



# The Determinants of Enrollment and Success of Community College Transfer Students

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## Background

- CSTEP was funded by the State of Kansas, Department of Commerce from a grant by the US Department of Labor's Employment and Training Administration to study the enrollment, success, and labor market outcomes of community college transfer students.
- We compare the completion rates of Community and Technical College transfer students to native students who start at four-year institutions.
- We examine the earnings and employment patterns of transfer students to those who start at four-year institutions.



## Transfer Students in Kansas

- "Nationally, 16.0 percent of two-year starters received a degree from a four-year institution within six years, with or without a prior associate's degree. In 16 states, this percentage was higher than the national average. In four states (Iowa, Kansas, North Dakota, and Virginia), one in five students who started at a two-year public institution had a four-year degree within six years."
- <https://nscresearchcenter.org/signaturereport12-statesupplement/>



## Transfer Students in Kansas

- According to the National Student Clearinghouse, Kansas ranks second in the total number of transfer students (49%).
- 51% of Kansas students who start in a two-year institution transfer (ranks third in US)
  - Of those, 57% transfer to a four-year institution
  - Our focus will be on Kansas residents who start in a community or technical college and transfer to four-year public universities
  - <https://nscresearchcenter.org/signaturereport9/>






## Methods

- We use KBOR data from 2008-2011 and follow students who are Kansas residents for six years to identify factors associated with completing a bachelor's degree.
- These data are matched to Department of Labor Employment records to examine employment and earnings.
- The economics literature has found that transfer students are less likely to complete bachelor's degrees.
  - Is this true for public universities? If so can we explain it using KBOR's comprehensive data?
- Use regression analysis to estimate factors associated with getting a bachelor's degree.

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## Bachelor's Completion Rates of Native and Transfer Students

	Native	Transfer Students
Bachelor's Degree	28,089	3,440
	56.4%	40.3%
No Bachelor's Degree	26,837	5,087
	43.6%	59.7%

Transfer students are about 16% less likely than native students to complete their bachelor's degrees within 6 or fewer years (Data are for all students who matriculate with KBOR).

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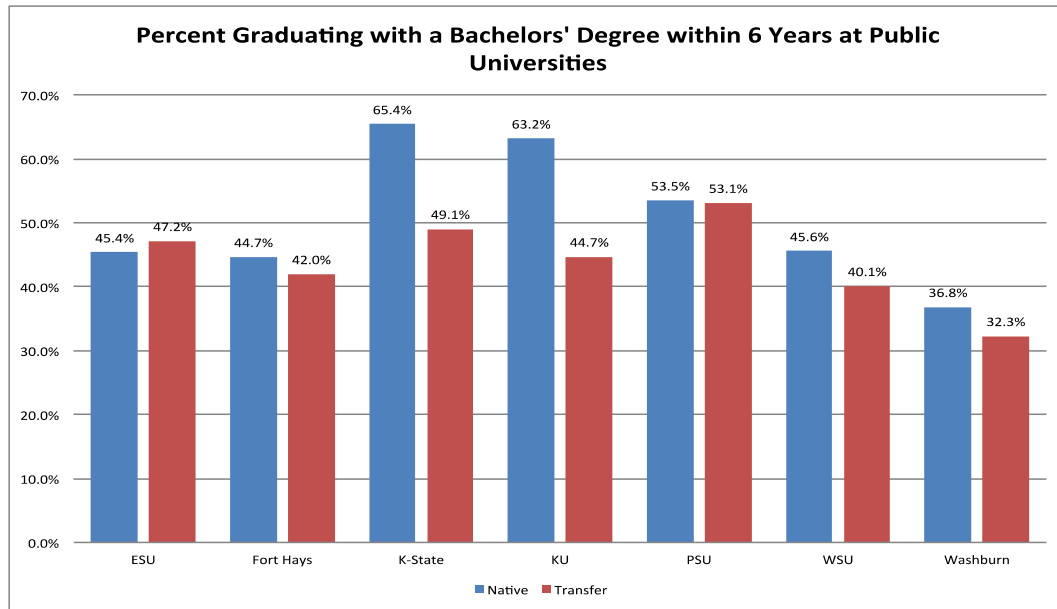


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## Bachelor's Completion Rates of Native and Transfer Students, Public Universities Only



Transfer students have similar graduation rates at state universities, but the gap with Natives at KU and K-State is larger. We will examine this in greater detail.

