

WHAT ARE THE BARRIERS TO A CAREER IN EDUCATION?

Decoding the Teacher Shortage in Syntucky

Team 3

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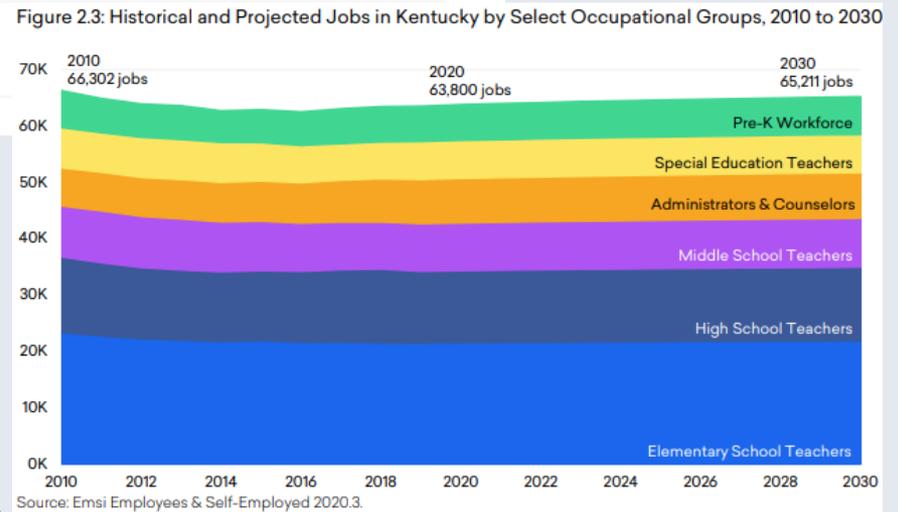
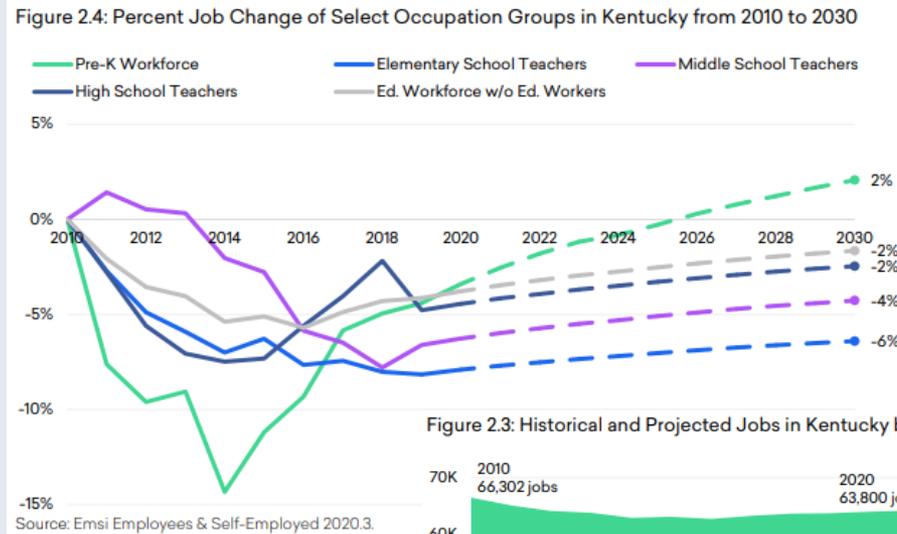
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WHAT IS A TEACHER SHORTAGE?

- A supply and demand problem which is worse when fewer people are entering teaching programs in college.
- The vacancy rate for KY is **30.57** teachers for **10,000** students, putting them in the fourth quartile nationally

Sources: Education Sector Analysis, Kentucky Council on Postsecondary Education, <https://cpe.ky.gov/data/reports/educationreport.pdf>.



