

## JOHN A. LOGAN COLLEGE ECONOMIC IMPACTS:

### INTRODUCTION

John A. Logan College, located in Carterville, Illinois (see Figure 1), is one of 39 college districts in the state that play a vital role in the educational and workforce preparation of the individuals and communities they serve. An integral part of Illinois' higher education system, John A. Logan College provides high-quality, accessible, and cost-effective educational opportunities for residents in a five county area in southern Illinois that includes all or portions of Franklin, Jackson, Perry, Randolph and Williamson counties.

Founded in 1967, John A. Logan College offers academic and vocational-technical instruction in a wide variety of associate degree, transfer, or certificate programs of study as well as adult continuing education programs that serve as a gateway to higher education for many community residents, employers, and K-12 students. Courses are offered on the main campus in Carterville as well as through extension centers in West Frankfort and Du Quoin.

John A. Logan College contributes to the vitality of its service area in many ways: educationally, culturally, recreationally, civically, and economically. Perhaps the least measured and understood of these are the economic contributions. Consider that:

- John A. Logan College adds skills to our workforce and boosts the competitiveness of area businesses.
- John A. Logan College graduates generate millions of dollars in local, state, and federal tax revenues.
- A John A. Logan College education increases earnings for workers. By completing courses, students gain skills that contribute to higher earnings and graduates enjoy even higher returns.
- As a major employer and business entity, John A. Logan College generates millions of dollars in local sales and wages and an estimated 650 jobs.

The current study is unique from many other state and national higher education economic impact analyses because the Illinois Community College Board (ICCB), in collaboration with Illinois Department of Employment Security (IDES) and Northern Illinois University (NIU) Center for Governmental Studies (CGS), maximized student-level and employee-level data through Illinois Longitudinal Data Systems. Specifically, ICCB Centralized Data System student-level data and IDES Workforce Longitudinal Data System employee-level wage data were matched by NIU CGS to determine student economic impact through their employment and earning gains. The economic impacts of the Illinois community colleges were identified through employee-level data, operations expenditures, and capital expenditures from ICCB's Centralized Data System and annual ICCB financial submissions.

Figure 1. John A. Logan College



A summary of key findings is presented in the next section followed by the detailed study results. These address the characteristics of John A. Logan College students taking credit courses, student Return on Investment (ROI) and economic outcomes, estimated tax revenues paid by John A. Logan College students, community college market penetration, and the economic impact of John A. Logan College.

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 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.

## Highlights of Significant Findings

John A. Logan College serves three integral educational purposes: it strengthens individuals' foundational academic skills, offers occupation-specific education and training, and prepares students for transfer to four-year post-secondary institutions. These activities represent significant economic contributions by increasing workers' earnings potential and generating additional tax revenues. Moreover, John A. Logan College is among the largest employers in the area and generates substantial additional economic benefits for local communities through local expenditures and employment impacts.

This economic impact analysis of John A. Logan College considers changes in student characteristics over a 12-year period, student outcomes, tax revenues generated, and economic impacts. Following are a number of significant findings from the analysis.

**A 25-year-old John A. Logan College program graduate can expect a total lifetime earnings gain of over \$530,000. This is a 41% increase over the \$1.3 million average total lifetime earnings of those not completing a community college program.**

- These earnings gains are realized with an average investment of about \$20,000, including foregone earnings while in college. The annual rate of return on this initial investment in a John A. Logan College degree is about 30.3%.

**A John A. Logan College education increases earnings for workers.**

- On average, all students who completed their John A. Logan College education in FY11 saw a \$4,500 increase in earnings over their pre-enrollment wages.
- When looking at just completers in Associate of Applied Science and long-term certificate programs, the first year earnings increase was \$7,000.

**Logan graduates generate millions of dollars in local, state, and federal tax revenues.**

- John A. Logan College students who attended school in 2002 paid an estimated \$55 million in state taxes and \$182 million in federal taxes between 2003 and 2012.
- John A. Logan College students who graduated in 2002 paid an estimated \$4 million in state taxes and \$13 million in federal taxes over the next 10 years.

**As a major employer and business entity, John A. Logan College generates millions of dollars in local sales and wages annually and over 650 jobs.**

- In FY12, over 480 full-time part-time staff lived in the district with a total payroll of about \$20.7 million.
- In addition to wages and salaries, John A. Logan College reported \$14 million in operating and capital expenditures.

**Including the multiplier effect, the total economic impact of John A. Logan College on the regional economy in FY12 was estimated at \$34.6 million and 652 jobs.**

**John A. Logan College increased completions by over 64% between 2000 and 2012.**

## SECTION 1

### JOHN A. LOGAN COLLEGE STUDENT ECONOMIC OUTCOMES

This section examines the economic outcomes for individuals who were John A. Logan College students. 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).

This comprehensive employment data source is estimated to cover 96 percent of total wage and salary civilian jobs.<sup>1</sup> While it is an immense database, there are certain limitations. The UI wage records contain neither the number of hours worked by participants nor the position they held. IDES provided the Center for Governmental Studies at NIU access to these data for the purposes of this study.

#### **Illinois Community College Student Economic Outcomes - Return on Investment**

To begin assessing the economic impact of a Logan student, it must be realized that education at a community college is an investment. Students attending college pay for their education in both cash and in foregone earnings. The net cash price is the cost of tuition, fees, books, and room and board. Foregone earnings result when a student spends time going to school and studying in place of earning money at work.

The analysis in this section focuses on the return on investment of students that completed a program, referred to as 'program completers', in FY2011. The cost of attending school during the FY2010 and FY2011 school years is compared with projected earnings over a 40 year post graduation time frame. The results are net present value (NPV) and internal rate of return (IRR) estimates for the average program completer in FY2011.

The net cash price of attending school was obtained from the National Center for Education Statistics' College Navigator tool. College Navigator employs Integrated Postsecondary Education Data System (IPEDS) data from the National Center for Education Statistics to calculate the 'average net price' for annual attendance at each school.

The other major cost for college attendees is their foregone earnings, often referred to as the 'opportunity cost' of attending college. The estimate for foregone earnings is based on program completers' earnings in the 12 months prior to their enrollment in the college. It is

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<sup>1</sup> See <http://www.bls.gov/opub/hom/pdf/homch5.pdf>. Examples of employment not covered by UI laws include self-employment and some agricultural and domestic work.

assumed that their average income would have increased by 3% per year during their two years in college.

The major benefit of completing college is the resulting increased earnings. Pre-enrollment to post-completion earnings gains were calculated for graduates of 2 year Associate of Applied Science and 2 year certificate programs at John A. Logan College. Gains for these graduates averaged \$7,035 in the first year.

Figure 2 presents the net return analysis based on the calculations noted above. The total cost during the two years the student is in school, including out of pocket expenses and foregone earnings is \$19,995. The return on investment occurs over a 40 year working life, where increased earnings for a degree completer are estimated to total over \$530,000 (compared to someone not attending community college).

Figure 2. Estimated Net Return for Associate Degree Completers

Year	Net Price	Opportunity Cost	Total Cost	Increased Earnings		Discounted Cash Flow
-1	2,388	\$7,072	\$9,460			-\$9,838
0	3,252	\$7,284	\$10,536			-\$10,536
1				\$7,035		\$7,328
2				\$7,246		\$7,246
3				\$7,463		\$7,165
4				\$7,687		\$7,084
5				\$7,918		\$7,005
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38				\$21,000		\$4,830
39				\$21,630		\$4,776
40				\$22,279		\$4,723
				<b>Total Increased Earnings</b>	<b>\$530,423</b>	<b>NPV \$216,934</b>
						<b>IRR 30.3%</b>

The net present value of investing in a John A. Logan College associate degree is about \$217,000. The internal rate of return on their investment is 30.3%. In other words, if a student put \$19,995 in an investment that returned 40 annual payments equivalent to the earnings gains from an associate degree, they would earn interest at a rate of 30.3%.

This analysis is conservative because it is based on increased earnings in the first post-completion year. As will be shown later in this report, earnings for many program completers grow significantly in the second through fifth post-completion years.

## Student Loan Debt and Its Impact on Return on Investment

Media stories related to student loan debt have been increasingly common in recent years. According to the Federal Reserve Bank of New York, in 2012 the average student loan balance for Americans under 30 was about \$21,000<sup>2</sup>. That was up from about \$13,500 in 2005. About 42% of 25 year olds have some amount of student debt.

When used responsibly, student loans can actually increase the rate of return of a college education. Students loans reduce the upfront cash cost of college. Loan repayment reduces the cash flow associated with earnings gains for several years after program completion. The rate of return on paying for college is increased if the average interest rate on federal student loans is lower than the rate of return from education.

The benefits to using student loans to pay for education only occur if the student receives a strong return on their educational investment. The analysis in this report shows the majority of Logan students do receive a good return in terms of earnings.

However, there are individual students (both program completers and non-completers) that are not able to find suitable work after they exit Logan. The recession has made this poor outcome more common. Nationally, there are more student loan delinquencies. In 2012, 17 percent of borrowers were over 90 days delinquent, up from under 10 percent in 2004<sup>3</sup>. Student loan data for individuals are not available to analyze how these loans are impacting Logan students. However, it is clear from national trends that counseling students on the proper use and management of student loans is becoming increasingly important.

The following sections investigate student economic outcomes from a variety of perspectives. First broad economic outcomes measured by employment and earnings are calculated. Next, average earnings gains and gains per credit hour are presented. Finally, earnings gains by age, instructional program and degree type are examined.

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<sup>2</sup> Federal Reserve Bank of New York (2013). *Student Loan Debt by Age Group*.  
<http://www.newyorkfed.org/studentloandebt/>

<sup>3</sup> Lee, Donghoon (2013). *Household Debt and Credit: Student Debt*. Federal Reserve Bank of New York.  
<http://www.newyorkfed.org/newsevents/mediaadvisory/2013/Lee022813.pdf>

## John A. Logan College Student Economic Outcomes – Employment and Earnings Analysis

Figure 3 displays the average annual post-completion earnings (inflation adjusted to 2012 \$) for two groups of Logan program completers from 2000 to 2011. The first group is the set of program completers that worked in each of the four post-program quarters (full-year), and the second group is the set of those that worked each of the quarters at an earnings level that was above minimum wage for 30 hours per week (full-time, full year).

