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The Demographics and Academics of College Going in Illinois

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Executive Summary

State and national economic strength is increasingly dependent on an educated workforce. A high school diploma, which once allowed people to live a decent and comfortable life, is no longer sufficient. The knowledge economy and globalization have significantly changed the relative earning power of different educational attainments. In order to help the state of Illinois assess the extent to which it is providing access to educational opportunities that lead to successful transitions to college and the workforce, the Illinois Education Research Council (IERC) is undertaking a six-year longitudinal study following the 113,660 students in the Illinois high school class of 2002. We are examining how well high school graduates are prepared for the next stages of their lives, and whether patterns of differential preparation along with background characteristics and high-school attributes are related to entry into and success in college.

Bird's Eye View of the Class of 2002

For every 1000 students in the Illinois Class of 2002, 262 were enrolled in an Illinois two-year institution their first year out of high school, while 112 were enrolled out-of-state. We can see in the table that 34% (343/1000) were not ready for college, and that 26% (262/1000) enrolled in a two-year institution. We can also see that about half (52/112) of those enrolled out-of-state came from the most-ready group of students, and that about one quarter (52/198) of all most-ready students enrolled out-of-state, or 31% (52/167) of those who went to college that first year.

AY2002-03 College Going per 1,000 Illinois Class of 2002 Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
343	Not/Least Ready	147	enrolled in college	104	17	10	12	4	31	5
		197	not enrolled in college							
111	Minimally Ready	64	enrolled in college	40	11	6	6	1	19	3
		47	not enrolled in college							
173	Somewhat Ready	120	enrolled in college	56	33	14	15	2	45	15
		54	not enrolled in college							
175	More Ready	138	enrolled in college	42	47	21	28	1	61	33
		37	not enrolled in college							
198	Most Ready	167	enrolled in college	20	62	33	52	0	40	30
		31	not enrolled in college							
1000		635	enrolled in college	262	171	84	112	8	204	152
		365	not enrolled in college							

Note: May not total exactly due to rounding.

Introduction

In the first report in this series, *The demographics and academics of college readiness in Illinois* (Presley & Gong, 2005) we found that about one third of Illinois public high school graduates in the Class of 2002 were ready for college coursework at a four-year institution, about one third were not/least ready, and one third were somewhat ready. High school course taking, high school quality and student demographic characteristics all contribute to the different levels of college readiness. This report, the second one in the series, addresses college participation in the first academic year after high school graduation (AY2002-2003).

The vast majority of the Class of 2002 aspire to complete at least a bachelor's degree.

It is commonly assumed that many of those entering postsecondary education through the two-year institutional portal do not aspire to complete a baccalaureate. The educational expectations of the Class of 2002 largely dispel this assumption, at least for traditional-age students. The vast majority (87%) of the Class of 2002 aspire to complete at least a bachelor's degree, with only slight differences by family income, race/ethnicity and region. While there are more differences by college readiness, nearly three quarters (72%) of the not/least-ready students expect to earn at least a bachelor's degree, as do nearly all (99%) of most-ready students. More than three quarters of those who did not even enroll in college in their first year after high school still expected to complete a bachelor's degree at some point.

Question 1: Who went to college in the year immediately following high-school graduation?

While readiness for college matters somewhat, almost half of the not/least ready students enrolled immediately in postsecondary education.

Overall, 60% of the Class of 2002 went straight to college in Fall 2002, and another 4% started in Spring 2003. The different college-going rates for students from different family income levels and racial/ethnic groups are largely related to different levels of college-readiness as these students complete high school. We also found, however, that less well-prepared students from higher-income families are more likely to continue, while Latino and Native American students are generally somewhat less likely to continue immediately into college.

While readiness is clearly related to continuation to college, it is significant to note that almost half of the students in the not/least-ready category did indeed go on to college in their first year after high school. On the other hand, it is also intriguing to note there are between 16% and 21% of well-prepared (more/most ready) students not continuing immediately into college. In later reports, we will be able to test whether they enrolled after a "gap" year—a phenomenon that is becoming quite commonplace in the transition from high school to college.

Question 2: Who went to four-year institutions and who went to two-year institutions?

Readiness for college matters a lot.

School preparation (i.e., the college-readiness measure) has an even stronger association with students' likelihood of enrolling in four-year vs. two-year colleges than it does with overall postsecondary participation. Differences in college readiness largely account for different enrollment patterns among major racial/ethnic groups. However, regional differences remain even after we took other factors into consideration—including student readiness and family income. Not/least-ready Chicago Public School (CPS) students are more likely to enroll in a four-year institution, while students from the Southeast are more likely to start in the two-year sector, including 35% of the most-ready students.

Two-year institutions, and especially private institutions, play a more important role in Illinois than many other states in providing access to postsecondary education. About 41% of the Class of 2002 who entered postsecondary education in

2002-2003 did so through an Illinois public two-year institution. But there is consistent evidence showing that those with a bachelor's degree have an advantage in the labor market over those with an associate degree. The State of Working Illinois study provides information on expected growth in Illinois. In these researchers' analysis, it is the bachelor's degree requirement that separates jobs with increasing wages from those with declining relative wages. It is clear from the large proportion of the Class of 2002 expecting to earn bachelor's degrees (87%) that recent high-school graduates understand the importance of the bachelor's degree to economic success. The longitudinal nature of this study will enable us to track whether those who start in the two-year sector eventually fulfill this expectation.

Question 3: Who went to more-competitive institutions?

Readiness for college matters most.

Academic preparation is the most powerful factor for distinguishing between those who went to more-competitive four-year institutions and those who went to less competitive ones.

However, we found that high family income and regional location have an additional impact on students' enrollment in more-competitive institutions. Given their college-readiness levels, students from the Northeast minus CPS and CPS were more likely to enroll in more-competitive institutions, especially compared to similar students from the Southwest. We also found some evidence of race-sensitive application and/or admission practices on the college destinations of students from different racial/ethnic backgrounds—especially for more-ready black and Latino students, and most-ready black, Latino and Asian students. Many black and Latino students have reached these levels of achievement despite disadvantages in their access to high quality K-12 educational opportunities. They have demonstrated strong academic potential against the odds. Race-sensitive admission practices are important as one tool towards equalizing educational opportunities in higher education. But it is equally important to take measures to ensure that every child, regardless of race/ethnicity or family income, has equal access to quality K-12 education and has equal opportunity to be equally prepared for college, as we emphasized in the first report from this study (Presley & Gong, 2005).

Question 4: Who went out of state for college?

More-prepared students are more likely to enroll out of state.

Illinois has for a long time been one of the major exporters of its college freshmen to other states. Indiana, Iowa, Wisconsin, and Missouri are the top destination states of Illinois' college emigrants. We are for the first time able to examine the characteristics of new high school graduates who are leaving Illinois for college, and we found that almost three quarters of those who leave Illinois for college are well prepared for college. But the brain-drain from Illinois is not due simply to students seeking more-competitive college environments out of state. One third of top students who go out of state are enrolling in less-competitive institutions.

The Teacher Quality Index and College Going

The IERC has developed a Teacher Quality Index (TQI) for Illinois' public schools as an indicator of the average academic attributes of their teachers. Having a cadre of teachers who on the average were themselves more academically successful appears to contribute to students going on to college from low-performing schools. And having a stronger cadre of teachers who were also teaching in a high-performing high school appears to contribute to an environment of higher outcomes for students' choices of where to enroll.

Concluding Comments

The IERC Longitudinal Study of the Class of 2002 reveals some important strengths and weaknesses in Illinois' education system. Our first report revealed that about one third of our public high school graduates are not ready for college, another third are somewhat ready, and only about one third are ready to move on towards earning a bachelor's degree. And yet most of them reported that they expected to earn a bachelor's degree or more eventually. There is clearly a mismatch for many between their expectations and the reality they will face as they embark on their postsecondary education. This finding is consistent with national results that found 72% of 10th graders expecting to earn at least a bachelor's degree (NCES, 2005). Education Secretary Margaret Spellings, in commenting on these national findings, said, "[W]e as a society have done an excellent job of selling the dream of attending college...but we have to make sure that we are preparing high school students to succeed once they get in the door" (U.S. Department of Education, 2005). In our first report we echoed this sentiment, recommending efforts to increase the academic rigor of our high schools, stronger articulation between high school and college curricula, and better information to students about the importance of working harder and choosing a more rigorous high school curriculum. But we also said that these strategies "will fail if we do not also address the educational experiences that students have prior to high school…students should not arrive in high school already 'left behind'" (Presley & Gong, 2005, p. 35). We called for school leaders, district leaders and state leaders to work in unison to crack the 'college readiness' challenge.

This second report shows that higher education is providing a second opportunity for many of our high school graduates to gain the skills and academic experiences they will need for personal and professional success. Almost half of Illinois' not/least ready high school graduates went on immediately to college, the majority enrolling in the two-year sector. But others went straight into the four-year sector, and we will be tracking whether these different paths lead to different longer-term outcomes for these students. Continuing on into higher education also provides a new opportunity for some who had succeeded against the odds of attending weak schools to attend more-competitive universities where they will experience communities of well-prepared students and be exposed to some of the best faculty in the world. And for all, higher education provides the opportunity to begin to explore paths perhaps hitherto unconsidered.

But the U.S. system of high-school/college transition is extremely inefficient with regard to the educational costs to families and taxpayers, and to the "opportunity costs"—that is, the lost income that students face when they must spend post-high school years gaining skills they should have been given the opportunity to master by the end of high school. In many other developed countries, students generally reach or exceed at the age of 16 the benchmarks we expect of our students at the end of high school. Their postsecondary institutions can focus on specialized higher learning, knowing that the general education needs of their students have been fulfilled through the school system. In Illinois, as well as other states, high-school/college collaboratives are being established that leverage the expertise of college instructional personnel and provide serious and rigorous learning environments for underserved high school juniors and seniors. We hope that Illinois will move forward creatively, guided by what will best prepare our youth for their transition to adults who are contributing to our economy and our society.

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Introduction

State and national economic strength is increasingly dependent on an educated workforce. In order to help the state of Illinois assess the extent to which it is providing access to educational opportunities that lead to successful transitions to college and the workforce, the Illinois Education Research Council (IERC) is undertaking a six-year longitudinal study following the Illinois high school class of 2002. We are examining how well high school graduates are prepared for the next stage of their lives, and whether patterns of differential preparation along with background characteristics and high-school attributes are related to entry into and success in postsecondary education. We are providing results in a series of reports. The first report, *The demographics and academics of college readiness in Illinois* (Presley & Gong, 2005), addressed the readiness of the Class of 2002 for college. This report, the second one in the series, addresses college participation in the first academic year after high school graduation (2002-2003). A third report in Summer 2006 will provide results on persistence in college, transfer, and discontinuation during the first three years after high school (through 2004-2005). Additional reports are anticipated in subsequent years that will report on persistence, transfer, and completion through the sixth-year after high school graduation.

The Private and Public Benefits of Educational Attainment

Educational attainment has consistently been shown to be an important factor distinguishing those who are more successful economically from those who are not. A high school diploma, which once allowed people to live a decent and comfortable life, is no longer sufficient. The knowledge economy and globalization have significantly changed the relative earning power of different educational attainments. The earning gap between people with a four-year degree or higher and those with a high school diploma has been widening in the past 30 years (Carey, 2004). A similar trend was identified in Illinois where "by 2004, the gap between those who had a college degree and those lacking a high school diploma was $12.74 per hour, an increase of 94.8% over the size of the corresponding gap in 1980" (Center for Tax and Budget Accountability and Northern Illinois University, 2005, p. 27).

The benefits of education are not just "private" benefits limited to the people who get the education. The state and the nation also benefit greatly from a well-educated population through increased tax revenues, and lower incidences of violence, addiction, illness (physical and psychological) and incarceration (Carnevale and Desrochers, 2004). College-educated citizens are also more likely to be active social and political participants by becoming involved in voluntary and other organizational activities and by being involved in the political process (such as voting, sense of civic duty, and interest in politics) (Pallas, 2000).

Summary of Findings from the College Readiness Report

In the first report in this series (Presley & Gong, 2005) we found that about one third of Illinois public high school graduates in the Class of 2002 were ready for college coursework at a four-year institution, about one third were not/least ready, and one third were somewhat ready. High school course taking, high school quality and student demographic characteristics all contribute to the different levels of college readiness. Black and Latino students, students from low income families, and students in high schools with weaker teaching staff are less likely to be ready for

college after graduating from high school than Asian and white students, students of high income families, and students in high schools with stronger teaching staff.

Questions Addressed in This Report

This report explores the implications of college readiness for college participation. We address four main questions for the Illinois Class of 2002:

1. Who went to college in the year immediately following high-school graduation?
2. Who went to four-year institutions and who went to two-year institutions?
3. Who went to more competitive institutions?
4. Who went out of state for college?

The report is organized in the following manner: we first introduce the data and key measures used for the report in a methodology section; then examine the educational expectations of the Class of 2002. The remainder of the report addresses the four key questions identified above. In Appendix 1, we provide several multiple regression analyses that assess the independent effects of a multitude of related variables for readers who would like to see results through this more complex analytic lens. In Appendix 5 we show how college going is associated with schools' teacher quality indices.

Methodology

Data

- In 2001, Illinois began administering the ACT test to all 11th graders in Illinois public schools as part of the Prairie State Achievement Exam (PSAE). Test scores and background information were, for the first time, available for most public-school students who would be completing high school one year later, rather than just those who elected to take the test because they were expecting to apply to a postsecondary institution that asked for ACT scores. Not only do we have information on those who were not college-bound, at least in the short run, but also those who planned to enter the postsecondary sector through two-year institutions, which typically do not ask for ACT scores. We were able to receive a copy of the 2002 senior class data from ACT under shared data agreements with the Illinois Board of Higher Education and ACT. We refer to this cohort of 113,660 Illinois public high school graduates as the Class of 2002. IERC 2005-3 contains an extensive description of their demographics.
- Student college enrollment information is obtained from the National Student Clearinghouse (NSC), a national collaborative in which most postsecondary institutions participate.
- College characteristics (such as level and control) are taken from Institutional Postsecondary Education Data System (IPEDS) of the U.S. Department of

Education. In addition, Barron's Profiles of American Colleges 25th edition (2003) was used as the source for college competitiveness information.

