# A Longitudinal Study of the Illinois High School Class of 2002: A Six-Year Analysis of Postsecondary Enrollment and Completion

Eric J. Lichtenberger, Ph.D.

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## The Study

- Who is included in the cohort
  - 113,135 public high school students who took the Prairie State Achievement Exam (PSAE)/ACT in the Spring of 2001 and indicated that they would be graduating in 2002.
- Who is not included in this cohort
  - Private high school graduates from Illinois
  - Out-of-State high school graduates who emigrated to Illinois higher education institutions



## Sources of Data

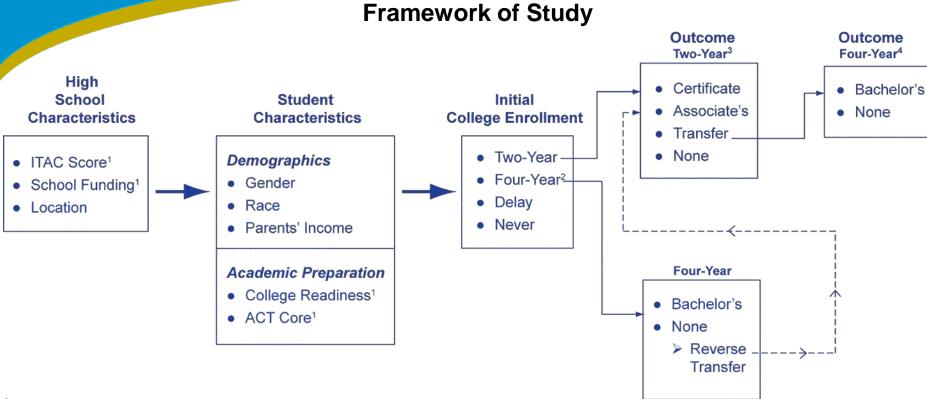
- ACT-ACT scores and information from the Student Interest Profiler
- National Student Clearinghouse-enrollment and degrees
- Illinois Community College Board-enrollment and degrees
- Illinois Shared Enrollment and Graduation Consortiumenrollment and degrees
- Illinois School Report Card- characteristics of the high schools
- IPEDS-characteristics of the four-year institutions
- Barron's-selectivity



## **Context of the Study**

- Graduation initiatives: President Obama, Lumina Foundation, Complete College America
- Illinois Public Agenda for College and Career Success
  - Increase the number of quality degrees
  - Reduce geographic disparities in educational attainment
  - Ensure college affordability for individuals, families, and taxpayers
  - Improve transitions along the educational pipeline—the postsecondary portion
- Several current studies that are focusing on postsecondary completion rather than only access (Bowen).





<sup>&</sup>lt;sup>1</sup> Potentially malleable



<sup>&</sup>lt;sup>2</sup> By sector and selectivity

<sup>&</sup>lt;sup>3</sup> Two-year outcomes are not mutually exclusive, so more than one could occur

<sup>&</sup>lt;sup>4</sup> For two-year to four-year transfers

## **IERC College Readiness Index**

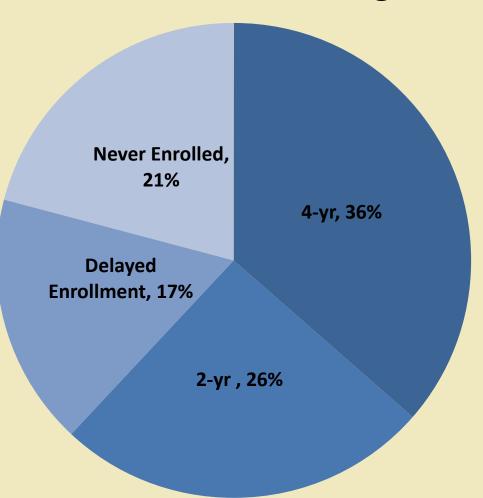
	High School GPA (self-reported)					
ACT	<= 2.4	2.5 - 2.9	3.0 - 3.4	3.5 - 4.0	Missing	
<20	19.7%	8.0%	6.5%	1.9%	14.6%	
20-22	3.1%	3.5%	5.2%	2.9%	4.0%	
23-25	1.1%	1.7%	4.2%	4.8%	2.7%	
26+	0.4%	0.8%	2.7%	9.5%	2.8%	



•Index created by combining ACT and HS GPA.