Figure 3. Average Annual Earnings (Inflation Adjusted \$)  
Program Completers 2000-2011



Earnings for those Logan program completers identified as full-year workers rose temporarily in 2004 to \$26,000. Beginning in 2000, earnings for this group went up and down annually, ending in 2011 about 3% lower than 2000. The group identified as full-time, full-year also experienced a similar pattern in their real (inflation adjusted) earnings. Except for a couple of

spikes in 2004 and 2007, earnings for this group rose slightly. By 2011, real earnings for full time, full year workers were about 9% higher than in 2000.

The UI data from IDES only includes program completers earning wages in Illinois. Program completers that successfully find employment in another state are not included. Additionally, program completers that are self-employed small business owners and certain agricultural workers are not covered by unemployment insurance and thus, are not included. Finally, since this measure only looks at the initial post completion year, students delaying employment to continue their education will have very low or no earnings. These students, who intend to transfer to a four year college, are becoming an increasingly large portion of community college graduates. Between 2006 and 2012, the percentage of program completers stating their intention to transfer grew from 33% to 38.5%. Analysis examining longer term earnings gains of certain program completers is included later in this report. It shows that earnings can grow significantly in the several years following completion.

National income measures exhibit similar trends. According to the Bureau of Labor Statistics, average inflation adjusted earnings of individuals employed full time that had some college or an associate degree rose by about 2.6% between 2000 and 2011<sup>4</sup>. This group most closely matches the full time, full year earnings shown in Figure 3.

Figure 4 explores the Logan non-completers and the relationship between credit hours and earnings gains for this group. The results show that while there is a generally 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 non-completers versus the program 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.

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<sup>4</sup> U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

Figure 4. Earnings Gain and Average Gain per Credit Hour  
by Earned Credit Hour Groups  
FY2011 Program Completers and Non-Completers

Earned Credit Hours	Total Number of Exiters	Pct of Total	Average Earnings Gains	Average Earnings Gain Per Credit Hour
Total	12,124	100.0%	\$1,827	\$150
.5 to 04 hours	7,412	61.1%	\$693	\$479
05 to 09	1,374	11.3%	\$2,755	\$392
10 to 14	712	5.9%	\$2,171	\$182
15 to 19	377	3.1%	\$3,355	\$197
20 to 24	298	2.5%	\$3,485	\$158
25 to 29	255	2.1%	\$4,325	\$159
30 to 34	219	1.8%	\$4,475	\$139
35 to 39	204	1.7%	\$3,630	\$98
40 to 44	132	1.1%	\$1,800	\$43
45 to 49	146	1.2%	\$4,784	\$101
50 to 54	131	1.1%	\$5,346	\$103
55 to 59	115	0.9%	\$3,639	\$63
60 and up	749	6.2%	\$6,008	\$77

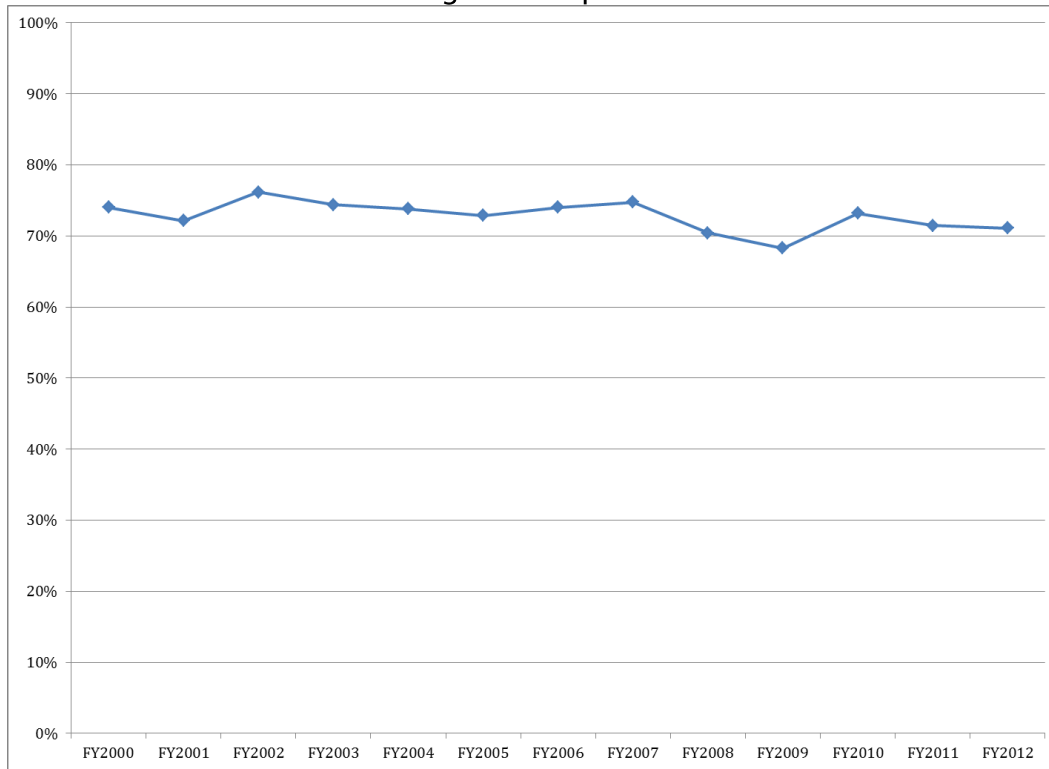
The focus now turns to the percentage of Logan program completers who are identified as employed in the first or second full post-completion quarter.<sup>5</sup> Figure 5 displays employment rates of Logan students who complete a program of at least one credit hour for each year from 2000 to 2012. Over this period employment rates bounced between 68% and 76%. This outcome should not be viewed as the most important measure of success since many program completers do not seek employment because they immediately transfer to a four year college.

To some extent, the decline in employment rates can be explained by overall economic conditions. According to the U.S. Census Bureau's American Community Survey, between 2007 and 2012, the unemployment rate for the Illinois population ages 25 to 64 with some college increased from 5.8% to 8.9%.

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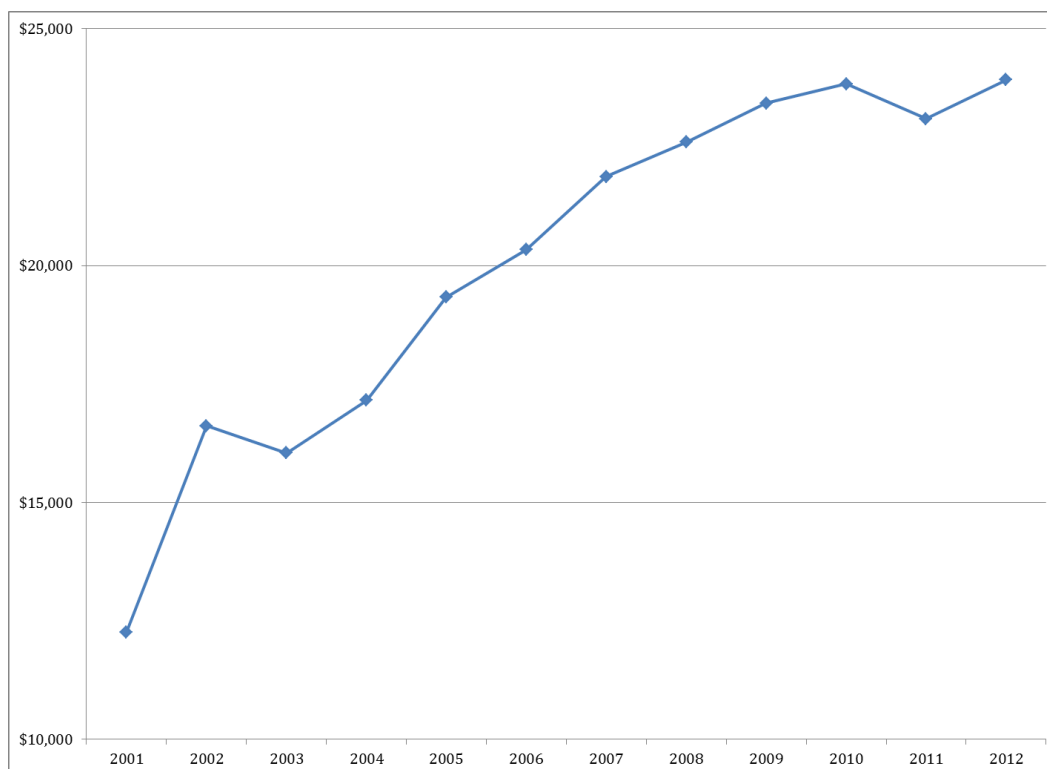
<sup>5</sup> The 1<sup>st</sup> full post completion quarter is the first full quarter after the completion of the program. This is to avoid using wages that were earned while the student was in the program.

Figure 5. Employed During the 1<sup>st</sup> or 2<sup>nd</sup> Post Completion Quarter  
Program Completers



Another method of examining the post-completion earnings of community college students is to track the earning of a specific cohort of program completers over time. For this analysis, the average annual earnings of all Logan program completers during the year 2000 were tracked over a 12-year period (see Figure 6). The results indicate that the Logan former students had steady earnings increases in the years following program completion, except for a couple of single year declines in 2003 and 2011. Even during the national recession, Logan completers generally continued to see earnings gains.

Figure 6. Average Annual Earnings (Inflation Adjusted \$)  
Program Completers FY2000



One of the major advantages of using longitudinal measurement of 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 widely 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 pre-enrollment quarters were used to produce an annual pre-enrollment earnings amount.

<sup>6</sup> For example, if a student completed a program in 2010, the procedure was to look at the credit hours earned in 2009, 2008, etc. If no credit hours were earned in 2008, then the start date of the earliest semester in which credits were earned was defined as the enrollment date.

Similarly, UI earnings for the four full post-completion quarters were used to determine the annual post-completion earnings. The results obtained for all program completers and completers most likely to directly enter the workforce following completion (AAS and long-term certificate programs) from 2005 to 2011 are displayed in Figure 7.

In the year following completion, about 79 percent of 2011 Logan completers were employed in Illinois. That was slightly higher than the statewide average of 77 percent. Looking at a longer time horizon, about 91 percent of 2005 completers were employed in Illinois in the five years following program completion, somewhat higher than the statewide average of 87 percent.