Key Measures

➢ *Readiness Index*

The IERC readiness index is modeled on the work of Berkner and Chavez (1997) who categorized academic characteristics of high school seniors of 1992 from a national sample dataset (NELS:88) who were attending four-year institutions by 1994. The IERC readiness index is a simplified version of this approach that combines information on students' ACT scores and high school GPAs. We apply the readiness index to all students in the cohort, not just those who attended a four-year institution in 2002-2003. The index has five levels—from not/least ready, through minimally ready, somewhat ready, more ready and most ready. Table 1 shows how the Class of 2002 is distributed by readiness category. For further information, please see *The Demographics and Academics of College Readiness in Illinois* (Presley & Gong, 2005).

Table 1.
Distribution of College Readiness Among the Illinois Class of 2002

Not/Least Ready	34%
Minimally Ready	11%
Somewhat Ready	17%
More Ready	17%
Most Ready	20%

➢ *College Competitiveness*

Barron's Profiles of American Colleges ranks higher education institutions in the United States on a six-level competitiveness scale, ranging from most competitive to non-competitive. An institution's ranking each year is based on a number of indicators of the academic quality of its freshman class, such as the percentage of applicants accepted for admission and the median SAT or ACT scores of the freshman class. We used rankings from the 25th edition in 2003, since these data were those that were available to the Class of 2002. We combined the top two categories (most/highly competitive) and the bottom two categories (less/non-competitive) to create four categories for our analysis. The middle two categories are very competitive and competitive.

Table 2 shows the criteria for the ratings, and the distribution among the categories of those members of the Class of 2002 who attended a four-year college in 2002-2003. Almost half (45%) of those attending a four-year institution were at institutions categorized in the "competitive" category.[1]

[1] We note that several Illinois institutions that were categorized as non-competitive in 2002 have since 'moved up' to the competitive category – indicating that most four-year institutions in Illinois now are at least somewhat selective in their admissions process.

Table 2.
Index of College Competitiveness

Barron's Selector Rating	Barron's Criteria for Rating	IERC Four-Year College Competitiveness (Distribution of 4-year attendees)
Most Competitive	ACT: 29+ GPA: 3.4–4.0	Most/Highly Competitive 20%
Highly Competitive	ACT: 27–28 GPA: 3.0–3.4	
Very Competitive	ACT: 24–26 GPA: 2.5+	Very Competitive 22%
Competitive	ACT: 21–23 GPA: 2.0–2.5+	Competitive 45%
Less Competitive	ACT: <21 GPA: NA	Less/Non Competitive 13%
Non Competitive	Graduation from high school	

➢ *College Enrollment*

The National Student Clearinghouse data provide information on enrollment each academic year as well as summer enrollments. We define enrollment as enrollment at any time during the academic year. Students sometimes pick up courses in another institution during the summer and return to their home institution in the fall. We did not want to count these enrollments as institutional transfers, and so elected to focus only on fall and spring enrollments. In addition, in cases where multiple institutional enrollments were found within an academic year, we selected the first institution as representing a student's enrollment for that year in order to help simplify an already complex enrollment-mapping task. In the few cases where simultaneous enrollments were found, the institution with highest enrollment status (i.e., full-time over part-time) was chosen.

For other measures used in this study readers are referred to *The demographics and academics of college readiness in Illinois (*Presley & Gong, 2005).

Educational Expectations of the Class of 2002

It is commonly assumed that many of those entering postsecondary education through the two-year institutional portal do not expect to complete baccalaureate degrees. The educational expectations of the Class of 2002 largely dispel this assumption, at least for traditional-age students. The vast majority (87%) of the Class of 2002 aspire to complete at least a bachelor's degree, with only slight differences by family income, race/ethnicity and region (Table 3).[2] While there are more differences by college readiness, nearly three quarters (72%) of the not/least-ready students expect to earn at least a bachelor's degree, as do nearly all (99%) of

87% of the Class of 2002 aspire to complete at least a bachelor's degree.

[2] We note that 22% of the Class of 2002 did not respond to the degree-expectations question. We assumed that these non-respondents were not systematically different from respondents after controlling for college readiness and college-going pattern, and then estimated their likely response if they had answered this question. Including these estimated responses, the overall percent expecting at least a bachelor's degree would have been a very similar 86%.

most-ready students. More than three quarters of those who did not even enroll in college in their first year after high school still expected to complete a bachelor's degree at some point.

86% of students who started in two-year institutions in 2002-2003 expected to obtain bachelor's degrees eventually.

Importantly, we found that more than four in five (86%) students who started in two-year institutions in 2002-2003 expected to obtain bachelor's degrees eventually, indicating that a large number of students are relying on community colleges as a stepping stone to further higher education. As the longitudinal study progresses over time, we will be able to measure what proportion of these students actually transfer to four-year institutions, and what demographic and academic background characteristics may help to explain potentially different outcomes for different groups of students.

Table 3.
Educational Expectation of the Illinois Class of 2002

	Overall				% Known	
	Missing	Less than BA	BA+	N	Less than BA	BA+
Family income						
Low Income	2%	19%	79%	20,644	19%	81%
Lower Middle Income	2%	15%	84%	31,443	15%	85%
Upper Middle Income	1%	9%	90%	18,806	9%	91%
High Income	1%	5%	94%	17,436	5%	95%
Missing Income	67%	5%	28%	35,331	15%	85%
Race/Ethnicity						
Black	19%	10%	71%	11,819	12%	88%
Latino	17%	16%	66%	8,761	20%	80%
Asian	14%	5%	81%	4,707	6%	94%
Native American	10%	28%	62%	581	31%	69%
White	14%	10%	76%	67,090	12%	88%
Multiracial	14%	8%	78%	1,827	10%	90%
Other	16%	15%	69%	2,157	18%	82%
Missing	60%	7%	33%	16,718	17%	83%
Region						
Chicago Public Schools	35%	10%	55%	15,395	15%	85%
Northeast minus CPS	19%	7%	74%	54,349	9%	91%
Northwest	22%	14%	64%	10,453	18%	82%
West Central	20%	13%	66%	8,574	17%	83%
East Central	20%	13%	67%	8,493	16%	84%
Southwest	19%	14%	66%	9,240	18%	82%
Southeast	18%	15%	67%	4,532	19%	81%
College Readiness						
Not/Least Ready	37%	18%	45%	39,015	28%	72%
Minimally Ready	5%	15%	80%	12,569	16%	84%
Somewhat Ready	21%	8%	71%	19,691	10%	90%
More Ready	14%	3%	83%	19,879	4%	96%
Most Ready	13%	1%	87%	22,506	1%	99%
Level of First Year College						
No College	26%	17%	56%	41,435	24%	76%
2-Year	20%	11%	69%	30,764	14%	86%
4-Year	19%	1%	80%	41,461	2%	98%
Total	22%	10%	68%	113,660	13%	87%

Question 1: Who Went to College in the Year Immediately Following High-School Graduation?

Overall, 60% of the Class of 2002 went straight to college in Fall 2002, and another 4% started in Spring 2003.

Overall, 60% of the Class of 2002 went straight to college in Fall 2002, and another 4% started in Spring 2003.[3] This represents 72,225 of the 113,660 students in the Class of 2002. Table 4 shows the percentage of students in each readiness category who went on to college in 2002-2003. While readiness is clearly related to continuation to college, it is significant to note that almost half of the students in the not/least-ready category did indeed go on to college in their first year after high school. On the other hand, it is also intriguing to note there are between 16% and 21% of well-prepared (more/most-ready) students not continuing immediately into college. We examine later whether this pattern is explained by students' background characteristics such as family income, race/ethnicity or high school location. In later reports, we will be able to test whether they enrolled after a "gap" year—a phenomenon that is becoming quite commonplace in the transition from high school to college.

Table 4.
College-Going Rate by Readiness, AY2002-03

Readiness Index	% to College in 2002/03
Not/Least Ready	43%
Minimally Ready	58%
Somewhat Ready	69%
More Ready	79%
Most Ready	84%
Total	**64%**

College Going by Readiness and Race/Ethnicity.

Overall, participation rates vary considerably by race/ethnicity (Table 5). Less than half of Latino students continue immediately to college, compared to 55% of black students, 70% of white students, and 78% of Asian students. Native American students have the lowest college-going rate at 39%.

College-going rates for less-ready students show considerable variation by race/ethnicity. Asian students have the highest college-going rates at each level of college readiness (ranging from 60% to 86%), while Native American students have the lowest continuation rates (ranging from 28% to 67% for not/least-ready

[3] Our data may slightly underestimate the actual continuation rate, especially for the most-ready students, due to the fact that a small number of institutions (which were mostly more-competitive institutions – a few of which attract Illinois students) did not participate in NSC in 2003. However, the large number of students in our study means that this slight underestimation bias does not constitute a serious concern, and will not change the overall pattern of college continuation.

The college-going rates of most-ready students are almost identical for all racial/ethnic groups.

through more-ready students, and a more comparable rate of 83% for most-ready students). Black- and white-student college-going rates are within five percentage points at each readiness level (ranging from 45/49% to 83/84%), while less-ready (not/least through somewhat ready) Latino students lag both groups by as much as 14 percentage points. The college-going rates of most-ready students are almost identical for all racial/ethnic groups.

Table 5.
College-Going Rate by Readiness and Race/Ethnicity, AY2002-03

Readiness Index	Black	Latino	Asian	Native American	White
Not/Least Ready	45%	35%	60%	28%	49%
Minimally Ready	57%	47%	66%	46%	61%
Somewhat Ready	67%	58%	79%	46%	72%
More Ready	83%	76%	84%	67%	79%
Most Ready	83%	85%	86%	83%	84%
Total	55%	49%	78%	39%	70%

College Going by Readiness and Family Income

In each readiness category, as family income increases, so does the college-going rate.

Overall, college continuation rates vary considerably by family-income level, from 53% for low-income students to 77% for high-income students (Table 6). This is consistent with what others have found (Mortenson, 2005). Even within each readiness category, as family income increases, so does the college-going rate. For the most-ready students, participation rates range from 80% (low income) to 87% (upper middle income). The differences are most distinctive for not/least-ready students, where just 36% of those from low-income families continue, compared to 42%, 50% and 56% of those from the next three income categories.

Table 6.
College-Going Rate by Readiness and Family Income, AY2002-03

Readiness Index	Low Income	Lower Middle Income	Upper Middle Income	High Income	Income Missing
Not/Least Ready	36%	42%	50%	56%	43%
Minimally Ready	53%	57%	66%	69%	49%
Somewhat Ready	61%	67%	74%	76%	71%
More Ready	75%	78%	81%	81%	79%
Most Ready	80%	85%	87%	84%	83%
Total	53%	63%	74%	77%	58%

College Going by Readiness and High School Region

Finally, we examined whether there are different college-going rates by region in Illinois. We found that, generally, college-going rates are quite similar by region (Table 7). Between 62% (East Central) and 69% (Southeast) of the 2002 cohort went immediately into college. The exception is Chicago public schools (CPS), where just 47% of the Class of 2002 went to college in their first year after high school. While CPS' lower participation rate is explained in part by its weaker readiness distribution (see Presley & Gong, 2005, Figure 5, p. 17), we note also that at lower readiness levels, participation is still lower than for similarly (un)prepared students in the other six regions. For example, only 34% of not/least-ready CPS students continued immediately to college compared to as high as 52% in the Southwest region. Indeed, the Southwest has the highest continuation rates in most of the readiness categories. Participation rates of CPS students in the more- and most-ready categories are quite comparable to those of other regions.

At lower readiness levels, college participation for CPS students is still lower than for similarly (un)prepared students in the other six regions.

Table 7.
College-Going Rate by Readiness and High School Region, AY2002-03

Readiness Index	Chicago Public Schools	Northeast minus CPS	Northwest	West Central	East Central	Southwest	Southeast
Not/Least Ready	34%	46%	42%	41%	41%	46%	52%
Minimally Ready	50%	62%	57%	56%	50%	59%	61%
Somewhat Ready	64%	70%	70%	69%	66%	70%	74%
More Ready	77%	80%	81%	78%	77%	78%	84%
Most Ready	84%	83%	87%	86%	85%	88%	88%
Total	47%	68%	64%	63%	62%	65%	69%

Summary and Conclusions about College Going

Readiness, readiness, readiness. The analyses we have just presented show that the different college-going rates for students from different family income levels and racial/ethnic groups are largely related to different levels of college readiness as these students complete high school. We also found, however, that less well-prepared students from higher-income families are more likely to continue, while Latino and Native American students are generally somewhat less likely to continue immediately into college. It is critical that Illinois wrestle with the problem of differential school quality that systematically handicaps students attending high-poverty/high-minority schools. In addition, however, additional efforts could be made to expose Latino and Native American students to the possibilities that exist for continuing on to college.

Question 2: Who Went to Four-Year Institutions and Who Went to Two-Year Institutions?

Illinois ranked 15th in the nation in 2002 in the proportion of its freshmen enrolling in public in-state two-year institutions, 42nd in the proportion enrolling in public in-state four-year institutions, and 6th in the proportion enrolling in private in-state institutions. Two-year institutions, and especially private institutions, play a more important role in Illinois than many other states in providing access to postsecondary education. In this section, we first present what research tells us about the labor market outcomes for recipients of two-year and four-year degrees, and then examine whether students' initial enrollment destinations are related to readiness, family income, race/ethnicity, and region in which their high school was located.

The labor market for two-year and four-year degree recipients

There is consistent evidence showing that those with a bachelor's degree have an advantage in the labor market over those with an associate degree. What is less consistent is the size of the economic advantage. On the one hand, a recent study using national data shows that in 2003 the median annual earnings of bachelor's degree holders is $12, 000 more than that of associate degree holders, and $19,000 more than that of high school graduates (Postsecondary Education Opportunity, 2004). Another study suggests that the wage differential between associates and bachelor's degree recipients is smaller, but also notes that differences are field-of-study dependent (Carnevale and Desrochers, 2004). The authors say that "associate's degrees generally provide workers with a wage boost of about 20 to 30 percent over a high school diploma, …while returns for workers with bachelor's degrees are roughly 40 percent more than high school graduates, but range from 18 percent among men with education degrees to 63 percent for men who majored in engineering or computer science" (p. 42).