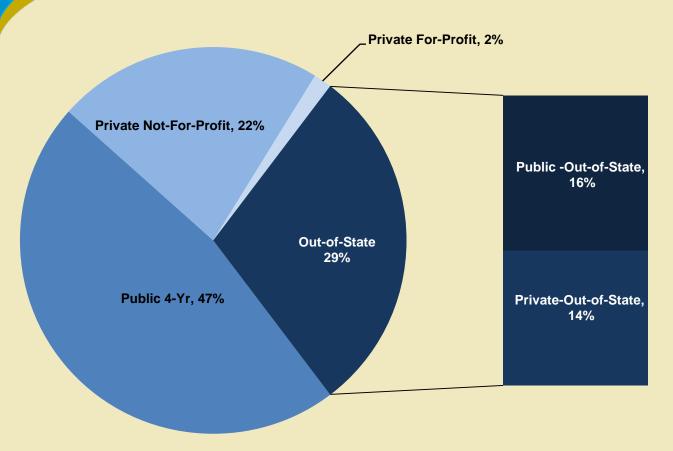
### **Basic College Enrollment**



- •62% Enrolled the initial fall semester.
- •17% delayed enrollment at a either a 2 or four yr. institution after fall 2002.
- •21% never enrolled in higher education over the six-year study period.



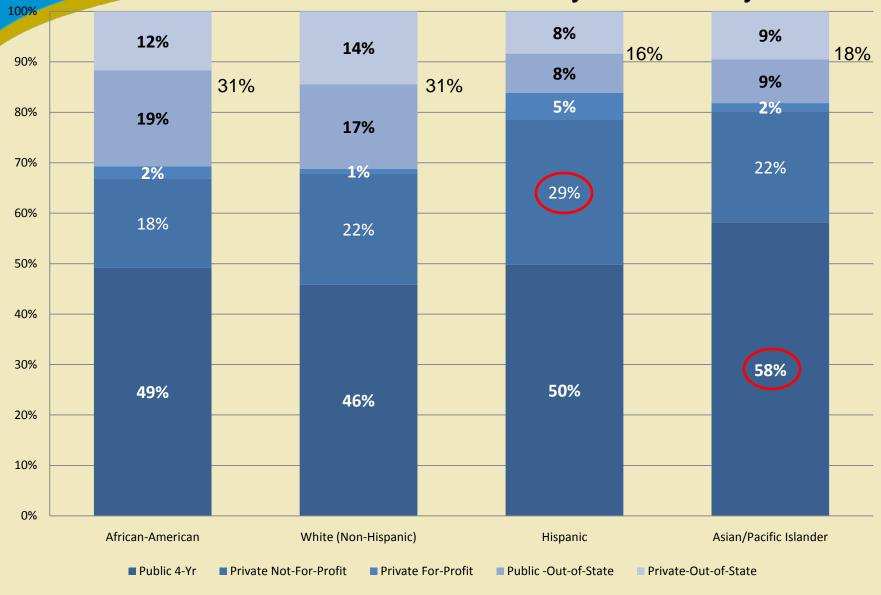
#### Sector of Four-Year Starters



- A little less than half attend Public Universities
- Around a quarter attend in state privates.
- 38% attend privates overall.
- Nearly a third attend out of state.
- More than half of students who go out of state attend public institutions.
- Illinois ranks 51<sup>st</sup> for Net Migration of College Freshman (PEO April 2010)

