



## College & Career Access, Persistence and Success Statewide

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CCAPS Donors Forum,  
Chicago Community Trust  
Chicago, IL

## Illinois Education Research Council



### Our Mission

*To provide objective and  
reliable evidence for  
Illinois P-20 education  
policy making and  
program development.*

*Ensuring Research-Informed Education Policy for Illinois*



## Illinois Education Research Council

- Founded in 2000 to provide research support to state educational agencies in policy and programmatic decisions
- Support to P-20 Council
  - Council Coordinator under Chair, Beth Purvis
  - Research arm of the Illinois P-20 Council
- Advisory Board with broad statewide representation
- Sit on P-20 Council & subcommittees and JELC
- Housed within the Graduate School at Southern Illinois University Edwardsville



3

## Impacts on Policy Related to Today's Talk

- The information from College Readiness and the Postsecondary Outcomes of Illinois High School Students (**IERC report 2012-1**) has been used by Advance Illinois and ACT to help frame college readiness at the state and national levels.
- An early study on the outmigration of college students in Illinois (**IERC report 2006-1**) and its recent follow-up study (**IERC report 2014 – 1**) have been used by IBHE and others in citing the need to recruit students back to the Illinois workforce and the economic impact of this loss.
- The 2014 outmigration report
  - was submitted to the national WDQI community of practice site as an exemplar of good practice
  - was also used by ISAC in the Pay It Forward, Pay It Back study that it delivered to the General Assembly on December 1, 2014.



4

## Overview of Studies

- College Readiness and Postsecondary Outcomes

- 2003 Cohort Study

- following students for 7 years

- 2009 Two IL universities (1 public, 1 private) study

- following students for 3 years

- Outmigration Study

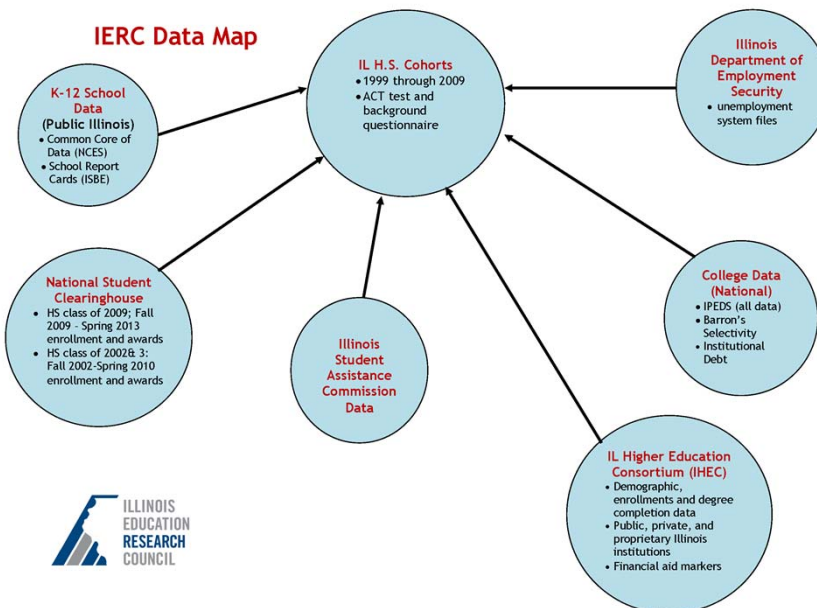
- 2003 Cohort

- All students who received a Bachelor's degree within 7 years
    - Graduates of both private and public high schools
    - Selected matched pairs based on propensity scores



5

### IERC Data Map



6

## 2003 Cohort Studies

- Reverse Transfer Students and Postsecondary Outcomes (2011-5)
- College Readiness & Postsecondary Outcomes (2012-1)
- College Confidence (2012-2)
- College Readiness & Overlapping Outcomes of Community College Students (2012-3)
- Community College Penalty & Bachelor's Degree Completion: Fact or Fiction (2013-1)
- Who has Access to Dual Credit in Illinois? (2013-4)
- Outmigration and Human Capital (2014-1)