A 2005 study of the Illinois workplace says that "[a]s the economy became increasingly service oriented and as the number of good-paying manufacturing jobs declined, one would expect wages to vary ever more closely with skills or what can proxy for them—education levels. An examination of median wages by education category suggests the operation of such a process" (Center for Tax and Budget Accountability and Northern Illinois University, 2005, p. 26.) This study concludes that more education brings higher household incomes to Illinois families, and that the earnings advantage is increasing, especially for those with a bachelor's degree or more.

It is the bachelor's degree requirement that separates jobs with increasing wages from those with declining relative wages.

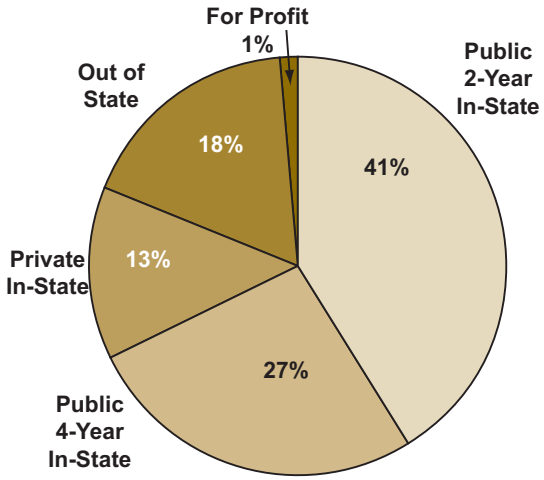
The State of Working Illinois study also provides information on expected job growth in Illinois. It reports that the workforce split between high-skill, high-wage and low-skill, low-wage jobs is growing. Among the 30 projected fastest-growing occupations in Illinois, just one (registered nurse) requires an associate degree, seven require a bachelor's degree, one requires a professional degree (lawyer), 19 require short- or medium-term on-the-job training, and two require related work experience. The report adds that 40.5% of the jobs created by these 30 fastest growing occupations have median wages that fall below $25,000 annually, while 37.2% come in above $45,000—demonstrating a trend towards growing income inequality and continuing decline in median wages. In these researchers' analysis, it is the bachelor's degree requirement that separates jobs with increasing wages from those with declining relative wages.

We showed earlier in this report (Table 3) that 87% of all the students in the Illinois Class of 2002 want a bachelor's degree or above, including 86% of those who started at a two-year institution in 2002-2003. It is clear that recent high-school graduates understand the importance of the bachelor's degree to economic success. The IERC study of the Class of 2002 allows us to look at who enters postsecondary education through the two-year-institution portal versus the four-year-institution portal, and who transfers from the two-year sector to the four-year sector. We plan to obtain data also on which degrees and certificates are obtained. The current report deals with the first step—what distinguishes those entering through the two-year portal from those entering through the four-year portal?

The College Destinations of the Class of 2002

In year one (Fall 2002 or Spring 2003), 41% of the Class of 2002 who entered postsecondary education did so through an Illinois public two-year institution. An additional 27% entered through an Illinois public four-year institution, 13% through an Illinois private institution (nearly all of which are four-year institutions), 18% enrolled out-of-state (again, most in four-year institutions), and 1% enrolled in for-profit institutions (Figure 1).

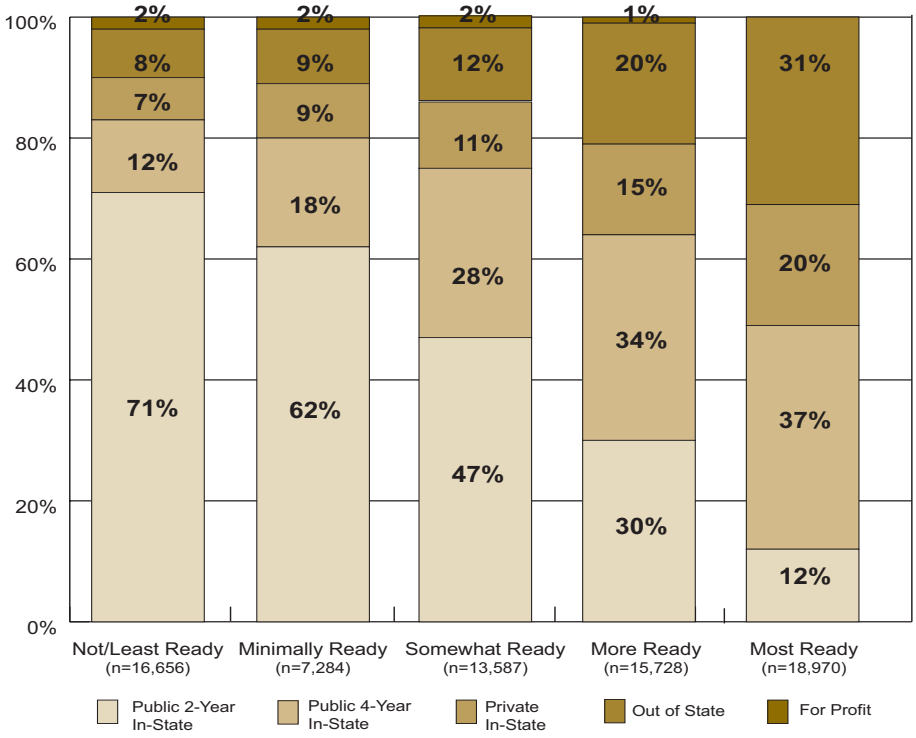
Figure 1.
Types of Colleges Attended by the Illinois Class of 2002 the First Year after High School



The type of institution in which students enroll is strongly related to their college-readiness (Figure 2). Seventy-one percent (71%) of the not/least-ready group who went on to postsecondary education enrolled in an Illinois public two-year institution. Two-year institutions appear to provide a 'second chance' for this group of students. Not surprisingly, the picture is quite different when we turn to the enrollment patterns of the most-ready students. Far fewer of the most-ready group enrolled in a two-year institution (although the fact that 12% did so is quite surprising), while 31% enrolled in an out-of-state institution—the largest proportion to do so among the readiness groups. Illinois experiences a "brain drain" of its best students to other states, although we show later that those living in the vicinity of the University of Illinois Urbana-Champaign (the only highly-competitive public institution in the state) are more likely to remain in-state to attend that institution.

Illinois experiences a "brain drain" of its best students to other states.

Figure 2.
Types of Colleges Attended by Illinois Class of 2002 the First Year after High School, by Readiness



College Destination and Race/Ethnicity[4]

Students from different racial/ethnic groups have different institutional enrollment patterns. But these different patterns are related to readiness, with a few exceptions.

Students from different racial/ethnic groups have different institutional enrollment patterns—almost half (47%) of Latinos enroll in Illinois two-year institutions (Table 8). But these different patterns are related to readiness, with a few exceptions. For example, among those in the not/least-ready category, black students are least likely to enroll in an Illinois two-year institution (52%), while white students are most likely to make this enrollment choice (77%). And not/least-ready black students are almost three times as likely to go out-of-state (15%). Among those in the most-ready category, white students are most likely to enroll in an Illinois two-year institution (13%) while again, black students are least likely to do so (2%), and are again most likely among the race/ethnic groups to enroll out-of-state (44%). The majority of most-ready Asian students enroll in an Illinois four-year institution (53%), compared to about one third among the other race/ethnic groups. The in-state enrollment pattern is related in part to the differential distribution of students in different racial/ethnic groups among the regions, and the regional differences in college destination, to which we turn after we examine the role of family income in college attendance. Appendix 4 provides a birds-eye view of the college destinations per 1000 students by race/ethnicity.

[4] We omit the Native American group of students from this component of the analysis because of their small numbers.

Table 8.
College Destination of Students by Readiness and Racial/Ethnicity

	Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	N
Not/Least Ready						
Black	52%	21%	9%	15%	3%	2,912
Latino	69%	13%	9%	4%	4%	1,515
Asian	67%	17%	8%	5%	4%	476
Native American	76%	4%	3%	14%	3%	94
White	77%	9%	7%	6%	1%	7,394
All Race/Ethnicity	71%	12%	7%	8%	2%	16,656
Minimally Ready						
Black	39%	31%	11%	16%	2%	1,053
Latino	60%	21%	10%	5%	4%	587
Asian	59%	23%	6%	8%	4%	273
Native American	82%	12%	0%	6%	0%	33
White	58%	14%	8%	9%	1%	4,735
All Race/Ethnicity	62%	18%	9%	9%	2%	7,284
Somewhat Ready						
Black	24%	42%	13%	19%	2%	1,457
Latino	44%	29%	15%	9%	4%	1,000
Asian	42%	36%	15%	6%	2%	706
Native American	64%	17%	2%	17%	0%	42
White	51%	25%	11%	12%	1%	8,516
All Race/Ethnicity	47%	28%	11%	12%	2%	13,587
More Ready						
Black	8%	44%	17%	30%	1%	776
Latino	23%	39%	25%	12%	1%	717
Asian	17%	50%	17%	15%	1%	813
Native American	37%	43%	10%	10%	0%	30
White	33%	32%	14%	20%	1%	11,860
All Race/Ethnicity	30%	34%	15%	20%	1%	15,728
Most Ready						
Black	2%	37%	16%	44%	0%	342
Latino	9%	40%	28%	23%	0%	491
Asian	5%	53%	21%	22%	0%	1,416
Native American	21%	31%	31%	17%	0%	29
White	13%	36%	19%	31%	0%	14,745
All Race/Ethnicity	12%	37%	20%	31%	0%	18,970
All Readiness Levels						
Black	36%	31%	12%	20%	2%	6,540
Latino	47%	25%	15%	9%	3%	4,309
Asian	26%	42%	16%	14%	1%	3,684
White	40%	27%	13%	19%	1%	47,250
Total	41%	27%	13%	18%	1%	

College Destination and Family Income

Table 9 shows how college destination is related to family income. Overall, low-income students are more likely to utilize Illinois two-year institutions (53%), while those from the highest-income quartile are most likely to utilize Illinois public four-year institutions or to enroll out-of-state (31% each). It is for the most-ready students that family income makes a substantial difference, particularly at the highest income level. Similarly ready for college, those from highest-income families are most likely to attend out-of-state institutions (41%) and least likely to choose Illinois two-year institutions (6%) compared to 18% and 19% respectively of low-income most-ready students. This high-income effect holds true for the minimally-ready,

It is for the most-ready students that family income makes a substantial difference.

somewhat-ready and more-ready groups as well where the proportions of high-income students enrolling out-of-state is about double the rate for other family income groups. Appendix 4 provides a birds-eye view of the college destinations per 1000 students by family income.

Table 9.
College Destination by Family Income and Readiness Level

	Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	N
Not/Least Ready						
Low Income	76%	8%	6%	7%	3%	3,097
Lower Middle Income	79%	7%	6%	7%	2%	2,668
Upper Middle Income	79%	7%	6%	7%	2%	1,751
High Income	72%	9%	7%	11%	1%	1,245
Income Missing	64%	16%	8%	8%	3%	7,895
Minimally Ready						
Low Income	61%	19%	8%	8%	3%	1,887
Lower Middle Income	67%	15%	8%	8%	2%	1,863
Upper Middle Income	64%	18%	9%	8%	1%	1,580
High Income	50%	22%	10%	16%	2%	1,097
Income Missing	66%	13%	9%	10%	2%	857
Somewhat Ready						
Low Income	50%	27%	12%	9%	2%	2,622
Lower Middle Income	55%	24%	10%	10%	2%	2,742
Upper Middle Income	51%	26%	11%	10%	2%	2,376
High Income	36%	30%	11%	22%	1%	1,790
Income Missing	42%	30%	13%	14%	1%	4,057
More Ready						
Low Income	35%	35%	18%	12%	1%	1,887
Lower Middle Income	38%	31%	16%	14%	1%	3,191
Upper Middle Income	33%	35%	14%	17%	1%	3,636
High Income	19%	35%	14%	32%	0%	3,498
Income Missing	28%	33%	16%	22%	1%	3,516
Most Ready						
Low Income	19%	38%	24%	18%	1%	1,367
Lower Middle Income	20%	37%	22%	21%	0%	3,137
Upper Middle Income	14%	39%	21%	26%	0%	4,518
High Income	6%	36%	17%	41%	0%	5,840
Income Missing	11%	36%	19%	33%	0%	4,108
All Readiness Levels						
Low Income	53%	23%	12%	10%	2%	10,860
Lower Middle Income	49%	24%	13%	12%	1%	13,601
Upper Middle Income	39%	29%	14%	16%	1%	13,861
High Income	23%	31%	14%	31%	0%	13,470
Income Missing	43%	26%	13%	17%	2%	20,433

College Destination and High School Region

In the Southeast, 35% of the most-ready group enrolled in a two-year institution, and this pattern held across all but the highest family-income quartile. In contrast, almost none (3%) of the most-ready students from CPS enrolled in a two-year institution.

We found considerable variation by region and college readiness level in the role the two-year sector played as an access portal (Table 10, Figures 3 and 4).

We see that not/least-ready students from the southeast region are most reliant on the Illinois two-year sector, with 90% enrolling in a two-year institution. The enrollment pattern for CPS students is quite different. They are least likely to access higher education through the two-year sector, with about half (52%) of those continuing to college enrolling in a two-year institution, while almost one quarter (24%) enrolled in an in-state four-year institution. In addition, 5% enrolled in a for-profit institution, a much higher proportion than in any other region.

While, for most regions of Illinois, the most-ready students in the Class of 2002 who went to college were most likely to enroll in an in-state four-year institution, this was not the case for the Southeast. In that region, 35% of the most-ready group enrolled in a two-year institution, and this pattern held across all but the highest family-income quartile.[5] In contrast, almost none (3%) of the most-ready students from CPS enrolled in a two-year institution. These patterns of enrollment for most-ready students hold true for every readiness level (Table 10). It is likely that this regional pattern is related to the differential proximity to four-year colleges in different regions of the state and to college recruitment strategies that seek to enroll a racially diverse student body.

Out-of-state enrollment was also quite usual for the most-ready students in each region, with the lowest proportion (15%) going out-of-state from the East Central region (the location of the University of Illinois Urbana-Champaign) and the highest proportion (36%) going from the Northeast minus CPS region. This general regional pattern is also apparent for more-ready students, although the actual percentages of students enrolling out-of-state are somewhat lower than for the most-ready students (ranging from 9% to 25% across regions).