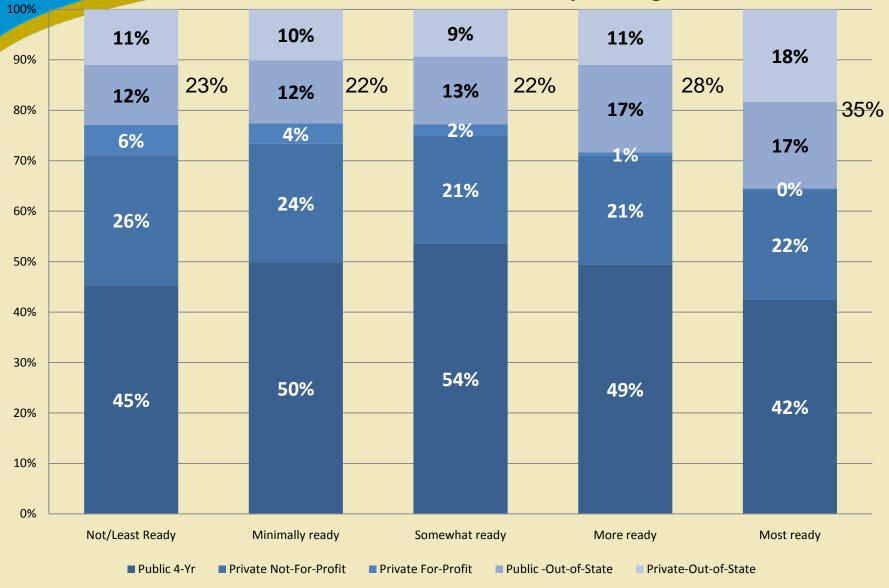


#### Sector of Four-Year Starters By Race/Ethnicity



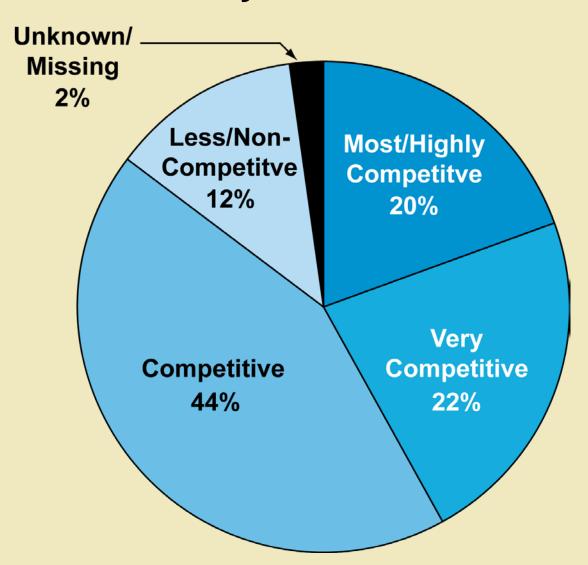


#### Sector of Four-Year Starters By College Readiness



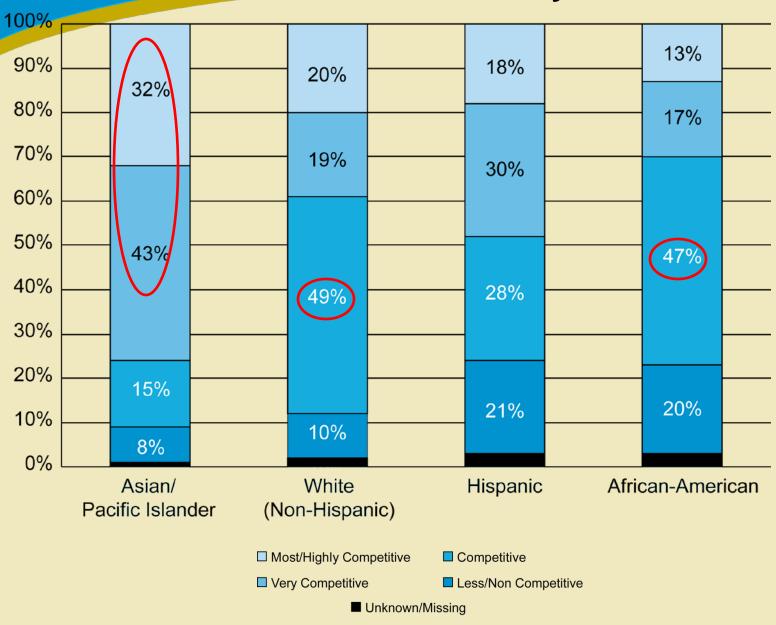