The average Logan pre-enrollment to post-completion earnings gain over the eight-year period from 2005 to 2011 was \$3,431<sup>7</sup>. This translates to a \$1.89 per hour increase in earnings assuming full-time, full-year employment ( $\$3,431 / \{52 \text{ weeks} \times 35 \text{ hours}\}$ ). Earnings gains were generally above \$4,000 each year except for 2008 and 2009. The low gains in these years were driven more by higher pre-enrollment earnings than lower post-completion earnings (see Table 2 in Appendix A for annual pre-enrollment and post-completion earnings).

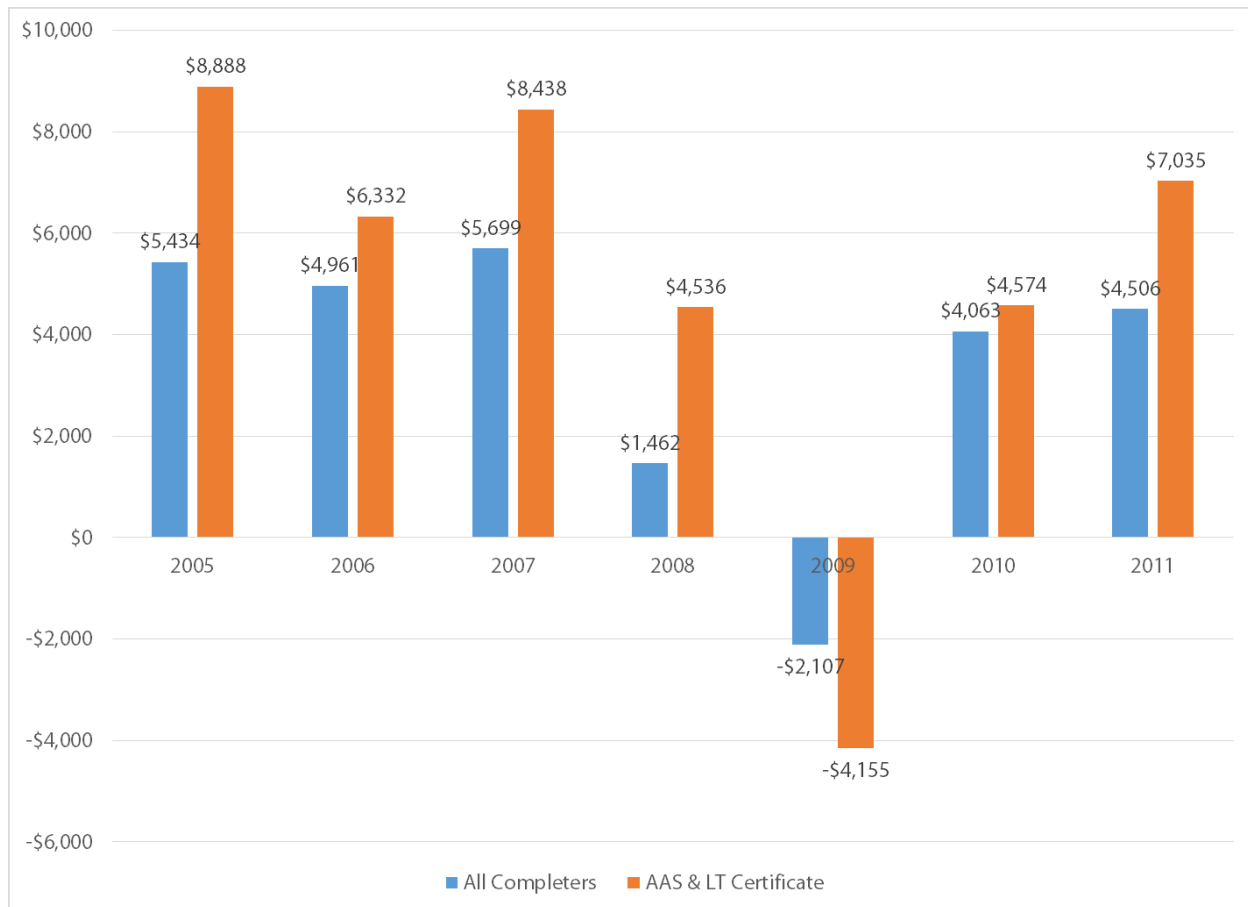
For completers in Associate of Applied Science and long term (more than 30 semester hours) certificate programs, earnings gains were higher. The average pre-enrollment to post-completion earnings gain for completers in these programs was \$5,093. Earnings gains peaked in 2005 at almost \$8,888 then declined during the recession. Earnings gains recovered strongly in 2011, reaching \$7,035.

In real terms, average earnings decreased for workers of all educational levels during the recession. According to the U.S. Census Bureau's American Community Survey, between 2007 and 2012, the median earnings of Illinois' population ages 25 to 64 decreased by \$2,006, adjusted for inflation during this time. Median earnings for Illinois residents with some college or an associate degree decreased by \$3,028.

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<sup>7</sup> The data series ends in 2011 due to the lack of a full year of post completion data and begins in 2005 due to the lack of sufficient hours earned by semester for the earlier completion cohorts.

Figure 7. Pre Enrollment to Post Completion Earnings Gains  
Program Completers 2005-2011



### John A. Logan College Student Economic Outcomes – Generated Tax Revenues

Logan students generate significant tax revenues. In order to accurately analyze this revenue, all students enrolled at Logan in FY2002 were identified. The annual total UI earnings for these individuals were obtained for each year from 2003 to 2012. Taxable earnings were estimated by subtracting the standard deduction for an individual from the annual earnings for each tax year. Federal taxes were estimated by applying the average marginal tax rate for a given year to the taxable earnings for that year. State taxes were estimated by applying the appropriate Illinois state tax rate (3% up to 2010 and 5% after 2011) to annual taxable earnings.

Figure 8 presents the estimated amount of tax dollars contributed by Logan students to the federal and state tax base over a period of 10 years. Separate estimates are produced for Logan students who were enrolled during 2002 and for the subset of those students who completed programs in 2002.

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 Logan students.

Figure 8. Estimated Federal and State Tax Revenue  
Paid by Enrollees and Program Completers 2002  
2003 – 2012

2002 Cohort	Federal Taxes	State Taxes
Enrollees	\$181,861,486	\$55,170,325
Completers	\$12,964,867	\$3,994,410

Substantial federal and state tax revenue is produced by Logan students. It is estimated that \$181.9 million in federal taxes was generated between 2003 and 2012 by students who attended Logan in 2002. Of that total, about 7% was contributed by students who completed in 2002. Similarly, of the estimated \$55.2 million in state tax dollars generated by 2002 enrollees, a similar percentage or \$4 million would have been generated by 2002 program completers.

## SECTION 2

### JOHN A. LOGAN COLLEGE ECONOMIC IMPACTS

#### John A. Logan College Economic Impacts – Expenditures and Employment

John A. Logan College is an important source of expenditures and employment for the region. As part of its day-to-day operations, the college purchases goods and services, many of them from the local economy. In addition, the income earned by its employees is spent in the local economy. Additionally, the college invests 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 and indirect effects. The direct effects are the employment, payroll and purchases of goods and services directly by Logan. The indirect effects occur through a variety of channels. For example, when a Logan hires a local printer to produce its catalogues and brochures, these orders contribute to the income of the local printing industry. The printers' employees spend at least some of their income locally, and these purchases contribute to the employment and the income of other local industries and services. The printers spend part of their income from Logan'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 Logan's initial purchase.

IMPLAN Pro economic modeling software was used to produce estimates of the indirect economic impacts of Logan, based on the direct impacts. 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 and indirect expenditures directly attributable to Logan activities in fiscal year 2012 approached \$34.6 million in value added (equivalent to gross state product) and an estimated 652 jobs. Summary data are provided in Figure 9.

Figure 9. John A. Logan College Economic Impact Summary  
FY 2012

Impact Type	Operations	Construction	Total	Employment
Direct	\$21,906,093	\$535,442	\$22,441,536	496
Indirect	\$11,792,410	\$389,668	\$12,182,078	156
Total	\$33,698,503	\$925,110	\$34,623,614	652

**Operational Expenditures.** Data provided by Logan to the Illinois Community College Board identified \$33.1 million in operating expenditures during fiscal year 2012<sup>8</sup> (including wages and salaries, but excluding capital investments, which are analyzed in the next section). Logan paid almost \$20.7 million in wages and benefits to its 484 employees that lived in the district. These direct impacts rippled through the economy creating additional jobs, payrolls, and other economic activity. These impacts are summarized in Figure 10. Over 635 jobs in the region could be attributed to Logan operations. These operations were associated with about \$51.5 million in economic output (equivalent to total sales of a business or total spending of a government enterprise). Value added, which is a measure similar to gross state product, totaled over \$33.7 million.

Figure 10. John A. Logan College's Operational Expenditures  
Output and Employment Impact – FY 2012

Employment and Operations Spending FY 2012			
Impact Type	Direct	Indirect	Total
Employment	484	151	635
Output	\$33,108,980	\$18,430,745	\$51,539,725
Value-Added	\$21,906,093	\$11,792,410	\$33,698,503
- Employee Compensation	\$20,658,853	\$5,023,890	\$25,682,743

**Capital Expenditures.** In addition to the economic activity generated by Logan operating and employee expenditures, the college's capital development projects also contribute significantly to the local economy. Since FY2008, the college has invested over \$18.6 million in capital projects in the district. In FY2012, the \$1.6 million in expenditures generated an estimated \$650,000 in indirect output for a total impact of \$2.2 million. These expenditures generated an estimated 17 jobs throughout the district. As can be seen in Figure 11, construction expenditures and resulting economic impacts vary from year to year.

<sup>8</sup> 2013 Data and Characteristics of the Illinois Public Community College System, Table IV-13 - Fiscal Year 2012 Audited Operating Expenditures by Object.

