

Committing to Keep Illinois Students In-State

**Understanding College Choice,
Student Migration Patterns,
and Retention Strategies**



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Executive Summary

Committing to Keep Illinois Students In-State: Understanding College Choice, Student Migration Patterns, and Retention Strategies

Since the 1960's Illinois has suffered a growing imbalance of in- and out-migration among college-bound youth. Today, Illinois is only one of six states with net out-migration rates for college students (Presley, 2003), and nearly 20,000 students annually migrated to colleges in other states during the 1990's. The problem with sending the best and brightest of Illinois youth out of state to college is that few will return. While some policy analysts have suggested that student migration is a value-neutral phenomenon (WICHE, 2005), others have suggested that student migration has inherent ensuing economic benefits associated with the gain and loss of educated citizenry (Smith & Wall, 2006). The projected loss in foregone state income and sales tax revenues alone over the lifetime of each lost cohort of student migrants is estimated at \$700 million (Smith & Wall, 2006), and there are numerous other economic and non-economic affects of student migration as well.

This report, sponsored by the Illinois Board of Higher Education and the Center for the Study of Education Policy at Illinois State University, presents in-depth multi-method research and analysis on what matters to Illinois students and their families when choosing a college, why so many students are leaving the state, where they are going, and what the state might do to encourage greater retention.

Our study shows that the highest concentrations of Illinois student migrants only go as far as adjacent states, accounting for nearly half of all student migrants. Their rationales behind this migration – detailed in this report - have implications for the affordability, quality, selectivity, distribution, capacity and marketing of Illinois colleges and universities.

Shifting the balance of student migration is an achievable goal, that can only be addressed through the combined efforts of many stakeholders in the Illinois education system. The report presents recommendations for the Illinois Board of Higher Education, the Governor and Legislature, colleges and universities, and high school guidance counselors.

The future of the state depends upon building and retaining an educated citizenry to sustain the economy and provide leadership for its government and institutions. Committing to keep Illinois students in-state is an investment worth making, and one we must make together.

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October 1, 2006

Introduction

The opportunity for an improved future through a college education is part of the contemporary American Dream, and the act of going to college is an American right of passage for millions of young people nationwide. Over 17 million individuals annually enroll in degree-granting colleges or universities (NCES, 2004). Of these, approximately 3 million attend college outside their state of residence (WICHE, 2005).

The flow of residents between states for the purposes of attending college, known as student migration, is the focus of this research report. While most states attract a comparable number of immigrating students (in-migrants) to replace their numbers of emigrating students (out-migrants), Illinois has suffered for decades from an imbalance of in- and out-migration. The migration of its young people to other states has significant implications for the future vitality of Illinois and should be an important policy issue for the state's citizens, government, businesses, and systems of secondary and postsecondary education.

This study, commissioned by the Illinois Board of Higher Education, investigates the pattern of student out-migration among college-bound Illinois youth and the underlying causes of student out-migration and in-state retention. The report is organized in three sections. The first presents background information and the impetus for this study, including research and information related to student migration and college choice. The second presents the study's methodology and findings, and situates the findings against available information on postsecondary education in Illinois. The final section presents recommendations for addressing Illinois' college student migration imbalance.

Illinois consistently ranks as the second highest net exporter of college students in the United States.

Part 1: Background

College Student Migration in Illinois

Since the 1960s, Illinois, has suffered a growing imbalance of in- and out-migration among college-bound youth. As shown in Figure 1 on the following page, nearly 20,000 students from Illinois annually migrated to colleges in other states during the 1990's¹. While exporting many of its college students to other states, Illinois imports relatively few out-of-state students, ranking 47th in the nation in the number of out-of-state students brought into the state for their postsecondary education (Presley, 2003). Between 1992 and 2002, Illinois exported 66,000 more students than it imported (Figure 2, following page), enough to populate many of the state's small towns.

Today, Illinois is one of only six states with net out-migration rates for college students and college graduates (Presley, 2003). Whether looking at numbers or proportions of students lost, Illinois consistently ranks as the second highest net negative exporter of college students in the United States, second only to New Jersey (according to amount) and Connecticut (according to proportion) (Mortenson, 2002; NCES, 2004).

While some policy analysts have suggested that student migration is a value-neutral phenomenon, (WICHE, 2005), others have suggested that student migration has inherent ensuing economic benefits associated with the gain and loss of educated citizenry (Smith & Wall, 2006). This section summarizes what is known about students who migrate out of state for their education and the

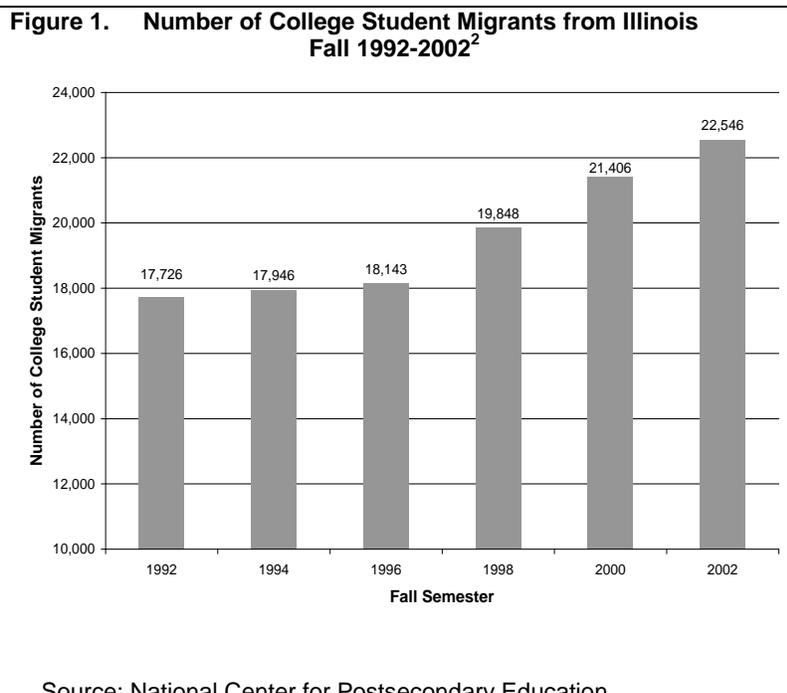
potential state-wide impact of student migration, and contextualizes this information against Illinois population projections.

Who Are Illinois' Student Migrants?

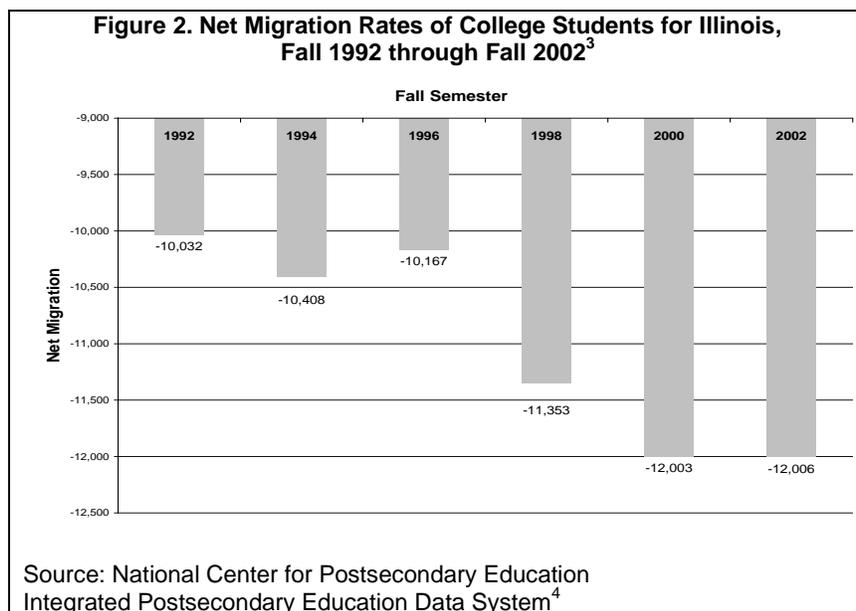
National studies yield a clear portrait of students who migrate out of state for college. They are more likely to be from upper middle-class families with higher levels of education, who reside in rural areas (Kodrzycki, 2001). Often, they migrate from rural areas with weak economies to urban areas with stronger economies (EDA, 1998; Rogers & Rodgers, 1997).

Illinois, with a high proportion of farmland and in many other ways a microcosm of the U.S. population, might be expected to follow national patterns. However, Gong & Presley (2006), surveying the college plans of graduating seniors from Illinois public high schools, found that college student migration is a state-wide problem that affects all areas.

Furthermore, the highest proportions of college emigrants were from not from rural areas, but were from Chicago's suburban areas. This may be because the largest proportion of the state's high school students is from that region.



Source: National Center for Postsecondary Education Integrated Postsecondary Education Data System



Source: National Center for Postsecondary Education Integrated Postsecondary Education Data System⁴

Looking within each region of the state, Chicago Public Schools had the highest percentage (10%) of out-migration. All other regions of the state sent between 8% and 5% of their college-bound seniors out of state for their postsecondary education (Table 1).

While nationally student migration is an upper-middle class phenomenon, in Illinois the common denominator is academic ability. An 1999 survey of 2,919 Illinois

college-bound high school seniors found that those who planned to leave state had an overall higher median composite ACT score than those who planned to attend college in-state, 22 versus 25 (IBHE, 1999a).

Looking at college enrollment patterns of Illinois high school graduates from the class of 2002, another study showed that better-prepared students are more likely to emigrate for college. In fact, almost three quarters of those who left Illinois for college were well-prepared for college (Gong & Presley, 2006). Those who were only minimally or somewhat ready for college were the students who were most likely to remain in state.

Thus while nationally young people from upper-middle class backgrounds leave rural areas to attend college and seek greater economic opportunity in or near urban areas, in Illinois student out-migration results from the best and the brightest students leaving the state from all geographic regions (rural, suburban, urban; upstate, mid-state, downstate).

College student migration is a state-wide problem that affects all Illinois geographic areas.

The Potential State-Wide Impact of Student Migration

The problem with sending the best and brightest of Illinois youth out of state to college is that few will return. Research indicates once a state resident migrates to another state to attend college, they are less likely to return upon graduation (Adelman, 2004; Kodrzycki, 2001; Perry, 2001; Tornatzkey et. al, 1998, 2001). Over 80% of high-school graduates who attend an in-state college continue to reside in their home state after college graduation (Figure 3). By contrast, only 50% of high-school graduates who attend an out-of-state college return to

In Illinois, better-prepared students are more likely to emigrate for college.

Table 1. Out-of-state College Enrollment among Illinois High School Graduates, Class of 2002, By Region

High School Region Class of 2002	Number of Public High School Graduates Who Enrolled in College Out-of-State	As a Percentage of Total College Student Emigrants, Class of 2002	As a Percentage of All College-Going Students from the Region, Class of 2002
Chicago Public Schools	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 %	-

Source: (Gong & Presley, 2006, p. 30)

their home state after college graduation. The other half of the college student migrants either continue to reside in the state where they graduated college, or migrate on to other states (Figure 4).

Nationally, most college student migrants fail to return to and reside in their home state within 5 years of graduation (Kodrzycki, 2001). Even if a student migrant does return to their native state following college graduation, they are less likely to remain in their native state permanently.

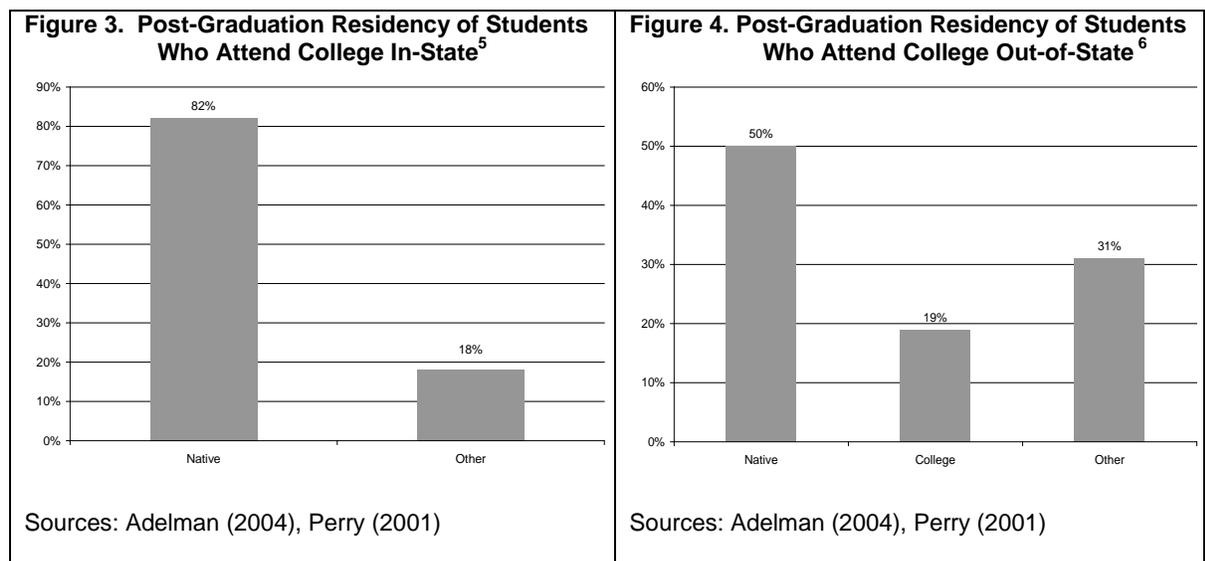
Numerous studies have consistently demonstrated that a college educated citizenry has a broad and quantifiable national impact, both economically and non-economically, and that these benefits accrue above and beyond the effects of mediating variables such as income, race, gender and age (College Board, 2004; IBHE 2005; IHEP, 1998, 2005; NCPPHE, 2005; Reseck et al., 2000).

Brain drain: The loss of a highly educated and skilled workforce. The slow bleed of a college-educated citizenry presents converse problems for the state of Illinois. When skilled intellectual or technical labor moves to other regions, a phenomenon known as brain drain, the entire region suffers adverse economic affects. College graduates fuel a competitive workforce (Reseck et al., 2000), replenishing retiring or migrating workers, and bringing current knowledge and new skills to bear. The lack of college graduates reduces a region’s ability to build a competitive workforce (Smith & Wall, 2006). Illinois’ loss of college students, which occurs across all regions of the state, diminishes human capital and the ability to maintain a highly educated and skilled workforce.