[5] We wondered whether the heavy reliance on the two-year sector in the southeast region was related to income level. We found this is not the case. In each of the family income quartiles, a higher proportion of most-ready students from this region were enrolled in Illinois two-year institutions than equally prepared students from other regions. In each of the lower three income quartiles, most-ready students from this region are most likely to be in a two-year institution. The exception is those from highest income families in this region, where enrollment in an in-state public four-year institution is the mode (see Appendix 3, Table A3.1 for the data).

Table 10.
College Destination of Students by Readiness and High School Region

High School Region	Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	N
Not/Least Ready						
Chicago Public Schools (CPS)	52%	24%	9%	10%	5%	3,122
Northeast (minus CPS)	72%	10%	8%	8%	2%	7,097
Northwest	80%	6%	4%	8%	1%	1,507
West Central	79%	8%	7%	5%	0%	1,184
East Central	77%	8%	8%	5%	1%	1,054
Southwest	81%	10%	2%	6%	1%	1,443
Southeast	90%	3%	1%	5%	1%	802
Minimally Ready						
Chicago Public Schools (CPS)	38%	34%	12%	11%	5%	833
Northeast (minus CPS)	59%	18%	10%	11%	2%	3,419
Northwest	76%	7%	7%	9%	1%	722
West Central	74%	12%	8%	5%	1%	587
East Central	71%	14%	9%	5%	1%	520
Southwest	69%	19%	4%	7%	1%	663
Southeast	83%	4%	2%	10%	1%	329
Somewhat Ready						
Chicago Public Schools (CPS)	23%	45%	16%	11%	4%	1,590
Northeast (minus CPS)	43%	27%	13%	15%	2%	6,378
Northwest	59%	21%	8%	10%	1%	1,306
West Central	52%	26%	12%	9%	1%	1,043
East Central	58%	25%	11%	6%	1%	1,204
Southwest	56%	28%	5%	11%	1%	1,150
Southeast	80%	9%	2%	9%	1%	708
More Ready						
Chicago Public Schools (CPS)	9%	43%	27%	19%	1%	876
Northeast (minus CPS)	24%	34%	16%	25%	1%	8,499
Northwest	45%	26%	13%	17%	0%	1,550
West Central	38%	33%	17%	12%	0%	1,235
East Central	38%	39%	13%	9%	0%	1,249
Southwest	37%	40%	8%	15%	0%	1,272
Southeast	66%	17%	4%	12%	0%	630
Most Ready						
Chicago Public Schools (CPS)	3%	42%	27%	27%	0%	765
Northeast (minus CPS)	8%	36%	20%	36%	0%	11,309
Northwest	22%	34%	20%	24%	0%	1,578
West Central	15%	41%	23%	22%	0%	1,346
East Central	17%	50%	19%	15%	0%	1,458
Southwest	17%	38%	15%	30%	0%	1,473
Southeast	35%	32%	7%	26%	0%	673

Figure 3.
College Destination of Not/Least-Ready Students by High School Region

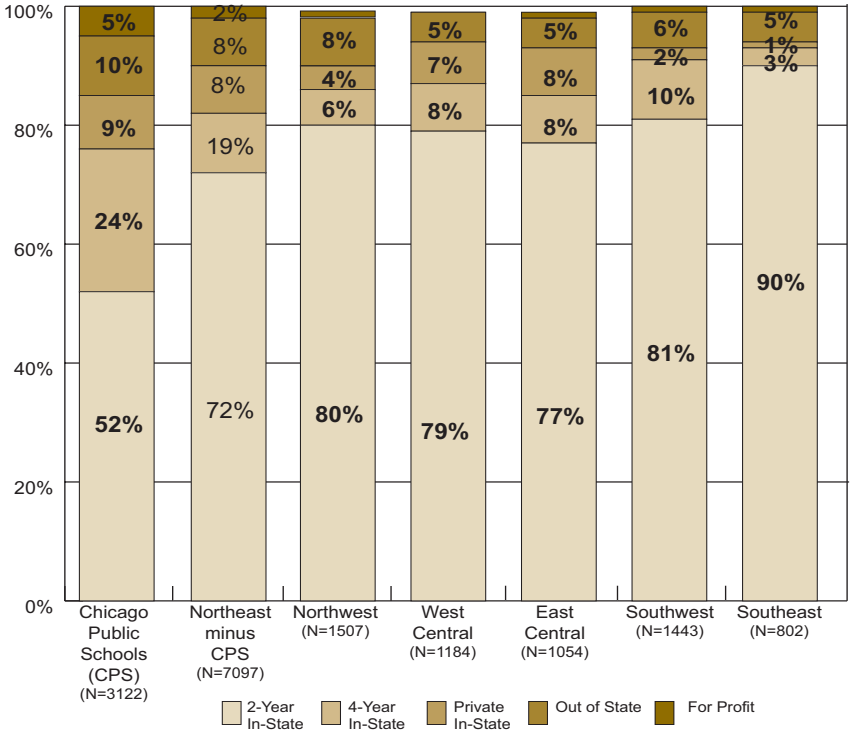
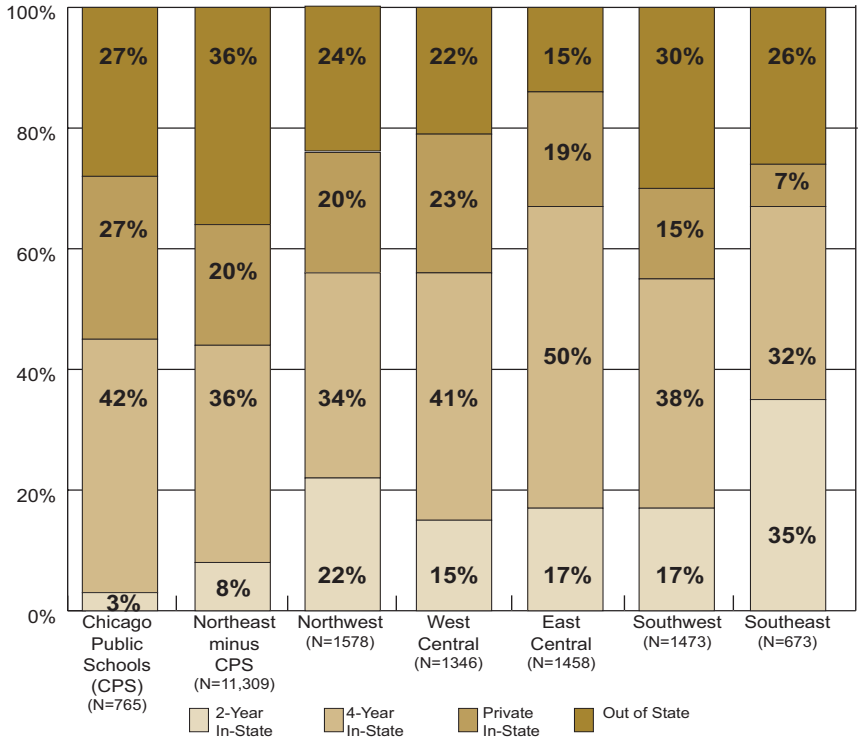


Figure 4.
College Destination of Most-Ready Students by High School Region



College-readiness has an even stronger association with students' likelihood of enrolling in four-year vs. two-year colleges than it does with overall postsecondary participation.

Summary and Conclusions About Two-Year versus Four-Year Sector Enrollment

Readiness, readiness, readiness. School preparation (i.e., the college-readiness measure) has an even stronger association with students' likelihood of enrolling in four-year vs. two-year colleges than it does with overall postsecondary participation. Differences in college readiness largely account for different enrollment patterns among major racial/ethnic groups. However, regional differences remain even after we took other factors into consideration—including student readiness and family income. Similarly prepared students from the Southeast region rely more on community colleges to begin their postsecondary education than those in other regions, while similarly prepared CPS students are more likely to access postsecondary education immediately through the four-year sector. It is likely that this regional pattern is related to the differential proximity to four-year colleges in different regions of the state and to college recruitment strategies that seek to enroll a racially diverse student body.

With two in five college matriculants starting their postsecondary education immediately at an Illinois community college (representing one quarter of all of the Class of 2002), this institutional sector provides a critical portal for the continuing preparation of Illinois' workforce, and provides access to college for those who might not otherwise continue into postsecondary education. However, while playing an important role in access, there is some evidence from national studies that enrolling in a community college diverts students from obtaining bachelor's degrees and thus has the potential to decrease the overall educational attainment of a state's residents (Rouse, 1995, 1998; Pascarella et. al.; 1998; Leigh & Gill, 2003). This is especially critical for Illinois, where we have shown that a considerable proportion of well-qualified high school graduates choose to begin their higher education through this sector. We also remind the reader that 86% of those starting in a two-year institution indicated that they expected eventually to obtain at least a bachelor's degree. In future reports we will examine the implications for educational attainment of community college attendance.

Question 3: Who Went to More Competitive Institutions?

Access to higher education in the U.S. is becoming universal, but the hierarchal nature of institutional types within the postsecondary system continues to confer differential benefits to graduates from more elite institutions. They benefit from a 'signaling' effect to employers who can be more certain of the higher-level skills of these graduates, they benefit from being part of a network of colleagues who have access to top jobs and organizational settings, and they may also benefit from an educational experience that demands their best performance. In this section, we examine how the Illinois Class of 2002 was 'sorted' into more competitive four-year institutions across the nation. Our institutional-competitiveness categories are based on the Barron's index, and are described in the methodology section. Our analysis includes only those students from the Illinois Class of 2002 who enrolled first in a four-year institution in 2002-2003.

The hierarchal nature of institutional types within the postsecondary system continues to confer differential benefits to graduates from more elite institutions.

Four-Year College Competitiveness and College Readiness

One in five (20%) of the Class of 2002 who went to a four-year institution enrolled in the top institutional category—those institutions that were classified by Barron's as being most or highly competitive institutions; and 22% went to the next group of institutions—classified as very competitive (Table 11, last row). The largest number of institutions in the Barron's classification fall into the competitive category, and almost half (45%) of the four-year-college goers in the Class of 2002 enrolled in this group of institutions.

Enrollment in different institutional tiers is closely related to our cohort's college-readiness level. We can see in Table 11 that the readier a student is the more likely he/she is to enroll in a most/highly-competitive institution—just 2% of the not/least ready group compared to 41% of the most-ready group. In contrast, 35% of the non/least ready-group that went to a four-year institution enrolled in a not/less-competitive institution, compared to 5% of the most-ready group. In addition, it is remarkable that most-ready students are four times as likely to go to a most/highly competitive four-year institution than are even those who fall into the more-ready category. There is a very strong relationship between being among the very top high school graduates and going to top-ranked postsecondary institutions.

There is a very strong relationship between being among the very top high school graduates and going to top-ranked postsecondary institutions.

Table 11.
Four-Year College Competitiveness by College Readiness (% Enrolling)

	Not/Less Competitive	Competitive	Very Competitive	Most/Highly Competitive	N
Not/Least Ready	35%	51%	12%	2%	4,099
Minimally Ready	27%	61%	11%	1%	2,478
Somewhat Ready	17%	58%	20%	5%	6,838
More Ready	10%	55%	26%	10%	10,686
Most Ready	5%	29%	25%	41%	16,436
Total	13%	45%	22%	20%	*40,537

Another 924 students went to four-year colleges for which Barron's does not have a competitiveness ranking.

Four-Year College Competitiveness by Race/Ethnicity

There is considerable difference in the pattern of enrollment in different tiers of four-year institutions across major racial/ethnic groups (Table 12).[6] Overall (i.e., without considering academic preparation) among the four major racial/ethnic groups, black students are least likely to be in most/highly competitive institutions while Asian students are most likely to be in this type of institutions (14% vs. 32%). Black students and Latino students are most likely to enroll in a non/less-competitive four-year institution. We next examined whether this distribution is related to students' college readiness.

Table 12.
Four-Year College Competitiveness by Major Race/Ethnic Categories (% Enrolling)

	Not/Less Competitive	Competitive	Very Competitive	Most/Highly Competitive	N
Black	21%	47%	18%	14%	3,959
Latino	22%	28%	31%	19%	2,157
Asian	9%	15%	44%	32%	2,626
White	10%	50%	20%	21%	27,085
Total	13%	45%	22%	20%	40,537

Table 13 shows the type of four-year institution in which students enrolled in 2002-2003, by major racial/ethnic group and readiness level. The distribution of not/least-ready students among institutional types is quite similar across the racial/ethnic groups, although white students in this group are least likely to enroll in a non/less competitive institution (25%) and the small group of Asian students (just 137) were most likely to be enrolled in this type of four-year institution (57%).

When we shift to students in our most-ready-for-college group, white students are less likely to be enrolled in a most/highly competitive institution (38%) than are black, Latino and Asian students (54%, 50% and 58% respectively). White most-ready students are more likely to be enrolled in the competitive group of institutions than those in the other three racial/ethnic categories. Nearly all (92%) Asian most-ready students are enrolled in the top two institutional tiers.

Minority students who achieve at the highest levels of performance in high school and who proceed to a four-year postsecondary education are most likely to gain access to most/highly competitive institutions.

Along with the proportional distribution of most-ready students, it is important to look at the actual numbers in each of these groups who are enrolled in this top tier of institutions—176 black students, 218 Latino students, 780 Asian students and 4818 white students. The higher proportional enrollment of most-ready-for-college minority students in the most/highly competitive institutions still results in a small representation of black and Latino students among all those in the Class of 2002 who enrolled in this group of institutions. In addition, we do not know the application patterns of these most-ready students, and so cannot assess whether minority-group students enjoy any advantage over white students in access to the top-tier institutions. What we can say is that minority students who achieve at the highest levels of performance in high school and who proceed to a four-year postsecondary education are most likely to gain access to most/highly-competitive institutions.

[6] Native American students in the Class of 2002 are omitted from this analysis because of their small numbers. Just 74 attended a four-year postsecondary institution in 2002-2003.

