	\$8,214
Mechanics & Repairers	2,012	\$12,140	\$21,321	\$9,181
Precision Production Trades	425	\$12,990	\$22,783	\$9,793
Engineering-Related Technologies	921	\$12,026	\$22,581	\$10,555
Health & Related Sciences	12,647	\$9,315	\$21,052	\$11,737
Construction Trades	599	\$13,886	\$26,552	\$12,666
Protective Services	1,686	\$13,852	\$28,864	\$15,012
Missing	30	**	**	**
Total	56,034	\$8,680	\$15,308	\$6,628



Table A-6
Pre-Enrollment and Post-Completion Earnings Gains by
Classification of Instructional Program - Program Completers 2005

Classification of Instructional Program	Students	Total Credit Hours	Total Pre to Post Earnings Gains	Aver. Earnings Gain Per Credit Hour
Education	82	4,366	\$161,389	\$36.97
Visual & Performing Arts	244	15,825	\$1,243,532	\$78.58
Personal & Miscellaneous				
Services	774	34,105	\$,2685,517	\$78.74
Multi/Interdisciplinary Studies	4,093	256,949	\$20,285,770	\$78.95
Agricultural Business &				
Production	659	39,361	\$3,124,142	\$79.37
Liberal Arts & Sciences,				
General Studies & Hum	10,536	628,646	\$53,901,082	\$85.74
Engineering	83	5,764	\$588,632	\$102.13
Public Administration &				
Services	119	6,980	\$749,837	\$107.43
Communications				
Technologies	208	11,316	\$1,290,386	\$114.03
Foreign Languages &				
Literatures	79	3,477	\$420,328	\$120.88
Home Economics	2,579	62,842	\$8,931,562	\$142.13
Business Management &				
Administrative Services	3,259	142,685	\$21,002,784	\$147.20
Computer & Information				
Sciences	1,349	66,050	\$10,844,355	\$164.18
Law & Legal Studies	231	10,697	\$1,897,555	\$177.40
Basic Skills	10,302	133,021	\$24,950,731	\$187.57
Engineering-Related				
Technologies	921	50,717	\$9,721,217	\$191.68
Mechanics & Repairers	2,012	87,194	\$18,473,306	\$211.86
Transportation & Materials				
Moving Workers	2,987	21,927	\$5,173,274	\$235.93
Precision Production Trades	425	15,479	\$4,162,268	\$268.89
Health Professions & Related				
Sciences	12,647	512,514	\$148,435,450	\$289.62
Construction Trades	599	23,210	\$7,586,662	\$326.87
Protective Services	1,686	65,080	\$25,310,102	\$388.91
Missing	160	6,572	**	**
Total	56,034	2,204,777	\$371,410,434	\$168.46



Table A-7
Pre-Enrollment & Post-Completion Earnings Gains by
Program Classification for Program Completers 2005

Program Classification	Students	Total Credit Hours	Total Pre to Post Earnings Gains	Average Earnings Gain Per Credit Hour
Vocational Skills	97	6,080	\$243,086	\$39.98
Baccalaureate/Transfer Instruction	13,919	857,234	\$69,146,504	\$80.66
General Associate Degrees	939	43,020	\$6,242,551	\$145.11
Adult Basic Education	1,591	14,,547	\$2,548,489	\$175.19
English as a Second Language	4,914	65814	\$11,764,489	\$178.75
Occupational/Technical Instruction	30,977	11,75,908	\$271,579,821	\$230.95
Adult Secondary Education	3,591	42,091	\$9,888,329	\$234.93
Missing	6	83	**	**
Total	56,034	2,204,777	\$371,413,269	\$168.46

Table A-8
Pre-Enrollment and Post-Completion Earnings Gains by Completion Degree
Program Completers 2005