Illinois’ brain drain is compounded by environmental forces. The world has moved from an industrial economy to a knowledge economy. Prior agrarian and industrial economies were based on the physical inputs of natural resources, labor and capital (Schleicher, 2006). In a knowledge economy, information and knowledge drive economic development and growth.

Because a knowledge economy is characterized by knowledge-intensive activities, rapid innovation and rapid obsolescence (Powell & Snellman, 2004), intellectual capabilities - the ability to produce and use information effectively – have become vital skills for individuals. The most robust modern economies will prove to be those that produce the most information and knowledge and make that knowledge easily and widely accessible (Schleicher, 2006), and this will be contingent upon a highly educated citizenry (Dean & Cunningham, 2006).

Illinois’ growth in knowledge-based industries ranks higher than the national average among states (NCPPE, 2004a). Yet a diminishing college-educated citizenry and the out- migration of the



best and brightest college-bound students present an unappealing environment for such 21st century companies, who rely on a highly skilled and intellectual workforce. In a knowledge economy, stanching brain drain is a policy imperative.

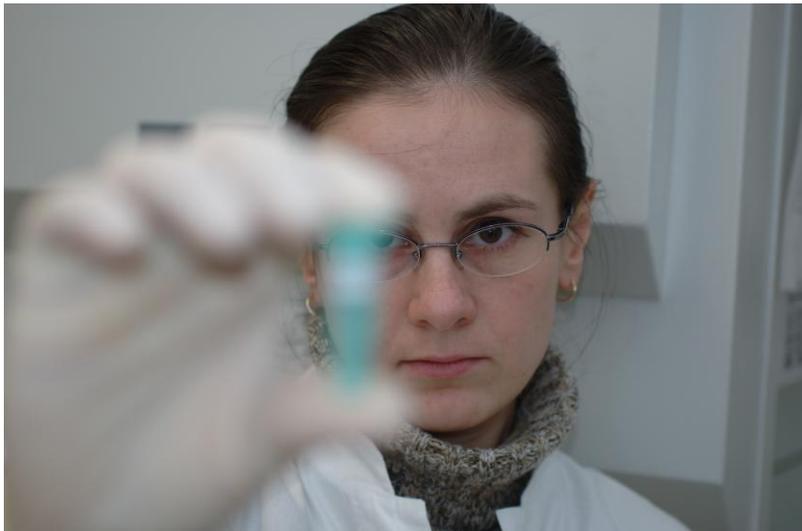
Furthermore, brain drain can be self-perpetuating. As younger people leave to seek areas with stronger economies, more job opportunities and greater pay, this decreases the likelihood of economic renewal, as businesses that would migrate into the area do not for lack of skilled and educated labor force – loss of human capital (EDA, 1998; Rogers & Rodgers, 1997). Of course, not all young people leave state to attend college, and those who remain as well as those who migrate in for college offer a labor pool for the state’s knowledge economy. However, Tornatzky et al. (1998), looking at college graduates in the engineering and sciences, demonstrated that out-migration of college-bound students adversely affects the overall subsequent retention of college-graduates. In fact, the single most important variable for retaining science and engineering college graduates is the overall percentage of high school students who attend college in that state.

For Illinois, this means that negative migration of college bound students may contribute to a double brain drain: initially, on the loss of college-bound students who leave state and never return; and subsequently, fueling the loss of college graduates – from both Illinois and elsewhere - who leave state after graduation to settle elsewhere. Negative student migration has the potential to affect Illinois’ competitiveness as a location for businesses in a knowledge economy.

Potential loss of business taxes and productivity. Closely aligned with the problem of a diminished intellectual and technically skilled work force is the potential loss of business taxes and productivity. Research clearly connects higher education with national economic growth and productivity (Reseck et al, 2000). Higher productivity, innovations and higher corporate profit translate into business tax receipts for state governments. Innovations, improved services and lower prices in turn benefit state citizens (Reseck et al., 2000). Conversely, as the skilled labor pool decreases, businesses may lose productivity and profitability, decreasing their contributions in state taxes and services to state citizens. Or, ultimately, they may relocate to another state in search of a more favorable labor pool.

Once a state resident migrates to another state to attend college, they are less likely to return.

Loss of projected income tax revenues. Perhaps more readily apparent is the loss of projected tax revenues from personal



In a knowledge economy, stanching brain drain is a policy imperative.

The lack of college graduates reduces a region’s ability to build a competitive workforce.

The Illinois Board of Higher Education concedes that Illinois loses revenue because of students leaving state for college.

and state income taxes. College graduates earn significantly more than those who do not attend or complete a college education. In March 2004, for example, the national average income of adult workers with a bachelor's degree was \$48,417, nearly twice as much as those with a high school diploma (US Census Bureau, 2004, in IHEP, 2005). The earnings for those with doctorate or professional degrees – to which the path begins with a baccalaureate degree - are higher still, at \$94,000 and \$127,000 respectively. Economists estimate that college graduates earn over a half million dollars more in their lifetime, present value, than those without a postsecondary degree (Reseck et al., 2000).

The estimated loss in foregone income and sales tax revenues for each cohort of Illinois student migrants is \$700 million.

The benefits of higher individual salaries accrue to the state as well, in the form of personal state and local tax revenues. Research suggests states with negative college student and graduate migration report significant financial losses. For example, Wisconsin annually loses approximately \$7 billion (Miller, 2000) in potential tax revenues had its college students remained and subsequently worked in state. New Jersey, one of the highest exporters of college students, loses about \$1.8 billion annually due to college student migration (Prospero, 2001).

The Illinois Board of Higher Education (IBHE) concedes that Illinois loses revenue because of students leaving state for college, but believes the financial impact is difficult to measure (Prospero, 2001). However, using fall 2000 data, Smith and Wall estimate that Illinois will lose about \$700 million in foregone state income and sales tax revenues over the lifetime of that cohort of student migrants alone. The amount increases for each year's cohort of student migrants.

The projected loss accounts for both the long-term loss of tax revenues, off-set by gains in tax revenues from in-migrants who remain in Illinois after graduation. Retaining college graduates, then, has the potential to ameliorate state revenue problems. Not only does an educated citizenry contribute to increased economic productivity and profitability, it also can directly increase state funds through the personal state and local income taxes on higher earnings from a greater number of citizens.

Other economic impact. Studies have shown that college graduates make better consumer decisions and have increased consumption of consumer goods. For the state's economy this translates into a thriving market for businesses, increased sales tax revenues on consumer goods purchased, property tax revenues on homes purchased, as well as taxes on other utilities and commodities such as gasoline, telephones, electricity and the like.

Additionally, retaining college graduates can reduce state costs through decreasing the proportion of state residents likely to use public assistance programs. For example, unemployment rates for those with high school diplomas are double that for adults with bachelor's degrees (US Census Bureau, 2004, in IHEP, 2005). Nationally, the proportion of citizens receiving some form of public assistance is twice as high for those with a high school diploma as it is for those with a bachelor's degree, and college graduates who need public assistance typically need it for shorter durations than their high school graduate counterparts (US Census Bureau, 2004, in IHEP, 2005). Mortensen (2002) states "a priori, we would expect state economic welfare to be related to statewide measures of educational attainment of each state's adult population." It makes sense, therefore, for Illinois to do all it can to retain its college-bound youth in state.

Non-economic impact. Research shows college graduates produce a multitude of non-economic benefits as well.⁷ While difficult to measure, the range of social benefits is extensive: more civic participation in voting, more volunteering and charitable giving, greater social cohesion and appreciation of diversity, improved health care and fewer premature adult deaths, improved health care and educational attainment for children of college graduates, more hobbies and leisure activities, appreciation and support of the arts and literature, and reduced crime (Reseck et al., 2000).

College graduates produce a multitude of non-economic benefits as well.

Perceived quality and value of Illinois colleges and universities. Over 50% of all Illinois college student migrants enroll at public colleges and universities in other states, much higher than the national average among student out-migrants of about 33%. Not only do college student migrants from Illinois tolerate the typically higher prices of out-of-state tuition at public institutions,⁸ but as Figure 5 on the following page shows, those who attend public colleges or universities tend to migrate further distances from Illinois than those who attend private institutions.



Little to no research addresses why a student would specifically select an out-of-state college, but research does show that when people choose to attend a particular college, they sacrifice present benefits for a greater chance of increased future earnings (Paulsen, 1990). Thus, a college student migrant must weigh non-economic (like homesickness or making new friends) and economic costs (like non-resident tuition or increased travel) in exchange for future benefits.

Therefore the fact that nearly half of all college student migrants enroll at public colleges and universities further from home, tolerating longer distances and higher prices rather than attend their own in-state public colleges and universities, calls into question the perceived quality and value of Illinois' public colleges and universities.

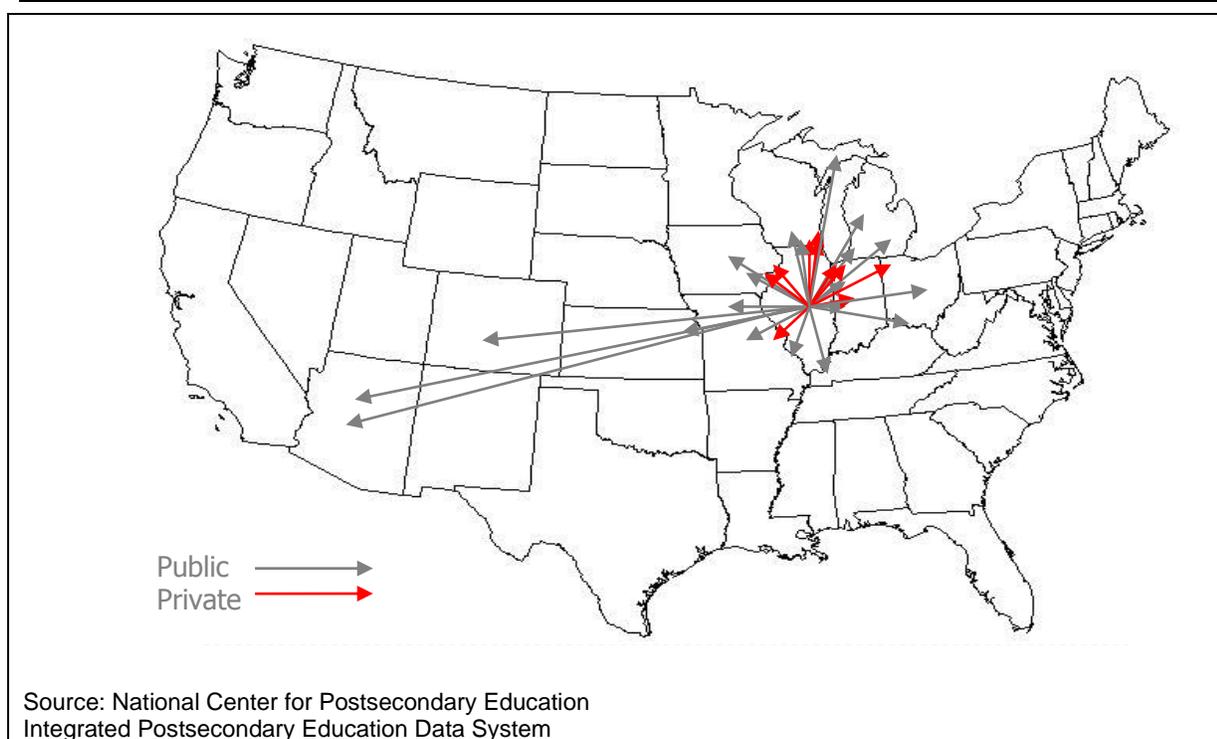
Illinois residents may believe that the benefits of attending another state's public colleges exceed the benefits of attending their own, or perhaps the academic offerings or mission differentiation among Illinois colleges and universities do not meet resident expectations or needs.

Population Projections for Illinois

The potential state-wide impact of continuing negative student migration is clear. Population projections exacerbate the problem. Currently, Illinois has a relatively small proportion of the adult population who have a bachelor's degree or higher (17.4%), ranking 25th in the nation (US Census Bureau, 2004a). It also has a large number of undereducated adults. Nearly 15% of the adult population has less than a high school diploma (Jones, 2005). As the Baby Boomer generation retires, the total available college-educated labor pool will diminish.

Between 1995 and 2000, only the states of California and New York lost more residents than Illinois (Franklin, 2003) and evidence suggests population losses through migration will continue. Yet

Figure 5. Location of the Top 30 Importers of Illinois College Students by Institution Control, Fall 2002



in the next 25 years, the population of Illinois is expected to grow only 4.9%, compared to an 8.2 % national growth rate (US Census Bureau, 2002).

Projected rise in international and minority populations. Illinois is projected to avoid actual population loss due to a large growth in new populations through international immigration and growth among minority populations. While the white and African-American population in Illinois is projected to stabilize in the next 25 years, the Hispanic and Asian population is projected to witness substantial growth, with the projected the number of Hispanics nearly doubling by 2025 (Herring, 2002). In fact, by 2025, the U.S. Census Bureau (2002) projects that more people of Hispanic origin will live in the state of Illinois than in Arizona or New Mexico. By the fall 2010, half of all high school graduates in the state of Illinois are projected to come from minority populations (ISBE, 2002).

As a result of demographic changes, more historically underrepresented groups will likely be attending and graduating from Illinois high schools. Although the state has made significant progress in preparing young people for postsecondary education and training, the college participation rate for ethnic minority groups has declined (NCPPE, 2004a). So that, at the same time Illinois faces challenges in retaining students in state for college, it also must attend to increasing its overall proportion of college-going students.

Projected declines in education and income levels. While Illinois may save immediate resources by sending its young people out of state for postsecondary education, it loses in the balance. Because high proportions of these migrants are unlikely to return, the state is less likely to see any long-term economic or non-economic return on the earlier K-12 educational investment for high school graduates who migrate out for college (Smith & Wall, 2006).