Table 13.
Four-Year College Competitiveness by Readiness and Race/Ethnicity (% Enrolling)

	Non/Less Competitive	Competitive	Very Competitive	Most/Highly Competitive	N
Not/Least Ready					
Black	33%	52%	11%	4%	1,254
Latino	46%	31%	19%	4%	421
Asian	57%	22%	19%	2%	137
White	25%	66%	8%	1%	1,393
Minimally Ready					
Black	26%	57%	14%	3%	611
Latino	42%	39%	18%	2%	215
Asian	41%	35%	23%	1%	102
White	22%	69%	8%	0%	1,338
Somewhat Ready					
Black	16%	54%	18%	12%	1,066
Latino	24%	31%	37%	8%	543
Asian	15%	26%	56%	3%	391
White	16%	68%	13%	3%	3,973
More Ready					
Black	12%	35%	30%	23%	703
Latino	11%	30%	38%	22%	543
Asian	6%	20%	66%	9%	659
White	10%	62%	21%	8%	7,755
Most Ready					
Black	5%	17%	24%	54%	325
Latino	3%	14%	33%	50%	435
Asian	1%	7%	34%	58%	1,337
White	5%	33%	24%	38%	12,626

It is among the more-ready group of students that we see what might be considered an enrollment advantage for black and Latino students to most/highly-competitive institutions. Also among this group of students, Asians are most likely to enroll in very-competitive institutions (66%) while white students are most likely to enroll in competitive institutions (62%). We remind the reader that black and Latino students in the more-ready category constitute just 8% and 11% respectively of those racial/ethnic groups in the class of 2002 (and just 3% and 7% respectively are most-ready students). Many of these students have reached these levels of achievement despite disadvantages in their access to high quality K-12 educational opportunities. They have demonstrated strong academic potential against the odds.[7] As the IERC study proceeds, we will be able to measure whether these more-ready students remain enrolled at rates similar to the most-ready students.

It is among the more-ready group of students, that we see what might be considered an enrollment advantage for black and Latino students to most/highly competitive institutions.

[7] In general, black and Latino students are disadvantaged in their access to high-quality high schools, as measured by the Teacher Quality Index (Presley, White and Gong, 2005). In particular, of the more-ready students who went to the most/highly competitive institutions, black and Latino students are much more likely than white students (21% and 16% vs. 6%) to have attended lowest-quality high schools and much less likely (23% and 30% vs. 57%) to have attended highest-quality high schools. They are also more likely to be from low-income families.

Four-Year College Competitiveness and Family Income

Students from high-income families are systematically able to enroll in institutions with higher competitiveness ratings than are similarly prepared students in lower-income quartiles.

We can see in Table 14 that family income continues to exert its influence on college destination beyond its relationship to students' academic achievement (readiness). In each readiness category, students from higher-income families are less likely to be in non/less-competitive institutions than students from lower-income families. Moreover, among those who are most-ready for college, students from the highest-family-income quartile are much more likely to go to most/highly-competitive institutions than students from the other three income quartiles (48% vs. 31-37%). This overall pattern suggests that students from high-income families are systematically able to enroll in institutions with higher competitiveness ratings than are similarly prepared students in lower income quartiles.

Table 14.
Four-Year College Competitiveness by Readiness and Family Income (% Enrolling)

	Non/Less Competitive	Competitive	Very Competitive	Most/Highly Competitive	N
Not/Least Ready Students					
Low Income	49%	42%	8%	1%	610
Lower Middle Income	43%	50%	5%	2%	447
Upper Middle Income	30%	62%	8%	1%	304
High Income	28%	60%	11%	1%	271
Income Missing	32%	51%	15%	3%	2,467
Minimally Ready Students					
Low Income	34%	53%	12%	2%	641
Lower Middle Income	30%	57%	12%	1%	565
Upper Middle Income	24%	65%	10%	1%	502
High Income	19%	68%	12%	2%	516
Income Missing	25%	62%	11%	2%	254
Somewhat Ready Students					
Low Income	23%	47%	24%	6%	1,218
Lower Middle Income	18%	56%	20%	5%	1,165
Upper Middle Income	19%	63%	14%	4%	1,113
High Income	11%	70%	16%	4%	1,086
Income Missing	14%	57%	22%	7%	2,256
More Ready Students					
Low Income	12%	45%	31%	12%	1,184
Lower Middle Income	14%	53%	26%	7%	1,894
Upper Middle Income	11%	59%	23%	7%	2,371
High Income	7%	59%	25%	9%	2,770
Income Missing	9%	52%	26%	13%	2,467
Most Ready Students					
Low Income	6%	33%	30%	31%	1,093
Lower Middle Income	7%	35%	25%	33%	2,470
Upper Middle Income	5%	33%	25%	37%	3,825
High Income	3%	24%	25%	48%	5,445
Income Missing	5%	27%	24%	44%	3,603

Four-Year College Competitiveness and High School Region

In an earlier section, we showed that enrollment in four-year colleges is related to high-school region. Here we examine whether there are regional differences in competitive-institution attendance. Indeed this is the case. Table 15 shows that not/least-ready students from the Northeast (minus CPS) and CPS are more likely to attend very-competitive institutions than comparable students from other regions (11% and 17% vs. 2-8%). The same is true for minimally-ready and somewhat-ready students. On the other hand, most-ready students from the Northeast (minus CPS), CPS and the East Central regions are most likely to be enrolled in the most/highly-competitive institutions while students from the Southwest region are least likely to be in this type of institution (45% or more vs. 22%).

Table 15.
Four-Year College Competitiveness by Readiness and High School Region (% Enrolling)

	Non/Less Competitive	Competitive	Very Competitive	Most/Highly Competitive	N
Not/Least Ready Students					
Chicago Public Schools (CPS)	45%	35%	17%	3%	1,385
Northeast minus CPS	30%	57%	11%	2%	1,713
Northwest	13%	78%	8%	0%	215
West Central	26%	67%	7%	1%	196
East Central	14%	79%	3%	4%	177
Southwest	59%	37%	2%	1%	214
Southeast	29%	62%	5%	4%	55
Minimally Ready Students					
Chicago Public Schools (CPS)	41%	41%	15%	3%	500
Northeast minus CPS	20%	66%	13%	1%	1,318
Northwest	14%	77%	7%	2%	126
West Central	19%	75%	6%	0%	119
East Central	11%	84%	3%	2%	121
Southwest	54%	43%	2%	1%	181
Southeast	30%	67%	3%	0%	33
Somewhat Ready Students					
Chicago Public Schools (CPS)	23%	32%	34%	11%	1,190
Northeast minus CPS	12%	63%	21%	4%	3,500
Northwest	9%	75%	12%	3%	488
West Central	17%	69%	8%	6%	454
East Central	8%	80%	8%	4%	404
Southwest	47%	43%	5%	5%	472
Southeast	30%	62%	4%	4%	120
More Ready Students					
Chicago Public Schools (CPS)	15%	21%	46%	18%	773
Northeast minus CPS	6%	56%	30%	9%	6,366
Northwest	6%	69%	20%	6%	830
West Central	10%	65%	16%	9%	731
East Central	8%	69%	9%	14%	747
Southwest	44%	41%	8%	7%	769
Southeast	19%	68%	5%	7%	190
Most Ready Students					
Chicago Public Schools (CPS)	4%	11%	39%	46%	736
Northeast minus CPS	2%	24%	28%	45%	10,320
Northwest	3%	42%	25%	30%	1,216
West Central	7%	38%	20%	35%	1,115
East Central	4%	39%	12%	45%	1,190
Southwest	25%	39%	15%	22%	1,167
Southeast	10%	49%	12%	29%	405

Summary and Conclusions About Enrollment and Institutional Competitiveness

Readiness, readiness, readiness. Once again, academic preparation is the most powerful factor that distinguishes those who went to more competitive four-year institutions from those who went to less competitive ones. However, we provided evidence that family income and regional location have an additional impact on students' enrollment destinations. We also found some evidence of race-sensitive application and/or admission practices in higher education on college destinations of students from different racial/ethnic backgrounds—especially for more-ready black and Latino students, and most-ready black, Latino and Asian students.[8] Race-sensitive admission practices are important as one tool towards equalizing educational opportunities in higher education.[9] But it is equally important to take measures to ensure that every child, regardless of race/ethnicity or family income, has equal access to quality K-12 education and has equal opportunity to be equally prepared for college, as we emphasized in the first report of this study entitled *The Demographics and Academics of College Readiness in Illinois* (Presley & Gong, 2005). After all, academic preparation is the most important factor determining college destination.

Question 4: Who Went Out of State for College?

Illinois has for a long time been one of the major exporters of its college freshmen to other states. Furthermore, it consistently ranks second among the 50 states in its net loss of freshmen (the number of residents enrolling out-of-state minus the number of non-residents enrolling in-state), behind only New Jersey (Mortenson, 2004). Indiana, Iowa, Wisconsin, and Missouri are the top-destination states of Illinois' college emigrants. The flow of Illinois students to other states has significant economic implications for the state (Smith and Wall, 2006) and constitutes an important policy issue for the state as well.

We are for the first time able to examine the characteristics of new high school graduates who are leaving Illinois for college, thus providing more detailed information for policy making.

This section of the paper reports on out-of-state enrollments for the Illinois Class of 2002. The data permit a deeper examination of this phenomenon than has been

[8] We do not know to which institutions students applied, and therefore cannot directly attribute the observed enrollment patterns to admission policies. Throughout our analyses of the Class of 2002, for example, we have seen that Asian students are more likely to seek out higher-quality educational opportunities, including enrolling in high schools with higher TQIs (teacher quality indices—see Presley, White & Gong (2005) and Presley & Gong (2005) for details). There is no evidence in the literature that Asian students are given preference in admissions—indeed there is some concern that the contrary is occurring. However, the higher percentages of black and Latino more-ready students enrolled in most/highly competitive institutions is suggestive of race-sensitive admissions practices.

[9] Gong (2006) has shown that when students enroll in a more competitive institution they are more, not less, likely to remain enrolled the second year than those with comparable characteristics but who enrolled in less competitive institutions. This finding suggests that affirmative action in higher education is helping to equalize postsecondary opportunity for some students who demonstrate strong potential but whose academic outcomes are hindered by unequal educational opportunities in Illinois K-12 schools.

possible to date, because previously available data, through the National Center for Education Statistics' system of postsecondary education data reporting, has been institutionally reported aggregate numbers. We are for the first time able to examine the characteristics of new high school graduates who are leaving Illinois for college, thus providing more detailed information for policy making. Readers are reminded that we are reporting on public high school graduates only, so our numbers will be smaller than those reported by Smith and Wall (2006).

Almost three quarters of those who leave Illinois for college are well prepared for college.

Types of Institutions Out-of-State Enrollees Attend

Of the 72,225 high school graduates in the Class of 2002 who went to college the first year after high school, 12,696 (18%) attended out-of-state institutions. Almost three quarters of those who leave Illinois for college are well prepared—46% are most ready and another 25% are more ready for college (Table 16, last column). Furthermore, half of the emigrants attended public out-of-state four-year institutions (29% + 22%, Table 16, bottom row).[10]

The brain-drain from Illinois is not due simply to students seeking more-competitive college environments out of state. One third of top students who leave Illinois for college are enrolling in lower-competitive institutions.

There are different attendance patterns across college-readiness levels for Illinois' college emigrants. The brain-drain from Illinois is not due simply to students seeking more-competitive college environments out of state. Table 16 shows that Illinois' college-prepared students are not leaving the state only to attend more-competitive institutions. While more than two-thirds of the most-ready college-student emigrants are enrolling in more-competitive public and private institutions (30% and 38% respectively), one third of these top students are enrolling in less-competitive institutions out of state. The majority of emigrating students from the more-ready group are enrolling in less-competitive public and private institutions (56%).

The less-ready students (not/least ready through somewhat ready) are most likely to be enrolling in public less-competitive institutions out of state, followed by private less-competitive institutions, although from 13% (not/least ready) to 26% (somewhat ready) are enrolling in more-competitive public and private out-of-state institutions.

Table 16.
College Type of Out-of-State Enrollees, by Readiness

Readiness Level	College Type					N	Column %
	2-Year	4-Year					
		Public, Less Competitive	Public, More Competitive	Private, Less Competitive	Private, More Competitive		
Not/Least Ready	31%	34%	7%	22%	6%	1,274	10%
Minimally Ready	23%	37%	8%	25%	8%	667	5%
Somewhat Ready	12%	39%	14%	23%	12%	1,630	13%
More Ready	5%	37%	22%	19%	17%	3,088	25%
Most Ready	1%	19%	30%	12%	38%	5,745	46%
Row %	8%	29%	22%	17%	24%	12,404*	100%

* 292 students went to colleges for which Barron's does not have a competitiveness ranking.

[10] We combined non/less-competitive institutions with competitive institutions to form the lower-competitive group of institutions. The more-competitive group includes very-competitive and most/highly competitive institutions.

Is Illinois Student Emigration for College Regionalized Within the State?

The answer is yes and no, depending on whether we look at actual numbers, or the proportion of emigrants by region. A large proportion (63.5%) of college emigrants are indeed from the Northeast (minus CPS) region (Table 17) but this is because a large proportion of the Class of 2002 is from that region. When we look at the *percentage* of students in each region enrolling out-of-state, there is little difference by region. CPS tops the list at 10%, with other regions ranging from 8% to 5% of their students enrolling out-of-state.

When we look at the percentage of students enrolling out-of-state, there is little difference by region.

Table 17.
High School Region of Out-of-State Enrollees

High School Region	N	Percentage of Total Emigrants	Percent of College-Going Students in Region
Chicago Public Schools (CPS)	966	7.6%	10%
Northeast minus CPS	8,063	63.5%	8%
Northwest	968	7.6%	8%
West Central	624	4.9%	5%
East Central	472	3.7%	5%
Southwest	883	7.0%	6%
Southeast	382	3.0%	5%
Region Unknown	335	2.6%	—
Total	**12,693**	**100.0%**	**—**

Other research has shown that nationally, about half of the students who enroll out-of-state for college eventually return to their home state. If we assume that Illinois natives are no different from students nationwide, we can at most expect half of these college-educated students to come back to live in Illinois after college (Smith and Wall, 2006). It may be that vibrant economic environments, such as the Chicago metropolitan area, may attract more to return. If this is the case, then the long-term economic loss to Illinois will be reduced, and the brain-drain stemmed.

The Teacher Quality Index and College Going

The IERC has developed a Teacher Quality Index (TQI) for Illinois' public schools as an indicator of the average academic attributes of their teachers (Presley, White and Gong, 2005). We were interested in knowing whether a school's TQI had any relationship to students' college-going patterns, even after taking into account the average college readiness of schools' 2002 seniors. We found that it did, and the results are shown in Appendix 4. Among high schools that fell into the ***lowest*** quartile of mean college readiness, school TQI boosted college going (Figure A4.1). Having a cadre of teachers who on the average were more academically successful appears to contribute to students going on to college from low-performing schools.