/ 7

## RELATIONSHIP OF COLLEGE READINESS TO COLLEGE OUTCOMES



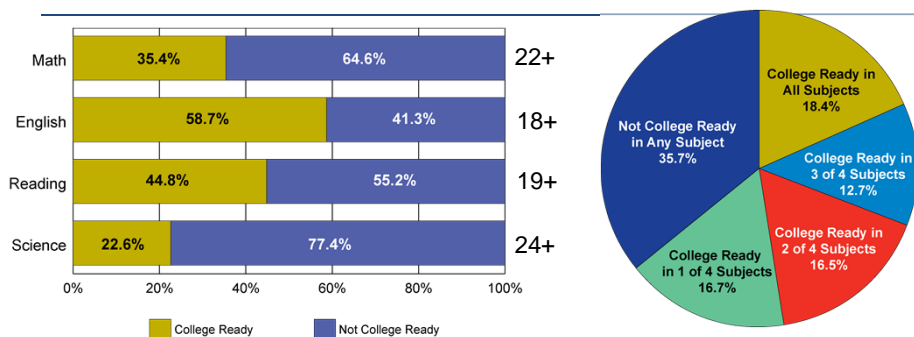
/ 8

## College Readiness and the Postsecondary Outcomes of Illinois High School Students (IERC 2012-1)

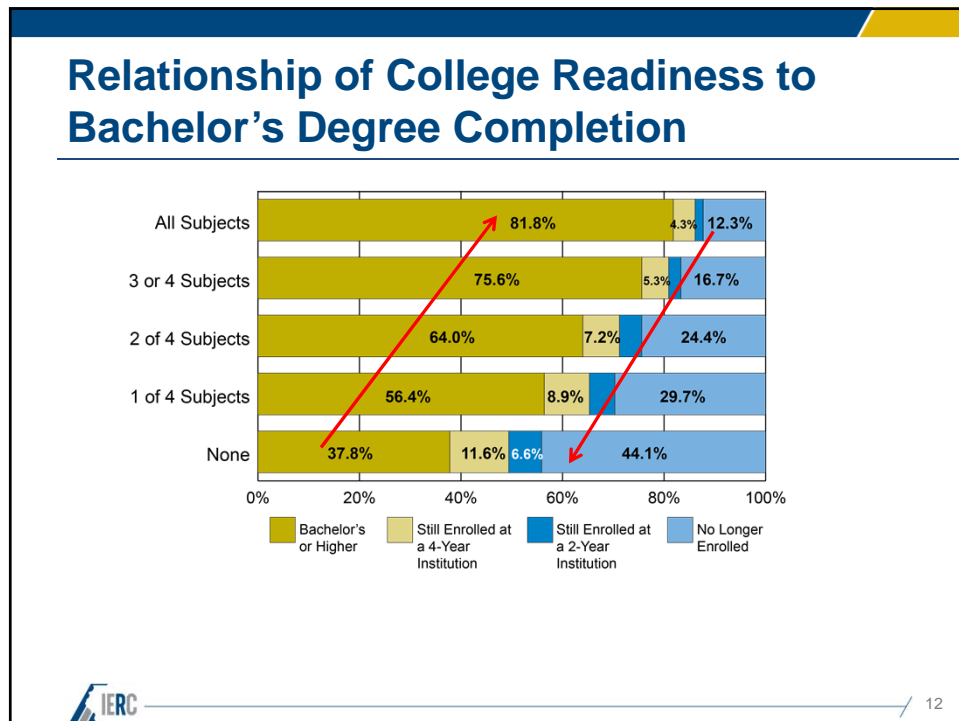
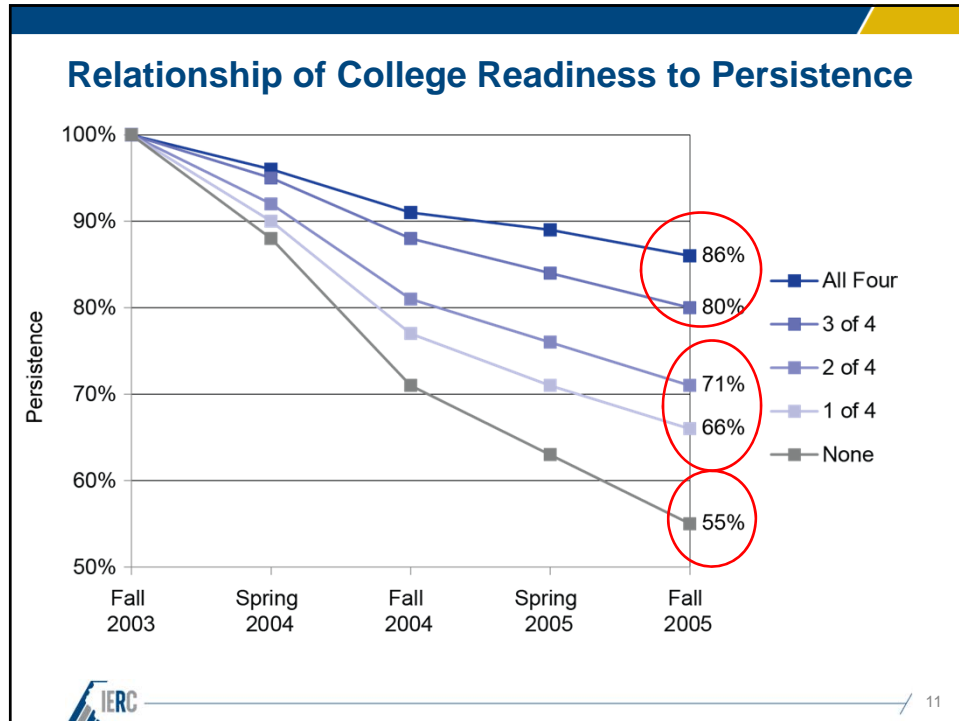
- Goal is to describe college outcomes related to college readiness
- If we meet ACT college readiness benchmarks in subject areas:
  - 50% chance of getting C or better in corresponding college course without remediation
  - 75% chance of getting a B or better in corresponding college course without remediation