Figure 11. Logan Community College's Construction Expenditures  
Economic Impact – FY 2008-2012

Construction Spending 2008			
Impact Type	Direct	Indirect	Total
Employment	13	6	19
Output	\$1,702,305	\$667,998	\$2,370,303
Value-Added	\$557,074	\$405,410	\$962,484
- Employee Compensation	\$472,886	\$193,981	\$666,867
Construction Spending 2009			
Impact Type	Direct	Indirect	Total
Employment	44	21	65
Output	\$5,949,616	\$2,333,206	\$8,282,823
Value-Added	\$1,956,106	\$1,423,556	\$3,379,661
- Employee Compensation	\$1,660,490	\$681,144	\$2,341,634
Construction Spending 2010			
Impact Type	Direct	Indirect	Total
Employment	27	13	41
Output	\$3,596,455	\$1,487,955	\$5,084,410
Value-Added	\$1,234,347	\$898,295	\$2,132,642
- Employee Compensation	\$1,047,807	\$429,817	\$1,477,624
Construction Spending 2011			
Impact Type	Direct	Indirect	Total
Employment	43	21	64
Output	\$5,796,901	\$2,401,191	\$8,198,092
Value-Added	\$1,993,552	\$1,450,807	\$3,444,359
- Employee Compensation	\$1,692,278	\$694,183	\$2,386,461
Construction Spending 2012			
Impact Type	Direct	Indirect	Total
Employment	11	6	17
Output	\$1,550,034	\$647,932	\$2,197,966
Value-Added	\$535,442	\$389,668	\$925,110
- Employee Compensation	\$454,524	\$186,449	\$640,972

## SECTION 3

### CHARACTERISTICS OF JOHN A. LOGAN COLLEGE STUDENTS

To provide a context for understanding the economic impacts of John A. Logan College, an analysis of student characteristics and program enrollment and completion between 2000 and 2012 for credit classes was undertaken. While not the primary focus of this report, it is nonetheless useful to identify significant changes in the student population that occurred over this 12-year period. Graphic representations of the data are selectively incorporated into this section, and corresponding data tables are provided in Appendix A.

This section highlights the noteworthy changes over this period in enrollments and completions in credit courses for 15 characteristics of Logan students. These include:

- |  |                            |
|--|----------------------------|
| 1. Total enrollments and completions     | 8. Residence               |
| 2. Degrees and certificates              | 9. Student intent          |
| 3. Age                                   | 10. Educational objective  |
| 4. Race and ethnicity                    | 11. Program classification |
| 5. Gender                                | 12. Instructional program  |
| 6. Students with disabilities            | 13. Veteran status         |
| 7. Highest grade completed at enrollment | 14. Online status          |
|  | 15. Student level status   |

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.

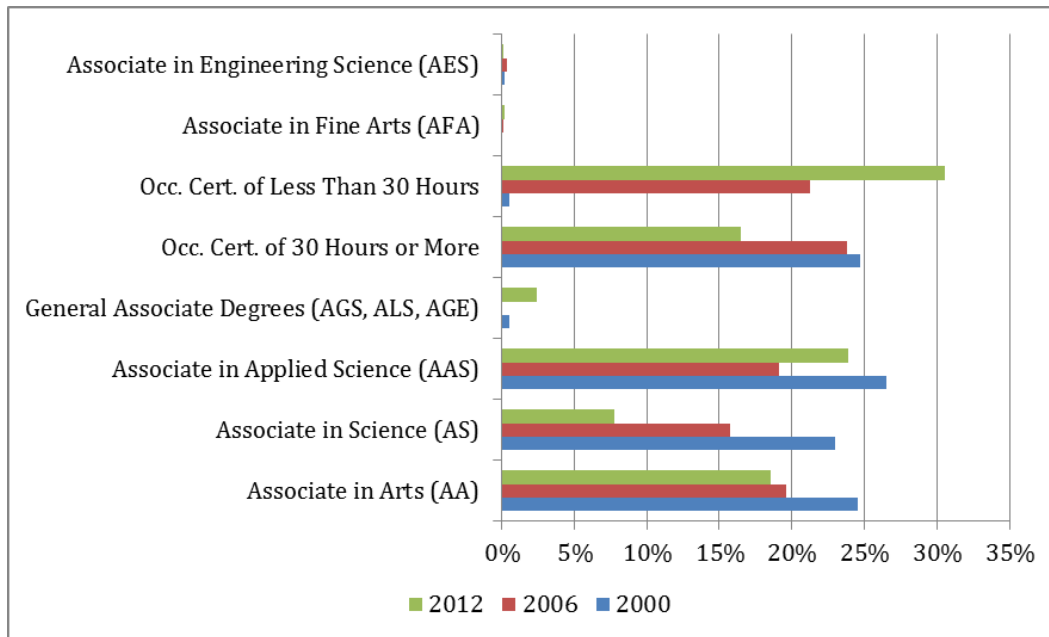
*Program completers* are students who have completed a course of study and have earned either a certificate or degree in a given year. For short-term certificates, these students may have been enrolled for a single year, the time necessary to earn that certificate. Other program completers may have been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

1. Total Enrollments and Completions. Overall, there was an increase of about 7,300 in college enrollments in credit courses, from 10,853 in 2000 to 14,767 in 2006, to 18,111 in 2012.

The rate of increase in program completers was also significant. There was a 64.1% increase in students who completed their program of study during this same period. There were 574 program completers in 2000, 801 program completers in 2006, and 942 program completers in 2012.

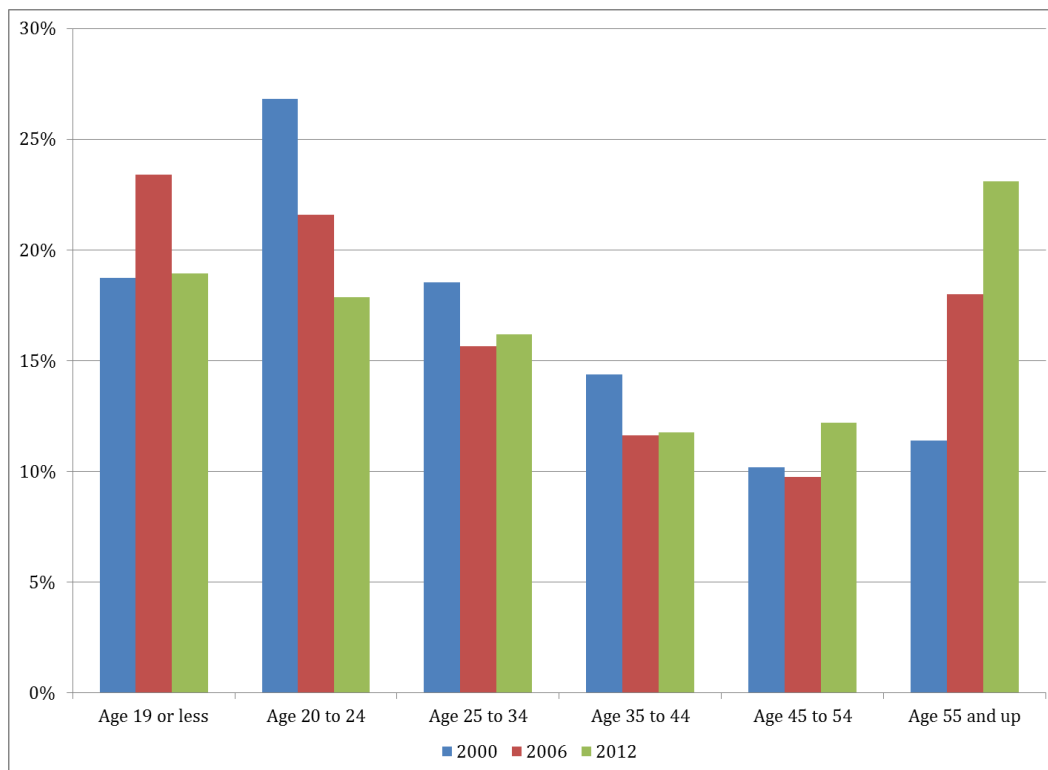
2. Degrees and Certificates. Certificate completion growth outpaced degree completion growth. The percentage of program completers earning a career certificate of less than 30 hours increased strongly from 2000 to 2012. Three Associate degree programs - Applied Science, Science, and Arts, - experienced declines over this period. Figure 12 shows these changes over the 12-year period.

Figure 12. Program Completers by Degree Type  
2000, 2006, 2012



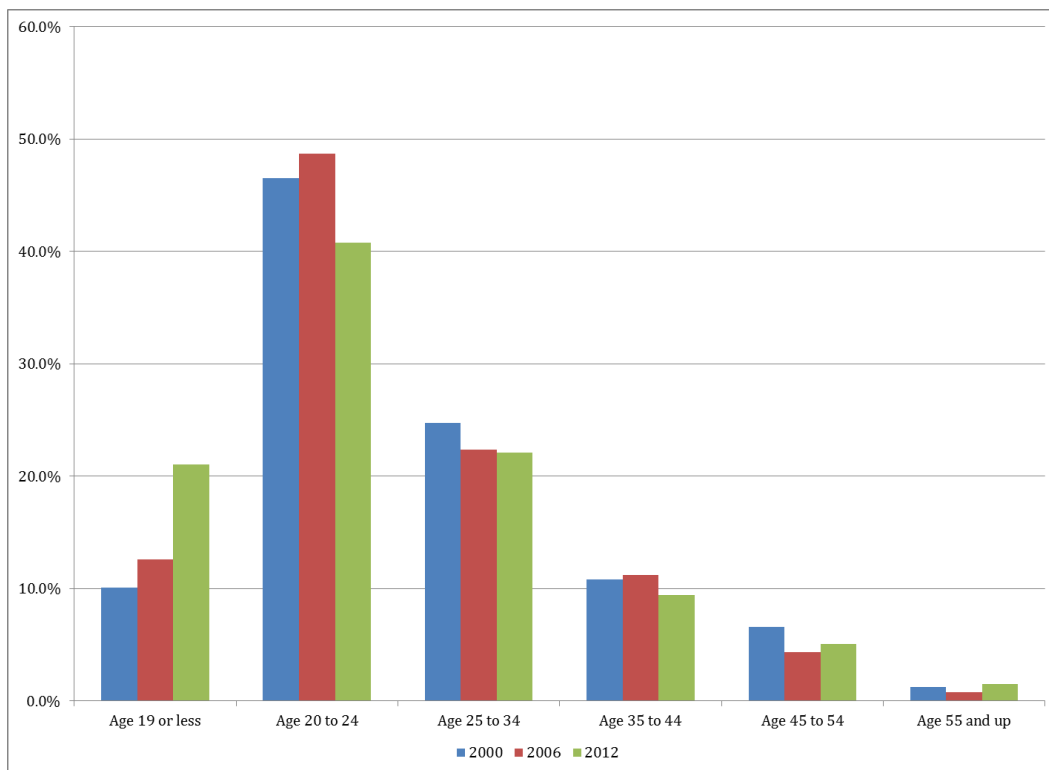
3. Age. The student body at Logan is getting somewhat older. The average age of enrollees was 32.6 years of age in 2000 to 34.6 in 2006. By 2012 the average age rose to 37.8. Enrollees over 55 made up the largest age cohort in 2012. Figure 13 illustrates the percentages of enrollees by age grouping.