## Selectivity of Four-Year Starters

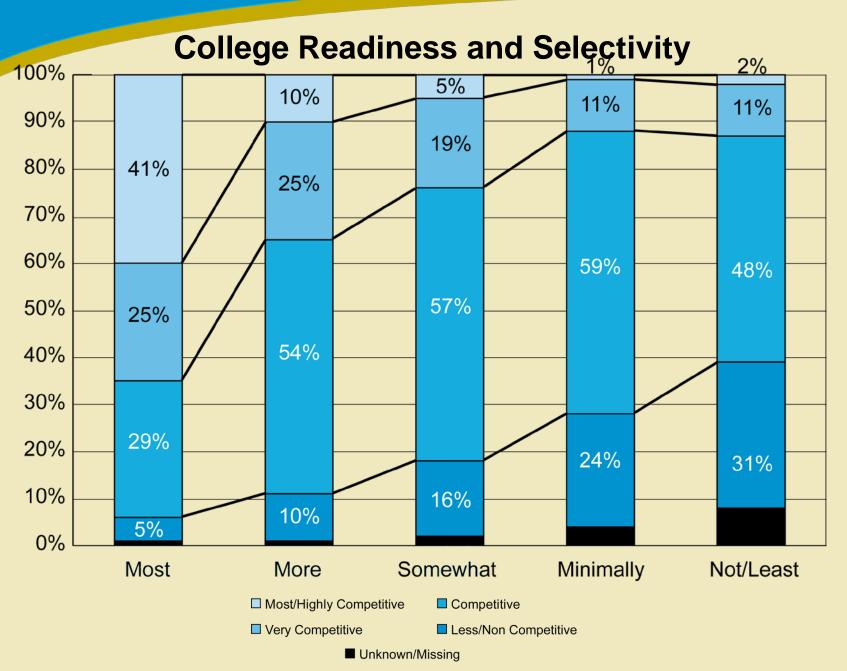




## **Race and Selectivity**

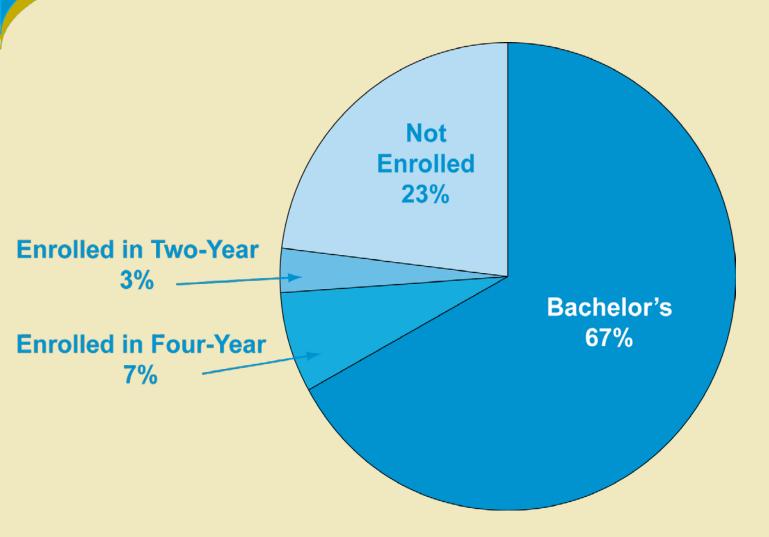








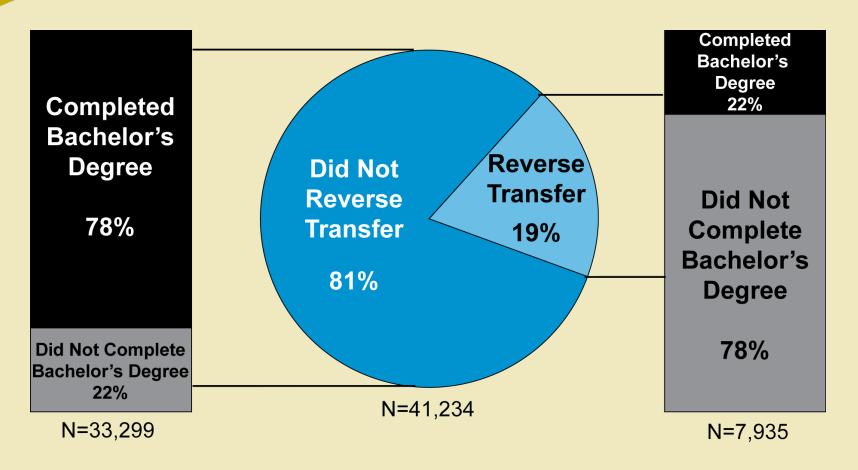