Illinois is expected to have an increase by 2020 in more than a quarter of a million residents age 25-64 who have a high school diploma or less (319,702), compared to an increase of only 68,073

adults who have a bachelors degree or higher (NCES, 2002 in Jones, 2005). For every 100 ninth-grade students in Illinois, only 20 will graduate from college with either an associate's degree within three years or a bachelor's degree within six years (NCPPE, 2004b). Only 10 more will complete a bachelor's degree by the time they are between the ages of 25-44 (NCES, 2002 in Jones, 2005).

The National Center for Public Policy and Higher Education (2005), looking at national trends, projected that by 2020 America's white working-age population will decline from 82% to 63%, while its minority working-age population will double from 18% to 37%. Unless the educational attainment levels of minority Americans is improved, the shift in income levels could result in a national drop of 2% of per capita income, up to a \$395 billion loss. For Illinois, the projections are bleaker. The decline in Illinois per capita income is expected to be 3% between 2000 and 2020 (NCES, 2002 in Jones, 2005).

A Problem Warranting Statewide Attention

In light of economic and demographic changes facing Illinois, greater attention should be paid to college student migration. Yet a review of policies and research specific to Illinois reveals little coordination or effort in the way of examining why a high school graduate would choose to attend an out-of-state college.⁹ While IBHE has conducted studies on the post-graduate plans of high school seniors and migration rates of science and engineering graduates (IBHE, 1999a, 1999b, 2001a, 2001b; Peddle & Trott, 2001), there has been little to nothing that specifically addresses college student migration in Illinois. There have been no prominent studies or commissions addressing the issue, and a review of articles, news stories, government documents, legislative initiatives or state policies that specifically aim to provide incentives for Illinois high school graduates to attend in-state colleges reveals little state-level concern for the matter.

Of note, institutions have made independent attempts to address the migration problem. In the 1980s, the Presidents of Northwestern University and the University of Illinois created the Illinois Merit Recognition Scholarship (MRS), awarding \$1000 to the top 10% of high school graduates who stay in-state for college. Yet subsequent survey research by the Illinois Students Assistance Commission has shown that \$1000 is an inadequate amount to affect the student migration problem, and that the majority of scholarship awards were accepted and used by students who would have attended an in-state college without it (ISAC, 2005).

The characteristics of an attractive and competitive state are a strong economy, good quality of life and civic involvement (Jones, 2005). The *Illinois Commitment*, the strategic plan of the Illinois Board of Higher Education (1999c), emphasizes the importance of higher education to the state's future economic and social well-being and a commitment to meeting the postsecondary education needs of its citizens. However, to adjust to the new demographic and economic realities of the future, the State of Illinois will need to develop the human capital of all its citizens if it is to witness economic growth and remain competitive with other states. An investigation of why and where Illinois residents migrate will be helpful in developing a clear policy toward college student migration – an integral component in planning for future economic growth.

The fastest growing populations are ethnic groups with histories of the least educational attainment and greatest under representation in college.

Only 30% of Illinois ninth-graders complete a bachelor's degree before age 44.

A clear policy towards student migration should be an integral component in planning for Illinois' future economic growth.

Research on College Choice

Seemingly simple, the college choice process is complex. The concept of choice should involve a student's ability to select a college that complements his or her academic abilities and aspirations. In reality, the choice of a particular institution does not equate with access. A student can choose to attend a college that complements his or her dreams, desires, and academic potential, but in light of ability to pay, distance, or selective admissions requirements, the choice of attending a particular college can be significantly narrowed.

For colleges and universities, the college choice process is also meaningful. In an effort to manage their enrollment, institutions respond to demographic and economic changes in society, education, and labor markets by providing a variety of academic programs and other services designed to appeal to the educational and consumer needs of college students.

Our review of the research on college choice categorized five theoretical models used to understand this complex process:

- The economic model, which views a student's decision to attend college as an investment decision (Hossler, Schmit & Vesper, 1999; McDonough, 1997; Paulsen, 1990).
- The status attainment model, which views a student's decision to attend college as calculation of its impact on their social status (Dale & Krueger, 1999; Hossler, Schmit & Vesper, 1999; McDonough, 1997; Paulsen, 1990).
- The psychological model, which looks at how college environments (e.g. social climate, student peers, costs and academic programs) fit with a student's individual identity (Chapman, 1981; Hearn, 1988; McDonough, 1997; Toukoushian, 2001).
- The information processing model, in which students attempt to reduce the process of uncertainty when selecting a college, by processing college-related information socially through interaction with peers, family and their school (Hossler, Schmit & Vesper, 1999).
- The hybrid model, which combines two or more of the aforementioned models in various ways (Chapman, 1981; Chapman & Jackson, 1987; Manski & Wise, 1983; McDonough, 1997).

The Process of Choosing a College

Models provide researchers with ways to measure how variables impact the college choice process. While each of the aforementioned categories of models differs in their emphasis of specific variables and the degree of rationality involved in the process, there are commonalities among them.

Nearly all models include following phases of the choice process: predisposition (deciding to go to college); search (evaluating a variety of institutions); choice (selecting and applying to colleges); and enrollment (choosing a particular institution among admissions offers) (Bouse & Hossler, 1991; Hossler & Stage, 1992; Matthews & Hadley, 1993).

In the predisposition stage, students begin to develop plans and aspirations for what they will do after secondary school. In this stage - usually the junior year of high school - socioeconomic status, information about colleges, and parents play a significant role in shaping aspirations. Research shows, for instance, that the act of saving for college sends a clear message to students about parental expectations following high school graduation (Hossler, Schmit & Vesper, 1999).

In the search stage, typically tenth through twelfth grade, students accumulate information on individual colleges and the processes of applying to and paying for college, and become more actively engaged with institutions they are considering. Students in this stage usually begin to consider how factors like financial aid, tuition, ability to pay, parental expectations, academic achievement, and the role of high school teachers and counselors will impact the saliency of institutions they are considering.

The choice stage is marked by narrowing a range of potential colleges. A hallmark of this stage is that students move from proximate and internal sources of information, like parents, peers, and counselors, to further and external sources of information, like college counselors, friends, and college publications.

The actual enrollment phase is further narrowed by admissions offers, the available resources for financing college costs, and further reflection on criteria from the choice stage. In this stage, federal, state and institutional policies govern admission offers and the type and amount of financial aid awarded. Ultimately, the student compares alternatives and enrolls in an institution.

Seemingly simple, the college choice process is complex that includes: deciding to go to college, evaluating institutions, application, and enrollment.

Combining all of the aforementioned models, Table 2 illustrates several of the many variables that impact the college choice process and ultimate enrollment decision. A longitudinal study of high school students determined that five criteria were the most influential in a student's decision-making process: admissions requirements, course offerings, campus atmosphere, student-faculty ratio, and amount of financial aid awarded (Galotti & Mark, 1994). More recent research indicates that perceived institutional quality has also become a significant factor (Long, 2004).

College Choice and Student Migration

Research has shown a variety of variables associated with college student migration. In an analysis of the National Education Longitudinal Survey, for example, Adelman (2004) found that migration is clearly related to institutional selectivity and type. Several studies have shown that

Table 2. Significant Variables in the College Choice Process	
Student Variables	Institutional Variables
<ul style="list-style-type: none"> ▪ Parental encouragement and involvement ▪ Socioeconomic status ▪ Type and amount of college-savings ▪ Perceived ability to pay ▪ Educational and occupational aspirations ▪ Motivation ▪ Academic ability, measured through academic achievement ▪ High school academic resources and control (public or private) ▪ Race 	<ul style="list-style-type: none"> ▪ Location (urban/rural) ▪ Proximity ▪ Institutional market niche and mission, including institutional class (Associate's, Baccalaureate, Masters, or Doctoral / Research) ▪ Institutional control (for-profit, public, private, religious affiliation) ▪ Institutional resources ▪ Athletic accomplishments, particularly national exposure ▪ Academic reputation, perceived quality ▪ Institutional size ▪ Class size ▪ Course/program offerings ▪ Highly qualified faculty ▪ Perceived college social, academic and racial climate ▪ Tuition price ▪ Housing options ▪ Net cost / Financial aid awarded, in scholarships and grants
<p>Sources: (Bouse & Hossler, 1991; Cabrera & La Nasa, 2000; Caparo et al., 2004; Hossler & Stage, 1992; Hoxby, 2004; Hu & Hossler, 2000; Kim, 2004; Matthews & Hadley, 1993; St. John et al., 2005; Smith, 1990; Toma & Cross, 1998; Touktkoushian, 2001)</p>	

increases in the perceived and recognized quality of state institutions attract more college student immigrants (Dotterweich, 2001; Garcia, 1983). However, the assessment of quality is subjective.

The price of a college has a major impact on migration, but can be mitigated by several factors, including receipt of scholarships or better financial aid, distance, or quality.



Students have equated small class size, institutional selectivity, diverse cultural initiatives and a productive research faculty with quality (Mixon & Hsing, 1994). Others have considered national reputations, range of academic programs and the presence of specialized programs (Murabito, 1996). Even a high-profile athletics team can convey an impression of institutional quality and subsequently increase migration rates (Murabito, 1996; Selingo, 1997; Sperber, 2001).

The price of a college has a major impact on migration, but can be mitigated by several factors, including the receipt of scholarships or better financial aid, distance, or quality (Fenske, Scott & Carmody, 1972; Fryman, 1988; OSSHE, 1996; Tuckman, 1970). Rizzo & Ehrenberg (2002) found that states with high-tuition policies generally have higher out-migration rates, perhaps because higher prices push institutions into a regional, instead of a state market. Conversely, other research indicates that state-based financial aid and in particular merit-based aid do provide incentives for students to stay in-state (Dynarski, 2004).

What is clear is that for students who remain in-state for college, the odds of their remaining in state after graduation are evenly good, regardless of whether they went to a non-selective, selective, or highly selective college (79%, 72% and 70% respectively) (Adelman, 2004). For students who migrate out of state for college, the odds of their moving back to their home state after graduation vary greatly dependent on institutional selectivity. While about half of those at non-selective out-of-state colleges are likely to return to their native state after graduation (52%), only 45% of those at selective colleges and only 30% of those at highly selective colleges are likely to return home (Adelman, 2004).

Part 2: Research

Examining College Choice & Student Migration in Illinois

In response to long-standing and growing negative net student migration and its potential adverse effects for the future of the state, the Illinois Board of Higher Education authorized this investigation of college choice and student migration patterns among Illinois youth. We addressed four main research questions:

- What is the pattern of migration among Illinois college-bound students?
- What are the underlying causes of student migration?
- What are the underlying influences that retain students in-state for their college education?
- What can be done to influence more Illinois graduating high school seniors to select Illinois colleges and universities for their postsecondary education?

The study relied on sequential mixed-methodology. In the first phase, a descriptive analysis of data from the U.S. Department of Education's Integrated Postsecondary Education Data System (IPEDS) yielded a clear view of where migrating Illinois college students enroll. A predictive analysis of institutional data using stepwise multiple regression identified what institutional characteristics were significant in attracting Illinois students.

The second phase involved interviews and focus groups with college-bound high school seniors from the class of 2006, current college-freshman who graduated from Illinois high schools in 2005, parents of college-bound seniors and current college freshmen, and high school guidance counselors. These qualitative data yielded insights into the college choice process which supported, supplemented and illuminated the findings from phase one.

Because the significance of the economic and non-economic impact of student migration manifests at the baccalaureate level, we focused our study on students who were bound out of state for four-year colleges and universities, but considered all college enrollments (both two-year and four-year) for students remaining in-state. The methodologies for each phase are explained more fully in the subsequent sections presenting the findings.

Illinois Student Migration Patterns

The research question addressed in phase one of our study was: What is the pattern of migration among Illinois college-bound students?

Methodology

Descriptive analysis. Using data from the Integrated Postsecondary Education Data System (IPEDS), we looked at fall 2004 freshmen enrollment patterns for four-year public and private universities, and targeted those institutions who reported enrolling Illinois residents in their freshman class.¹⁰ The purpose was to reveal the pattern of college student migration including: 1) where Illinois students are going; 2) which types of schools tend to attract Illinois students according to institutional type, type of control and religious affiliation; and 3) which schools are the state's top competitors and tend to take the largest numbers of Illinois students.

We then collected and analyzed the admissions and recruitment materials for the top twenty out-of-state colleges that are importing the largest number of Illinois students, including attention to whether or not there were any institutional financial aid programs targeted at Illinois residents or state policies such as tuition reciprocity agreements that may influence Illinois students' decisions to enroll there.

Predictive analysis. Using fall 2004 IPEDS data from the colleges and universities enrolling Illinois student migrants, we examined institutional characteristics to develop a meaningful predictor model of the kind of institutional context that is most likely to successfully recruit Illinois student migrants. To achieve this, we used stepwise multiple regression through SPSS software (Statistical Package for the Social Sciences), which allowed us to isolate and identify meaningful predictor characteristics one at a time. An initial model was defined where the predictor variable with "the highest zero-order correlation with the [dependent] variable [was] first entered into the analysis" (Pedhazur, 1997, p. 214). SPSS added each subsequent dependent variable to the model, seeking the greatest increment to R^2 , after taking into account the predictor variables already in the equation. Any variables not deemed as significant at the .05 level or higher were removed during the process. The resulting model is predictive, but not explanatory. That is, it can predict what kinds of characteristics are most likely to attract Illinois students, but it cannot unequivocally explain why Illinois students are enrolled there.

In our analysis, the dependent variable was the number of first-time, first-year Illinois students an institution enrolls. For independent variables, we included 18 different IPEDS institutional characteristics (Appendix A) that research has associated with college student migration (Dotterweich, 2001; Fenske, Scott & Carmody, 1972; Fryman, 1988; Garcia, 1983; Gossman et al., 1968; Lewis, 1964; Lyons, 1974; McHugh & Morgan, 1984; Mixon, 1992; Mixon & Hsing, 1994; Sewell, 1964; Strand, 1967; Tornatzky, Gray, Tarant & Zimmer, 2001; and Tuckman, 1970). In deriving this list, we winnowed variables that were highly correlated (e.g. using only ACT scores instead of both ACT and SAT scores), and omitted program offerings, since IPEDS data do not identify which specific academic programs enroll Illinois students. Finally, we delimited our analysis to only four-year public and private non-profit colleges and universities, because about 85% of all Illinois college student migrants attend those types of institutions (Smith & Wall, 2006).