There was an even stronger relationship between school TQI and college going patterns when we looked at who went to a four-year or a two-year institution, and who enrolled in a more-competitive four-year college. But this time, the relationship appeared only for the ***strongest-performing*** schools (Figures A4.2 and A4.3). Having a strong cadre of teachers who were also teaching in a high-performing high school appears to contribute to an environment of higher outcomes for students' college choices of where to enroll.

Review of Major Findings

In the first report in this series (Presley & Gong, 2005) we found that about one third of Illinois public high school graduates in the Class of 2002 were ready for college coursework at a four-year institution, about one third were not/least ready, and one third were somewhat ready. High school course taking, high school quality and student demographic characteristics all contribute to the different levels of college readiness. This report, the second one in the series, addressed college participation in the first academic year after high school graduation (2002-2003).

Educational Expectations of the Class of 2002

It is commonly assumed that many of those entering postsecondary education through the two-year institutional portal do not aspire to completing a baccalaureate. The educational expectations of the Class of 2002 largely dispel this assumption. The vast majority (87%) of the Class of 2002 aspire to complete at least a bachelor's degree, with only slight differences by family income, race/ethnicity and region. While there are more differences by college readiness, nearly three quarters (72%) of the not/least-ready students expect to earn at least a bachelor's degree, as do nearly all (99%) of most-ready students. More than three quarters of those who did not even enroll in college in their first year after high school still expected to complete a bachelor's degree at some point.

Question 1: Who went to college in the year immediately following high-school graduation?

Readiness, readiness, readiness. The different college-going rates for students from different family income levels and racial/ethnic groups are largely related to different levels of college-readiness as these students complete high school. We also found, however, that less well-prepared students from higher-income families are more likely to continue, while Latino and Native American students are generally somewhat less likely to continue immediately into college. It is critical that Illinois wrestle with the problem of differential school quality that systematically handicaps students who are attending high-poverty/high-minority schools. In addition, however, additional efforts could be made to expose Latino and Native American students to the possibilities that exist for continuing on to college.

Overall, 60% of the Class of 2002 went straight to college in Fall 2002, and another 4% started in Spring 2003. While readiness is clearly related to continuation to college, it is significant to note that almost half of the students in the not/least-ready category did indeed go on to college in their first year after high school. On the other hand, it is also intriguing to note there are between 16% and 21% of well-prepared (more/most-ready) students not continuing immediately into college. In later reports, we will be able to test whether they enrolled after a "gap"year—a phenomenon that is becoming quite commonplace in the transition from high school to college.

Participation rates vary considerably by race/ethnicity. Less than half of Latino students continue immediately to college, compared to 55% of black students, 70% of white students, and 78% of Asian students. Native American students have the lowest college-going rate at 39%.

Asian students have the highest college-going rates at each level of college readiness (ranging from 60% to 86%), while Native American students have the lowest continuation rates (ranging from 28% to 67% for more-ready students, and a more comparable rate of 83% for most-ready students). The college-going rates of most-ready students are almost identical for all racial/ethnic groups.

College continuation rates vary considerably by family-income level, from 53% for low-income students to 77% for high-income students. The differences are most distinctive for not/least-ready students, where just 36% of those from low-income families continue, compared to 42%, 50% and 56% of those from the next three income categories.

We found that, generally, college-going rates are quite similar by region. At lower readiness levels, college participation for CPS students is still lower than for similarly (un)prepared students in the other six regions. For example, only 34% of not/least-ready CPS students continued immediately, compared to as high as 52% in the Southwest region. Indeed, the Southwest has the highest continuation rates in most of the readiness categories.

Question 2: Who went to four-year institutions and who went to two-year institutions?

Readiness, readiness, readiness. School preparation (i.e., the college-readiness measure) has an even stronger association with students' likelihood of enrolling in four-year vs. two-year colleges than it does in overall postsecondary participation. Differences in college readiness largely account for different enrollment patterns among major racial/ethnic groups. However, regional differences remain even after we took other factors into consideration—including student readiness and family income.

In year one (Fall 2002 or Spring 2003), 41% of the Class of 2002 who entered postsecondary education did so through an Illinois public two-year institution. An additional 27% entered through an Illinois public four-year institution, 13% an Illinois private institution (nearly all of which are four-year institutions), 18% enrolled out-of-state (again, most in four-year institutions), and 1% in for-profit institutions.

Students from different racial/ethnic groups have different institutional enrollment patterns. But these different patterns are related to readiness, with a few exceptions. Among those in the not/least-ready category, black students are least likely to enroll in an Illinois two-year institution (52%), while white students are most likely to make this enrollment choice (77%). And not/least-ready black students are almost three times as likely to go out-of-state (15%). Among those in the most-ready category, white students are most likely to enroll in an Illinois two-year institution (13%) while again, black students are least likely to do so (2%), and are again most likely among the race/ethnic groups to enroll out-of-state (44%).

It is for the most-ready students that family income makes a substantial difference. Similarly ready for college, those from highest-income families are most likely to attend out-of-state institutions (41%) and least likely to choose Illinois two-year institutions (6%) compared to 18% and 19% respectively of low-income most-ready students.

In the Southeast, 35% of the most-ready group enrolled in a two-year institution, and this pattern held across all but the highest family-income quartile. In contrast, almost none (3%) of the most-ready students from CPS enrolled in a two-year institution.

Question 3: Who went to more-competitive institutions?

Readiness, readiness, readiness. Once again, academic preparation is the most powerful factor that distinguishes those who went to more competitive four-year institutions from those who went to less competitive ones. However, we provided evidence that family income and regional location have an additional impact on students' enrollment destinations. We also found some evidence of race-sensitive application and/or admission practices in higher education on college destinations of students from different racial/ethnic backgrounds—especially for more-ready black and Latino students, and most-ready black, Latino and Asian students.

One in five (20%) of the Class of 2002 who went to a four-year institution enrolled in the top institutional category—those institutions that were classified by Barron's as being most or highly competitive institutions, and 22% went to the next group of institutions—classified as very competitive. The largest number of institutions in the Barron's classification fall into the competitive category, and almost half (45%) of the four-year-college goers in the Class of 2002 enrolled in this group of institutions.

Enrollment in different institutional tiers is closely related to our cohort's college-readiness level. There is a very strong relationship between being among the very top high school graduates and going to top-ranked postsecondary institutions. Students from high-income families are systematically able to enroll in institutions with higher competitiveness ratings than are similarly prepared students in lower-income quartiles.

The distribution of not/least-ready students among four-year institutional types is quite similar across the racial/ethnic groups, although white students in this group are least likely to enroll in a non/less competitive institution (25%) and the small group of Asian students (just 137) were most likely to be enrolled in this type of four-year institution (57%).

When we shift to students in our most-ready-for-college group, white students are less likely to be enrolled in a most/highly competitive institution (38%) than are black, Latino and Asian students (54%, 50% and 58% respectively).

Along with the proportional distribution of most-ready students, it is important to look at the actual numbers in each of these groups who are enrolled in this top tier of institutions—176 black students, 218 Latino students, 780 Asian students and 4818 white students. The higher proportional enrollment of most-ready-for-college minority students in the most/highly competitive institutions still results in a small representation of black and Latino students among all those in the Class of 2002 who enrolled in this group of institutions.

It is among the more-ready group of students, that we see what might be considered an enrollment advantage for black and Latino students to most/highly competitive institutions. We remind the reader that black and Latino students in the more-ready category constitute just 8% and 11% respectively of those racial/ethnic groups (and just 3% and 7% respectively are most-ready students). Many of these students have reached these levels of achievement despite disadvantages in their access to high quality K-12 educational opportunities. They have demonstrated strong academic potential against the odds. Race-sensitive admission practices are important as one tool towards equalizing educational opportunities in higher education. But it is equally important to take measures to ensure that every child, regardless of race/ethnicity or family income, has equal access to quality K-12 education and have equal opportunity to be equally prepared for college, as we emphasized in the first report of this study entitled *The Demographics and Academics of College Readiness in Illinois* (Presley and Gong, 2005).

Question 4: Who went out of state for college?

Illinois consistently ranks second among the 50 states in its net loss of freshmen (the number of residents enrolling out-of-state minus the number of non-residents enrolling in state), behind only New Jersey. Indiana, Iowa, Wisconsin, and Missouri are the top-destination states of Illinois' college emigrants. We are for the first time able to examine the characteristics of new high school graduates who are leaving Illinois for college. Almost three quarters of those who leave Illinois for college are well prepared for college. But the brain-drain from Illinois is not due simply to students seeking more-competitive college environments out of state. One third of top students who leave the state for college are enrolling in less-competitive institutions out of state.

The Teacher Quality Index and College Going

The IERC has developed a Teacher Quality Index (TQI) for Illinois' public schools as an indicator of the average academic attributes of their teachers. Having a cadre of teachers who on the average were themselves more academically successful appears to contribute to students going on to college from low-performing schools. And having a stronger cadre of teachers who were also teaching in a high-performing high school appears to contribute to an environment of higher outcomes for students' choices of where to enroll.

Bird's Eye View of the Class of 2002

The table below (Table 18) shows the college-going outcomes per 1000 students in the Class of 2002. So, for example, for every 1000 students, 262 were enrolled in a two-year institution their first year out of high school, while 112 were enrolled out-of-state. It is possible to calculate many percentages using this table. First, it tells us that 34% (343/1000) were not ready for college, or that 26% (262/1000) enrolled in a two-year institution. But we can also see that about half (52/112) of those enrolled out-of-state came from the most-ready group of students, and that about one quarter (52/198) of all most-ready students enrolled out of state, or 31% (52/167) of those who went to college that first year. Appendix 4 provides separate tables by race/ethnicity and family income.

Table 18.
AY2002-03 College Going per 1,000 Illinois Class of 2002 Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
343	Not/Least Ready	147	enrolled in college	104	17	10	12	4	31	5
		197	not enrolled in college							
111	Minimally Ready	64	enrolled in college	40	11	6	6	1	19	3
		47	not enrolled in college							
173	Somewhat Ready	120	enrolled in college	56	33	14	15	2	45	15
		54	not enrolled in college							
175	More Ready	138	enrolled in college	42	47	21	28	1	61	33
		37	not enrolled in college							
198	Most Ready	167	enrolled in college	20	62	33	52	0	40	30
		31	not enrolled in college							
1000		635	enrolled in college	262	171	84	112	8	204	152
		365	not enrolled in college							

Concluding Comments

The IERC Longitudinal Study of the Class of 2002 is revealing some important strengths and weaknesses in Illinois' education system. Our first report revealed that about one third of our public high school graduates are not ready for college, another third are somewhat ready, and only about one third are ready to move on towards earning a bachelor's degree. And yet most of them reported that they expected to earn a bachelor's degree or more eventually. There is clearly a mismatch for many between their expectations and the reality they will face as they embark on their postsecondary educations. This finding is consistent with national results that found 72% of 10th graders expecting to earn at least a bachelor's degree (NCES, 2005). Education Secretary Margaret Spellings, in commenting on these national findings, said, "[W]e as a society have done an excellent job of selling the dream of attending college...but we have to make sure that we are preparing high school students to succeed once they get in the door" (U.S. Department of Education, 2005). In our first report we echoed this sentiment, recommending efforts to increase the academic rigor of our high schools, stronger articulation between high school and college curricula, and better information to students about the importance of working harder and choosing a more rigorous high school curriculum. But we also said that these strategies "will fail if we do not also address the educational experiences that students have prior to high school…students should not arrive in high school already 'left behind'" (Presley & Gong, 2005, p. 35). We called for school leaders, district leaders and state leaders to work in unison to crack the 'college readiness' challenge.

This second report shows that higher education is providing a second opportunity for many of our high school graduates to gain the skills and academic experiences they will need for personal and professional success. Almost half of Illinois' not/least ready high school graduates went on immediately to college, the majority enrolling in the two-year sector. But others went straight into the four-year sector, and we will be tracking whether these different paths lead to different longer-term outcomes for these students. Continuing on into higher education also provides a new opportunity for some who had succeeded against the odds of attending weak schools to attend more-competitive universities where they will experience communities of well-prepared students and be exposed to some of the best faculty in the world. And for all, higher education provides the opportunity to begin to explore paths perhaps hitherto unconsidered.

But the U.S. system of high-school/college transition is extremely inefficient with regard to the educational costs to families and taxpayers, and to the "opportunity costs"—that is, the lost income that students face when they must spend post-high school years gaining skills they should have been given the opportunity to master by the end of high school. In many other developed countries, students generally reach or exceed at the age of 16 the benchmarks we expect of our students at the end of high school. Their postsecondary institutions can focus on specialized higher learning, knowing that the general education needs of their students have been fulfilled through the school system. In Illinois high school/college collaboratives are being established that leverage the expertise of college instructional personnel and provide serious and rigorous learning environments for underserved high school juniors and seniors. We hope that Illinois will move forward creatively, guided by what will best prepare our youth for their transition to adults who are contributing to our economy and our society.

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Appendix 1
The Independent Effects of Factors Associated with College Going

Question 1: Who went to college in the year immediately following high-school graduation?

The tables and graphs presented in the main body of this report are only able to examine the relationship between two variables at the same time. While such methods are useful for examining the basic relationship between two factors, they cannot answer other important questions. For instance, we found that race/ethnicity and family income are associated with college participation rates. We also know, however, that race/ethnicity, family income, and college readiness are strongly associated with one another. So, we might well ask whether race/ethnicity has an independent effect on college participation rates over and above that of readiness and income. To gain more detailed insight on complex relationships such as these, we must rely on statistical techniques that are able to account (or statistically control) for contributions of more than one predictor. Logistic regression is one of the techniques that is used when there is reason to expect that strong relationships exist among a set of predictors. Therefore, we combined the predictors of college-going we have already described, along with additional measures that were available in the ACT data set and are likely to be related to college going, into a multiple regression analysis to better understand the independent impact each of them has on college-going (refer to Appendix 4 for descriptions and distributions of these variables). The results are shown in Figure A1.1. For ease of interpretation, the coefficient estimates from the logistic regression are converted to change-in-probability using a method suggested by Peterson (1985).

Everything else being equal, those who are most-ready for college are 21 percentage points more likely to go immediately to college as those who are not/least ready.