Degree Type	Students	Total Credit Hours	Total Pre to Post Earnings Gains	Average Earnings Gain Per Credit Hour
Associate in Arts & Science	965	63,159	\$,3583,935	\$56.74
Vocational Skills	131	8,604	\$625,395	\$72.69
Associate in Science	4,105	257,909	\$20,339,102	\$78.86
Associate in Arts	8,640	522,749	\$44,088,513	\$84.34
Associate in Engineering Science	83	5,764	\$588,632	\$102.13
General Associate Degrees	928	42,643	\$6,193,956	\$145.25
Occ. Cert. of 30 Hours or More	4,677	236,668	\$44,219,149	\$186.84
Basic Skills	10,171	124,417	\$24,325,336	\$195.51
Associate in Applied Science	8,849	578,194	\$137,960,453	\$238.61
Occ. Cert. of Less than 30 Hours	17,412	359,449	\$89,303,681	\$248.45
Missing	6	83	**	**
Total	55,967	2,199,639	\$371,228,152	\$168.46



Table A-9
Program Enrollments by Age at Enrollment: 1996 & 2006

	1990	6	2006		
Age at Enrollment	Students	Percent	Students	Percent	
Age 19 or less	143,518	22.27	175,048	26.42	
Age 20 to 24	148,078	22.98	159,079	24.01	
Age 25 to 34	157,162	24.39	139,149	21.00	
Age 35 to 44	111,022	17.23	97,238	14.68	
Age 45 to 54	55,632	8.63	61,390	9.27	
Age 55 and up	28,945	4.49	30,632	4.62	
Missing	18,856	**	5,105	**	
Total	663,213	100	667,641	100	

Table A-10
Program Completers by Age at Enrollment: 1996 & 2006

	199	96	2006			
Age at Enrollment	Students	Percent	Students	Percent		
Age 19 or less	5,324	16.27	7,960	14.97		
Age 20 to 24	10,563	32.29	17,401	32.73		
Age 25 to 34	8,306	25.39	13,700	25.77		
Age 35 to 44	5,835	17.83	8,096	15.23		
Age 45 to 54	2,236	6.83	4,672	8.79		
Age 55 and up	453	1.38	1,329	2.50		
Missing	69	**	240	**		
Total	32,786	100	53,398	100		

Table A-11
Program Enrollments by Race/Ethnicity: 1996 & 2006

Race/Ethnicity	199	6	2006			
Race/Elimicity	Students	Percent	Students	Percent		
White	441,533	67.12	429,451	64.71		
African American	97,769	14.86	97,194	14.65		
Hispanic	83,713	12.73	102,687	15.47		
Asian or Pacific Islander	28,659	4.36	28,658	4.32		
Other	6,105	0.93	5,615	0.85		
Missing	5,434	**	4,036	**		
Total	663,213	100	667,641	100		



Table A-12
Program Completers by Race/Ethnicity: 1996 & 2006

Age at Enrollment	199	96	2006		
Age at Enrollment	Students	Percent	Students	Percent	
White	25,585	78.04	34,548	64.70	
African American	4,090	12.47	7,472	13.99	
Hispanic	1,695	5.17	7,832	14.67	
Asian or Pacific Islander	1,097	3.35	2,630	4.93	
Other	319	0.97	916	1.72	
Total	32,786	100	53,398	100	

Table A-13
Disadvantaged Status at Enrollment for Program Enrollments: 1996 & 2006

Status	199	96	2006		
Status	Students Percen		Students	Percent	
Academically. Disadvantaged	181,675	27.39	157,798	23.64	
Economically Disadvantaged	26,930	4.06	36,459	5.46	
Both Econ. and Acad. Disadvantaged	55,063	8.30	76,537	11.46	
Missing / Not Disadvantaged	399,545	60.24	396,847	59.44	
Total	663,213	100	667,641	100	

Table A-14
Disadvantaged Status at Enrollment for Program Completers: 1996 & 2006

Status	199	96	2006		
Status	Students Percent		Students	Percent	
Academically. Disadvantaged	5,727	17.47	8,432	15.79	
Economically Disadvantaged	4,021	12.26	6,070	11.37	
Both Econ. and Acad. Disadvantaged	2,549	7.77	4,252	7.96	
Missing / Not Disadvantaged	20,489	62.49	34,644	64.88	
Total	32,786	100	53,398	100	