## Distribution of College Readiness



- English benchmark met by 58.7% of the cohort
- Overall college readiness (meeting all four) is almost entirely predicated on the test with the highest benchmark-Science.
- 80% of the students meeting the science benchmark, met all of the benchmarks.



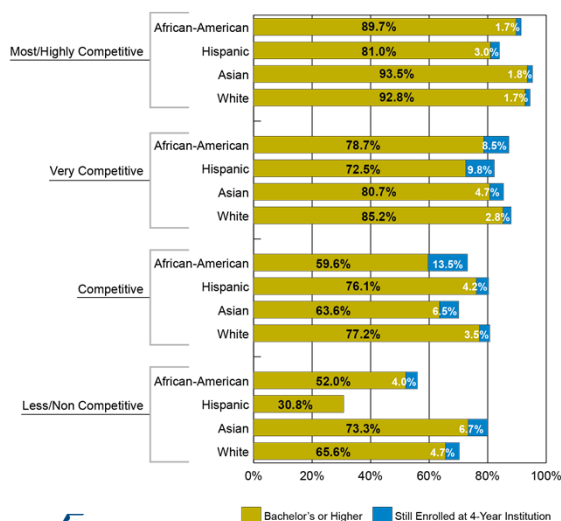
## College Readiness, Institutional Selectivity, and Bachelor's Completion

Selectivity	End of Study Status			
	Bachelor's or Higher	Still Enrolled at Four-Year	Still Enrolled at Two-Year	No Longer Enrolled
<b>Most/Highly Competitive</b>				
All Four	92.2%	1.7%	0.6%	5.5%
3 of 4	89.2%	2.1%	1.0%	7.7%
2 of 4	82.5%	4.2%	1.1%	12.3%
1 of 4	74.3%	2.3%	3.6%	19.8%
None	72.7%	7.1%	2.0%	18.2%
<b>Very Competitive</b>				
All Four	83.2%	3.4%	1.3%	12.1%
3 of 4	82.4%	3.5%	1.6%	12.4%
2 of 4	72.0%	5.7%	3.1%	19.2%
1 of 4	68.4%	5.6%	4.0%	22.0%
None	55.9%	8.7%	4.9%	30.5%
<b>Competitive</b>				
All Four	76.6%	3.8%	2.0%	17.6%
3 of 4	74.2%	3.1%	2.3%	20.4%
2 of 4	66.4%	5.4%	3.4%	24.9%
1 of 4	62.2%	5.6%	4.4%	27.8%
None	46.7%	8.2%	4.7%	40.4%
<b>Less/Non Competitive</b>				
All Four	63.6%	4.7%	2.5%	29.2%
3 of 4	60.3%	4.5%	3.7%	31.5%
2 of 4	49.8%	9.3%	4.2%	36.8%
1 of 4	42.8%	9.3%	4.2%	43.7%
None	27.5%	10.9%	6.6%	55.0%

- Students meeting two of four benchmarks from the most competitive institutions had similar rates of bachelor's completion as students meeting all four benchmarks enrolling at very competitive institutions.
- The least prepared students enrolling at the most competitive institutions outperformed the best prepared students at less competitive institutions.

13

## Interaction of Institutional Selectivity & Race/Ethnicity



- For the most-ready Hispanic students, there was only a moderate difference between those enrolling at competitive or better institutions.
- However, among the most-ready Hispanic students there was a sharp decline in BA completion at non-competitive institutions.
- Enrolling at a highly selective institution narrows the racial gap for African-American students.