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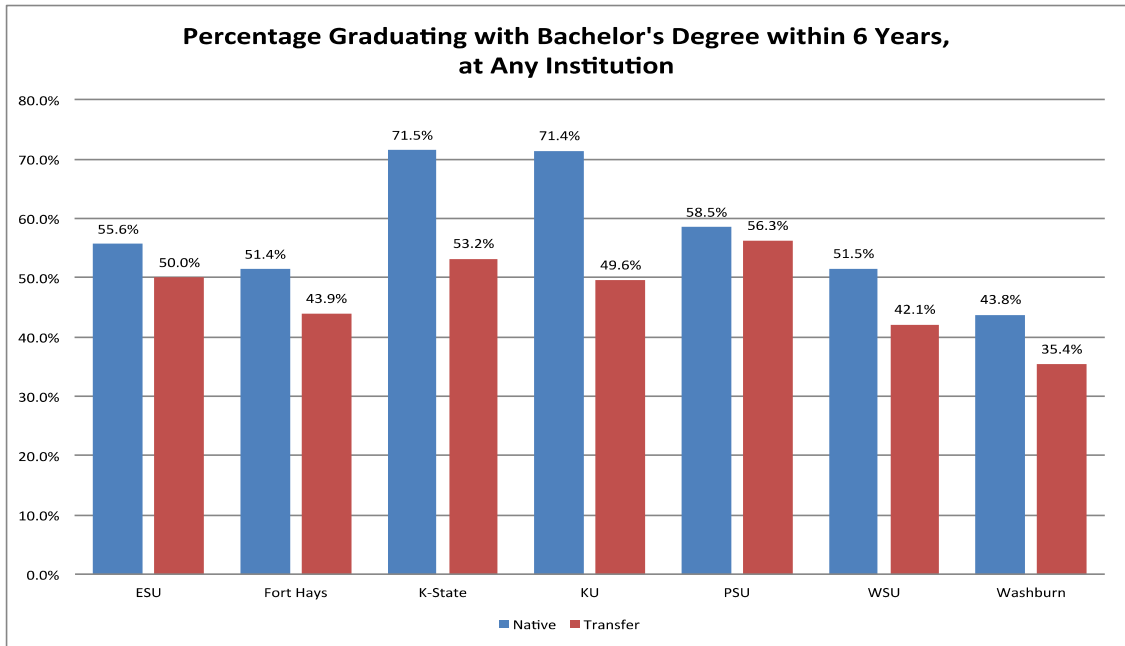


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## Bachelor's Completion Rates of Native and Transfer Students, All Institutions



When we allow for completion at any institution (from National Student Clearinghouse), the success rates increase for both groups.

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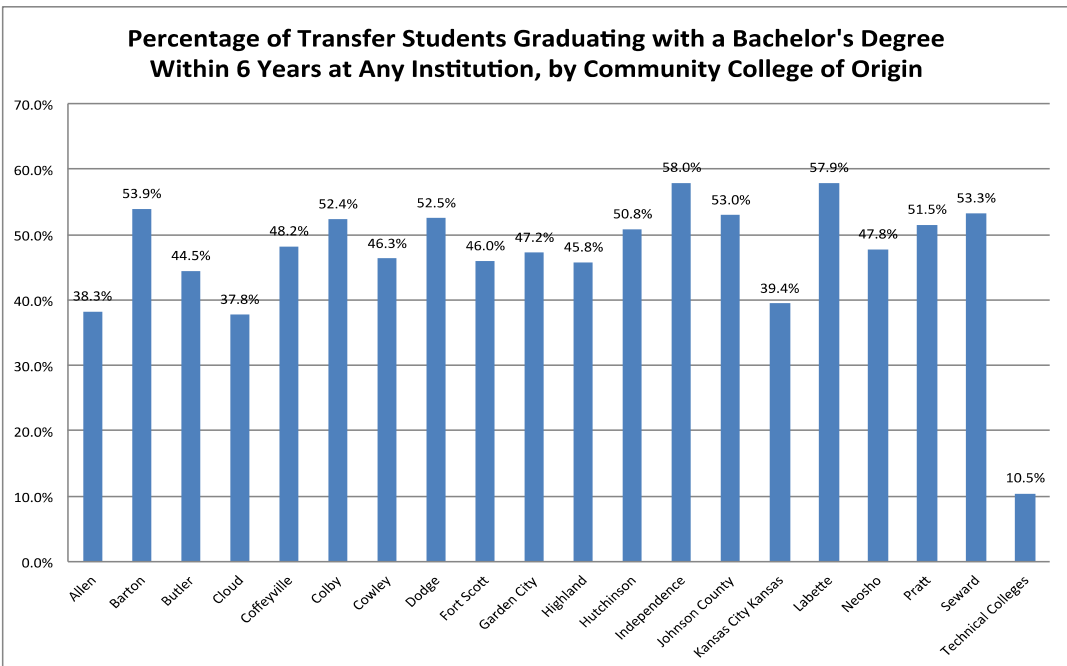
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## Bachelor's Completion Rates by Community College of Origin

Percentage of Transfer Students Graduating with a Bachelor's Degree Within 6 Years at Any Institution, by Community College of Origin



There is significant variance across institutions in the likelihood of Transfer students completing their bachelors' degrees.