Findings: Who Enrolls Illinois Student Migrants

Over 78,000 Illinois high school graduates enrolled in fall 2004 as freshmen at colleges and universities across the country (78,957). Of these, nearly a quarter (24%, or 19,183) enrolled in colleges outside of Illinois. Only half as many students entered Illinois from other states to begin their college studies here (8,672), yielding a negative net student migration of -10,511, or a loss of over 13% of college bound freshmen (NCES, 2004).

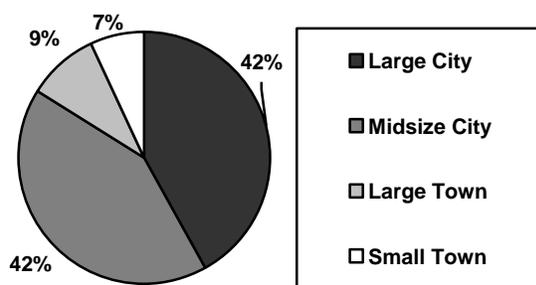
Overview of all importing institutions. Illinois out-migrants attended 1017 different colleges and universities throughout all 49 states and the District of Columbia. Approximately a third was publicly (34%), and two thirds were privately controlled (66%). Nearly 7% were Historically Black Colleges & Universities.

The majority of the institutions selected by Illinois out-migrants (39%) were located in mid-sized cities or their suburbs where residents numbered less than 250,000. Another sizable proportion of importing institutions (36%) were located in large cities or suburbs where residents numbered greater than 250,000. About half as many importing institutions (15%) were in small towns where residents numbered only 2,500 – 25,000. The remainder were scattered throughout large towns and rural areas. Approximately a third (29%) were located in the Midwest.

Details for high-importing institutions. Nearly half of all Illinois out-migrants (9326, or 48.6%) were concentrated in only 33 institutions (Appendix B), which each enrolled more than 100 students (ranging from 1060 to 106). More than half were publicly controlled (56%). Among the privately controlled institutions, slightly more were religiously affiliated (24%) than not (20%) (Figure 6).

The typical high-importing institution was a large university with a very high research focus. More than half of all high-importing institutions either had a high (15%) or very high (42%) research focus. Another 27% were master's institutions (Appendix C, Figure 7). Over half were large institutions (58%). Another quarter (24%) were medium-sized (Appendix B). As with the trend among all Illinois-importing institutions, most were located in large (42%) or mid-sized

Figure 6. Location of Colleges & Universities Importing Largest Numbers of Illinois High School Graduates



Source: National Center for Postsecondary Education Integrated Postsecondary Education Data System

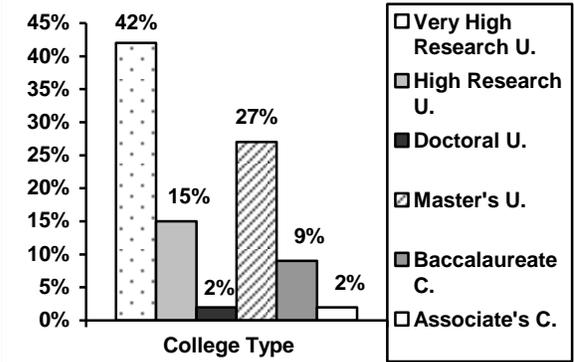
(42%) cities (Figure 6). Nearly all were well-ranked by US News & World Report, and were selective (Appendix C, Figure 8).

As shown previously (Figure 5) these institutions were primarily located in states bordering, or very near to Illinois. Iowa, with 1910 Illinois in-migrants, was the largest importing state. Wisconsin, with 1780 Illinois in-migrants and Indiana, with 1575 and Missouri, with 1459, were the next three largest importers. Michigan, Ohio, Kansas and Kentucky together imported a combined 1703 Illinois in-migrants in fall 2004 (Appendix B, C). The majority of these importing institutions (69%) are public colleges and universities (Figure 9). Individually, these states import enough Illinois students to make up the freshmen classes of medium-sized colleges or universities. Combined, they total more than the population of many of Illinois' small towns and could fill the freshman class of an entire large university.

Of note, when looking at the proportion of Illinois freshmen within these institutions, Smith & Wall (2006), studying the economic impact of Illinois college student migration, noted that nearly a third of University of Iowa's (29%) and Marquette's (32%) freshman classes are imported from Illinois.

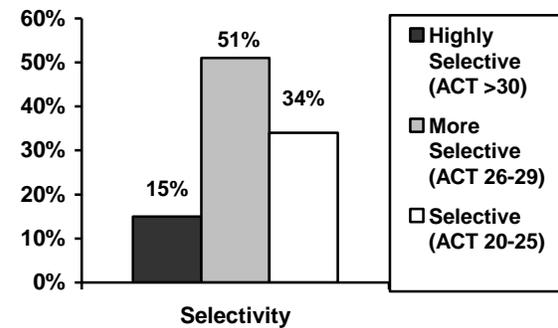
Analysis of recruitment materials from top importing institutions. Our analysis of the admissions and recruitment materials for the top ten colleges and universities importing Illinois students did not reveal any institutional financial aid programs specifically targeting Illinois residents, nor state policies such as tuition reciprocity agreements that may influence Illinois students' decisions to enroll there. However, some institutions (e.g. Murray State University) have developed institutional policies designed to heavily recruit students from other states. Murray State is located in Kentucky, where the college going population in state is not enough

Figure 7. Types of Colleges & Universities Importing Largest Numbers of Illinois High School Graduates, by Carnegie Classification



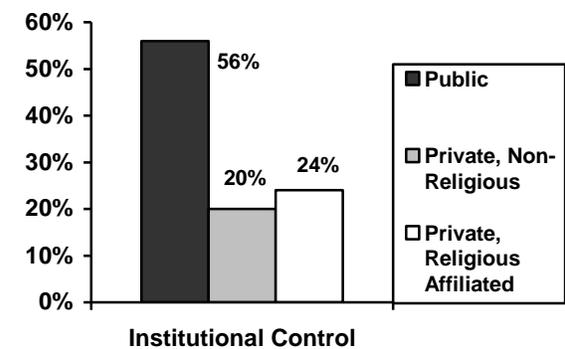
Source: Carnegie Foundation (n.d.)

Figure 8. Selectivity of Colleges & Universities Importing Largest Numbers of Illinois High School Graduates, based on Average ACT scores



Source: Carnegie Foundation (n.d.)

Figure 9. Control of Colleges & Universities Importing Largest Numbers of Illinois High School Graduates



Source: National Center for Postsecondary Education Integrated Postsecondary Education Data System

to fill colleges and universities, and institutions seem to intentionally recruit students from others states to fill their seats.

The highest concentrations of Illinois student migrants head to nearby states: Ohio, Indiana, Iowa, Kansas, Kentucky, Missouri and Wisconsin.

Illinois student migrants typically attend large, nationally-ranked public research universities that award high institutional grants and scholarships.

Statistical analysis. Regression analyses of IPEDS data for fall 2004 freshmen enrollments showed that Illinois student migrants attended selective public and private institutions in the Midwest with large enrollments, smaller class sizes, and large amounts of institutional aid. These were significant at the .01 level and accounted for 13% of the explained variance in the enrollment of Illinois residents in an out-of-state institution. Although many of the institutions enrolling the highest numbers of Illinois students are nationally-ranked and have higher tuitions, price was not a significant predictor of migration.

Summary: Descriptive and predictive analyses of freshman migration patterns. Our findings agreed with those of Gong & Presley (2006) who found that half of Illinois student migrants attended public institutions, and Smith & Wall (2006), who further refined this as large public research universities. We further add from our descriptive and predictive analyses that Illinois migrants a) migrate to nationally ranked institutions that are close to home, b) are equally willing to move to mid-sized cities and surrounding suburbs as they are large cities and their suburbs, c) are not deterred by price, and d) are attracted to high amounts of institutional aid.

Research suggests that college student migrants possess higher academic aptitude, measured by ACT scores and GPA (NCES, 2004). Institutions compete heavily for these students, primarily by awarding merit-based institutional grants and scholarships. The fact that price is not a significant predictor of migration, but institutional aid is, may indicate the use of merit aid as a means to mediate the demand and supply for talented students.

College Choice among Illinois Students & Their Families

Research questions addressed in phase two of the study included: What are the underlying causes of student migration? What are the underlying influences that retain students in-state for their college education? What can be done to influence more Illinois graduating high school seniors to select Illinois colleges and universities for their postsecondary education?

Methodology

The second phase involved interviews and focus groups to yield insights into the college choice process to supplement and illuminate the findings from quantitative analyses.

We used purposeful sampling techniques to sample three high schools from different regions of the state. Because other research has shown that student migration rates are highest among high school seniors in Chicago Public Schools, northeast suburban Illinois, and southern Illinois (southeast and southwest combined), we focused on these regions.¹¹

This strategy yielded three schools for the study who represented not only the three primary regions from which student migrants originate, but also a representation of urban, suburban and rural schools; large, medium and small schools; diverse, modestly diverse, and homogenous student bodies; and above, at and below the state median for representation of low income families. This

balance of institutional characteristics can be directly attributed to the nature of the majority of schools from the regions sampled. The institutional characteristics of the schools sampled are shown in Table 3.

The schools sampled had above-state-average high school graduation rates and above-state-average ACT composite scores. However, this bias in the sample population was favorable for the purposes of this study, as other research has demonstrated that in Illinois and across the nation, the best and brightest students are also the most likely to migrate out of state for college.

Within each school, we used random stratified sampling techniques to sample 10 individuals within three different groups: a) high school seniors attending these schools who were at that time making college choices for the 2006-2007 academic year; b) recently graduated alumni of these high schools who currently attend college at both in-state and out-of-state institutions; and c) parents of these high school seniors and alumni. We interviewed the high school seniors as a focus group, and interviewed the alumni and parents individually over the telephone and in person. We also interviewed the school guidance counselors at each school.

For stratified sampling within the schools, we asked each school's guidance counselor to select the total population of college-bound seniors and alumni-now-current-college-freshmen. For college-bound seniors, we instructed the counselors to randomly sample 100 students, from which we would randomly sample 10 willing participants. For current college freshmen, we instructed the counselors to divide them according to whether they were enrolled out-of-state or in-state, and to randomly sample 50 of each, from which we randomly sampled 5 willing participants each (10 total). We further invited 10 parents from each school's resulting group of high school and college students sampled. Our intention was to achieve as equal a representation of those headed or enrolled at in-state and out-of-state colleges as possible. The total invited study participants were 95.

Table 3. Profiles of Schools Sampled for Focus Groups and Interviews				
	School A	School B	School C	Illinois State Average
<i>School Characteristics</i>				
Geographic Location	Urban Northern	Rural Southern	Suburban Northern	-
School Size	Small	Medium	Large	-
School Enrollment	703	1010	3103	-
<i>Student Racial/Ethnic Background</i>				
White	23.8	97.4	47.8	56.7
Black	29.3	0.6	38.1	20.3
Hispanic	32.7	1.0	9.1	18.3
Asian / Pacific Islander	13.8	1.0	2.5	3.7
Native American	0.4	0.0	0.2	0.2
Multiracial / Ethnic	0.0	0.0	2.3	0.7
<i>Student Socio-Economic Background</i>				
Low income	60.9	14.6	32.5	40.0
Limited English Proficiency	0.9	0.0	2.4	6.6
Mobility	3.1	6.5	7.5	16.1
<i>Student Academic Achievement</i>				
High School Graduation Rate	93.3	92.9	91.5	87.4
ACT Composite Score	23.3	21.3	21.9	20.1
Source: Illinois State Board of Education http://webprod1.isbe.net/ereportcard/publicsite/getProfileSearchCriteria.aspx				

Not all those invited to participate were willing to do so, but we had a strong response rate of 77%. Our final study sample included: a) 5 high school guidance counselors; b) 22 college freshmen, nearly evenly divided between the three schools, 9 of whom were enrolled in-state and 13 of whom were enrolled out-of-state; c) 26 high school seniors, nearly evenly divided between the three schools, 11 of whom were intending to migrate out for college, 10 of whom planned to remain in-state, and 5 of whom were undecided as to where they would go; and d) 21 parents, among whom 7 had children either had recently enrolled or were planning to enroll in-state, 10 had children who had either recently enrolled or were planning to enroll out-of-state, and 4 had children who were still very much undecided as to where they would enroll in fall 2006 (Figure 10). The parent perspectives on college enrollment were much broader than the figures presented here, as approximately 40% of the sample pool had other children who either were or had enrolled in college.

During the interviews we used open-ended questions to inquire about the processes of choosing where to apply to college and which college was ultimately selected. We sought information on who was involved in the process, what were the principal considerations, and what were the sources of information in learning about college possibilities. For those enrolled or headed out-of-state, we sought perceptions as to whether there were comparable opportunities in Illinois. We further asked participants for their own views on why so many Illinois students were leaving the state for college, and what might be done to retain them. As baseline information, we asked about parental educational attainment, family geographic origins, parents' colleges attended, and whether and where any siblings were enrolled in college.

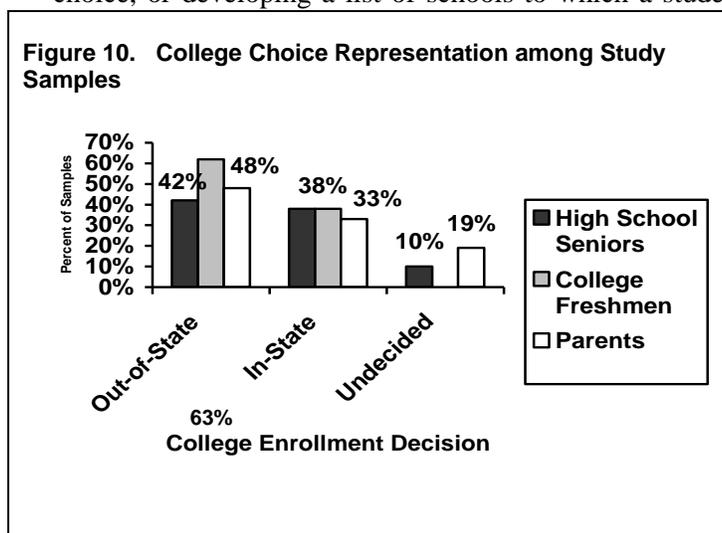
We recorded and transcribed interview and focus group data and then analyzed their content for emerging themes (Miles & Huberman, 1994), using safeguards to maximize potential threats to descriptive, interpretive and theoretical validity of the findings (Maxwell 1996).