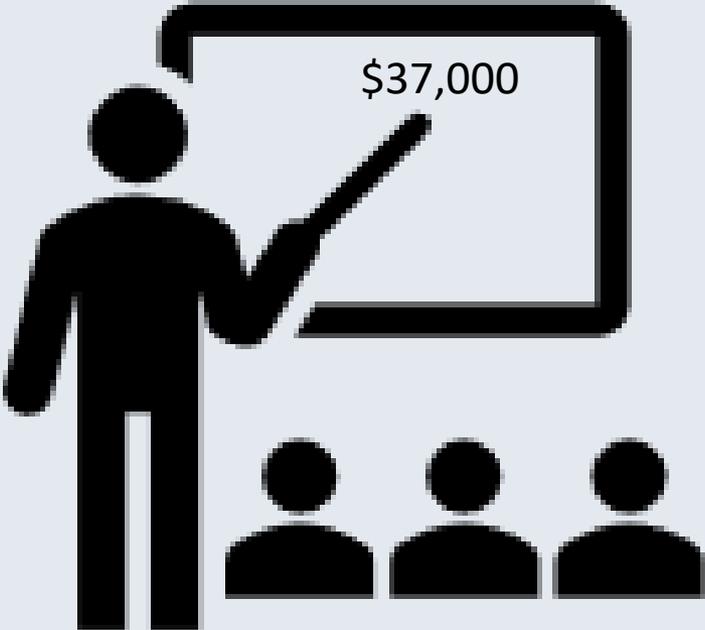
BARRIERS TO A CAREER IN EDUCATION

- Teaching is a profession with barriers to entry, including, in most cases, a **college degree and professional credential**.
- Nationally, the six-year bachelor's degree **completion rate** for first-time, full-time students at four-year institutions, is between **54 and 64 percent**.
- For **Pell grant recipients**, the completion rate is between **39 and 51 percent**.

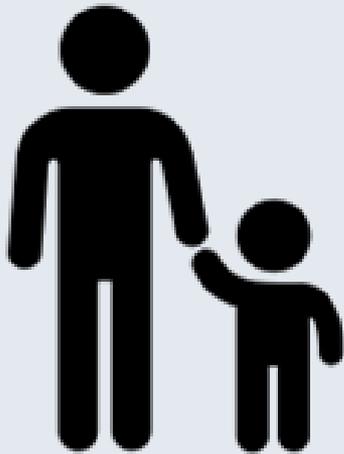


Sources: Completion rate estimates are from National Center for Education Statistics (<https://nces.ed.gov/fastfacts/display.asp?id=40>); Center for American Progress ([New Insights Into Attainment for Low-Income Students - Center for American Progress](#)); and Brookings ([A look at Pell Grant recipients' graduation rates | Brookings](#)).

DOES IT PAY TO BE A TEACHER IN KENTUCKY?



\$32,000
living wage



\$67,000
living wage

Sources: Living wage data are from Dr. Amy K. Glasmeier and the Massachusetts Institute of Technology, <http://livingwage.mit.edu>. Starting salary data are from National Education Association, <https://www.nea.org/resource-library/teacher-salary-benchmarks>.

PROJECT HYPOTHESES

Focus on supply-side of the teacher shortage and barriers that contribute to the shortage:

- (1) low or decreasing **enrollment** overtime in education major;
- (2) low or decreasing **completion** rates; and
- (3) low or decreasing **income** growth.



SELECTED DATA AND MEASUREMENTS

Sample

- Cohort 2013 (n=2,893)
- Students pursuing a BA with education major

Sub-Group Analysis

- Completers with education major vs. non-education majors
- Pell Grant recipients vs. Non-Pell