Table A-15
Highest Grade Completed at Enrollment for Program Enrollments: 1996 & 2006

Highest Degree Proviously Formed	199	6	2006		
Highest Degree Previously Earned	Students	Percent	Students	Percent	
None	98,605	18.68	123,795	20.33	
GED	23,546	4.46	23,328	3.83	
High School Diploma	289,543	54.86	229,520	37.69	
Post High School/Certificate	116,060	21.99	232,395	38.16	
Missing	135,459	**	58,603	**	
Total	663,213	100	667,641	100	



Table A-16
Highest Grade Completed at Enrollment for Program Completers: 1996 & 2006

Highest Degree Previously Earned	199	96	2006		
Highest Degree Previously Earned	Students Percent		Students	Percent	
None	3,007	9.84	7,056	14.34	
GED	1,589	5.20	2,822	5.73	
High School Diploma	14,826	48.51	16,196	32.91	
Post High School/Certificate	11,141	36.45	23,142	47.02	
Missing	2,223	**	4,182	**	
Total	32,786	100	53,398	100	

Table A-17
Student Intent at Enrollment for Program Enrollments: 1996 & 2006

Student Intent	19	96	2006	
Student intent	Students	Percent	Students	Percent
For personal interest	78,059	13.80	84,920	15.08
To improve skills for my present job.	92,889	16.42	90,558	16.09
To prepare for a future job after CC.	137,939	24.38	110,862	19.69
To prepare for college transfer.	146,290	25.85	185,117	32.88
To prepare for the GED test or improve basic skills	110,668	19.56	91,492	16.25
Missing	97,368	**	104,692	**
Total	663,213	100	667,641	100

Table A-18
Student Intent at Enrollment for Program Completers: 1996 & 2006

Student Intent	19	96	2006	
Student intent	Students	Percent	Students	Percent
For personal interest	1,609	5.69	5,276	11.18
To improve skills for my present job.	3,011	10.64	5,237	11.10
To prepare for a future job after CC.	11,759	41.57	14,191	30.07
To prepare for college transfer.	10,007	35.37	15,560	32.97
To prepare for the GED test or improve basic skills	1,903	6.73	6,928	14.68
Missing	4,497	**	6,206	**
Total	32,786	100	53,398	100



Table A-19
Student Objective at Enrollment for Program Enrollments: 1996 & 2006

Student Objective	199	96	2006	6	
Student Objective	Students	Percent	Students	Percent	
Not pursuing a certificate or degree	336,105	50.90	374,062	56.03	
To complete a certificate	76,282	11.55	49,670	7.44	
To complete an associate degree	247,902	37.54	243,909	36.53	
Missing	2,924	**		**	
Total	663,213	100	667,641	100	

Table A-20 Student Objective at Enrollment for Program Completers: 1996 & 2006

Student Objective	199	96	2006		
Student Objective	Students	Percent	Students	Percent	
Not pursuing a certificate or degree	6,153	18.84	19,351	36.28	
To complete a certificate	5,380	16.47	8,448	15.84	
To complete an associate degree	21,132	64.69	25,546	47.89	
Missing	121	**	53	**	
Total	32,786	100	53,398	100	

Table A-21
Program Classification at Program Enrollment: 1996 & 2006

Program Classification	19	996	2006		
Program Classification	Students	Percent	Students	Percent	
Adult Basic Education	67,011	10.10	26,004	3.89	
Adult Secondary Education	15,274	2.30	19,659	2.94	
Baccalaureate/Transfer Instruction	277,541	41.85	265,549	39.77	
English As a Second Language	4,159	0.63	64,950	9.73	
General Associate Degrees (AGE, ALS, AGS)	22,708	3.42	29,776	4.46	
General Studies	23,636	3.56	12,277	1.84	
Occupational/Technical Instruction	177,390	26.75	184,204	27.59	
Vocational Skills	75,494	11.38	65,222	9.77	
Total	663,213	100	667,641	100	