Findings:

What Matters to Illinois Students When Applying to College

In this section we report findings for the causes of student migration and influences on in-state student retention, as well as salient findings applicable toward developing retention strategies. However, we reserve for the subsequent recommendations sections our commentary on the research question, "What can be done to influence more Illinois graduating high school seniors to select Illinois colleges and universities?"

We discuss our findings by separating out the college choice process into its two final stages: choice, or developing a list of schools to which a student will apply; and enrollment, or ultimately selecting one institution from among admission offers.



Applying to college. Illinois high school graduates, both college-bound and currently enrolled in college, clearly looked for two principal criteria when evaluating colleges and universities and developing a short list of schools to which they would subsequently apply. First and foremost was the prestige and quality of the school. Actually distinct categories, students discussed prestige and quality as though the terms were interchangeable. Often when they talked

about quality, they really meant prestige; and when they were evaluating prestige, they were really trying to determine quality. The second most important criteria was what we refer to as a lifestyle choice, evaluating the degree of fit between the overall organizational context (location, institutional type, organizational culture, social climate, student peers) and individual identity and preferences.

There were variances. For example, students who were under prepared for college and had average to below-average grade point averages and ACT composite test scores were not reaching for the sky in terms of institutional prestige. They were not trying to find the best schools, they were simply trying to determine good schools. Similarly, middle and upper-middle income students of average academic ability were neither confident of their opportunities for gaining admission to the most prestigious schools, nor their ability to pay the tuition if they should be admitted (having family incomes too high to qualify for any financial aid other than student loans).

Students who clearly knew their choice of academic major added the step of evaluating the quality of an individual academic program to this step of selecting colleges for which they would apply. We encountered many students who perceived that Illinois colleges and universities either did not offer their desired academic major, or lacked distinctive programs. Among these students, no clear pattern of academic major emerged. We heard this response concerning programs ranging from music and dance to pharmacy and international affairs. This finding agreed with a 1999 IBHE-sponsored survey found that the availability (69%) and quality (77%) of specific academic programs mattered highly among college-bound Illinois high school seniors. For those students in our study sample who had not yet chosen academic majors, the overall quality of the school mattered most.

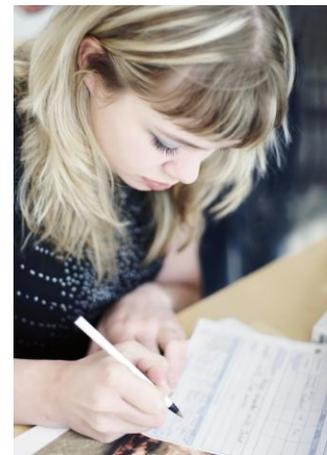
Simultaneous with evaluating the quality or prestige of institutions against their academic abilities and interests, students evaluated the overall organizational context and compared its suitability or fit with their individual identity and preferences.

How students and their families evaluate quality and prestige. When asked how they evaluated quality and prestige, student and their families reported that they looked primarily at an institution's rankings (usually from US News & World Report, but also from Petersons or other guides), and its reputation among their peers, families, friends, and teachers. This supported previous research on student migrants, which found that out-migrants are likely to attend colleges they have heard about through word of mouth from friends, relatives and classmates (Hsing & Mixon, 1996).

Other indicators of quality for students and their families included institutional selectivity, diversity of majors, small class size, and a higher-classed sports division. The lack of a partying reputation was also important. For other indicators of prestige in addition to rankings and reputation, students and their families repeatedly named selectivity, class size and sports divisions. Some students named indicators relative to their majors, such as the quality of laboratories; or opportunities for internships. Many were concerned with the quality of teaching and attention they would receive from their prospective professors.

Illinois high school graduates clearly looked for two criteria when applying to college: prestige or quality, and lifestyle.

The majority of students and parents named rankings and reputation among the indicators they used to evaluate the quality of prospective colleges.



How students and their families evaluate lifestyle choices. While many students named a desire for a large university experience, a sizable number also expressed preference for smaller schools. Regardless of school size, nearly all participants agreed on the importance of a college town feel, or if located in a large city, then a discernable campus appeal. Residential life and extracurricular opportunities were important to many students, as well as a diverse student body.

Most students interviewed did not really want to go far away from home. They conceptualized distance as being far enough away to be independent, yet not too far for affordable regular visits home. The typical comfort zone was approximately two hours from their home town.

Students idealized their college experience as an opportunity to get away and discover who they are. They sweepingly generalized Illinois colleges and universities as either being “corn and bean field colleges in the middle of nowhere,” or urban commuter colleges with little campus life.

The importance of student-university relationships. In evaluating quality and personal fit, student-university relationships were mentioned repeatedly as having an important impact. Students and their families spoke of attentiveness and personal calls from admissions staff and faculty. Their narratives indicated a desire to feel important, wanted by a college or university.

In contrast, poor customer service from admissions or financial aid staff, or from an academic department were immediate turn-offs that prompted students to apply elsewhere.

Participants Speak about the College Application Process and Criteria

“I wanted to go somewhere where my diploma will matter once I graduate.”

- Chicago High School Student

“First I looked at all the schools that offered my academic major. Then I took off all the ones that didn’t have good enough academics. Then my parents looked at the list and named all the schools I wasn’t allowed to apply to because they weren’t strong enough schools.”

- Chicago Suburban High School Student

“I wanted to go to a Big 10 university and go to a school that has a good reputation and was well-known throughout the U.S.”

- Out-of-State College Student, Chicago HS Graduate

“Sometimes I have to say to a parent that it’s not the logo you are going to put on your car [that matters, nor]... while you are at a dinner party that you can say your kid went to this school or that school.”

- Chicago Guidance Counselor

“I kind of looked for diversity. I wanted to go to a big university where there would be a variety of people.”

- Downstate High School Student

“I wanted to get away from here but not too far away that I can’t come home if I wanted to.”

- Downstate High School Student

“It had to be either a college-like campus, like a college town, or a big city. I didn’t want to go somewhere in the middle of nowhere.”

- Out-of-State College Student, Chicago HS Graduate

Some students built upon the legacies of older siblings enrolled at in- or out- of-state institutions. They and their parents were comfortable with the organizational context already, and knowledgeable about the administration. For others, early college encounters such as summer enrichment programs and camps helped forge strong relationships. Several, in absence of these experiences, relied on real or virtual tours.

Important to note: down-state residents indicated that they felt stronger allegiance to St. Louis and Missouri than to Chicago or Illinois.

Findings: What Matters to Illinois Students When Enrolling in College

Ultimately, when selecting from admissions offers, the choice process focused on money. Students and their families wanted the best possible school with which they felt comfortable, for the best possible price. Only 8% of all parents, high school and college students interviewed said that money was not a concern when enrolling in college. These individuals either had ample financial means (significant family wealth or robust college-designated savings);

or they were high-ability, high financial need students who were confident of getting adequate scholarships and grants. The individuals most worried about their ability to pay for college were middle-class students with average ability, most of who did not qualify for grants or scholarships.

When discussing aid, what was strikingly apparent was that students did not consider student loans a form of financial aid. Most were concerned about accumulating loan debt that either they or their parents would have to repay. Therefore, when making enrollment decisions they sought grants and scholarships to reduce total tuition costs.

More than half (58%) of out-migrating students cited institutional aid awards (merit or need-based) as part of their enrollment decision. Only about a fifth (19%) of students remaining in-state reported receiving institutional aid awards. Of these, 11% received tuition remission resulting from a parent employed at the college or university, and 8% received other forms of institutional aid.

The financial aid strategies described by students and their families were vastly different for in- and out-of-state institutions. Out-of-state colleges and universities awarded higher financial aid. They also used savvy merit aid awards to woo students, and make them feel very academically talented. Several participants reported that public institutions in bordering states offer tuition reciprocity if their ACT composite scores and high school grade point averages were within certain ranges, making prices competitive with Illinois public institutions. This supported the previous research of Tornatzky et al. (1998), who observed that lower out-of-state tuition serves as an inducement to student migration.

In contrast students reported a general lack of merit aid in Illinois institutions, and inadequate financial aid. Although students migrating out of state for college reported receiving institutional aid awards from in-state colleges and universities, the amount was small compared to their out-of-state offers. The students' reports indicated that Illinois colleges and universities may heavily gap students in their financial aid awards, offering aid packages that combined with the student's expected family contribution fail to meet the costs of attendance. Their cautiousness concerning accepting student loans echoed the research of St. John et al. (2000), who determined that when students receive aid that only partially meets their needs (resulting in an aid gap), the psychological stress of future loan repayments has a negative influence on college-attendance decisions.

Important to note: for high-ability students, in-state scholarship awards vastly lower than out-of-state awards were perceived as insulting.

Significantly, our findings differed from previous literature on one important point: although prior research found that high family income is a positive predictor of a student's likelihood to migrate out of state

(Fenske, Scott & Carmody, 1974), we found that high, middle and lower income students were all likely to move out of state. In fact, the low-income, high-achieving students interviewed at the

Participants Speak about Student-University Relationships

"It all depended on the coaches and whether they were interested in you or not. Some of them, I would contact them, email them three or four times and they wouldn't get back to me at all. Are they just too busy, or what?"

- *Downstate High School Student*

"I think it felt like ... everybody is on their own in Urbana compared to Iowa State where it seemed like everybody was like family."

- *Out-of-State College Student, Chicago HS Graduate*

"Personally, I think that a college should show that they have anybody [sic] who actually cares. The people at Southern Methodist University were much more easily approached. They actually had faculty members call me up and talk about their programs ... versus other colleges didn't make an attempt to contact me and when I did contact them they didn't contact me back whatsoever."

- *Out-of-State College Student, Chicago HS Graduate*

"Size was a consideration. I like to interact with teachers and developing relationships with teachers."

- *Out-of-State College Student, Chicago Suburban HS Graduate*

Chicago magnet school were perhaps the most savvy regarding college options and opportunities and were willing to find the right fit of an institution that met their criteria – whether that was in or out of state.

Finally, when we asked students who migrated out of state for college what might have persuaded them to choose an Illinois institution instead, almost all said that they could be influenced by better financial aid offers.

Student Perceptions of Illinois Colleges and Universities

Enrolling in college is as much of an emotional decision as it is a rational one. Objective facts aside, students and their families evidenced several strong negative impressions of Illinois colleges and universities.

Perceptions of limited choices. Students spoke of having limited choices for their college education in terms of institutional prestige, geographic distribution, institutional capacity and affordability.

When asked which schools they had considered or were considering, participants mentioned the same three institutions repeatedly as their only choices for the best schools in Illinois, in terms of quality and prestige: University of Illinois at Urbana Champaign, Northwestern University, and Knox College. Several voiced the belief that many Illinois' public and private institutions lacked distinguished programs. Yet their perceptions should not be interpreted as based on a complete body of knowledge. Few participants actually knew about the wide range of Illinois colleges and universities. They either had not received information about most schools, or what they had received was unremarkable and did not stand out in their remembrance.

Of note, guidance counselors spoke of the state also lacking in less selective university

options for their students, saying that the increase in selectivity among Illinois' public universities was not high enough to attract students looking for prestige, yet was high enough to reduce the number of options available for academically less talented students.

Along with perceived limits on prestigious schools, participants spoke of having limited geographic choices for going to college in Illinois. The majority of postsecondary institutions are concentrated in the Chicago area. Yet many graduating high school seniors from the Chicago area felt that they wanted to get away from the city to flex and explore their independence; whereas downstate students feel a greater affinity for St. Louis and head southward, not northward, for college.

Participants Speak about Enrollment Decisions I

"The University of Chicago won't give full scholarships. Iowa state comes up with more money than they do. I had a student who is a valedictorian, a kid with an EFC [earned family contribution] of zero and \$23,000 on her parent's 1040 form, and they offered her a loan of \$20,000. I said to the admissions people, 'you want minority students but you are not willing to step up to the plate. This young man is Hispanic and he's a national merit scholar and you are going to lose him...'"

- Chicago Guidance Counselor

"If I get into this place it doesn't matter, if I don't have enough money to go there."

- Chicago High School Student

"I read a lot of articles on financial aid and sometimes it is actually more expensive to go to a state school than to go to a private school, because private schools – if you are poor – will pay for your education. If I go to Swarthmore, even though the price is higher, it will cost me less money than going to UIUC because they didn't give me much financial aid."

- Chicago High School Student

Institutions located in other areas were stigmatized by the surrounding corn and bean fields, and judged as being boring places.

Perceptions of poor capacity, value and service. Students also reported their perceptions that Illinois colleges and universities were over-crowded and mass producing. A few spoke of programs not having enough seats for entering students, or not having enough seats for currently enrolled students.

Combined with this, study sample participants had negative experiences with enrollment. Faculty and staff were not as responsive to their questions as they would have liked. Students said they were offered more grants and scholarships out-of-state than in-state. Their impression of the college admissions and financial aid counselors' attitudes was, 'take it or leave it. So, they left it.

Other Salient Findings Applicable towards Retention Strategies

Students and their families found the process of selecting, applying and enrolling in college overwhelming. They would have liked more coordination and guidance from their counselors and more information about financial aid. Those who felt the most comfortable with the process either had older siblings in college or had teachers who assigned class projects related to evaluating college opportunities. Parents and peer education were primary supports. Guidance counselor support varied significantly by region, and even within schools.