Enrollment Trends Over Time

- Cohorts 2013-2016
- By major fields

Completion

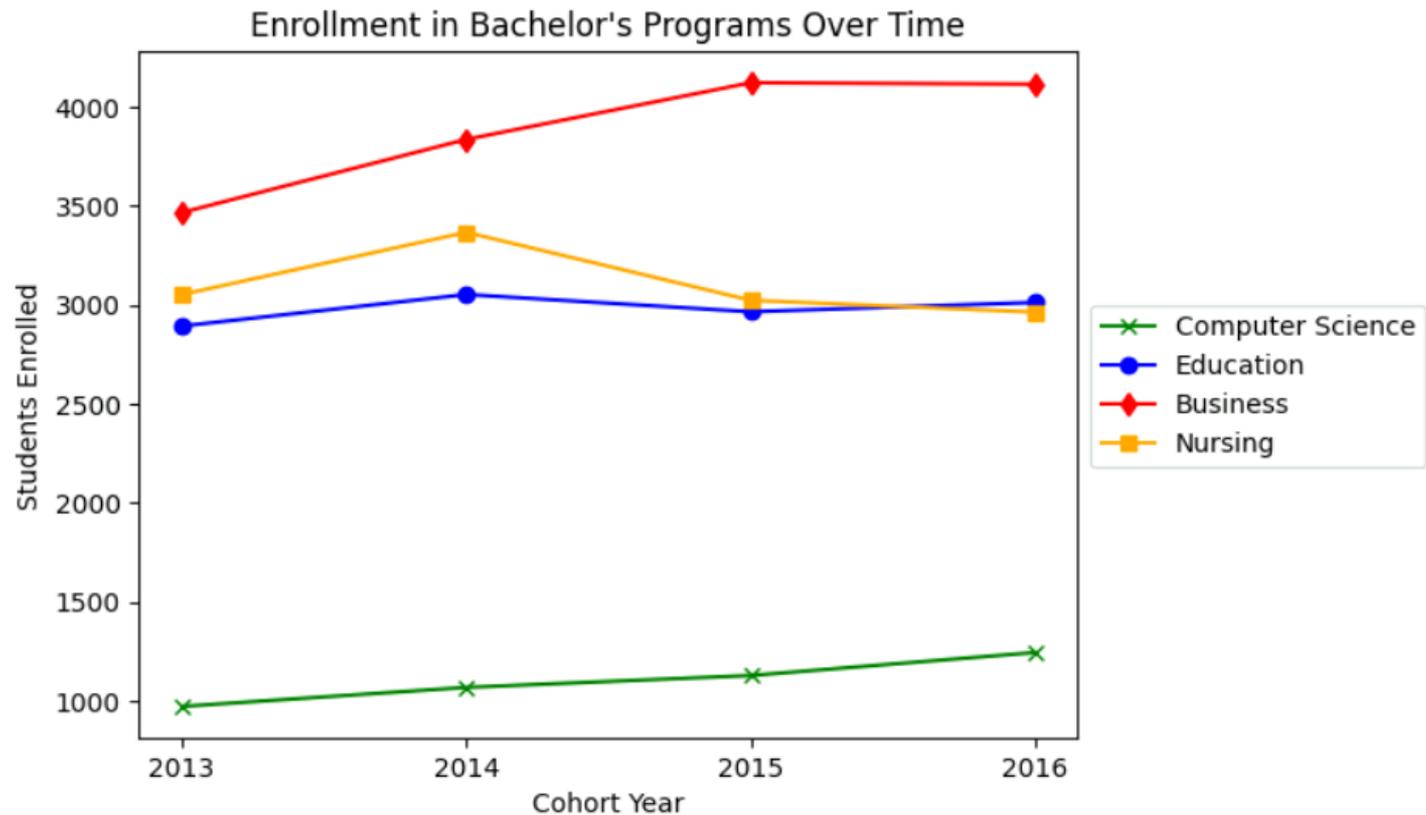
- Cohort 2013 (n=2,767)
- Completers vs. the non-completers

Wage

- Cohort 2013 (n=2,767)
- Wage Growth
- Use wage records for 7th, 8th, and 9th year since enrollment