14

## Two Institution Study

### Developing Indicators Toward a College Degree – IERC 2013

- Proof of concept study for the ILDS
- Examined relationship of college readiness and other factors to retention and progression at 2 IL institutions



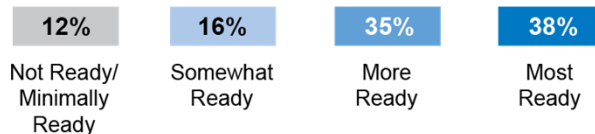
Follow-up study was a quasi-experimental study investigating how college readiness itself was related to retention and progression



15

## Distribution of IERC College Readiness Index

ACT Comp	Self-Reported High School GPA				
	≤2.4	2.5 - 2.9	3.0 - 3.4	3.5 - 4.0	Missing
<20	4.4%	5.4%	4.7%	2.2%	0.9%
20-22	1.0%	6.6%	10.6%	7.4%	1.5%
23-25	0.7%	5.4%	9.6%	11.3%	1.6%
> 25	0.3%	2.6%	5.5%	17.3%	1.2%



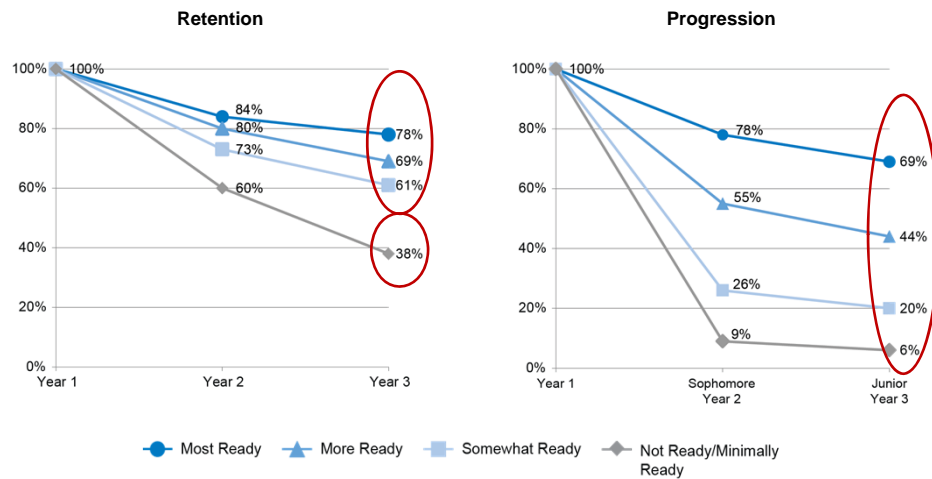
Source: Presley & Gong (2005). Illinois Education Research Council