Table A-22
Program Classification at Program Completion: 1996 & 2006

Program Classification	19	996	2006		
Frogram Classification	Students	Percent	Students	Percent	
Adult Basic Education	76	0.23	1,611	3.02	
Adult Secondary Education	1,795	5.47	2,952	5.53	
Baccalaureate/Transfer Instruction	11,952	36.45	14,070	26.35	
English As A Second Language	19	0.06	4,126	7.73	
General Associate Degrees (AGE, ALS, AGS)	743	2.27	971	1.82	
General Studies	15	0.05	5	0.01	
Occupational/Technical Instruction	18,053	55.06	29,568	55.37	
Vocational Skills	133	0.41	95	0.18	
Total	32,786	100	53,398	100	

Table A-23
Classification of Instruction at Program Enrollment: 1996 & 2006

Classification of Instructional Program	19	1996		2006	
Classification of Instructional Program	Students	Percent	Students	Percent	
Liberal Arts & Sciences, General Studies & Humanities	250,375	37.75	237,840	35.62	
Basic Skills	115,663	17.44	130,767	19.59	
Business Management & Administrative Services	67,769	10.22	47,150	7.06	
Health Professions & Related Sciences	53,391	8.05	74,721	11.19	
Multi/Interdisciplinary Studies	51,418	7.75	52,842	7.91	
Engineering-Related Technologies	33,411	5.04	31,005	4.64	
Personal Awareness & Self-Improvement	18,590	2.80	11,241	1.68	
Vocational Home Economics	12,036	1.81	7,433	1.11	
Precision Production Trades	11,667	1.76	6,477	0.97	
Protective Services	11,079	1.67	13,369	2.00	
Mechanics & Repairers	8,717	1.31	12,740	1.91	
Public Administration & Services	7,535	1.14	5,194	0.78	
Marketing Operations/Marketing & Distr	4,892	0.74	864	0.13	
Personal & Miscellaneous Services	3,521	0.53	3,677	0.55	
Agricultural Business & Production	3,467	0.52	3,363	0.50	
Construction Trades	2,431	0.37	3,916	0.59	
Visual & Performing Arts	1,689	0.25	4,451	0.67	
Computer & Information Sciences	0	0.00	4,354	0.65	
Home Economics	0	0.00	4,879	0.73	
All Other CIPS	5,561	0.84	11,358	1.70	
Missing	1	**	0	**	
Total	663,213	100	667,641	100	



Table A-24
Classification of Instruction at Program Completion: 1996 & 2006

Classification of Instructional Program	19	96	2006		
Classification of Instructional Program	Students	Percent	Students	Percent	
Health Professions & Related Sciences	7,205	21.98	12,936	24.23	
Liberal Arts & Sciences, General Studies & Humanities	8,501	25.93	10,682	20.00	
Basic Skills	1,954	5.96	8,784	16.45	
Multi/Interdisciplinary Studies	4,148	12.65	4,208	7.88	
Business Management & Administrative Services	3,117	9.51	3,233	6.05	
Home Economics	0	0	2,458	4.60	
Transportation & Materials Moving Workers	178	0.54	2,034	3.81	
Mechanics & Repairers	1,192	3.64	1,832	3.43	
Protective Services	904	2.76	1,829	3.43	
Computer & Information Sciences	0	0	962	1.80	
Engineering-Related Technologies	916	2.79	794	1.49	
Personal & Miscellaneous Services	515	1.57	734	1.37	
Agricultural Business & Production	472	1.44	691	1.29	
Construction Trades	293	0.89	601	1.13	
Precision Production Trades	800	2.44	414	0.78	
Law & Legal Studies	135	0.41	244	0.46	
Visual & Performing Arts	96	0.30	220	0.41	
Communications Technologies	14	0.04	151	0.28	
Public Administration & Services	114	0.35	101	0.19	
Education	44	0.13	95	0.18	
Foreign Languages & Literatures	0	0	83	0.16	
Engineering	32	0.10	82	0.15	
Library Science	64	0.20	80	0.15	
Vocational Home Economics	1,531	4.67	0	0	
Miscellaneous	561	1.74	150	0.28	
Total	32,786	100	53,398	100	