What Figure A1.1 tells us is that academic preparedness, as measured by the College Readiness Index, is the primary

Figure A1.1.
Change in Probability of Going to College, AY2002–03

BACKGROUND

Female vs. Male 0.07

vs. White		vs. Low Income	
Black	0.05	Lower Middle	0.04
Latino	-0.04	Upper Middle	0.08
Asian	0.06	High	0.07
Native Am	-0.15		
Other/Multi	-0.04		

ACADEMIC PREPARATION

Core 0.06

vs. Not 4-year Ready		vs. Algebra 2	
Marginally Ready	0.08	Algebra 1	-0.16
Somewhat Ready	0.14	Geometry	-0.06
More Ready	0.18	Trig/> Alg 2	0.05
Most Ready	0.21	Calculus	0.04

EDUCATION PLANS AND ENVIRONMENT

Declared intention to enroll	-0.03
Sure about major	0.04
Sure about occupation	-0.03
5 extra activities	0.03
10 unit increase in % grads in school continuing to college	0.07

Numbers in bold show a statistically significant difference in comparison to the referant item.

Model fit: Deviance/DF=1.12
N= 100,338

Some cases were excluded from the regression analysis due to missing predictor values.

LOCATION

vs. Northeast (minus CPS)	
CPS	0.01
Northwest	**0.03**
West Central	**0.02**
East Central	0.01
Southwest	**0.05**
Southeast	**0.07**

vs. Urban	
Rural	0.01
Suburban	0.01
Town	0.01

predictor/determinant of college-going. Everything else being equal, those who are most-ready for college are 21 percentage points more likely to go immediately to college as those who are not/least ready. But this analysis also shows that math course-taking has an effect above and beyond readiness and other variables. The lower the math level completed by students, the lower their likelihood of enrolling in college. Those who stopped at Algebra 1 are 16 percentage points less likely to enroll than those who stopped at Algebra 2 and are similar in all other respects. Those who took math higher than Algebra 2 enjoy an additional boost for going to college over those who stopped at Algebra 2, even when they have the same readiness level. Finally, we note that taking the ACT-recommended core set of courses generally increases the likelihood of going immediately on to college by another 6 percentage points.

Those who took math higher than Algebra 2 enjoy an additional boost for going to college over those who stopped at Algebra 2, even when they had the same readiness level.

The effect of race/ethnicity varies by category. Everything else being equal, black and Asian students are more likely to go on to college than white students with similar characteristics, while Latino and Native American students are less likely to go on. Family income has an independent effect as well. Students from upper-income families are 7-8 percentage points more likely to go on to college than those from low income families, after controlling for other factors. Females are 7 percentage points more likely to go on than males. Certainty about major, more extra-curricular activities, and being from high schools with higher college continuation rates also increase one's likelihood of going on—everything else being the same. High-school location (region and locale) generally has no or only a small relationship to college going after we have controlled for other demographic and academic factors. The largest positive effect is for students who went to high school in the Southeast region, where they were about 7 percentage points more likely to go on to college —everything else being equal.

Another way of looking at the relative probability of students from different racial/ethnic groups attending college is to 'hold constant' college readiness—that is, to estimate college-going rates if all groups reached equal readiness levels. In Table A1.1, we provide the actual and adjusted probabilities of going on to college for the major racial/ethnic groups. We can see that if the average readiness level of black students were brought up to the level of an average white student, but all other conditions remained unchanged, black students' college participation rates would be very comparable to white students (68% compared to 70%). If the average readiness level of Latino students were raised to match those of white students, with all other conditions remaining unchanged, the 21 percentage-point gap would be reduced to 9 percentage points (61% compared to 70%). Latino students would still be less likely to continue immediately onto college. On the other hand, the higher actual participation rate of Asian students is largely due to their stronger academic preparation. If Asian students had the same average readiness level as white students (and again, all other conditions remained unchanged), their college participation rate would be reduced to become more comparable to white students (68% compared to 70%) and about the same as the projected rate for black students if the latter also had the same readiness level as white students. What all of this means is that differential college-going rates are largely explained by different college-readiness levels. However, we know that different readiness levels are strongly related to students' family income levels, and race/ethnicity which are in turn related to the differences in the schools in which most lower-income students are educated (Presley, White and Gong, 2005).

Table A1.1.
Actual and Adjusted Probability of Going to College, AY2002-03

	Actual Probability	Adjusted Probability[1]
Black	0.562	0.682
Latino	0.496	0.611
Asian	0.788	0.681
White	0.702	0.702

[1] Assumes students in each racial/ethnic group have the same readiness level as white students while other differences remain unchanged.

Question 2: Who went to four-year institutions and who went to two-year institutions?

In order to better understand the interrelationship among the many variables that are related to enrollment by institutional sector, we again did a statistical analysis that allows us to examine the 'independent' effects of many variables on whether students enrolled in a two-year or a four-year institution. The results are shown in Figure A1.2.

College readiness has the largest independent impact on enrollment in a two-year versus four-year institution, with most-ready students being 37 percentage points more likely to enroll in a four-year institution—everything else being equal. Indeed, the impact of college readiness on college-sector destination is even stronger than its impact on going to college (see Figure A1.1). The independent additional effect of taking higher-level math courses is also remarkable. Students taking calculus are 13 percentage points more likely to be going to a four-year college than similar students who stopped with Algebra 2. And students who did not get as far as Geometry were 18 percentage points less likely to be going to a four-year college, independent of their readiness level and other demographics. Taking higher-level mathematics courses signals a strong inclination to choose a four-year institution—above and beyond students' general college readiness.

The impact of college readiness on college-sector destination is even stronger than its impact on going to college.

Taking higher-level mathematics courses signals a strong inclination to choose a four-year institution—above and beyond students' general college readiness.

Figure A1.2 confirms our earlier finding that high school location is closely related to students' college sector destination. Compared to students with similar academic and demographic characteristics, those from CPS were 18 percentage points more likely to enroll in a four–year college than those from the Northeast (minus CPS) region, while those from the Southeast region were 20 percentage points less likely to enroll in a four-year college.

Other student demographic characteristics also make a difference in four-year college enrollment—even

Figure A1.2.
Change in Probability of Going to 4-Year College versus 2-Year College for Those Enrolling in Colleges in AY2002–03

BACKGROUND

Female vs. Male 0.02

vs. White		vs. Low Income	
Black	**0.22**	Lower Middle	0.01
Latino	**0.05**	**Upper Middle**	**0.06**
Asian	0.02	**High**	**0.15**
Native Am	**-0.11**		
Other/Multi	-0.00		

ACADEMIC PREPARATION

Core vs. less than core 0.06

vs. Not 4-year Ready		vs. Algebra 2	
Marginally Ready	**0.12**	**Algebra 1**	**-0.18**
Somewhat Ready	**0.22**	**Geometry**	**-0.10**
More Ready	**0.30**	**Trig/> Alg 2**	**0.09**
Most Ready	**0.37**	**Calculus**	**0.13**

EDUCATION PLANS AND ENVIRONMENT

Plan to earn BA+	0.01
5 extra activities	**0.12**
10 unit increase in % grads in school continuing to 4-year college	**0.08**

Numbers in bold show a statistically significant difference in comparison to the referant item.

Model fit: Deviance/DF=0.97
N= 64,539

Some cases were excluded from the regression analysis due to missing predictor values.

LOCATION

vs. Northeast (minus CPS)

CPS	0.18
Northwest	**-0.07**
West Central	-0.02
East Central	-0.03
Southwest	-0.01
Southeast	**-0.20**

vs. Urban

Rural	-0.03
Suburban	-0.00
Town	0.03

when other factors are held constant. Students from the highest family-income quartile are more likely to go to four-year colleges than those with a similar academic preparation from the lower two income quartiles. Finally, after controlling for other factors, black students are 22 percentage points, and Latino students 5 percentage points more likely to enroll in a four-year institution, while Native American students are 11 percentage points less likely to do so. Asian students are about equally likely to go to four-year institutions as white students.

Question 3: Who went to more-competitive institutions?

Figure A1.3 shows the results of our logistic regression analysis for those who went to four-year institutions.

Academic preparation, especially college readiness, has its strongest effect when we look at college competitiveness. Everything else being the same, being most-ready increases the likelihood of attending a more-competitive college by 48 percentage points. Even being somewhat ready increases the likelihood by 20 points. Taking higher-level math courses influences the likelihood even after its effect on college readiness.

Academic preparation, especially college readiness, has its strongest effect when we look at college competitiveness.

Starting from geometry, one level higher in the math ladder increases the likelihood of enrolling in a more-competitive institution by 9 percentge points and taking calculus increases the likelihood by 21 percentage points.

The model also indicates that background factors —especially being of Asian, black and Latino race/ethnicity—adds to the likelihood of attending a more-competitive college. Parents' income still has an independent effect, but it is much smaller (just 6%), and only for those from highest-income-quartile families. We see a continuing regional effect, favoring CPS in contrast to students from the two southern regions.

Figure A1.3.
Change in Probability of Going to More-Competitive 4-Year College for Those Going to 4-Year Colleges in AY2002–03

BACKGROUND

Female vs. Male -0.00

vs. White		vs. Low Income	
Black	0.16	Lower Middle	-0.00
Latino	0.27	Upper Middle	0.00
Asian	0.32	High	0.06
Native Am	-0.01		
Other/Multi	0.15		

ACADEMIC PREPARATION

Core 0.02

vs. Not 4-year Ready		vs. Algebra 2	
Marginally Ready	-0.01	Algebra 1	-0.02
Somewhat Ready	0.20	Geometry	-0.09
More Ready	0.31	Trig/> Alg 2	0.09
Most Ready	0.48	Calculus	0.21

EDUCATION PLANS AND ENVIRONMENT

Plan to earn graduate degree	0.10
5 extra activities	0.05
10 unit increase in % grads in school continuing to selective 4-year college	0.09

Numbers in bold show a statistically significant difference in comparison to the referant item.

Model fit: Deviance/DF=1.04
N= 36,401

Some cases were excluded from the regression analysis due to missing predictor values.

LOCATION

vs. Northeast (minus CPS)

CPS	0.10
Northwest	-0.01
West Central	-0.03
East Central	-0.03
Southwest	-0.16
Southeast	-0.13

vs. Urban

Rural	-0.05
Suburban	-0.02
Town	-0.04

Appendix 2
Descriptive Statistics for the Variables Employed in the Logistic Regression Models

Variable	N*	% Cell
Gender		
Female	52,010	51.8%
Male	48,328	48.2%
Race/Ethnicity		
Black	10,129	10.1%
Latino	7,735	7.7%
Asian	4,280	4.3%
Native American	524	0.5%
White	61,442	61.2%
Other/Multiracial	3,560	3.6%
Missing Race	12.668	12.6%
Family Income		
Low	19,134	19.1%
Middle Low	20,307	20.2%
Middle High	17,910	17.9%
High	16,526	16.5%
Missing	26,461	26.4%
College Readiness		
Not/Least Ready	32,135	32.0%
Marginally Ready	11,799	11.8%
Somewhat Ready	17,519	17.5%
More Ready	18,085	18.0%
Most Ready	20.800	20.7%
Highest Level Math		
No Math	2,569	2.6%
Algebra I	4,933	4.9%
Geometry	7,060	7.0%
Algebra II	23,911	23.8%
Trig or other Advanced Math	39,637	39.5%
Calculus	22,228	22.2%
ACT-Recommended Core Courses		
Yes	44,306	44.2%
No	56,032	55.8%
High School Location-Region		
Chicago Public Schools	12,856	12.8%
Northeast (minus CPS)	49,644	49.5%
Northwest	9,352	9.3%
West Central	7,792	7.8%
East Central	7,822	7.8%
Southwest	8,634	8.6%
Southeast	4,238	4.2%

Variable	N*	% Cell
High School Location-Locale		
Rural	12,822	12.8%
Suburb	51,944	51.8%
Town	11,514	11.5%
Urban	24,058	24.0%
Plan to Enroll		
Yes	86,195	85.9%
No	14,143	14.1%
Sure About Major		
Yes	65,828	65.6%
No	34,510	34.4%
Sure About Occupation		
Yes	64,636	64.4%
No	35,702	35.6%
Plan to Earn BA+		
Yes	72,934	72.7%
No	27,404	27.3%
Prefer 4-Year		
Yes	64,517	64.3%
No	35,821	35.7%
Graduate Degree		
Yes	39,478	39.35%
No	60,860	60.7%
College Enrollment		
Yes	64,539	64.3%
No	35,799	35.7%
Level of College		
Four-Year	37,204	57.7%
Two-Year	27,335	42.4%
Competitiveness of Four-Year Colleges		
Non/Less Competitve	31,645	49.8%
Competitive	16,313	25.7%
Very Competitive	8,069	12.7%
Most/Highly Competitive	7,556	11.9%

	N	Mean	S.D.
Number of Extra Curricular Activities	100,338	2.37	2.43
% of Graduates in Any College	100,338	63.84	12.95
% of Graduates in Four-Year College	100,338	36.65	14.59
% of Graduates in More Competitive Four-Year College	100,338	15.32	11.31

* Some cases were excluded from the regression analysis due to missing predictor values.