#### **Four-Year Outcomes**



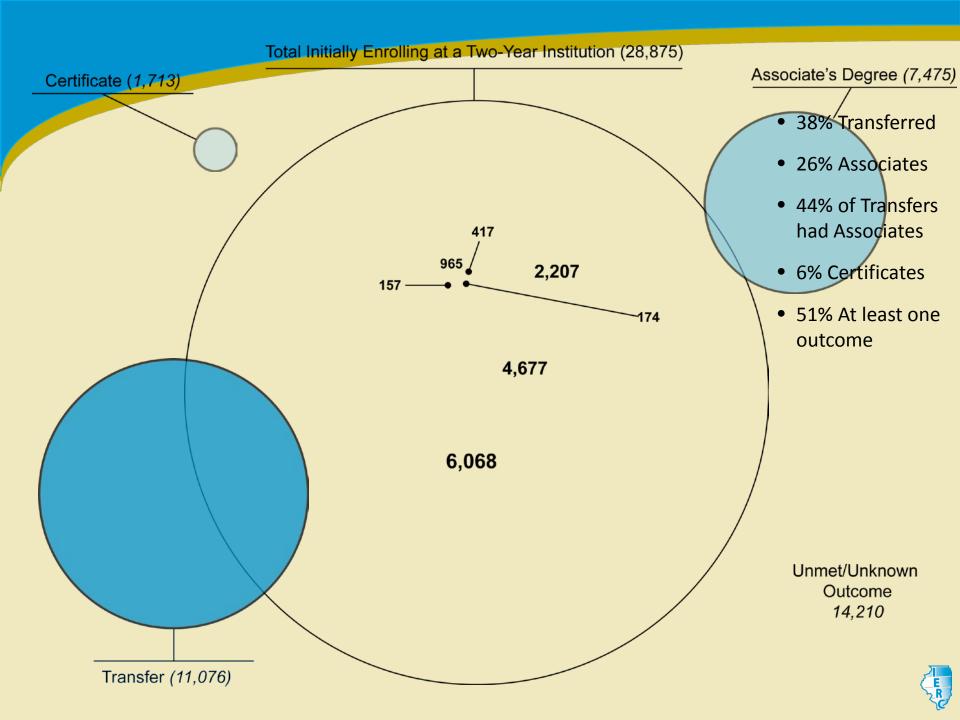
- 67% Grad rate over six years.
- An additional 10% were still enrolled in higher education.
- A little less than a quarter did not complete and were not enrolled.