## Where Do Transfer Students End Up?

	ESU, FHSU, PSU & WSU	KU & K-State
Total Transfers	4,271	2,702
Percent of Total Transfers	61%	39%
Bachelor's Degree	1,923	1,394
	45%	52%
No Bachelor's Degree	2,348	1,308
	55%	48%

Transfer students are more likely to attend ESU, FHSU, PSU & WSU. However, their graduation rates are lower at those institutions.

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## Analysis of Bachelor's Completion Rates

- We estimated a regression model using KBOR data on first-time enrollees from 2008-11 to identify the factors associated with completion rates. The models include controls for:
  - Public universities
  - Year started
  - Gender and Race
  - Developmental courses
  - ACT scores
  - High School GPA
  - Pell grants
  - Being a nontraditional student (Age > 23)
  - Credits accepted



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## Analysis of Completion Rates

- In our basic model, transfer students are 12.5 percentage points less likely to receive a bachelor's degree.
  - The gap falls to 10.1 percentage points after adding controls for gender, race and being a nontraditional student.
- Once we include measures of poverty in the Zip Code, ACT score, high school GPA and developmental courses,
  - The gap narrows to only 3 percentage points.



## Analysis of Completion Rates

- Female students are more likely to complete than male students.
- After controlling for ACT and GPA, black students are 6 percentage points less likely to complete.
- Developmental courses reduce the probability of completing a four-year degree.
- Nontraditional students (> 23 years old) are 14 percentage points less likely to complete degrees.
- Coming from a high-poverty Zip Code reduces completion by 7 percentage points.
- Higher GPA and ACT scores increase the likelihood of obtaining a bachelor's degree.



## Analysis of Completion Rates— Transfer Students Only

- Pell grant recipients at Community Colleges are 9 percentage points less likely to complete their degrees compared to non-Pell students.
- When more than 80 percent of Community College credits are accepted, transfer students are 8 percentage points more likely to complete their degrees.
- The more credits transferred, the higher the likelihood that students complete their degree.



## Do Transfer Students have the Same Characteristics as Native Students?

	Public University Native	Public University Transfer	KU & K-State Native	KU & K-State Transfer
ACT > 25	32.0%	8.8%	38.9%	12.4%
GPA > 3.7	26.8%	8.7%	29.3%	9.8%
Low Poverty Zip Code	41.2%	28.9%	48.0%	35.2%
Nontraditional	3.0%	9.2%	0.8%	5.3%
Developmental	19.7%	42.8%	14.9%	40.8%

Transfer students are less likely to have high GPAs and ACT scores, and come from low poverty Zip Codes. They are more likely to be nontraditional students and take developmental courses. The gaps between Native and Transfer students are larger at KU/K-State than for public universities as a whole.



## Analysis of the Gap between Native and Transfer Students

- Gaps can be decomposed into differences in average characteristics and differences in estimated coefficients due to unobservable factors.
  - Differences in average characteristics explain 81% of the completion gap for all public universities.
  - Differences in average characteristics explain 57% of the completion gap at KU and K-State.





## Employment and Earnings of Transfer Students vs. Natives

- Transfer students choose different majors than four-year starters.
- Transfer students are 4 percentage points more likely to be employed in Kansas and Missouri one year after completing the bachelor's degree.
- Transfer students earn \$950 less than natives after controlling for major, gender, race/ethnicity and age.
- For all Kansas resident students, nonwhite and nontraditional students are 7.8 percentage points and 1 percentage point less likely to be employed in the region one year after completing the degree.

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## Conclusions

- Similar to the literature, we found that transfer students are less likely to complete a bachelor's degree within 6 years compared to native students.
  - Most of the gap can be explained by observable characteristics such as GPA, ACT Score and developmental courses.
- The difference in these characteristics is larger at KU and K-State than for public universities as a whole, contributing to the larger gap in completion.
- Transfer students are more likely to be employed in the region, but earn \$950 less on average than native students.



## Acknowledgements

- This workforce product was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The U.S. Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.







## Conclusions

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Grazie  
*Obrigado*

*Toda*  
Thanks

Takk  
Gracias

Merci

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