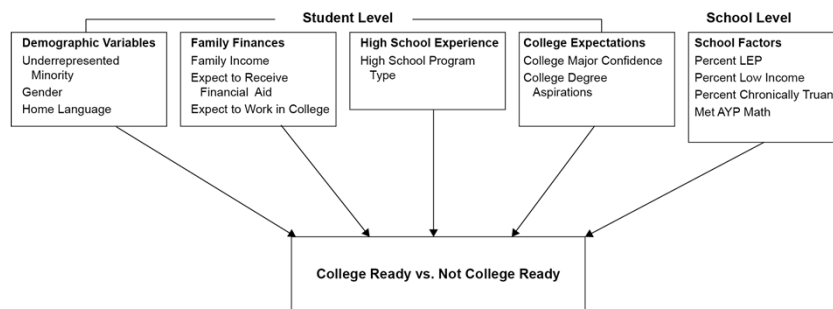
16



## Relationship of College Readiness Level to Retention & Progression



## Quasi-Experimental Design



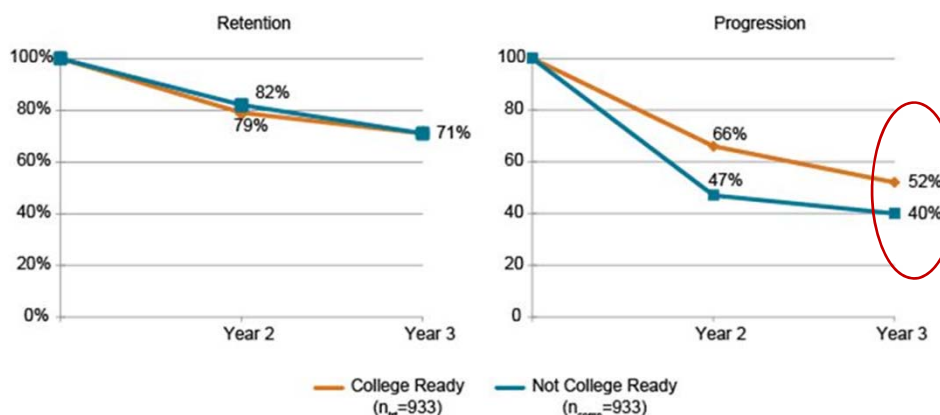
## Matching Example

- |                                                            |                                                            |
|------------------------------------------------------------|------------------------------------------------------------|
| • Latina female                                            | • Latina female                                            |
| • Expect to work in college                                | • Expect to work in college                                |
| • Family in mid-income bracket                             | • Family in mid-income bracket                             |
| • Took HS core curriculum                                  | • Took HS core curriculum                                  |
| • Attended high percent LEP and high percent low income HS | • Attended high percent LEP and high percent low income HS |
| • <b>Not college ready</b>                                 | • <b>College ready</b>                                     |



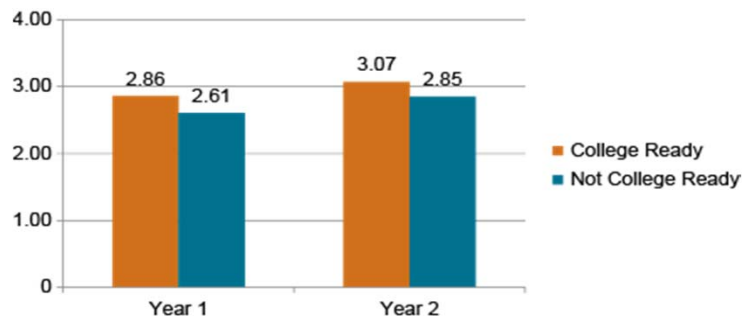
19

## Retention vs. Progression Differences due to College Readiness



20

## GPA Differences due to College Readiness



## Substantive Findings

- College readiness itself is not related to retention, once other student and school factors are controlled
- However, college readiness is related to on-time progression, controlling for student and school factors
- Implies that different forces operate to increase retention and on-time progression. Most common retention strategies used in colleges are:
  - academic clubs, pre-enrollment orientation, career counseling services, recreation/intramurals, internships, and cultural activities programs
  - Yet academic activities, e.g., study skills labs, tutoring, summer bridge programs, enhanced advising practices, are more likely to increase college readiness

## Predicting College Success

### Adaptive College Patterns

- Good college readiness in HS, particularly in English and math
- Taking dual credit courses
- Going to most selective college possible
- Not reverse transferring



/ 23

## POST-DEGREE EMPLOYMENT



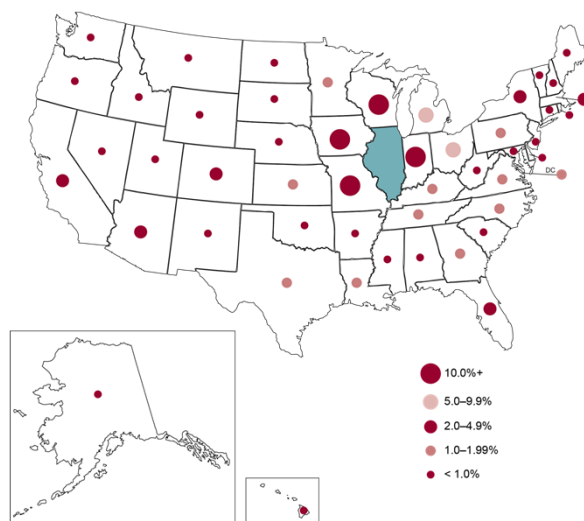
/ 24

## Outmigration and Human Capital: Homeward Bound or Gone for Good (2014–1)

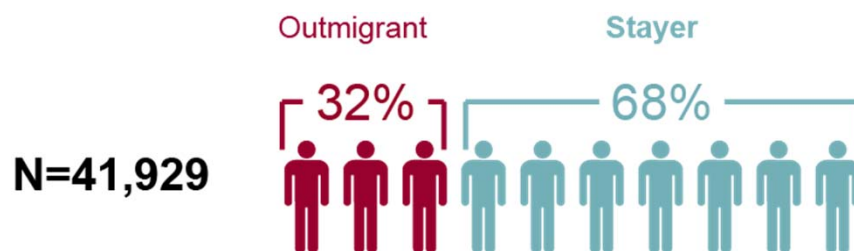
- Each year the state of Illinois experiences a net loss of roughly 11,000 students.
  - Summit
  - Plano
  - Minooka
- Outmigrants tend to be among the best and brightest Illinois high school graduates
- This represents a significant loss of human capital.