Students with either first-generation immigrant or high poverty status were the least supported during the college choice process. Immigrant parents, although they wanted the best possible college education for their children, lacked an understanding of the criteria that define a superior education and the strategies associated with going to college. For high poverty students, either their parents were literally or figuratively absent from their lives, or they shared the same deficit of knowledge and experience concerning U.S. postsecondary education. Our observations agreed with prior research demonstrating that although their parents may hold a high value on

Participants Speak about Enrollment Decisions II

"... we are in the bracket that we don't get any [financial] help, that kind of sucks. Anything would be helpful, but they don't want to give us anything. We are not rich, but I don't know, the poor people get so much more [grants] and the rich people can afford it. When you fall in the middle, you just fall through the cracks."

-Downstate High School Student

"In Illinois you have 12 state schools. The rest are private so they are more expensive. So [if a student] can go to Missouri and pay out of state tuition, maybe get tuition reciprocity, if her scores are high enough, and it is going to be less than going to private school, and [will] have a bigger name diploma."

- Downstate Guidance Counselor

"In the end, it got down to almost like buying a car. Dollars, in my perspective, were a really important thing. At U of I, the folks in the business office just acted like they were selling cars. They didn't offer us anything for [our daughter], not much of anything, and we got to the point where it was like, 'is this the best you can do?' and their attitude was that if our daughter wasn't going to enroll and pay it, then someone else would. They could take the next one in line."

- Downstate Parent

"[A student] was looking at some of the directional schools [state universities named for their geographic region], and she had chosen Western Illinois, but her mom didn't want her to go there, because her mom wanted her to go to one of the schools that started with 'University of Illinois.'"

- Chicago Suburban Guidance Counselor

"Money talks. If Illinois had some incentive in a monetary way to keep students in state, I think that would be huge. And scholarships, for kids to say that they got a scholarship, no matter what, it make them think that they have accomplished this in some way. Money attracts students. A lot of out-of-state campuses that want to increase their out-of-state numbers offer scholarships to out-of-state students."

- Chicago Suburban Guidance Counselor

the importance of education, first-generation immigrant youth receive minimal parental support when choosing a college, because their parents simply lack the experience and understanding of U.S. postsecondary education and the preparation, admission and financial processes involved (Ceja, 2006). Often siblings, peers and family friends provide the needed support.

While several white upper-class participants spoke of the cache of going east for college, viewing it as a status symbol, most immigrant families valued staying together. This has implications for college student recruitment and in-state retention, as population projections for Illinois forecast a decline in white residents and a rise in ethnic minorities and immigrants.

In general, mailings were not as an important source of college information for students, whereas the internet and materials available in the schools were. More important than printed and on-line information, personal contact and outreach from individual colleges, their admissions offices, their financial aid offices, faculty and coaches were impressive and often tipped the balance in enrollment decisions.

Discussion: Comparing Perceptions to Objective Realities

Participants Speak about Perceptions of Illinois Colleges & Universities

"I know a lot of people that didn't want to go to school in Illinois. A lot of colleges are like a cornfield college. It's either that or Chicago and if you go to Chicago then you are in a huge city and the schools are three times the amount of tuition. So it's kind of like price or surroundings. We don't have anything in between."

- Downstate High School Student

"It seems to me that if you look at [University of] Illinois it is very competitive to get into, and that kinds of turns [students] away. If you look at some of the schools that are way up in Chicago, some [students] don't want to go there. Some of those other [out of state schools] give in-state tuition, are smaller schools, are in the southern part of the region. They [the students] feel comfortable. It's far enough away where they can go, but close enough that they can come back."

- Downstate Guidance Counselor

"There isn't as much opportunity in southern Illinois as there is in northern Illinois. [Not as many colleges and universities.]"

- Downstate Guidance Counselor

"One of my oldest daughter's classmates went to an Illinois university ... and we saw her on the street and asked how it was going and she said, "It's easy." Well, that answer compared to my daughter's [experience] at Truman wasn't even close. If I'm paying thousands and thousands of dollars for my kid to go to college, I don't want her to tell me that it's easy. ...at Truman, we think we get a better bang for the buck."

- Downstate Parent

"[UIS offered my daughter] a full ride scholarship for four years, [yet] ... she was still wanting to take out a loan and go to Mizzou, and part of that is because ... the [UIS] campus is – she didn't say the word 'commercial' - it wasn't a close, intimate type of feeling. It sort of felt institutional."

- Downstate Parent

It is important to acknowledge that our findings for the qualitative phase of this study reports student, parent and guidance counselor perceptions and preferences concerning postsecondary education. It would be dangerous to draw implications and recommendations without situating these findings against objective realities for Illinois postsecondary education. Therefore, we include this section on salient information for Illinois colleges and universities to compare the extent to which realities match perceptions.

Institutional Characteristics of Illinois Colleges & Universities

Illinois has 184 colleges and universities (IBHE, n.d.). The vast majority (69%) of all Illinois colleges and universities are located in Chicago and its immediate suburbs (IBHE, n.d.).

Availability of traditional four-year colleges or universities. The majority (73%) of Illinois postsecondary institutions are either two-year colleges (35%) or specialized colleges and universities (38%) awarding degrees in fields such as art, music, business, theology, or

allied health and medicine. Only a quarter (27%) are traditional colleges and universities offering four-year undergraduate programs (Carnegie Foundation, n.d.). Within those 51 traditional colleges and universities, two-fifths are baccalaureate colleges, two-fifths are master's universities, and one-fifth are doctoral or research universities. Only a quarter (24%) of these are public.

Institutional quality. Approximately 40% of Illinois' baccalaureate colleges are nationally ranked, and 90% of its doctoral universities are nationally ranked in U.S. News & World Report (2006). Illinois is home to:

- 6 of the top 104 liberal arts colleges in the country;
- 4 of 124 top national universities in the country;
- 2 colleges in the third and fourth tiers of liberal arts colleges in the country; and
- 6 universities in the third and fourth tiers of national universities in the country.

However, looking at the proportion of quality institutions within the Midwest region, which attracts Illinois' student migrants, Illinois is home to only 7 of the top 52 comprehensive colleges in the Midwest (13%); and only 12 of the top 70 Master's universities (17%).

Characteristics of master's and doctoral institutions. As evidenced in other studies and through our regression analysis and qualitative interviewing, the biggest proportion of Illinois student migrants enroll in master's or doctoral universities. Therefore, we highlight comparative characteristics of Illinois' 31 public and private master's and doctoral universities.

Illinois' universities comprise only a slice (6%) of its postsecondary education institutions. (Figure 11). The majority of these schools are located in large or midsize cities and their suburbs (Figure 12). Most are selective (78%). Only a small proportion (12%) have more or highly selective admissions. Likewise, only a small proportion (10%) have less selective admissions (Figure 13).

**Participants Speak about
Perceptions of Illinois Colleges & Universities**

"There are only a few schools in Illinois that have the reputation of being good for undergraduate education."

- Chicago Suburban Parent

"I don't really know much about Illinois colleges except for U of I."

- Chicago Suburban Parent

"I think the smart ones ... look to the University of Illinois at Urbana-Champaign as the best school in the state. It's kind of a crap shoot in terms of getting in, at least from what I've heard. Even if you have really good test grade scores, it's kind of random ... because of the number of applicants they have."

- Chicago Suburban Parent

"I don't think that the other [Illinois] state universities do enough to promote and market themselves and really establish what they have to offer in the area up here, the north suburban area. And I would guess that is the case throughout some of the fancier public schools on the north shore and in the west suburbs or the affluent south suburbs. When [University of] Illinois advances in playing in the NCAA tournament, then everybody wears orange. Everybody comes out of the woodwork. But you really don't hear a whole lot of [other] Illinois stuff with the same kind of drum-beater intensity throughout the year. ... I think it is something that the profile and particular strengths of [Illinois institutions] need to be trumpeted more."

- Chicago Suburban Parent

"[The university] didn't offer him anything, just \$1000. They didn't even say they'd work with him. Not a word at all! He's a valedictorian! If you are trying to lure students, that's like getting a slap in the face."

- Chicago Parent

"There's not enough room in state. You figure out that 130,000 kids sit for the Prairie State exam, the ACT for juniors. There aren't 130,000 spots in the state of Illinois even if you add up all the private schools. So, where are you going to go? We do not have enough capacity to educate all of our students in Illinois."

- Chicago Guidance Counselor

College Affordability

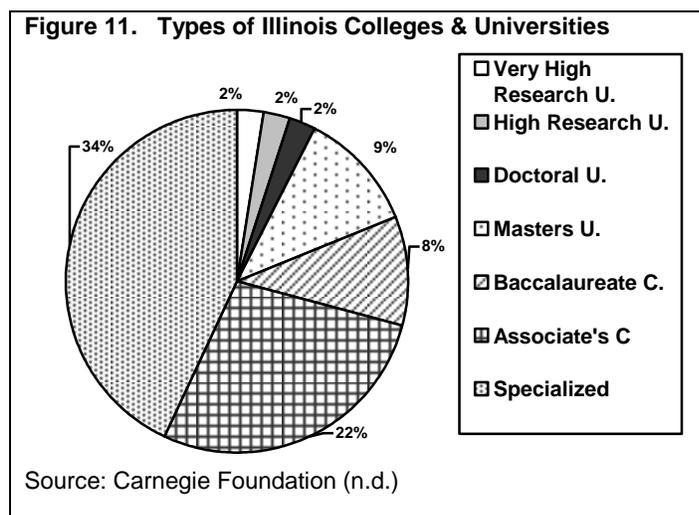
The National Center for Public Policy & Higher Education (2006) issued a failing grade for college affordability in Illinois as part of its biennial state-by-state postsecondary education report card series. Among NCPPHE's observations in their analysis of Illinois:



- On a positive note, Illinois' investments in need-based financial aid have been relatively high since 1992, compared to other states.
- Yet NCPPHE reports that even after deducting financial aid, the net college costs for low- and middle-income families to send their child to a public four-year college or university demand over half (52%) of their annual family income. Even at community colleges the net college costs are high, demanding nearly two-fifths (36%) of annual family income.
- Undergraduate students borrowed an average of \$3,770 last year (2005) to pay for college.

NCPPHE concluded that Illinois does not offer low-priced college opportunities. Furthermore, the affordability problem affects various income levels differently. For example, the 40% of Illinois residents who have the lowest incomes (lower and lower-middle) would need to pay a staggering 105% of their annual family income in college costs, after deducting their financial aid awards. Whereas the 20% of Illinois residents in the upper-middle income bracket would pay 30% of their annual family income, and the 20% of residents in the highest income bracket would pay 19% of their family income. For those 20% of families who are middle income, their share of net college costs would be 45%. Families are expected to make up this difference with their current income, savings, or student loans.

Although research has generally found that both loans and grants have positive effects on enrollment (Dynarski, 2002a, Heller, 1997), increasingly students and families are concerned about the stress of tuition loan burdens. The receipt of grants versus loans has different effects on students from different income groups although analysts still do not fully understand the direction of and underlying influences on those differences (Dynarski, 2002a). Unfortunately, borrowing money to pay for college can create losing situations. For example, while federal data show that larger



percentages of community college students must borrow to finance their college education, research on the effects of financial aid on college persistence has shown that loans have a negative affect on degree attainment among community college students (Dowd & Coury, 2006). Given correlations between degree attainment and salary earnings, those who borrow for college and fail to complete degrees will most likely have a more difficult time in repaying them.

Illinois is not alone. Concerns about college affordability echo across

the nation. Stanley Ikenberry, a leading figure in higher education nationally and within Illinois has observed that across the nation, “tuition at public institutions is higher. Cuts in state support to public universities have forced tuition increases, as campuses have attempted to replace lost state revenue. Unfortunately, increases in tuition and fees outpaced inflation, growth in personal income, and virtually every available benchmark. .. [Increases] to need-based financial aid ... have been inadequate. ..[and] not immune to cuts” (2005, p. 1-2). NCPHE’s most recent biennial report card series (2006) shows that only one state improved on more than half the indicators for affordability. While 32 states improved on some of the indicators, 17 – including Illinois – declined on most or all of the indicators (NCPHE, 2006).

State Postsecondary Education Policies

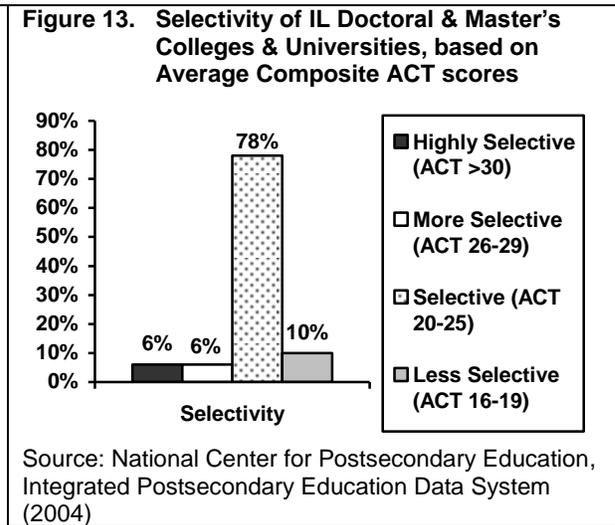
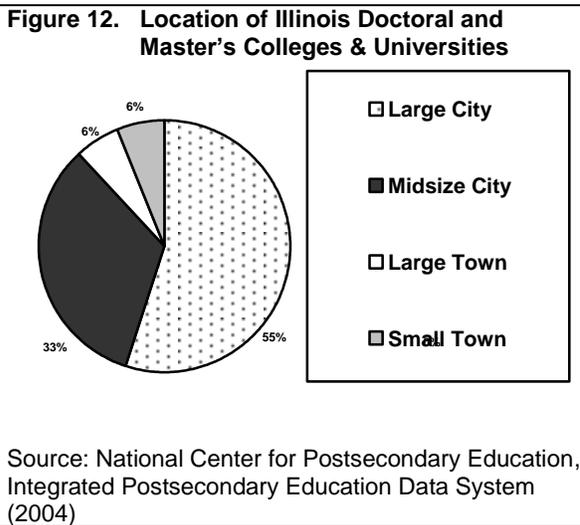
Appropriations. In 1980-81, nearly half the revenue of America’s public colleges and universities came from state and local appropriations. Twenty years later, that proportion of support dropped to a third. (IHEP, 2005/NCES, 2004)

Illinois invests \$229 dollars in higher education for each of its state citizens, ranking 26th in the nation for appropriations per capita (Grapevine, 2006b). Yet, Illinois higher education has also faced shrinking public support. Over the last five years (2001 – 2006) appropriations for Illinois public colleges and universities have declined by -3.8%, ranking the state 39th in the nation for fiscal support to public higher education. In the past year (2005-2006), the state’s rank slipped further to 49th in the nation, as appropriations to higher education declined by -2.6% (Grapevine, 2006a).