Figure 13. Program Enrollments by Age at Enrollment  
2000, 2006, 2012



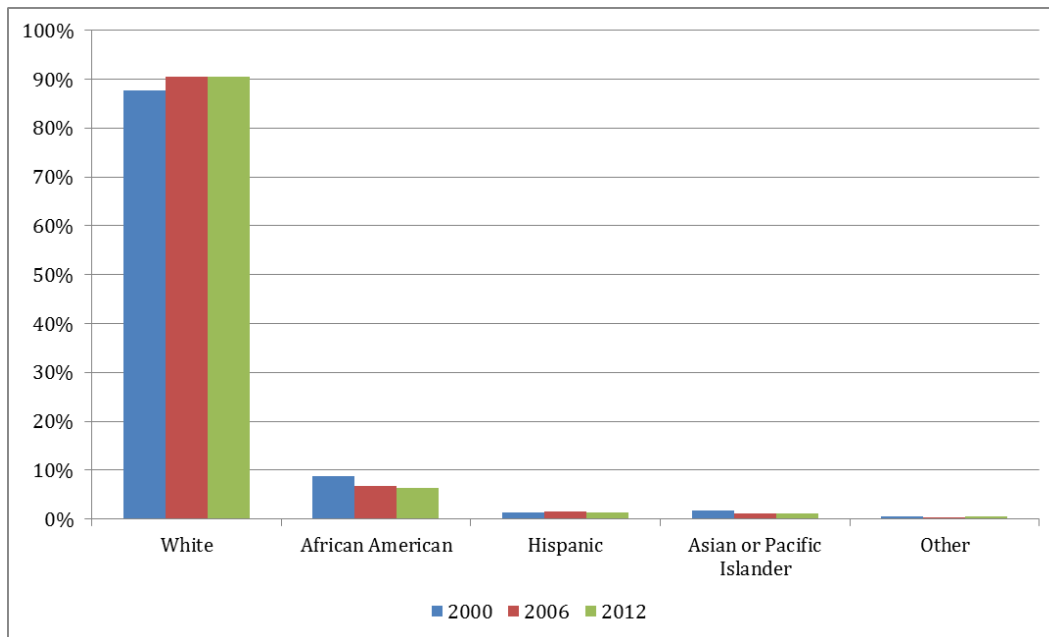
While the average age of enrollees increased, program completers became somewhat younger between 2000 and 2012. The average age at program completion increased slightly from 27.1 to 26.1 years from 2000 to 2006. The average age of program completers then declined to 25.9 by 2012. As indicated in Figure 14, the largest age cohort of program completers was 20-24 followed by 25-34.

Figure 14. Program Completers by Age at Enrollment  
2000, 2006, 2012



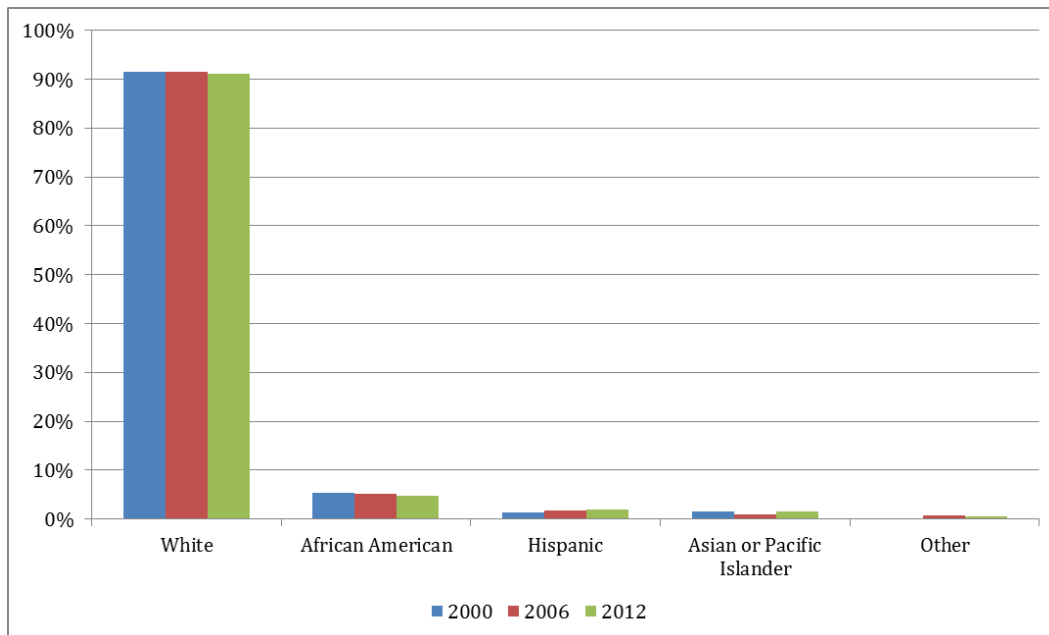
4. Race and Ethnicity. Enrollments at the college have decreased for minorities from 2000 to 2012, while enrollments for whites during the same period increased. African American enrollees comprised the largest minority group, but declined slightly between 2000 and 2012. Figure 15 depicts these changes.

Figure 15. Program Enrollments by Race/Ethnicity  
2000, 2006, 2012



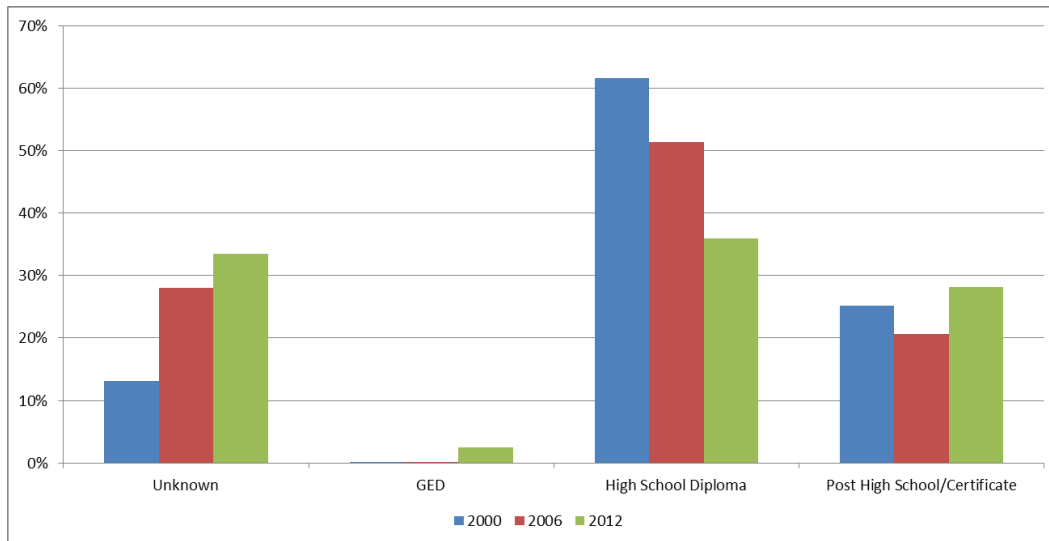
As illustrated in Figure 16, the racial breakdown of completers remained stable from 2000 to 2012. White completers make up over 90% of the total. No other group makes up more than 10 percent of completions.

Figure 16. Program Completers by Race/Ethnicity  
2000, 2006, 2012



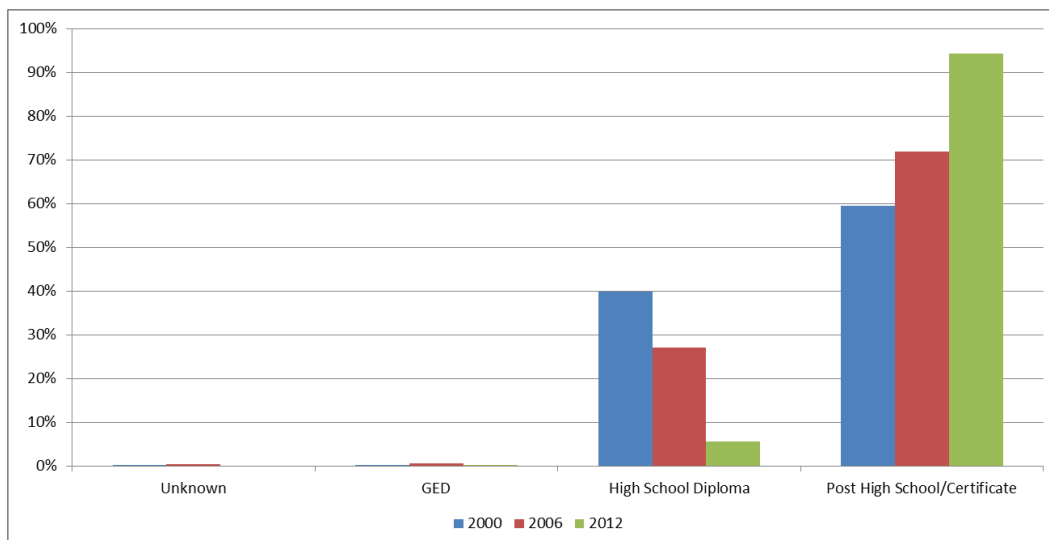
5. Gender. Females enroll at higher rates than males in the college. For both 2000 and 2006 females comprised just over 55% of all enrollees. By 2012, the percentage of female enrollees increased to 61%. Women make up an even larger percentage of completions, 68% in 2000. In 2006 and 2012 females comprised about 65% of all program completers.
6. Students with Disabilities. The percentage of enrolled individuals reporting a disability at the time of enrollment increased from 0.5% in 2000 to 0.9% in 2006 to 1.3% in 2012. The percentage of program completers reporting a disability also increased steadily, going from 0.5% in 2000 to 3.8% in 2012.
7. Highest Grade Completed at Enrollment. For enrollees for whom a specific level of education was indicated, the percentage with only a high school diploma decreased significantly from 2000 to 2012. Figure 17 illustrates the percentage of enrollees by highest grade completed.

Figure 17. Program Enrollments by Highest Grade Completed at Enrollment  
2000, 2006, 2012



As shown in Figure 18, program completers with a post-secondary credential (i.e., associate degree, bachelor's degree, master's degree, doctorate degree, certificate, or first professional degree) made up the growing majority of completers in all three years examined.