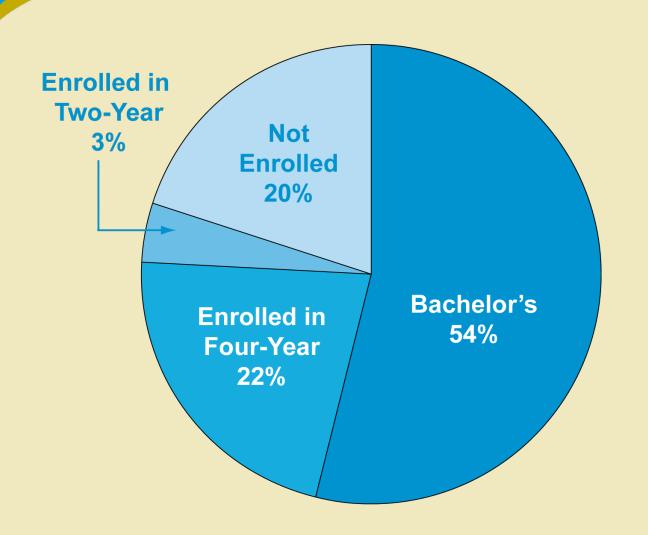
#### **Reverse Transfer**







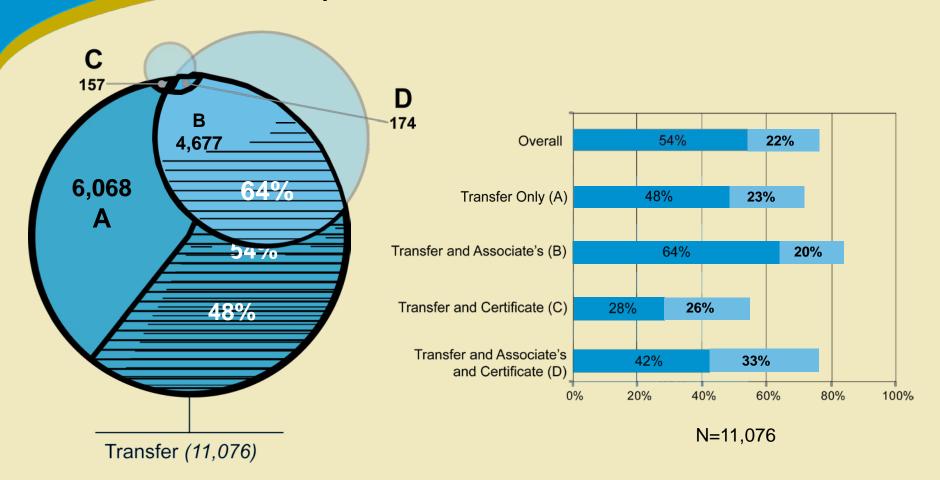
#### **Two-Year to Four-Year Transfer**



- Over half earned a bachelor's degree by the Spring of 2008.
- An additional 22% were still enrolled in a fouryear institution.
- This illustrates that time to degree may be increased.



#### **Bachelor Completion Rate for Two-Year to Four-Year Transfers**





# Logistic Regression

- Two separate models
  - Initial enrollment at four-year institution
  - Bachelor's degree completion for four-year starters
- Included all student and school characteristics included in the framework
- Determined each variable's predictive importance regarding the outcome holding everything else constant

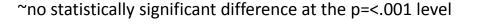


#### Predicting 4-Yr Enrollment and Bachelor Completion

# Odds Ratios for Key Student Characteristics

- Definite Gender Gap (widens)
- For Race, the pattern varied across the comparisons
- Although parental income was extremely important in both measures, it lost some of its predictive value in terms of completion

Variable	Initial 4-yr Enrollment	Bachelor Completion
Gender		
Female to Male	1.19	1.51
Race		
African-American to White	2.17	(1.56)
Hispanic to White	~	(1.38)
Asian to White	1.48	~
Parental Income		
High to Low	2.28	1.76
Mid-High to Low	1.63	1.47
Mid-Low to Low	1.20	1.14





#### **Predicting 4-Yr Enrollment and Bachelor Completion**

# Odds Ratios Calculated for College Readiness and Region

- College readiness matters the most in both measures.
- All of the regions were more likely to enroll than the Southeast
- However, only two of the regions were more likely to complete: Northeast and West Central

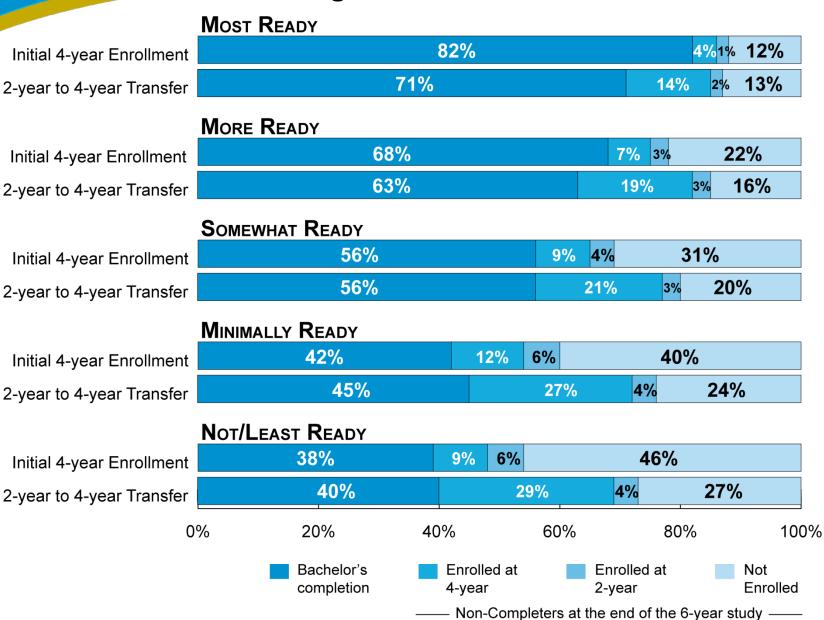
Variable	Initial 4-yr Enrollment	Bachelor Completion	
College Readiness			
Most to Not/Least	24.59	5.85	
More to Not/Least	11.30	2.86	
Somewhat to Not/Least	5.29	1.91	
Minimally to Not/Least	2.91	1.29	
Region			
Chicago to Southeast	4.44	~	
Northeast to Southeast	2.10	1.40	
Northwest to Southeast	1.51	~	
West Central to Southeast	1.86	1.41	
East Central to Southeast	1.72	~	
Southwest to Southeast	2.21	~	