## Outmigration Patterns

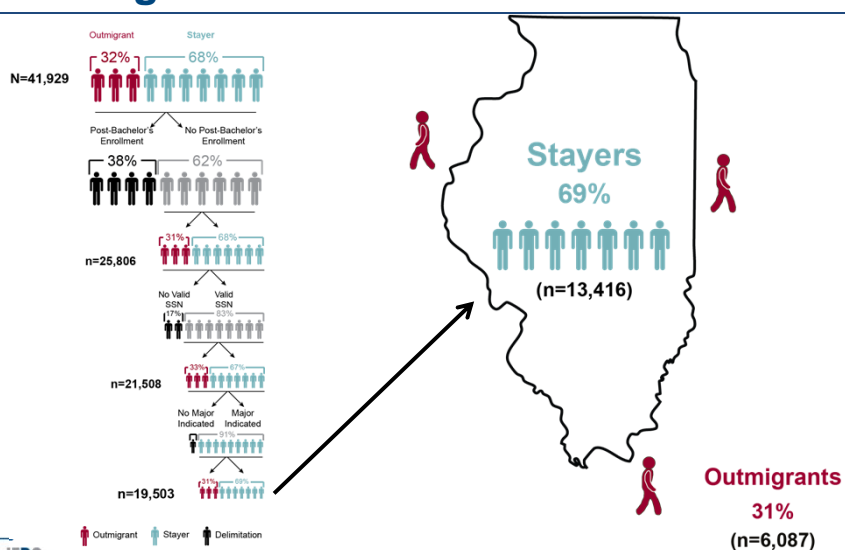


## Outmigration Status



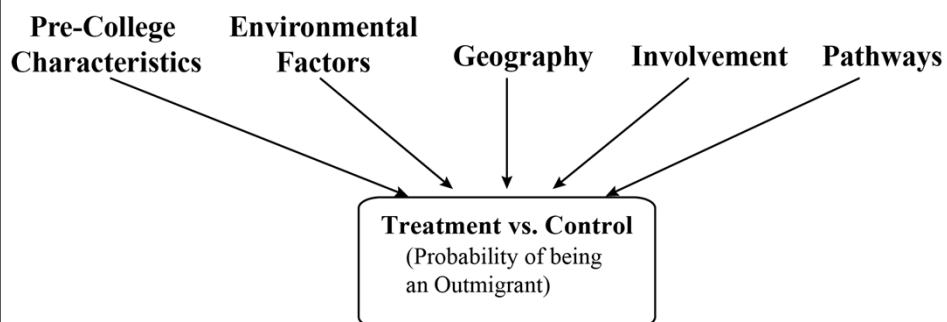
27

## Study Group Composition Prior to Matching



28

## Conceptual Model Predicting Outmigration



## Example of a Matched Pair

### Outmigrant

- Aurora
- 62% likelihood of being an outmigrant
- Graduated from The Ohio State University
- Majored in Chemical Engineering

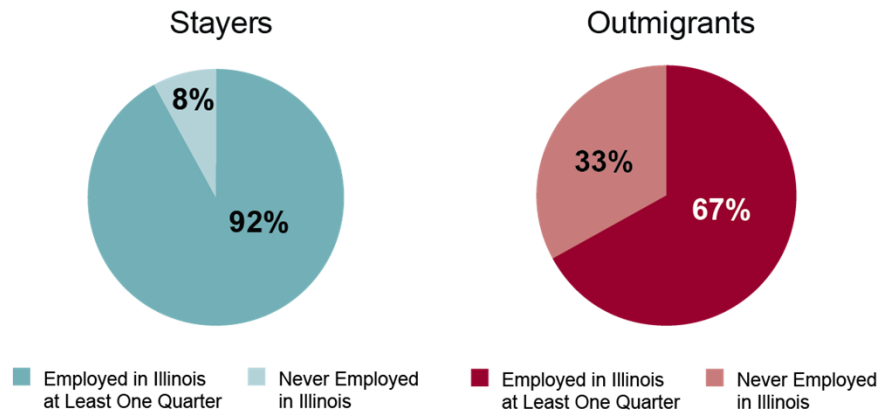


### Stayer

- Aurora
- 62% likelihood of being an outmigrant
- Graduated from the University of Illinois at Urbana-Champaign
- Majored in Chemical Engineering



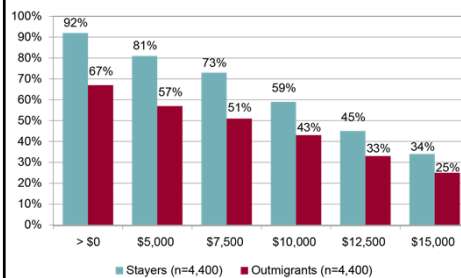
## Overall Rate of Post-Bachelor's Illinois Employment