Figure 18. Program Completers by Highest Grade Completed at Enrollment  
2000, 2006, 2012



8. Residence. As shown in Figure 19, when comparing program enrollments by residence, the vast majority of Logan students resided in-district at the time of enrollment. The percentage of students from out-of-district (but in Illinois) grew to slightly over 20% in 2012.

Figure 19. Program Enrollments by Residency at Enrollment  
2000, 2006, 2012

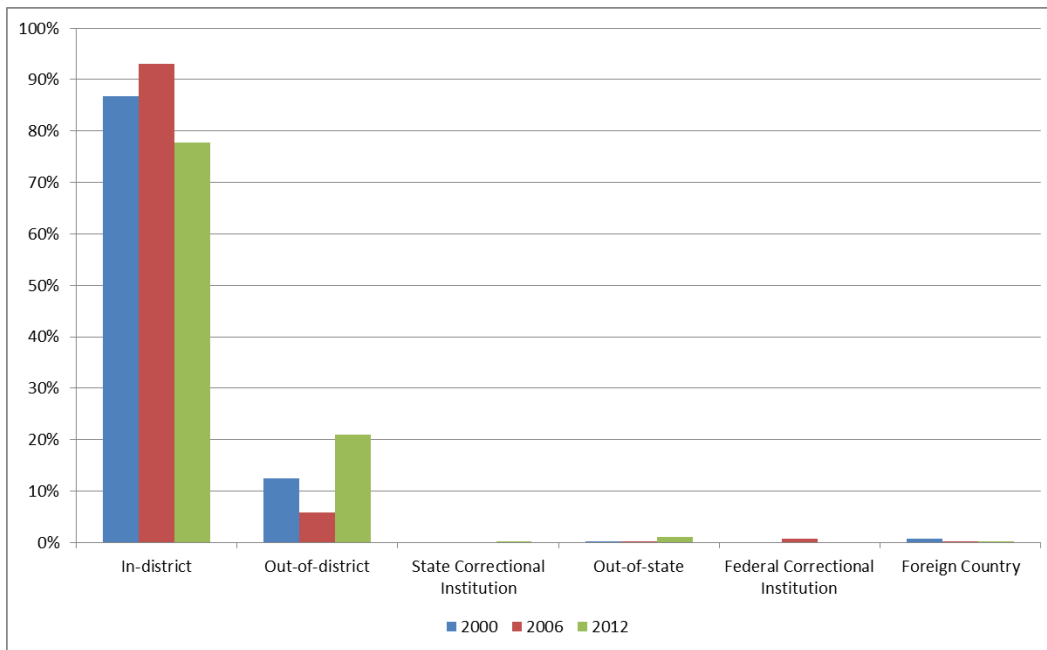
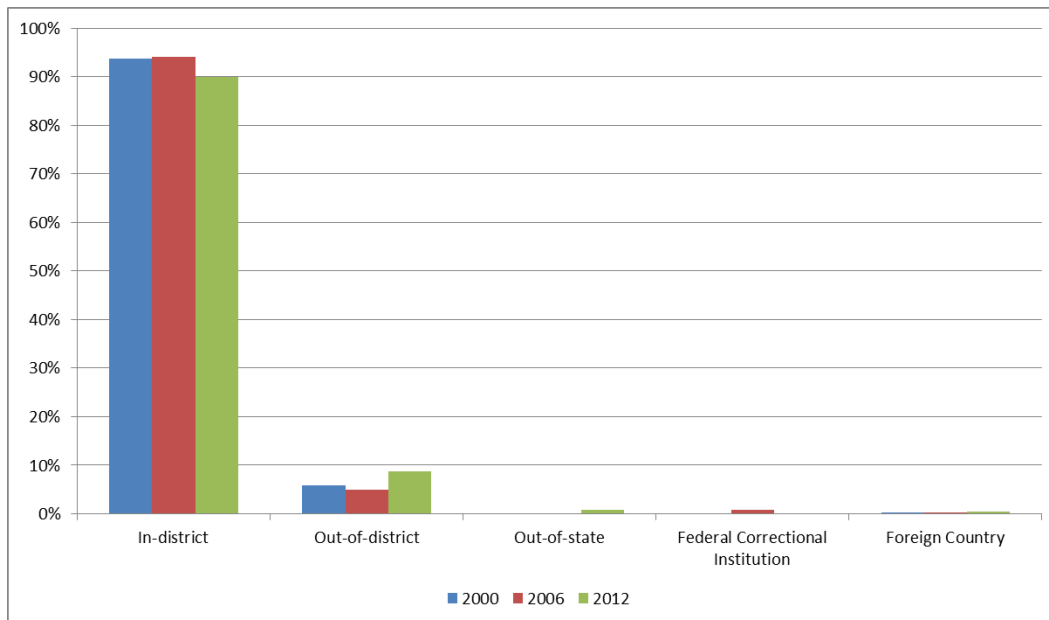


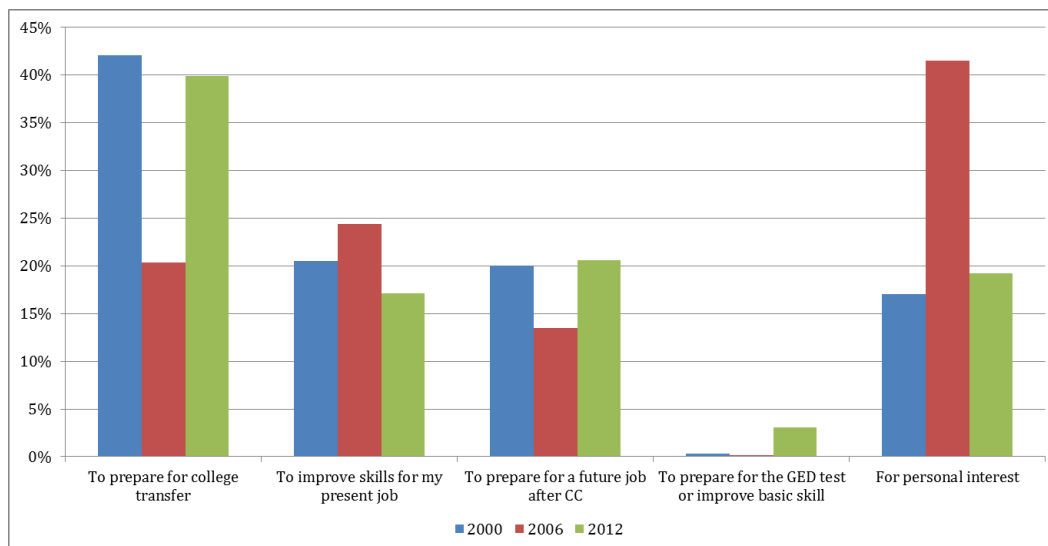
Figure 20 shows program completers by residency at enrollment. Students residing in-district represented over 90% of all program completers. Out-of-district program completers as a percentage of the total increased slightly over this period.

Figure 20. Program Completers by Residency at Enrollment  
2000, 2006, 2012



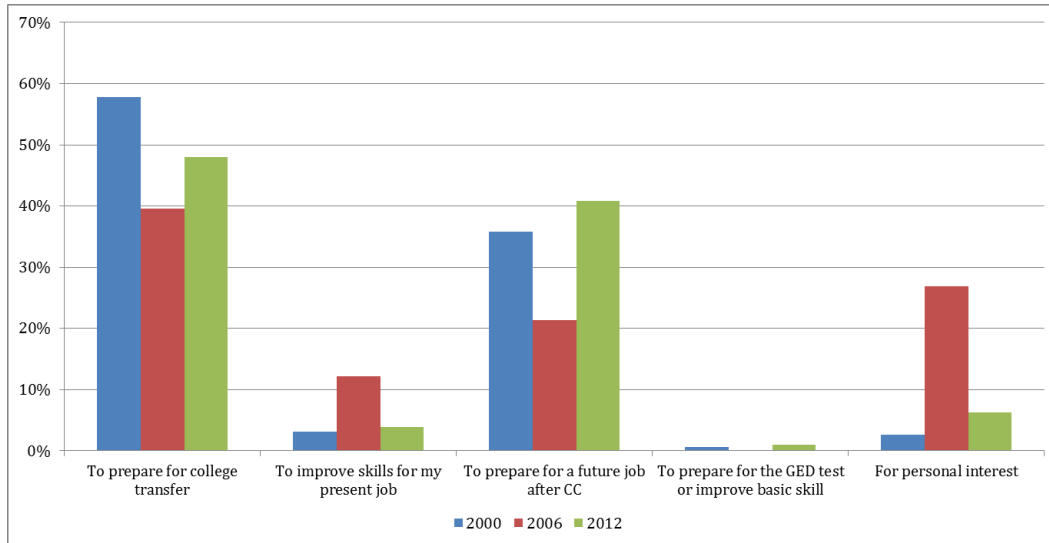
9. Student Intent. Preparing for college transfer was the intent of the largest percentage of Logan enrollees in 2000 and 2012. In 2006, those enrolling for personal interest made up the largest group. Figure 21 presents student intent data for individuals enrolled in 2000, 2006 and 2012.

Figure 21. Program Enrollments by Student Intent at Enrollment  
2000, 2006, 2012



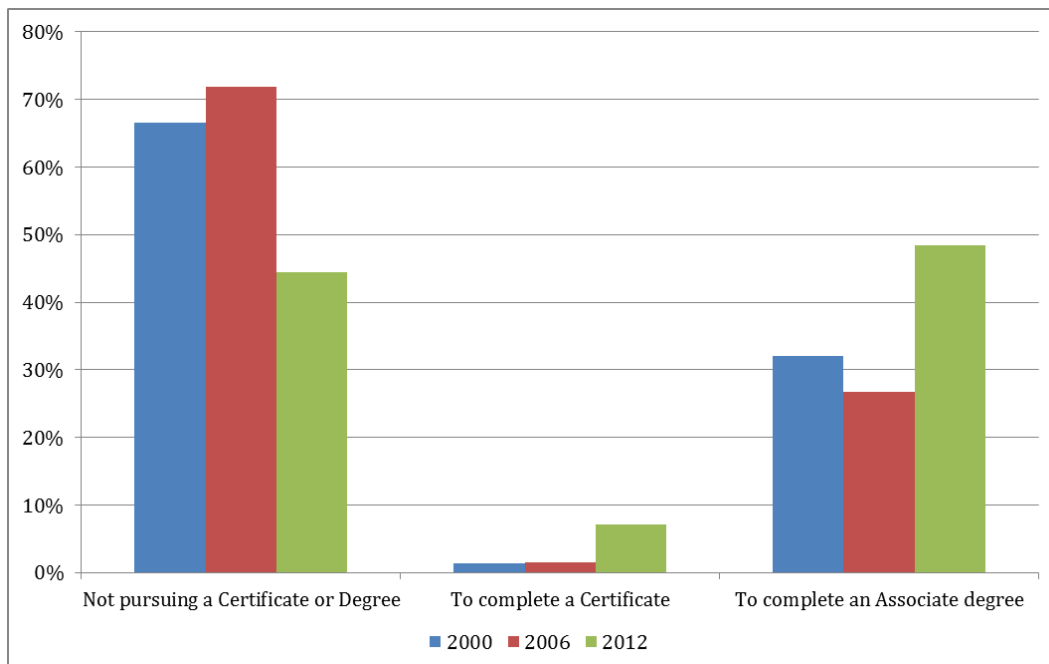
Program completions were highest for Logan students who were preparing for college transfer followed by students preparing for a job after community college. As with enrollment, those taking courses for personal interest made up the largest group of completions.