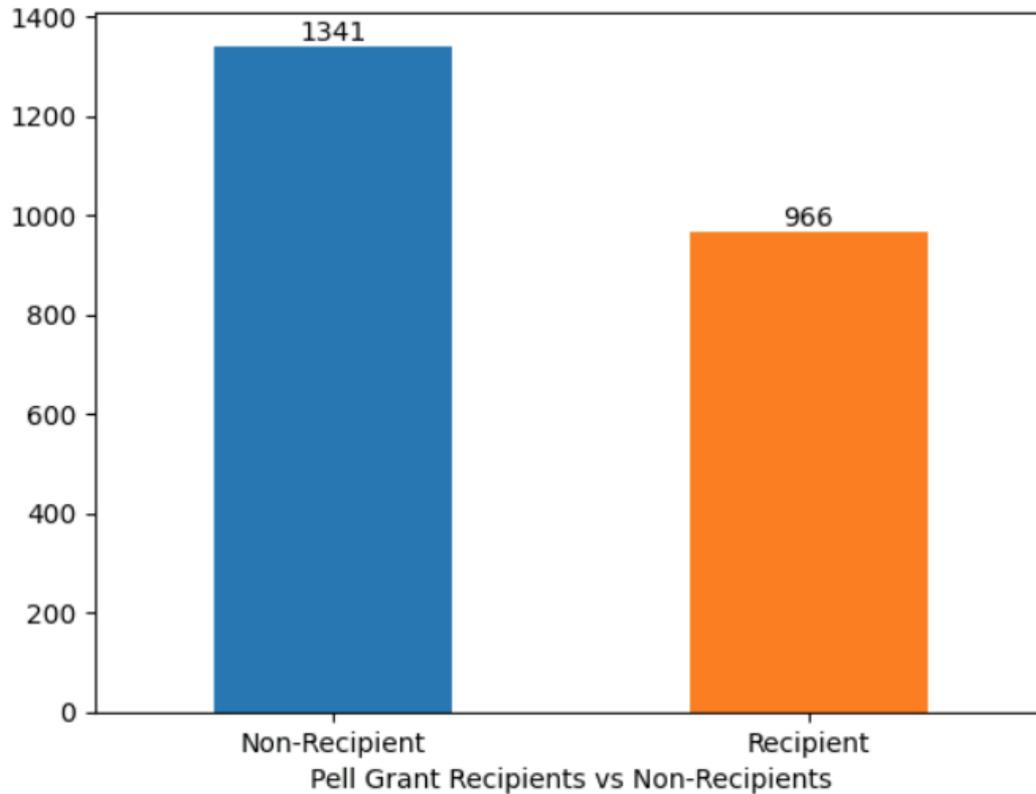
ENROLLMENT HYPOTHESIS: EDUCATION ENROLLMENT IS LOWER AND FLAT



Data Source: Syntucky Data

ENROLLMENT HYPOTHESIS: SUBGROUP OF PELL VS. NON-PELL RECIPIENTS

Pell Grant Disbursement for Education Bachelors Enrollees in Cohort 2013



n = 2,893