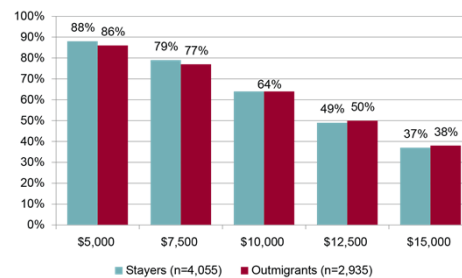
31

## Quarterly Wage Thresholds: Absolute and Conditional Upon Illinois Employment

### Overall



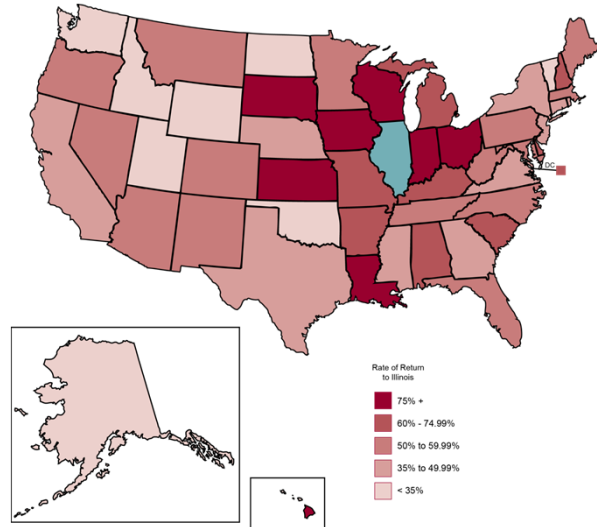
### Conditional Upon Illinois Employment



32

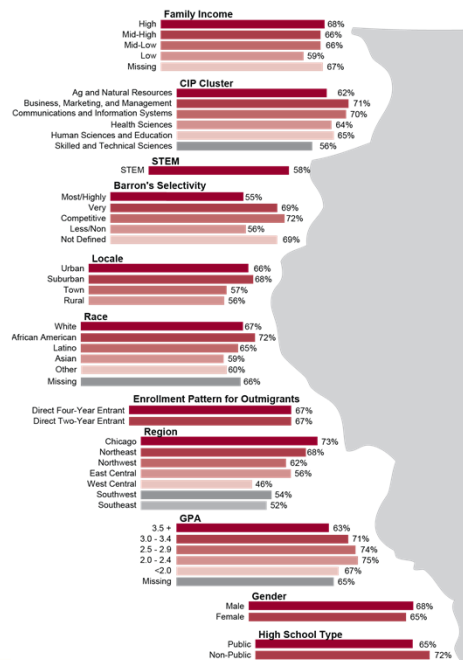


## Rate of Illinois Employment by Graduation State for Matched Study Group Members



33

## Who Returns?



34

## Major Findings

- Outmigrants were significantly less likely to gain employment in Illinois relative to stayers.
- Among the outmigrants, those with stronger academic profiles were less likely to obtain Illinois employment.
- Further, the outmigrants with the degrees deemed most important for the Illinois economy were even less likely to return to Illinois for employment.



/ 35

## Consequences of Outmigration

- Outmigrants experienced significantly lower rates of Illinois-specific employment relative to the stayers resulting in substantially lower aggregate Illinois wages among the outmigrant group.
- Relatedly, substantially fewer outmigrants reached the various Illinois-specific earnings thresholds.
- This in turn, represents some of the negative economic impact that outmigration has on the state of Illinois.



/ 36

## Current Studies

Have 2009 Illinois HS cohort for public school students and linked to college outcomes

Initial study (Baber & Holt) of relationship of institutional aid factors on college completion for stayers. What role student factors, e.g., college readiness and family income, play in this relationship.

### Findings to date:

- Institutional debt is negatively related to retention but not to 4-year completion
- Barron's selectivity is related to both retention and completion
- More differential effect of income level on retention for students at non-profit privates
- Less difference in completion between students at publics and non-profit privates if from higher income family



/ 37

## 2015, 13<sup>th</sup> Annual Focus on Illinois Education Research Symposium

- Theme: *Pathways to an Affordable College Education*
- October 8 & 9, Sheraton in Lisle IL
- Keynotes:
  - **Dr. David Figlio**, Director of the Institute for Policy Research at Northwestern University  
*The Importance of Instructors and Instruction in Introductory Courses*
  - **Dr. Laurie Elish-Piper**, Acting Dean, College of Education, Northern Illinois University  
*Creating a Mentoring Continuum to Support Student Success*
- Guest Speaker:
  - **Dr. James Pellegrino**, Co-Director of the Learning Sciences Research Institute, University of Illinois at Chicago  
*To Test or Not to Test? — That is Not the Question: Thinking Productively About Educational Assessment*