~no statistically significant difference at the p=<.001 level

# **DISCUSSION**

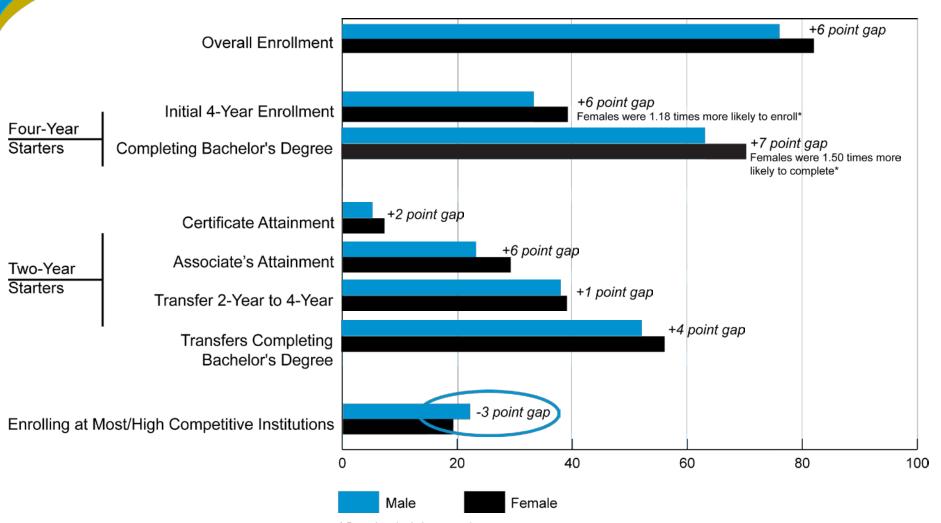


#### College Readiness Matters





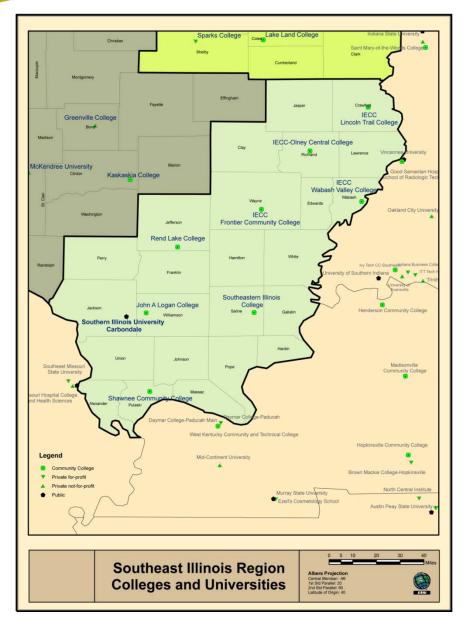
#### **Gender Difference**



<sup>\*</sup> Based on logistic regression.



#### Southeast Region and Surrounding Colleges and Universities



- Limited access to fouryear institutions in Southeast IL
- Highest college going region (85%)
- Highest Two-Year Starters (47%)
- Lowest Four-Year Starters Region (19%)
- 39% four-year starter go out of state.



#### **Conclusions**

- College Readiness was the strongest indicator of participation and completion through all the different outcomes measured in this study.
- There was a gender gap favoring female students in terms of participation and an even larger gap favoring female students for bachelor completion.
- Generally speaking, Asian and White students had higher participation and completion rates compared with African-American and Hispanic students (the descriptive and predictive results varied).
- Students in the Southeast region have less access (proximity) to fouryear institutions, so they use the community college system and out-ofstate 4-yr institutions more than students from other areas of the state.
- Two-yr to four-yr transfer is a viable pathway for bachelor degree completion. For students in the somewhat to the not/least ready college readiness categories, taking the two-year to four-year transfer pathway improves the likelihood that the student will graduate with a bachelor's degree.



#### **Contact Information**

Eric Lichtenberger Assistant Research Professor elichte@siu.edu

IERC ierc.siue.edu 618-650-2840