Figure 22. Program Completers by Student Intent at Enrollment  
2000, 2006, 2012



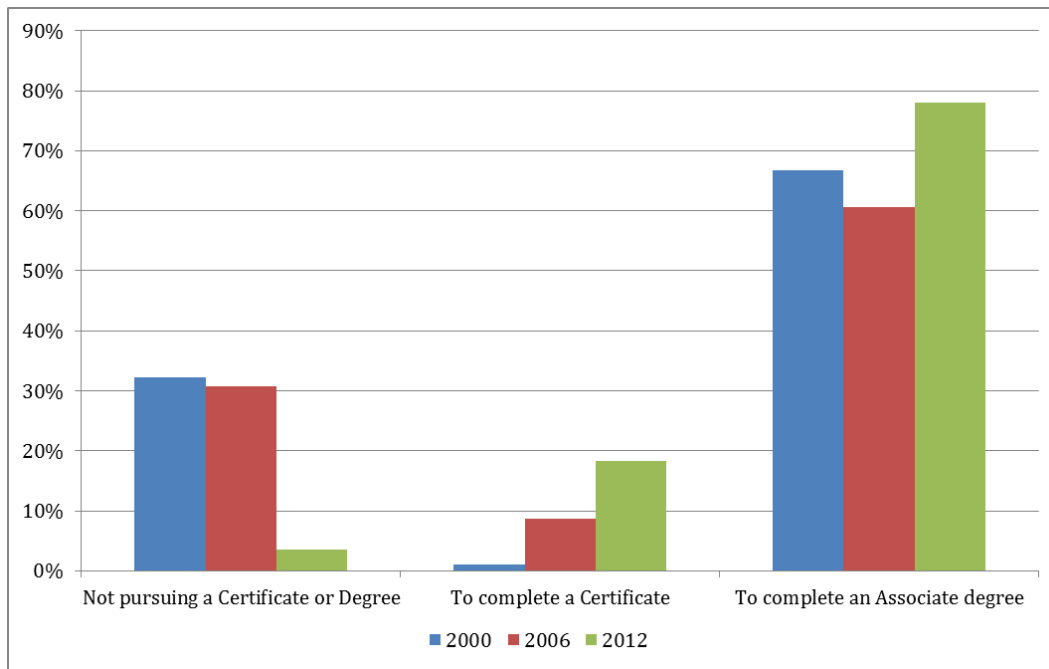
10. Educational Objective. Students' educational objectives have changed from 2000 to 2012 to be more focused. As illustrated in Figure 23, the percentage of enrollees who were not pursuing a certificate or associate degree decreased from 2000 to 2012. By 2012, there was a strong increase for students with the objective of obtaining an associate degree.

Figure 23. Program Enrollments by Student Objective at Enrollment  
2000, 2006, 2012



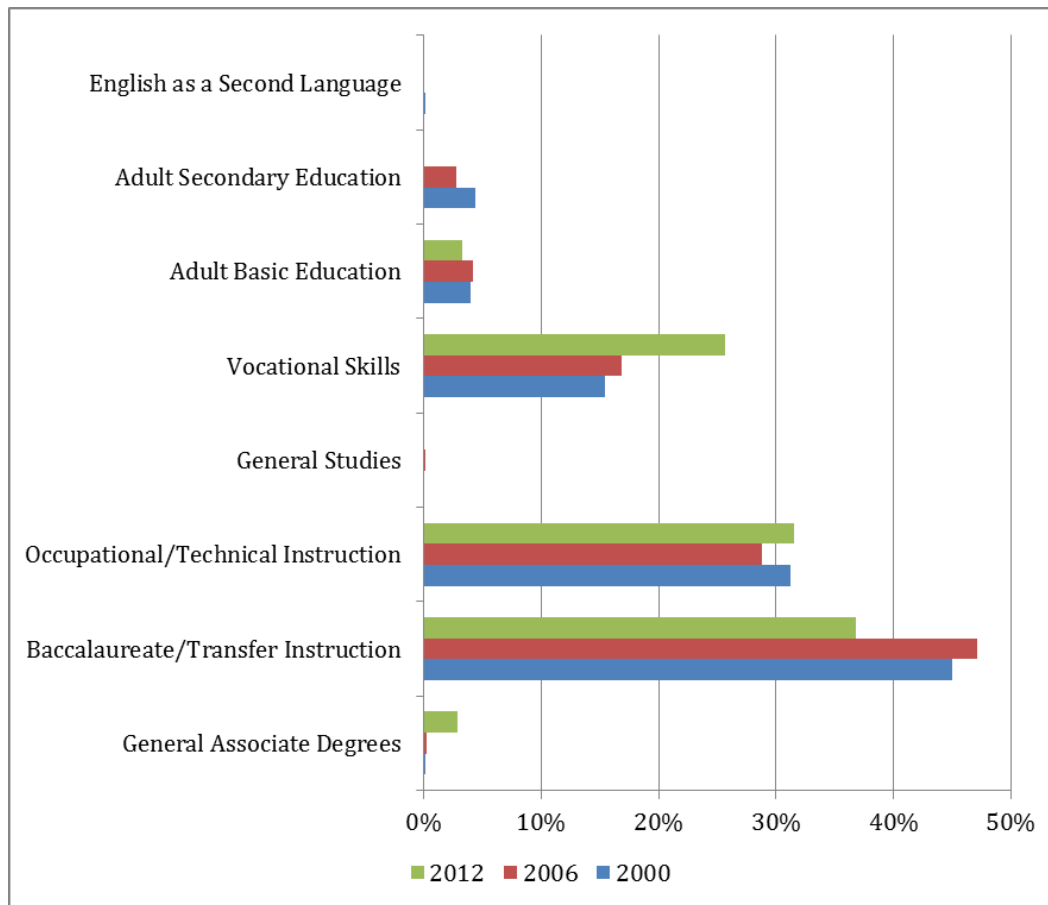
As shown in Figure 24, students pursuing an associate degree made up the largest percentage of program completers from 2000 to 2012. Program completers that had the intent to complete a certificate grew to almost 20% of completers in 2012.

Figure 24. Program Completers by Student Objective at Enrollment  
2000, 2006, 2012



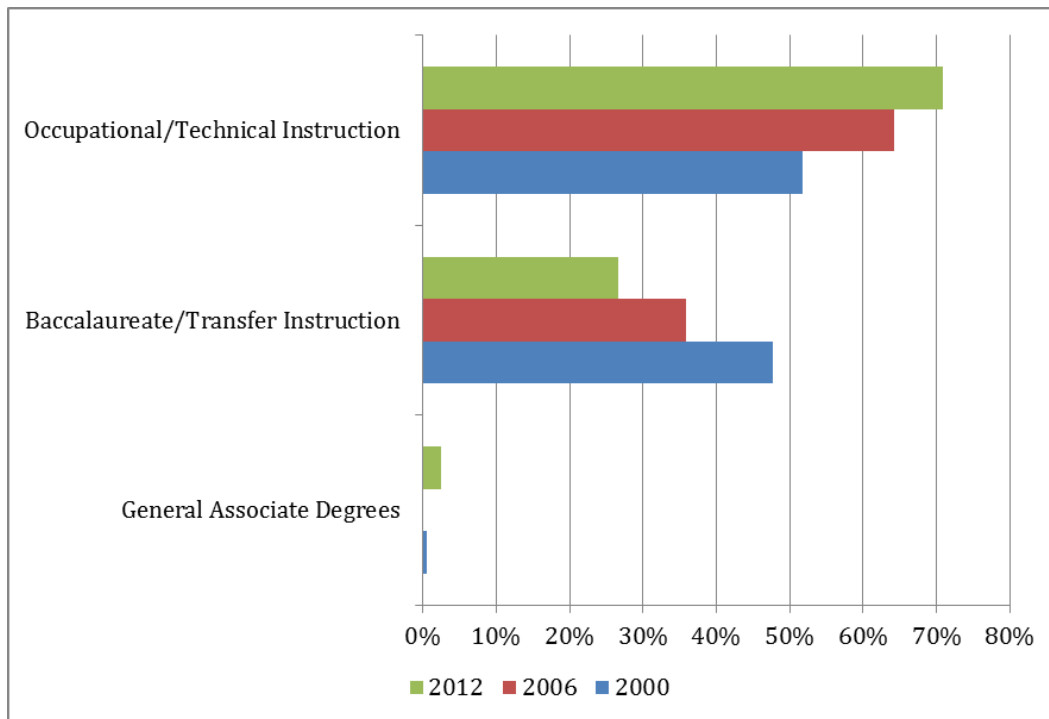
11. Program Classification. Between 2000 and 2012 the top programs in terms of total overall enrollments have remained Baccalaureate/Transfer, Occupational/Technical Instruction, and Vocational Skills. These programs represented almost 95% of all enrollments in 2012. Figure 25 illustrates these trends.

Figure 25. Program Enrollments by Program Classification Structure at Enrollment 2000, 2006, 2012



As evident in Figure 26, Occupational and Technical Instruction was selected by the majority of program completers, growing to 71% of program completers in 2012. The second highest percentage of program completers was in Baccalaureate/Transfer programs, but this number declined from 2000 to 2012. These two programs account for over 95% of all program completers.