Appendix 3
Supplementary Table

Table A3.1.
College Destination of Most-Ready Students by Region and Family Income

	Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	N
Low Income						
Chicago Public Schools (CPS)	3%	46%	33%	17%	1%	198
Northeast (minus CPS)	13%	37%	28%	21%	1%	545
Northwest	30%	33%	23%	14%	<1%	131
West Central	22%	43%	23%	13%	0%	115
East Central	23%	42%	16%	19%	<1%	128
Southwest	25%	42%	15%	19%	0%	130
Southeast	43%	28%	12%	17%	0%	95
Lower Middle Income						
Chicago Public Schools (CPS)	4%	52%	24%	20%	0%	203
Northeast (minus CPS)	14%	38%	25%	23%	<1%	1,433
Northwest	28%	33%	19%	20%	<1%	368
West Central	23%	36%	22%	19%	0%	280
East Central	22%	43%	22%	12%	0%	290
Southwest	22%	36%	19%	23%	<1%	347
Southeast	45%	27%	7%	21%	0%	164
Upper Middle Income						
Chicago Public Schools (CPS)	1%	36%	27%	35%	0%	150
Northeast (minus CPS)	10%	39%	23%	28%	<1%	2,565
Northwest	21%	33%	22%	25%	0%	388
West Central	17%	42%	21%	21%	0%	358
East Central	20%	49%	18%	14%	0%	409
Southwest	18%	41%	15%	26%	0%	408
Southeast	35%	27%	7%	31%	<1%	153
High Income						
Chicago Public Schools (CPS)	1%	24%	26%	49%	0%	86
Northeast (minus CPS)	4%	34%	17%	45%	0%	4,271
Northwest	13%	36%	20%	30%	<1%	309
West Central	7%	45%	20%	28%	0%	284
East Central	8%	56%	17%	19%	0%	316
Southwest	9%	37%	12%	42%	0%	351
Southeast	18%	46%	5%	31%	0%	112
Missing Income						
Chicago Public Schools (CPS)	5%	38%	25%	32%	0%	128
Northeast (minus CPS)	8%	35%	18%	39%	<1%	2,495
Northwest	21%	33%	20%	26%	<1%	382
West Central	12%	40%	27%	22%	0%	309
East Central	15%	53%	20%	12%	0%	315
Southwest	16%	34%	17%	34%	0%	237
Southeast	32%	34%	7%	26%	<1%	149

Due to rounding, totals may not add to 100%

Appendix 4
College Participation per 1000 of the Illinois Class of 2002

Table A4.1.
Black Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
544	Not/Least Ready	246	enrolled in college	128	51	23	38	6	90	16
		298	not enrolled in college							
157	Minimally Ready	89	enrolled in college	34	28	10	15	2	43	9
		68	not enrolled in college							
185	Somewhat Ready	123	enrolled in college	29	52	16	23	3	63	27
		62	not enrolled in college							
79	More Ready	65	enrolled in college	5	29	11	20	0	28	31
		14	not enrolled in college							
35	Most Ready	29	enrolled in college	1	11	5	13	0	6	22
		6	not enrolled in college							
1000		553	enrolled in college	198	170	65	109	12	230	105
		447	not enrolled in college							

Table A4.2.
Latino Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
487	Not/Least Ready	173	enrolled in college	119	24	15	8	8	37	11
		314	not enrolled in college							
143	Minimally Ready	67	enrolled in college	40	14	6	4	3	20	5
		76	not enrolled in college							
196	Somewhat Ready	114	enrolled in college	50	33	17	10	5	33	27
		82	not enrolled in college							
108	More Ready	82	enrolled in college	19	32	20	10	1	25	37
		26	not enrolled in college							
66	Most Ready	56	enrolled in college	5	22	16	13	0	8	41
		10	not enrolled in college							
1000		492	enrolled in college	232	125	74	44	17	123	121
		508	not enrolled in college							

Table A4.3.
Asian Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
167	Not/Least Ready	101	enrolled in college	67	17	8	5	4	23	6
		66	not enrolled in college							
88	Minimally Ready	58	enrolled in college	34	13	3	5	3	17	5
		30	not enrolled in college							
191	Somewhat Ready	150	enrolled in college	63	54	22	9	3	34	49
		41	not enrolled in college							
205	More Ready	173	enrolled in college	29	87	30	26	2	36	104
		32	not enrolled in college							
349	Most Ready	301	enrolled in college	14	159	62	66	0	22	262
		48	not enrolled in college							
1000		783	enrolled in college	207	330	125	109	11	132	426
		217	not enrolled in college							

Table A4.4.
White Students

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
225	Not/Least Ready	110	enrolled in college	85	10	7	7	1	19	2
		115	not enrolled in college							
116	Minimally Ready	71	enrolled in college	48	10	6	6	1	18	2
		45	not enrolled in college							
176	Somewhat Ready	127	enrolled in college	65	32	13	16	1	49	10
		49	not enrolled in college							
223	More Ready	177	enrolled in college	58	57	25	36	1	83	33
		46	not enrolled in college							
260	Most Ready	220	enrolled in college	29	79	43	69	1	72	117
		40	not enrolled in college							
1000		704	enrolled in college	283	188	94	134	5	241	163
		296	not enrolled in college							

Table A4.5.
Students from Low-Income Families

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
417	Not/Least Ready	150	enrolled in college	114	13	9	11	4	27	3
		267	not enrolled in college							
171	Minimally Ready	91	enrolled in college	56	18	8	7	3	27	4
		80	not enrolled in college							
207	Somewhat Ready	127	enrolled in college	64	35	15	11	3	41	18
		80	not enrolled in college							
122	More Ready	91	enrolled in college	32	32	16	11	1	33	25
		31	not enrolled in college							
83	Most Ready	66	enrolled in college	12	25	16	12	1	21	32
		17	not enrolled in college							
1000		526	enrolled in college	278	123	63	52	11	148	82
		474	not enrolled in college							

Table A4.6.
Students from Lower-Middle Income Families

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
293	Not/Least Ready	124	enrolled in college	98	9	7	8	3	19	1
		169	not enrolled in college							
153	Minimally Ready	87	enrolled in college	58	13	7	7	2	23	3
		66	not enrolled in college							
192	Somewhat Ready	128	enrolled in college	70	30	13	12	2	41	14
		64	not enrolled in college							
191	More Ready	149	enrolled in college	57	47	23	21	1	59	29
		42	not enrolled in college							
171	Most Ready	146	enrolled in college	29	55	32	31	1	48	67
		25	not enrolled in college							
1000		634	enrolled in college	312	154	83	78	8	190	115
		366	not enrolled in college							

Table A4.7.
Students from Upper-Middle Income Families

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
187	Not/Least Ready	93	enrolled in college	74	6	5	6	2	15	1
		94	not enrolled in college							
128	Minimally Ready	84	enrolled in college	54	15	7	7	1	24	3
		44	not enrolled in college							
171	Somewhat Ready	126	enrolled in college	65	33	14	13	2	49	11
		45	not enrolled in college							
238	More Ready	193	enrolled in college	64	68	27	33	1	88	38
		44	not enrolled in college							
277	Most Ready	240	enrolled in college	33	94	51	63	1	78	126
		37	not enrolled in college							
1000		737	enrolled in college	289	216	104	122	6	253	179
		263	not enrolled in college							

Table A4.8.
Students from High-Income Families

	College Readiness	College Enrollment Within a Year After High School Graduation		Institutional Type of First Enrollment					4-Year Competitiveness	
				Public 2-Year In-State	Public 4-Year In-State	Private In-State	Out of State	For Profit	Less	More
126	Not/Least Ready	71	enrolled in college	52	6	5	8	1	14	2
		55	not enrolled in college							
92	Minimally Ready	63	enrolled in college	31	14	7	10	1	26	4
		29	not enrolled in college							
135	Somewhat Ready	103	enrolled in college	37	30	11	23	1	50	12
		32	not enrolled in college							
248	More Ready	200	enrolled in college	38	70	27	64	1	104	55
		48	not enrolled in college							
399	Most Ready	335	enrolled in college	19	121	57	138	0	84	228
		64	not enrolled in college							
1000		773	enrolled in college	178	242	107	242	4	278	301
		227	not enrolled in college							

Appendix 5
College Going and High School Teacher Quality

We showed in the first report of this series, *The Demographics and Academics of College Readiness in Illinois* (Presley & Gong, 2005), that high school attributes, as measured by the Teacher Quality Index (TQI) created by the IERC, affect students' achievement. Here we examine whether TQI has an impact on college enrollment beyond its impact on student achievement. We divided Illinois public high schools into four quartiles of roughly equal number (quartiles), based on their student body academic preparation as measured by the mean readiness level of their students. We then examined college participation rates of schools in the same tier of student mean readiness but in different quartiles of TQI. Table A5.1 shows how Illinois public high schools are distributed by TQI quartiles and mean readiness quartiles.

First we note that most schools with a mean readiness in the lowest quartile also have TQI in the lower quartiles and most schools with a mean readiness in the highest quartiles also have TQI in the higher quartiles. So there is a strong relationship between TQI and students' performance, but the relationship is not a simple linear one. Some schools prepare students well for college in spite of lower TQIs and some schools do not do as well as one would expect from their TQIs.

Table A5.1.
Distribution of Illinois Public High Schools by TQI and Mean College Readiness

School TQI Quartiles	School Mean Readiness Quartiles			
	Lowest	Lower Middle	Upper Middle	Highest
Lowest	79	36	27	11
Lower-Middle	42	52	42	24
Upper Middle	21	54	41	43
Highest	11	23	47	78

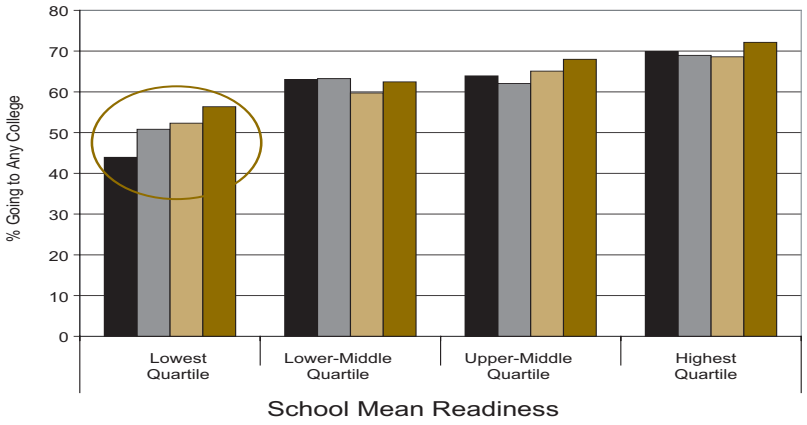
Second we compared college-going rates of schools with comparable student academic preparation but different TQIs. The results are presented in the figures that follow. Figure A5.1 shows that TQI makes some difference in the overall college participation rates only for schools with the lowest average readiness level. As TQI improves, the college participation rate increases from 44% to 56% for this group of schools.

Figures A5.2 and A5.3 show that, even after controlling for a schools' average student readiness, teacher quality makes a difference in the percentage of students who go on to attend four-year colleges. This effect is most evident on the right-hand side of Figure A5.2, for schools with the best-prepared student body. In this group, schools with the lowest TQI scores only send about 31% of their students on to four-year colleges, while schools with the highest TQI scores send about 47% of their students to four-year colleges.

TQI makes the most salient difference in the more-competitive four-year college going rates for schools in the highest quartiles of mean readiness (Figure A5.3). With the same student body performance, the rate increases from 8% at schools in the lowest TQI quartile to 23% at schools in the highest TQI quartiles.

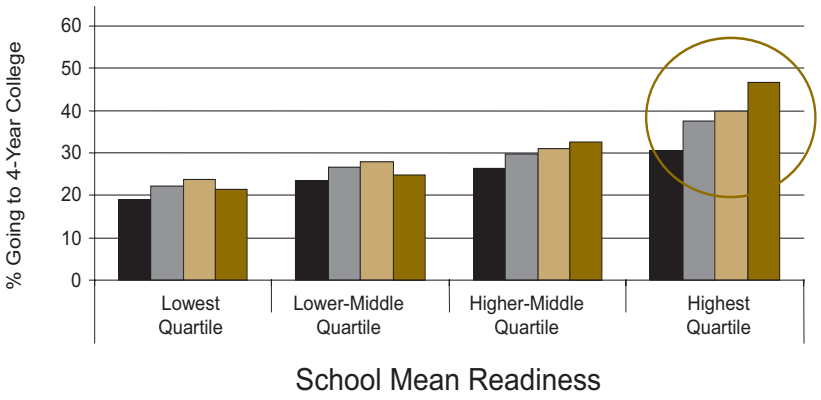
In conclusion, it appears that TQI affects the rate of college participation beyond its effect on student achievement. We also ran regression analysis that confirmed the independent effect of school TQI, after controlling for student body demographics and performance. We also ran the regression models with students as the unit of analysis, and again found a strong TQI effect. Results are available upon request.

Figure A5.1.
Going to College, by School TQI and School Mean Readiness for the Illinois Class of 2002



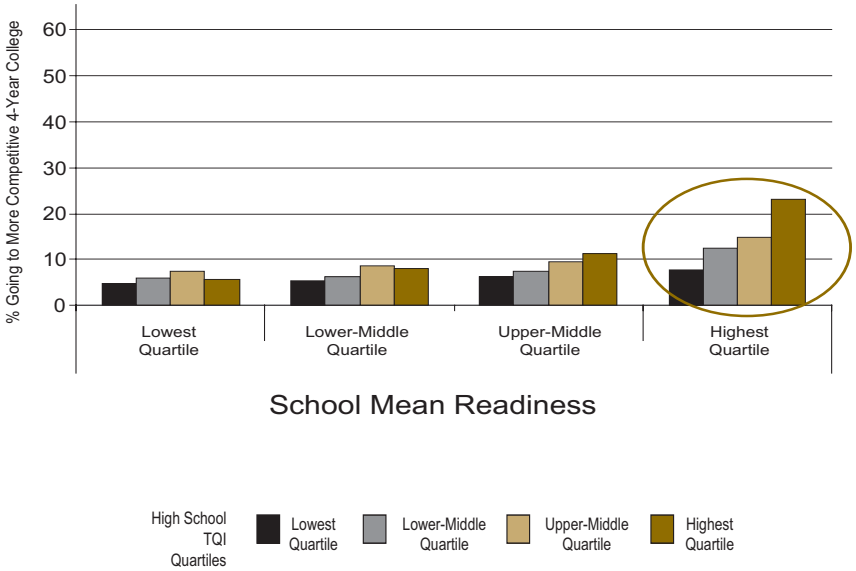
- *In schools with the **lowest** overall college readiness, a higher TQI leads to more college-going.*

Figure A5.2.
Four-Year College Attendance by School TQI and School Mean Readiness



- *In schools with the **highest** overall college readiness, a higher TQI lead to more students taking the four-year college route.*

Figure A5.3.
More-Competitive Four-Year College Attendance by School TQI and School Mean Readiness



- *In schools with the highest overall college readiness, a higher TQI leads to more students attending more-competitive four-year colleges.*

For further information, contact the IERC toll-free at 1-866-799-IERC (4372)
or by email at ierc@siue.edu.

About the Illinois Education Research Council

The Illinois Education Research Council was established in 2000 at Southern Illinois University to provide Illinois with education research to support P-16 education policy making and program development. The IERC undertakes independent research and policy analysis, often in collaboration with other researchers, that informs and strengthens Illinois' commitment to providing a seamless system of educational opportunities for its citizens. Through publications, presentations, participation on committees and an annual research symposium, the IERC brings objective and reliable evidence to the work of state policy makers and practitioners.