Appropriations include support not only for individual colleges and universities, but also for adult education, the board of higher education, and certain scholarships and grants programs. Isolating appropriations for Illinois public universities, support rose last year, but only slightly (0.3%) (IBHE, 2005).

Guaranteed tuition. The state’s public colleges and universities offer a tuition guarantee program, in which each year’s class of incoming students are guaranteed a set tuition rate for a designated number of years. Tuition rates can only be raised between each year’s classes, not within.

Financial aid. As NPHHE noted (2006), Illinois’ investments in need-based financial aid have been relatively high since 1992, compared to other states. Yet recent policy decisions have begun to undermine the state’s historic performance in providing a high level of need-based financial



aid for students (NCPPE, 2004). State funding for the Monetary Award Program increased in the fiscal 2006 budget, but only by 2%, to which the federal government contributed another 1.5% (IBHE 2005). At the same time, the budget eliminates funding for the Merit Recognition Scholarship, which was \$5.4 million on fiscal year 2005. The MRS program may have been eliminated because research had shown that its \$1000 awards were an inadequate amount to retain the top 10% of students in state, and that it would take at least a \$6,000 scholarship to entice a student to remain in-state (ISAC, 2005).

Realities of Illinois Higher Education

Our review of the objective realities of Illinois higher education showed both agreement and disagreement with the perceptions reported by study participants. Clearly, students and their families' perceptions that Illinois colleges are becoming unaffordable is supported by trend data, policy analysis (NCPPE, 2006), and internal analysis by the Illinois Board of Higher Education and the Illinois Student Assistance Commission (IBHE, 2003a). This, coupled with the presence of comparable regional public and private institutions that either have lower prices or are willing to reduce net costs through grants, scholarships and discounts, makes Illinois higher education appear a poorer value.

With many nationally ranked institutions, we did not find objective evidence to support perceptions that Illinois colleges and universities lack quality. What they may lack is prestige and adequate marketing. However, we found that Illinois' proportion of regionally ranked institutions is lower, and the state may compete with higher numbers of well-regarded institutions near its borders. Study participants simply may not be aware of all the education options that the state has to offer.

Concerning participants' perceptions that they lack choices, an objective answer may be elusive and depends upon the angle of analysis. Illinois has many postsecondary education institutions, but only a quarter of these offer traditional four-year undergraduate programs. Illinois has many selective institutions, but few highly selective and few lower selective institutions. In terms of campus culture and organizational fit, the present University of Illinois system simply may be inadequate to meet the demand of Illinois residents who hail from a strong Big 10 Culture. Additionally, the state lacks public institutions with strong liberal arts undergraduate programs, the equivalent of Public Ivy's. Finally, participants factor affordability into their concept of choice. The lack of affordable college options in Illinois may equate to the perceived lack of choice.

In terms of selectivity, with the majority of Illinois universities concentrated in the "selective" range, those who seek higher selectivity (most highly talented) and those that need less selectivity (less academically talented), may indeed lack in-state choices.



Finally, in terms of geographic location, with so many colleges and universities concentrated in the Chicago area those who seek to leave Chicago may lack choices, as well as those who reside downstate and would like to attend college in Illinois, but not necessarily live in Chicago.

Further research is needed to substantiate participants' perceptions concerning overall institutional capacity and capacity by academic program.

Part 3: Recommendations for Policy & Practice

This final section of our report presents recommendations for addressing Illinois' college student migration imbalance.

Highlights of Findings

The most obvious conclusions that can be drawn from the descriptive, regression, and qualitative analyses are:

- The highest concentrations of Illinois student migrants only go as far as adjacent states, accounting for nearly half of all student migrants.
- Nearly half of Illinois student migrants are concentrated within 33 institutions.
- Illinois student migrants typically attend large, nationally-ranked public research universities with a Big 10 culture.
- Study participants looked for quality and prestige when deciding where to apply to college, and then looked for institutional fit.
- When deciding where to enroll, the decision for students who migrate out-of-state centers on getting the lowest overall cost (tuition, room and board; less grants and scholarships).
- Illinois student migrants typically attend institutions that award high institutional grants and scholarships.

Furthermore:

- Study participants did not demonstrate a high degree of knowledge about the range of colleges and universities in the state, their offerings or their quality.
- Study participants equated quality with prestige.
- Study participants located in Chicago and the Chicago suburbs stereotyped colleges and universities that are located away from urban centers as being boring, and an ill personal fit.

Finally:

- One of the clearest criteria that might have influenced more migrating Illinois students to attend college in-state is better affordability, higher financial aid, or both.

Comparing our findings against various college choice models, we draw an understanding of why Illinois students attend out-of-state colleges. As with the status attainment model, students choose what they perceive as the best college education that they may reach, given their academic abilities. Their perceptions on quality are firmly intertwined with national rankings, subjective reputations and prestige. As with the psychological model, students choose institutions where they perceive the student body is similar to them in a variety of characteristics, including values, life goals, and social groups. Large numbers of students attend types of institutions that are limited or not

The Realities of Illinois Higher Education

- Only a quarter (27%) of Illinois postsecondary education is traditional four-year undergraduate programs.
- Heavily weighted in selective institutions, few highly selective and few low selective.
- Chicago-dominated geographic distribution.
- Lack of college affordability.
- Lack of public awareness of quality.

available in Illinois – Big 10 research universities with prominent athletic programs (Illinois has only one), selective liberal arts colleges, and Historically Black Colleges and Universities (HBCUs). These are emotional decisions. Finally, from an economic perspective, student migrants act rationally, deciding the benefits of attending an out-of-state college are higher than the costs. In most instances, the out-of-state alternatives simply are a better value. In other instances, students perceive that they get greater time and attention from the competing institution. Or, in the case of status-seeking students, exchanging economic capital for cultural capital, many college student migrants from Illinois may be trading time (distance) and resources (out-of-state tuition and travel) for perceived future economic benefits.

Examining the problem of college student migration in the context of college choice theories suggests that rationality is subjective, and thus individual responses to institutional and state policies will also be subjective for college student migrants. Nevertheless, the projected consequences of Illinois' negative student migration are clear. Addressing the problem of student migration is an economic imperative. Based on our understanding of what Illinois students want and need, we can develop clear recommendations for policy and practice that may influence greater proportions of our young people to remain in state for college.

Committing to Keep Illinois Students In-State: Recommendations for Policy & Practice

Clearly, Illinois' college student migration imbalance threatens the state with future adverse economic and non-economic impact. The strategies for improving the imbalance are simple: keep more Illinois students in-state; attract more new students to Illinois; or a combination of the two. We believe the most immediate need is to retain our best and brightest students in state for college. Achieving this goal will require the combined efforts of state agencies, the legislature, colleges and universities, and high schools. Therefore, we recommend specific strategies for each.

Recommendations for the Illinois Board of Higher Education

1. Review capacity. Conduct or commission a system-wide review of Illinois post-secondary education, looking at college locations, range of institutional types, enrollment capacity, and specific program offerings, quality and capacity. The review should consider:

- Ensuring Illinois colleges and universities have enough enrollment capacity to meet the state's future postsecondary education needs.
- Ensuring Illinois has enough capacity in programs critical to the state's future economic well-being.
- Targeting state resources to improve program quality.
- Targeting state resources to elaborate and enhance the distinctiveness among institutional types and expand capacity beyond the over-stretched University of Illinois at Urbana-Champaign. Enhancements should be targeted for those campuses that a) are other popular choices for students, b) are located in or near metropolitan areas, c) have diverse student bodies, and d) have the capacity to offer prestigious programs. This will create incentives for the other state universities to pursue more separate and distinct missions and programs, and ultimately provide additional prestigious options in public higher education.

2. Host a symposium. IBHE, as the state's coordinating body of postsecondary education, should sponsor a symposium on the topic of student migration, inviting public and private university representatives as well as high school guidance counselors and college students who attend out of

state institutions to attend with the goal of developing institutional strategies for retaining more students in state. Symposium topics might include developing strategies to:

- Build better college town atmospheres for institutions located in rural areas and small-towns;
- Improve residential life in urban institutions;
- Improve institutional marketing and recruitment strategies;
- Increase campus diversity; and
- Refine financial aid strategies for recruiting high achieving students.

The symposium should conclude with each institution developing specific strategies they can undertake, as well as collective recommendations for how the state can help support institutional efforts.

3. Initiate a current and comprehensive tuition analysis. Public perceptions of the affordability of Illinois higher education are a significant influence in student migration, as is the level of institutional aid awarded at out-of-state colleges and universities. The National Center for Public Policy and Higher Education (2006) reviewed the affordability of Illinois higher education and rated it poorly. IBHE should conduct or commission a comprehensive analysis of tuition among Illinois public colleges and universities and the state's top enrolling private colleges and universities, comparing them to the top out-of-state student migration destinations named in this report (Appendix B). The analysis should include tuition price and total college costs, and also types of aid awarded and average award sizes. It should include net tuition comparisons and college affordability according to income levels (as in the model developed by NCPPHE, 2006). While there have been studies of Illinois college affordability and tuition, there are no current comprehensive studies that compare Illinois to top competing schools that include aid packages offered by our competitors.

4. Initiate a good-to-great funding program. Our study encountered student, parent and guidance counselor perceptions that the state hosts only a few truly distinctive programs, while the majority of institutions duplicate each other's programs and are good at best. We recommend that IBHE initiate and recommend for funding a program for Illinois' public and private colleges and universities that provides incentives for campuses to create or one or more programs of excellence, making already outstanding programs among the best in the nation. The state may further link a category of such funding to critical program areas needed for the state's economy, but the purpose should be to establish a range and variety of excellent nationally-ranked programs dispersed among Illinois colleges and universities.

5. Launch a public marketing campaign for Illinois colleges and universities. Our study found that the public perceived only a few Illinois universities as high quality, and that perceptions of quality were inseparable intertwined with prestige. The perceptions of limited quality were not substantiated by our cross comparison with the U.S. News and World Report rankings for Illinois colleges and universities. Here, we perceive a communication gap in which the public lacks awareness of the range of education offerings across the state. We recommend that the state sponsor a mass marketing campaign to increase public awareness of range and quality of Illinois colleges and universities.

Recommendations for the Governor and Legislature

1. Improve affordability. Our study found that after applying to a list of potential colleges, students make their final enrollment decision based on the best projected tuition cost (price less financial aid). Tuition costs have risen in Illinois as state appropriations for higher education have declined. Public colleges and universities need higher state budget appropriations to help keep tuition prices low and to preserve and enhance quality.

2. Increase financial aid funding. One of the highest correlates to student out-migration was the amount of institutional aid offered. The significance and influence of financial aid offers were expanded in the qualitative part of our study. Colleges and universities need more financial aid funding to further improve affordability for those less able to pay, and to provide leverage for keeping these high achieving students in state. The ISAC study (2005) for example, found that the \$1,000 award offered through the Merit Recognition Scholarship Program was not enough to keep students in state, and that \$6,000 incentive would be required to keep students in state. Rather than increase funding to the program, it was disbanded. Institutions might implement their own sponsored tuition discounting for students who are seriously considering enrolling out of state (e.g. applied, were accepted, and paid a deposit to an out-of-state college).

3. Increase capacity. The state may consider creating a restricted fund for the purposes of increasing institutional capacity, based on the results of the recommended IBHE study on institutional capacity. Our study found that the largest importers of Illinois students are Big-10 type campuses, and that many students leave state when their top-choice, the University of Illinois at Urbana Champaign, is either unaffordable or unreachable. Based on our study, a promising strategy for increasing enrollment capacity would be to invest in expanding undergraduate instructional capacity at public universities that are geographically dispersed throughout the state and either close to or within metropolitan regions. Funds restricted and designated for this purpose could be used to: hire additional faculty, maintain quality class sizes, upgrade or expand modern classrooms and laboratories, and create partnerships for privatized housing options (reducing the need to build and maintain very expensive dormitories).

4. Fund a good-to-great funding program. We recommend that IBHE initiate a ‘good-to-great funding program, but it would require the partnership and support of the Governor and Legislature in order to fund the program.

Recommendations for Colleges and Universities

1. Develop institutional strategies. Individual colleges and universities should attend the IBHE symposium on student migration, assess their institution against the known influences on student migration and retention, and develop institutional strategies to improve in the areas most likely to attract more Illinois students.

2. Cultivate relationships with prospective students. The students and families in our study sought greater personal relationships with prospective institutions. Deluged with direct mail, advertisements and internet resources, students were impressed by contact from admissions officers, financial aid officers, coaches and university faculty. Institutions should invest time and fiscal resources into creating greater personalized recruitment for prospective students.

3. Partner with high school guidance counselors. High school guidance counselors can be an important avenue for building awareness about Illinois colleges and universities and

encouraging students to consider in-state options for their postsecondary education. College and university admissions officers should build stronger partnerships with high school guidance counselors throughout the state.

Recommendations for High School Guidance Counselors

1. Get to Know Illinois Colleges and Universities. High school guidance counselors should partner with colleges and universities to build awareness of in-state postsecondary options.

2. Promote Illinois Colleges and Universities. High schools should promote in-state postsecondary options through strategies such as developing designated resource tables or areas for Illinois colleges and universities, requiring class projects to research and compare Illinois colleges and universities, or hosting Illinois college awareness-fairs with college admissions representatives.

Recommendations for Attracting New Students to Illinois

Other policy analysts have suggested regional tuition reciprocity agreements as a solution to migration imbalances (WICHE, 2005). While we believe that the primary effort should be on retaining Illinois students in state, increasing the in-migration of talented students is another strategy that may help reduce the overall negative net migration, increase the prestige of Illinois colleges and universities, and increase the attractiveness of state institutions by offering greater diversity and talent in the student body.