Figure 26. Program Completers by Program Classification Structure at Enrollment  
2000, 2006, 2012

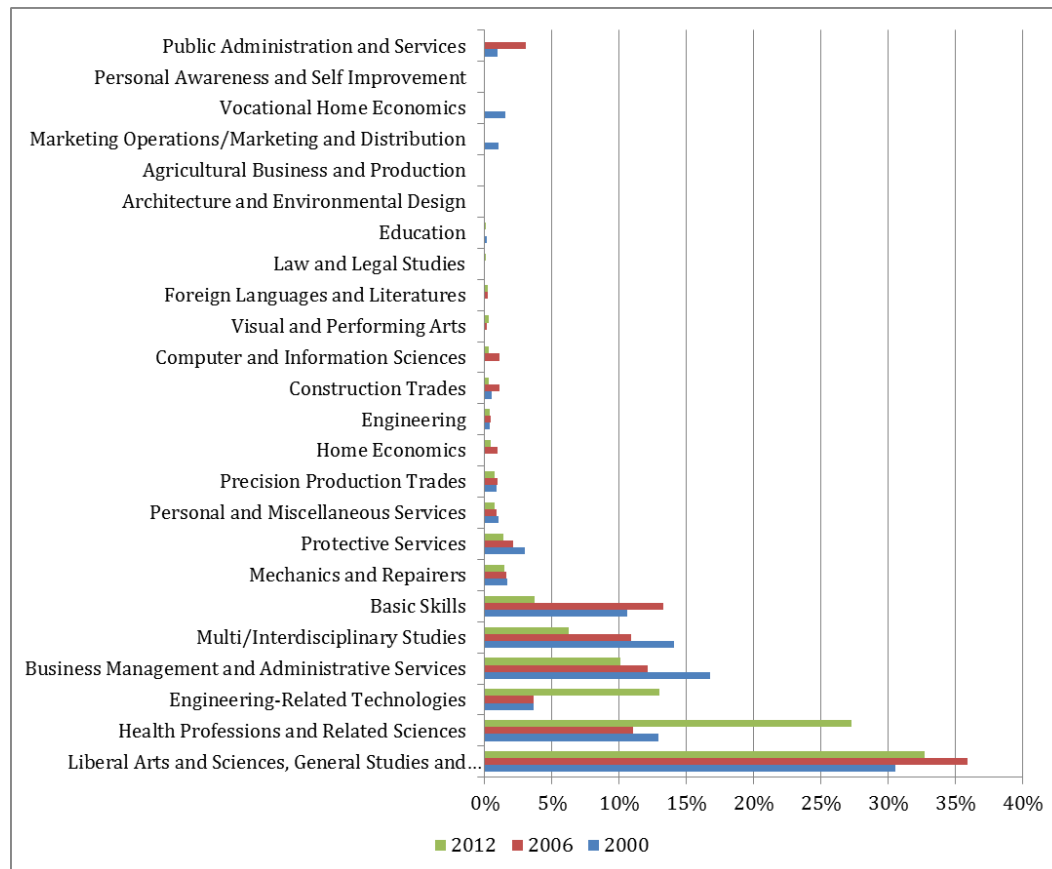


12. Instructional Program. Using the national CIP (Classification of Instructional Programs) typology at the two-digit level, students enrolling in the college may select from 35 programs of instruction. Four broad CIPs stand out as representing 83% of enrollments in 2012:

- Liberal Arts and Sciences, General Studies and Humanities
- Health Professions and Related Sciences
- Engineering Related Technologies
- Business Management and Administrative Services

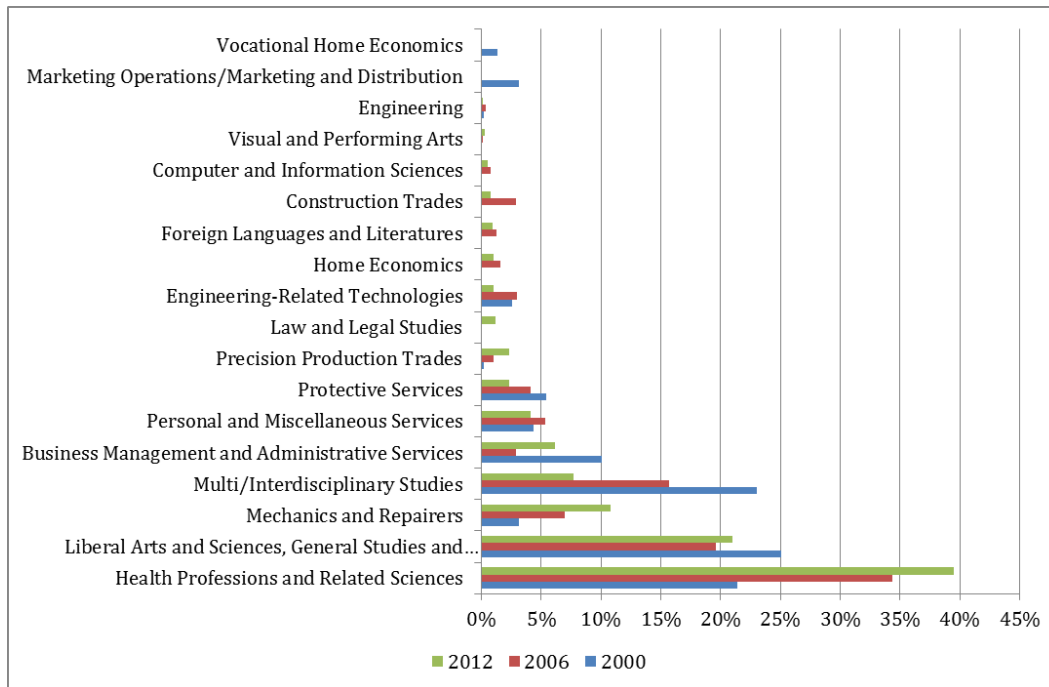
As portrayed in Figure 27, the most significant increase from 2000 to 2012 was in the percentage of students enrolling in Health-related professions and Engineering Related Technologies. There were declines in Business Management and Administrative Services, Multi/Interdisciplinary Studies and Basic Skills enrollments.

Figure 27. Program Enrollments by Classification of Instructional Program at Enrollment 2000, 2006, 2012



Data for students completing programs reveal that Mechanics and Repairers and Multi/Interdisciplinary Studies replace Engineering Related Technologies and Business Management in the top four CIPs. Liberal Arts and Sciences had the largest percentage of program completers in all three years. Health Professions and Related Sciences grew strongly between 2000 and 2012. Business Management and Administrative Services and Multi/Interdisciplinary Studies programs saw a decline in program completers. Figure 28 displays these data.

Figure 28. Program Completers by Classification of Instructional Program at Enrollment  
2000, 2006, 2012



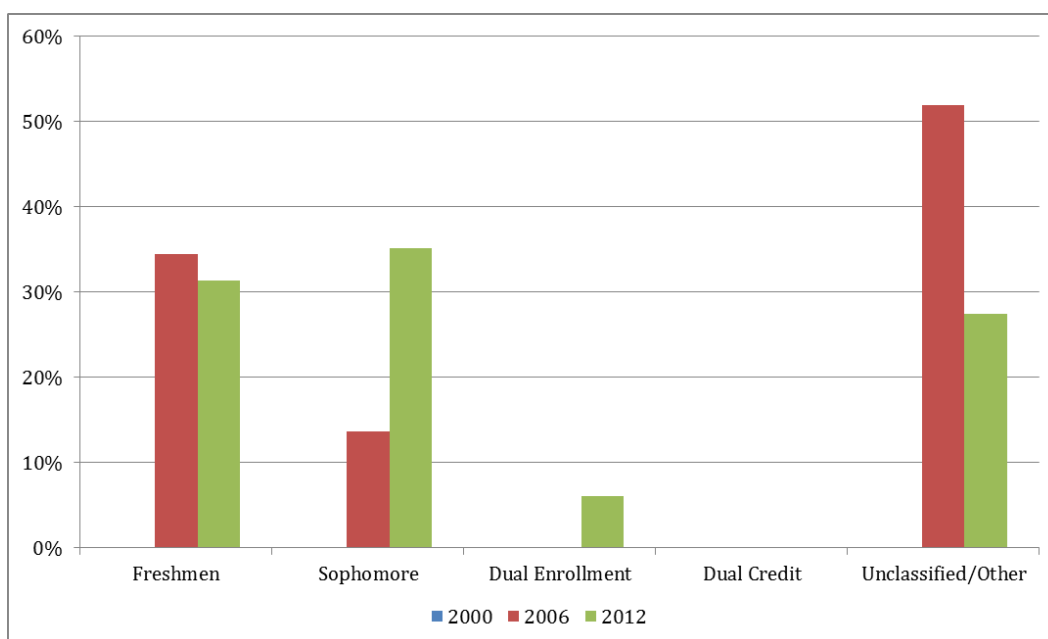
13. Veteran Status. Veteran enrollment at the college is generally declining. In 2000, 247 students identified themselves as veterans – about 2.3% of total enrollees. This number fell to 66 (0.4%) in 2006, and grew again by 2012, when 292 veterans made up 1.6% of total enrollment.

Veterans make up a larger percentage of program completers. In 2000, 1.9% of program completers (11) reported veteran status. Veterans made up 0.7% of 2006 program completers (6) and 3.4% of 2012 program completers (32).

14. Online Status. In 2006, 334 students took at least one online course for credit. That was 2.3% of the total annual head count. Over the next six years, online students increased strongly. By 2012, 2,270 students took at least one online class for credit, about 12.5% of total students.

15. Student Level Status. Dual credit students are high school students that are receiving both high school and college credit for courses they complete at a community college. Dual enrollment students are high school students that receive college credit but not high school credit for courses they complete. There were no dual enrollment students in 2006 but they grew to 6% of enrollees in 2012 (Figure 29). Freshmen made up the largest group of community college enrollees 2006, but dropped between 2006 and 2012. Sophomores grew strongly as a portion of total enrollment between 2006 and 2012 (data were not collected in 2000). There were no dual credit enrollments reported in either year.

Figure 29. Program Enrollments by Student Level  
2006 and 2012



Sophomores made up the majority of program completers in both, growing slightly from 2006 to 2012 (Figure 30). Dual enrollment students made up almost 12% of program completers in 2012. There were no dual credit completers reported in either year.

Figure 30. Program Completers by Student Level  
2006 and 2012