Table A-25
Type of Degree at Completion: 1996 & 2006

	1:	996	2006			
Degree Type	Students	Percent	Students	Percent		
Associate in Applied Science (AAS)	9,204	28.07	9,036	16.92		
Associate in Arts (AA)	7,245	22.10	8,683	16.26		
Associate in Arts & Science (A & S)	526	1.60	1,029	1.93		
Associate in Engineering Science (AES)	29	0.09	81	0.15		
Associate in Fine Arts (AFA)	0	0	67	0.13		
Associate in Science (AS)	4,152	12.66	4,210	7.88		
Basic Skills	1,890	5.76	8,689	16.27		
Cert. in Gen. Stud. of 30 Hours or Less	15	0.05	5	0.01		
General Associate Degrees (AGS, ALS, AGE)	743	2.27	971	1.82		
Occ. Cert. of 30 Hours or More	3,594	10.96	4,701	8.80		
Occ. Cert. of Less than 30 Hours	5,255	16.03	15,831	29.65		
Vocational Skills	133	0.41	95	0.18		
Total	32,786	100	53,398	100		



## Appendix B

## **Economic Impact Analysis Tables Illinois Community Colleges - FY05**\*

Table B-1: Operational Expenditures: Output and Employment Impacts								
	Direct	Indirect	Induced	Total				
Expenditures (minus wages & benefits)	\$ 314,633,067							
Total Illinois (79.5%) Output Impact	\$ 250,227,664	\$ 88,409,836	\$ 97,311,965	\$500,354,868				
Total Illinois Employment Impact	33,237	5,783		39,020				

Table B-2: Full-Time Employee Expenditures: Output Impacts								
		tal Employee xpenditures						
Output Impacts	(Direct Effect)		Indirect Effects		Induced Effects		Total Effects	
Full-Time	\$	568,968,431	\$	145,649,522	\$	171,586,817	\$	886,204,770
Administration	\$	83,339,305	\$	21,875,065	\$	25,809,808	\$	131,024,178
Nonteaching Professionals	\$	126,615,415	\$	32,163,323	\$	37,689,495	\$	196,468,233
• Faculty	\$	247,562,304	\$	62,879,508	\$	73,831,912	\$	384,273,724
Classified Staff	\$	111,451,407	\$	28,731,626	\$	34,255,602	\$	174,438,635

Table B-3: Full-Time Employee Expenditures: Employment Impacts									
Employment Impacts	Total Employee Expenditures (Direct Effect)	Indirect Effects	Induced Effects	Total <b>⊞</b> fects					
Full-Time	4,081	1,072	1,625	6,778					
Administration	604	160	244	1,009					
Nonteaching Professionals	885	237	357	1,479					
Faculty	1,779	464	699	2,942					
Classified Staff	812	212	324	1,348					

Table B-4: Part-Time Employee Expenditures: Output Impacts									
Output Impacts	E	Total Employee Expenditures (Direct Effect)		Indirect Effects		Induced Effects		Total Effects	
Part-Time	\$	554,594,717	\$	143,478,586	\$	170,707,230	\$	868,780,533	
Administration	\$	656,203	\$	166,691	\$	195,331	\$	1,018,225	
Nonteaching Professionals	\$	33,489,576	\$	8,790,410	\$	10,371,571	\$	52,651,557	
Faculty	\$	445,279,778	\$	114,790,935	\$	136,860,777	\$	696,931,490	
Classified Staff	\$	75,169,160	\$	19,730,550	\$	23,279,551	\$	118,179,261	

<sup>\*</sup> Data sources for these tables included ICCB's *Fiscal Year 2005 Salary Report for the Illinois Public Community Colleges* and individual community college surveys.



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Table B-5: Part-Time Employee Expenditures: Employment Impacts								
Employment Impacts	Total Employee Expenditures (Direct Effect)	Indirect Effects	Induced Effects	Total Effects				
Part-Time	4,038	1,055	1,616	6,709				
Administration	5	1	2	8				
<ul> <li>Nonteaching Professionals</li> </ul>	243	64	98	405				
• Faculty	3,246	845	1,296	5,387				
Classified Staff	545	145	220	910				