We do not advocate state-wide tuition reciprocity agreements at the present time. State-wide reciprocity agreements may encourage more students to leave Illinois, without guaranteeing that more students will be encouraged to come here from other states.

Our study found that a few specific institutions in other states offer Illinois students tuition reciprocity according to their achievement levels. We recommend a similar strategy, eliminating or reducing surcharges on out-of-state students at the highest achievement levels. This might be enacted for all public colleges and universities, or it might be phased in by offering it at selected institutions, such as those in border regions. The state would potentially generate economic gains from the proportion of those immigrating students who remain in Illinois to live and work. However, recognizing that out-of-state tuition differentials provide a needed source of revenue to under-funded institutions, this strategy cannot be enacted without combining it with overall increased appropriations to public colleges and universities.

Conclusion

“[H]igher education provides the foundation for Illinois’s future by enhancing the social, economic, and civic well-being of the state and its residents” (IBHE, 1999c). The Illinois Board of Higher Education, through the *Illinois Commitment*, demonstrates its intention to meet the needs of all Illinois residents and provide quality, relevant postsecondary education options. This planning document focuses on six policy areas: economic growth, P-20 partnerships, affordability, access and diversity, high quality, and accountability and productivity.

Our study strongly builds upon and supports the *Illinois Commitment* by examining why the state is a lead exporter of young college entrants and what we can do to attract, enroll and retain more of our graduating high school seniors at Illinois colleges and universities.

We found that many students and their families are unaware of the educational opportunities within Illinois and perceive Illinois higher education as lacking distinctive quality.

We further found that Illinois is large enough in geographic area and different enough in demographic composition to have generated different reasons for student migration. Our comprehensive investigation documents empirically the pattern of migration to public research institutions within driving distance of the Chicago metropolitan areas, as well as the pattern of migration of downstate residents to state colleges in the southern and eastern border states of Indiana, Kentucky and Missouri.

Moreover, families perceive Illinois public higher education as unaffordable, and are attracted to better grants and scholarships offered by public and private institutions in other states. In that regard, the state has not met its commitment for the more than 20,000 students who need to leave state annually in order to find high quality, affordable education.

We believe these problems can be addressed, but not without state commitment, resources and time. The resources will be significant and the timeline may be long, but it's an investment worth making. The future of the state depends upon building and retaining an educated citizenry to sustain the economy and provide leadership for its government and institutions.

It's an investment we must make together. State agencies, high schools and individual colleges and universities must partner to find ways to retain more students in state, attract more students from out of state, and increase the providing overall proportions of Illinois students going to college. Above all, the legislature must increase its investment in the future of the state, by the resources to ensure the quality, competitiveness, capacity and affordability of Illinois higher education.



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Appendix A

In our analysis of Illinois student migration trends, the dependent variable was the number of first-time, first-year students an institution enrolls from Illinois. For independent variables, we included 18 institutional characteristics from the National Center for Education Statistic's Integrated Postsecondary Education Data System, including:

- Carnegie Classification
- Region
- Urbanization
- Historically Black Colleges & Universities
- Religious Affiliation
- Yield-1
- Yield-2
- Percent of Undergraduates – Female
- Enrollment of Undergraduates
- Percent of Full-time Faculty with Tenure
- FTE per Full Time Faculty
- Core Revenue per FTE
- Percent FTFT Receiving Federal Grants
- Percent FTFT Receiving Institutional Grants
- Percent FTFT Receiving Loans
- Net Price
- ACT Composite Scores in 75th Percentile
- Hospital

For definitions of these characteristics, please see <http://nces.ed.gov/ipeds/glossary/>.

Appendix B

Institutional Characteristics of Colleges and Universities Enrolling the Highest Numbers of Illinois Student Migrants in their Fall 2004 Freshman Class						
Institution	Number of IL Freshmen Enrolled	State	Urbanization (City, or nearest large city, if a suburb)	Type of Control	Average Freshman ACT Score	Religious Affiliation
University of Iowa	1060	IA	Midsize city	Public	27	No
Purdue University – Main	778	IN	Large city	Public	28	No
Indiana U. – Bloomington	684	IN	Large city	Public	27	No
Marquette University	597	WI	Large city	Private	28	Catholic
Univ. Wisconsin - Madison	531	WI	Midsize city	Public	30	No
Univ. Missouri - Columbia	364	MO	Midsize city	Public	28	No
Carthage College	362	WI	Midsize city	Private	26	Lutheran
Saint Louis University –Main	344	MO	Large city	Private	27	Catholic
Iowa State University	307	IA	Large town	Public	27	No
Miami University – Oxford	291	OH	Large city	Private	29	No
Univ. Michigan – Ann Arbor	275	MI	Midsize city	Public	30	No
Ranken Technical College	271	MO	Large city	Private	20	No
St. Ambrose University	251	IA	Midsize city	Private	20	Catholic
Michigan State University	236	MI	Midsize city	Public	25	No
University of Notre Dame	219	IN	Large city	Private	33	Catholic
University of Kansas - Main	214	KS	Midsize city	Public	27	No
Northern Michigan Univ.	204	MI	Large city	Public	24	No
Valparaiso University	199	IN	Large city	Private	29	Lutheran
University of Dayton	193	OH	Large city	Private	27	No
Arizona State Univ. –Tempe	188	AZ	Midsize city	Public	24	No
Western Michigan University	176	MI	Large town	Public	23	No
Univ. Colorado - Boulder	170	CO	Large city	Public	25	No
Washington Univ. –St Louis	165	MO	Large city	Private	33	No
Butler University	163	IN	Large city	Private	28	No
Loras College	162	IA	Midsize city	Private	25	Catholic
Truman State University	160	MO	Midsize city	Public	30	No
Southeast Missouri St. Univ.	155	MO	Midsize city	Public	26	No
Carroll College	143	WI	Midsize city	Private	26	Presbyterian
Drake University	130	IA	Midsize city	Private	29	No
University of Arizona	118	AZ	Large city	Public	24	No
Murray State University	113	KY	Small town	Public	25	No
DePauw University	110	IN	Small town	Private	29	Methodist
Ball State University	106	IN	Large town	Public	25	No
Total number of Illinois student migrants enrolled:	9326	Total percentage of Illinois student migrants enrolled by these institutions: 48.6%				
Key: Large city = cities of > 250,000 residents, and their suburbs Midsize city = cities of < 250,000 residents, and their suburbs Large town = > 25,000 residents Small town = 2,500 – 25,000 residents Source: (NCES, 2004)						

Appendix C

Type, Size and Selectivity of Colleges and Universities Enrolling the Highest Numbers of Illinois Student Migrants in their Fall 2004 Freshman Class					
Institution	No. of IL Freshmen Enrolled	State	Institutional Type	Size and Setting	USNWR Rankings
University of Iowa	1060	IA	Very High Research University	Large 4-year, primarily residential	64 th – Top Tier National Universities
Purdue University – Main	778	IN	Very High Research University	Large 4-year, primarily residential	64 th – Top Tier National Universities
Indiana U. – Bloomington	684	WI	Very High Research University	Large 4-year, primarily residential	70 th – Top Tier National Universities
Marquette University	597	WI	High Research University	Large 4-year, highly residential	81 st – Top Tier National Universities
Univ. Wisconsin - Madison	531	MO	Very High Research University	Large 4-year, primarily nonresi.	34 th – Top Tier National Universities
Univ. Missouri - Columbia	364	MO	Very High Research University	Large 4-year, primarily residential	88 th – Top Tier National Universities
Carthage College	362	WI	Baccalaureate College – Diverse	Small 4-year, highly residential	30 th – Top Tier Midwestern Master's C.
Saint Louis Univ. – Main	344	MO	High Research University	Large 4-year, highly residential	77 th – Top Tier National Universities
Iowa State University	307	IA	Very High Research University	Large 4-year, primarily residential	81 st – Top Tier National Universities
Miami University – Oxford	291	OH	High Research University	Large 4-year, primarily residential	60 th – Top Tier National Universities
Univ. Michigan – Ann Arbor	275	MI	Very High Research University	Large 4-year, primarily residential	24 th – Top Tier National Universities
Ranken Technical College	271	MO	Primarily Associate's	Small 4-year, primarily nonresi.	Not Ranked
St. Ambrose University	251	IA	Master's Colleges & Universities	Small 4-year, primarily residential	40 th – Top Tier Midwestern Master's C.
Michigan State University	236	MI	Very High Research University	Large 4-year, primarily residential	70 th – Top Tier National Universities
University of Notre Dame	219	IN	Very High Research University	Large 4-year, highly residential	20 th – Top Tier National Universities
University of Kansas - Main	214	KS	Very High Research University	Large 4-year, primarily nonresi.	88 th – Top Tier National Universities
Northern Michigan Univ.	204	MI	Master's Colleges & Universities	Medium 4-year, primarily residential	Not Ranked
Valparaiso University	199	IN	Masters Colleges & Universities	Medium 4-year, highly residential	3 rd – Top Tier Midwestern Master's C.
University of Dayton	193	OH	High Research University	Medium 4-year, highly residential	105 th – Top Tier National Universities
Arizona State Univ. – Tempe	188	AZ	Very High Research University	Large 4-year, primarily nonresi.	Third Tier – National Universities
Western Michigan University	176	MI	High Research University	Large 4-year, primarily nonresi.	Third Tier – National Universities
Univ. Colorado - Boulder	170	CO	Very High Research University	Large 4-year, primarily nonresi.	77 th – Top Tier National Universities
Washington Univ. –St Louis	165	MO	Very High Research University	Large 4-year, highly residential	12 th – Top Tier National Universities
Butler University	163	IN	Master's Colleges & Universities	Medium 4-year, highly residential	5 th – Top Tier Midwestern Master's C.
Loras College	162	IA	Baccalaureate Colleges – Diverse	Small 4-year, highly residential	25 th – Top Tier Midwestern Comprehensive Col.
Truman State University	160	MO	Master's Colleges & Universities	Medium 4-year, primarily residential	8 th – Top Tier Midwestern Master's C.

Table continued on following page

Type, Size and Selectivity of Colleges and Universities Enrolling the Highest Numbers of Illinois Student Migrants in their Fall 2004 Freshman Class					
Institution	No. of IL Freshmen Enrolled	State	Institutional Type	Size and Setting	USNWR Rankings
Southeast Missouri State Univ.	155	MO	Master's Colleges & Universities	Medium 4-year, primarily residential	Not Ranked
Carroll College	143	WI	Master's Colleges & Universities	Small 4-year, highly residential	28 th – Top Tier Midwestern Comprehensive Col.
Drake University	130	IA	Master's Colleges & Universities	Medium 4-year, primarily residential	4 th – Top Tier Midwestern Master's C.
University of Arizona	118	AZ	Very High Research University	Large 4-year, primarily nonresi.	98 th – Top Tier National Universities
Murray State University	113	KY	Master's Colleges & Universities	Medium 4-year, primarily residential	Not Ranked
DePauw University	110	IN	Baccalaureate Colleges – Diverse	Small 4-year, highly residential	48 th – Top Tier Liberal Arts Colleges
Ball State University	106	IN	Doctoral / Research University	Large 4-year, primarily residential	Third Tier – National Universities
Total number of Illinois student migrants enrolled:	9326	Total percentage of Illinois student migrants enrolled by these institutions: 48.6%			
Source: (Carnegie Foundation, n.d, USNWR, 2006)					

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Notes

- ¹ NCES tracks the migration rates of first-time, first-year college students only. Migration data is collected every other year.
- ² Unless noted otherwise, all college student migration data was collected from the Integrated Postsecondary Education Data System (IPEDS). IPEDS is the data collection source for the federal government and is administered by the National Center for Education Statistics (NCES).
- ³ Represents the number of non-resident students at Illinois colleges *minus* the number of Illinois students who attended college in other states.
- ⁴ The Integrated Postsecondary Education Data System (IPEDS) is one of six postsecondary surveys conducted by the National Center for Education Statistics. It was specifically designed to collect comprehensive data on all postsecondary institutions. All postsecondary institutions receiving federal funds under Title IV of the Higher Education Act must submit information to IPEDS.
- ⁵ Extrapolated from national data based on the research of Adelman (2004) and Perry (2001). *Native state* refers to the state where the student was a resident during their first year of college, typically the state where they graduated high school. Respectively, Perry and Adelman found that 81% and 83% of students who attend an in-state college continue to reside in their native state 4 years after college graduation.
- ⁶ Extrapolated from national data based on the research of Adelman (2004) and Perry (2001). *College state* refers to the state where the student graduated college. Respectively, Perry and Adelman found that 52% and 48% of college student migrants resided in their native state 4 years after college graduation. Respectively, Perry and Adelman also found that 19% and 17% of college student migrants resided in the state where they graduated college 4 years after college graduation.
- ⁷ Traditional statistical models have experienced difficulty capturing the non-economic social benefits of higher education. Contemporary analyses of the non-economic benefits, however, show significant economic benefits resulting from increased numbers of college students living in a region. The fact that college graduates are more likely to vote, volunteer, or not smoke produce real and measurable economic benefits.
- ⁸ High college student migration rates for New England states can largely be explained by its historical value on private postsecondary education. Furthermore, college student migration rates for Midwestern states can generally be explained by tuition reciprocity agreements (i.e., Wisconsin and Minnesota or the Midwest Higher Education Compact). Illinois does not have a tuition reciprocity agreement with any state and does not participate in any tuition-exchange program, rendering high public college student migration rates an anomaly specific to Illinois.
- ⁹ This may be the result in the difficulty in tracking students. While the number of students at a college or university from a particular state can be easily found through IPEDS, non-relational, inconsistent, and decentralized databases and tracking mechanisms make it extremely difficult to discover anything about the student, including their gender, ethnicity, age, or high school.
- ¹⁰ Fall 2004 enrollments were the most current IPEDS data available at the time of the study.
- ¹¹ Note: Although there is not data to identify what high schools export the highest percentage of Illinois students, these regions were selected based on the hypothesis that the students who are migrating out-of-state are paying high tuition costs to attend an out-of-state institution. Accordingly, schools in these site visits are located in high income areas within the state, most notably, areas located in the city and the Chicago suburbs.