Breakfast panel on *Affordability Across the P-20 Spectrum*



/ 38



## **Illinois Education Research Council**

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39

## **APPENDIX**



40

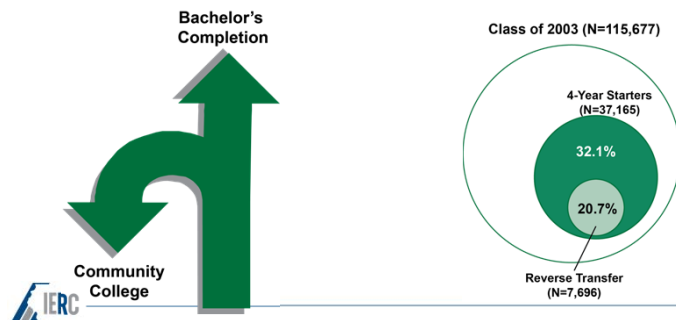
## STUDENT TRANSFER



/ 41

### Reverse Transfer Students and Postsecondary Outcomes: A Potential Opportunity (IERC 2011-5)

- Sample size of 2003 graduating cohort,  $N = 115,677$
- About 1/3 enrolled in a 4-year college the fall after graduation
  - Of those, about 1/5 reverse transferred,  $n = 7,696$



/ 42

## Reverse Transferring vs. Reverse Articulation

### Reverse Transfer

- Pertains to students who start at a four-year college and later transfer to a community college.
- The term has been used in educational research for the past 20 years.
- The definition usually excludes concurrent enrollment and summer school enrollment.
- A transfer takes place.

### Reverse Articulation

- Pertains to students who start at a community college and later transfer to a four-year without earning an associate's degree .
- Involves the post-transfer articulation of credit from the four-year college to the original community college.
- The emphasis is on the ex post facto awarding of associate's degrees for vertical transfer students by using credits earned at the four-year to fulfill associate's degree requirements.



43

## Factors Relating to Reverse Transfer

- Male
- Middle income family
- Less college readiness in English & Math
- More college readiness in Science
- Proximity to home
- Less selective college
- Public college



44

## Distance in Miles Between High School and Initial Four-Year Institution

	≤30	>30 – ≤100	>100 – ≤175	>175
Reverse Transfers	30.9%	23.5%	22.4%	23.2%
Other 4-Year Starters	23.9%	20.7%	29.3%	26.1%

**Reverse transfer students tend to initially enroll closer to home.**



45

## Outcomes for Reverse Transfer Students

- 16% earned an Associate's degree; 3% earned a certificate
- Over ½ returned to a 4-year university
- Only 29% returned to the same university
- Tended to return to an equally or less selective college
- ¼ earned a Bachelor's degree



46

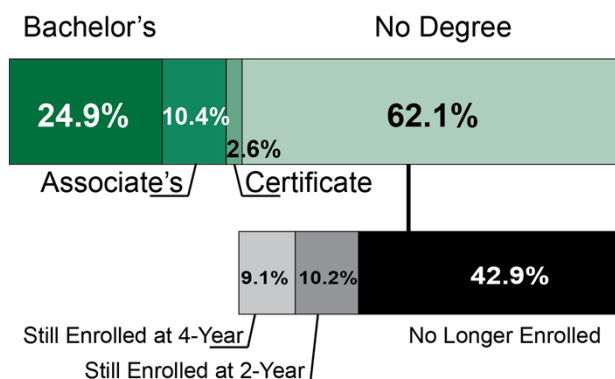
## Reverse Transfer and End of Study Status

End of Study Status						
		Bachelor's Degree or Higher	Non-Completers			Total
			Still Enrolled at 4-yr	Still Enrolled at 2-yr	No Longer Enrolled	
Reverse Transfer Students	Row %	24.9%	12.1%	12.4%	50.6%	100.0%
	Column %	7.2%	54.9%	100.0%	50.2%	20.7%
Other Four-Year Starters	Row %	84.3%	2.6%	0.0%	13.1%	100.0%
	Column %	92.8%	45.1%	0.0%	49.8%	79.3%
Total	Row %	72.0%	4.6%	2.6%	20.9%	100.0%
	Column %	100.0%	100.0%	100.0%	100.0%	100.0%



47

## Highest Degree and End of Study Status for Reverse Transfer Students



48