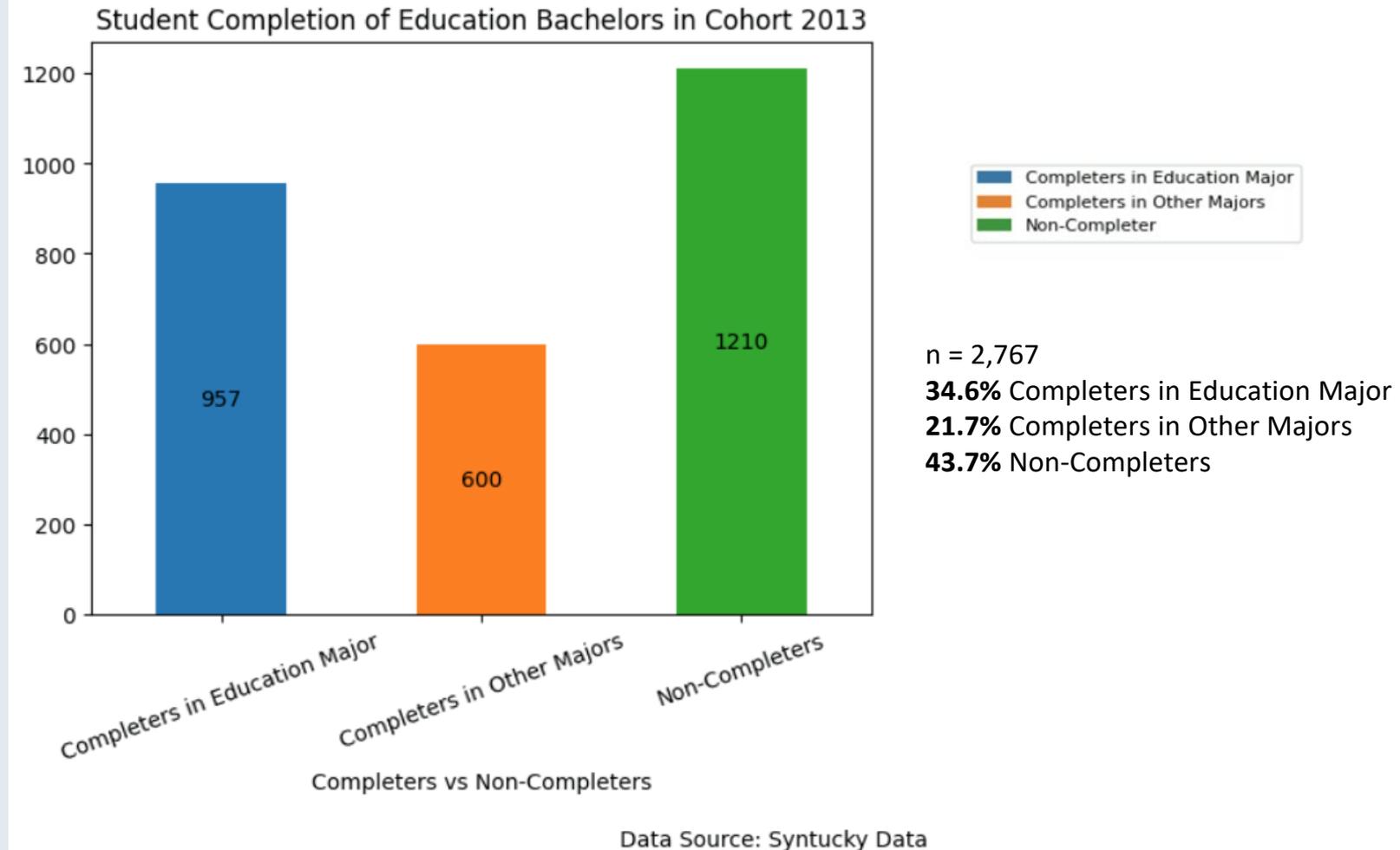
46.4% Pell Grant Non-Recipients

33.4% Pell Grant Recipients

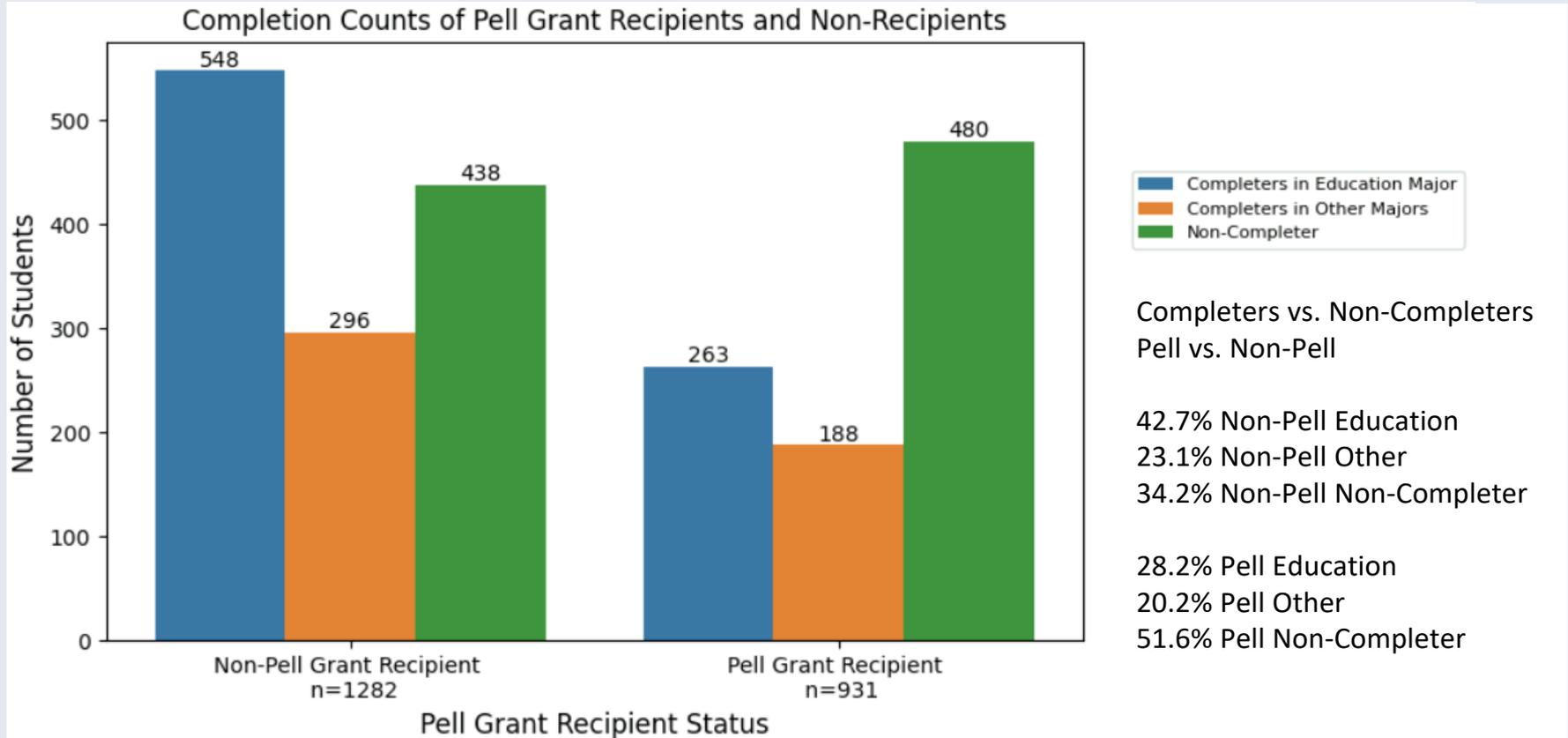
20.3% Missing Data

Data Source: Syntucky Data

COMPLETION HYPOTHESIS: ONLY ABOUT ONE-THIRD COMPLETE A BACHELOR'S IN EDUCATION



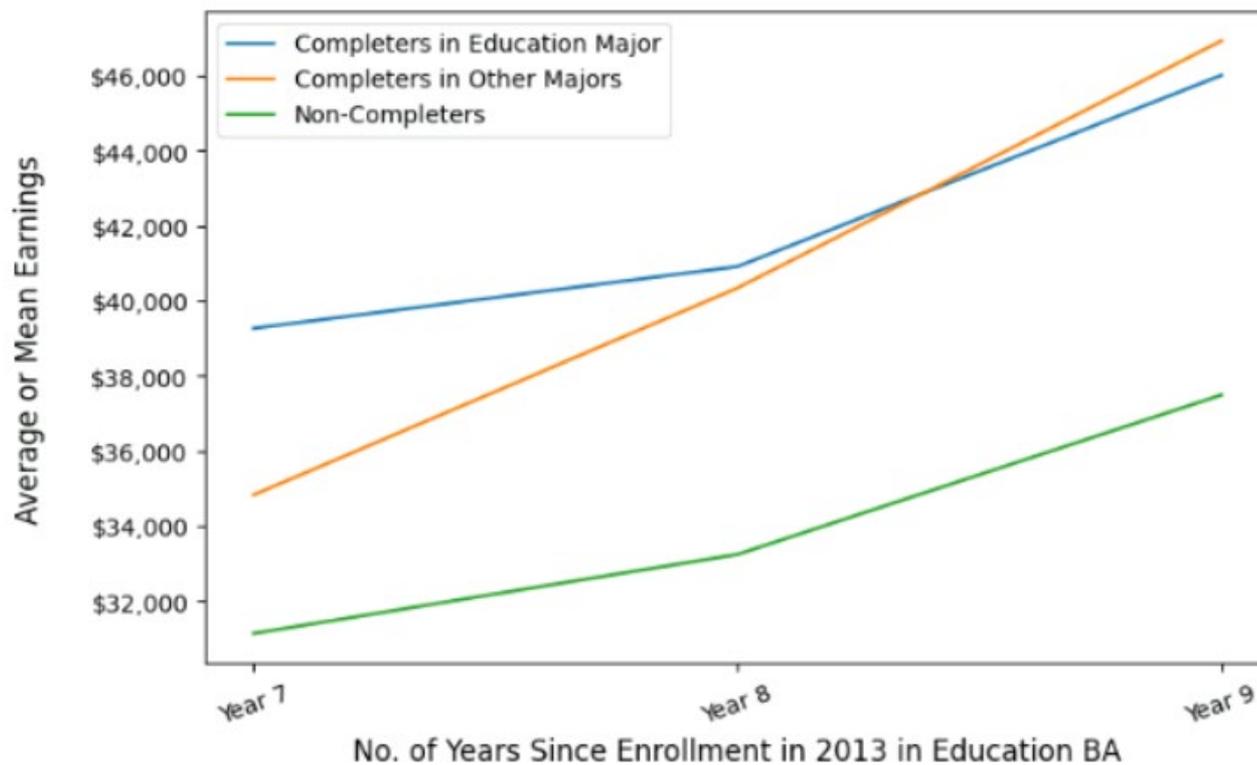
COMPLETION HYPOTHESIS: PELL RECIPIENTS COMPLETE AT A LOWER RATE THAN NON-PELL RECIPIENTS



Data Source: Syntucky Data

WAGE HYPOTHESIS: NON-EDUCATION COMPLETERS EARN MORE BY YEAR NINE

Years 7 - 9 Earning Outcomes of Students Enrolled in Education Major in 2013
by Educational Attainment



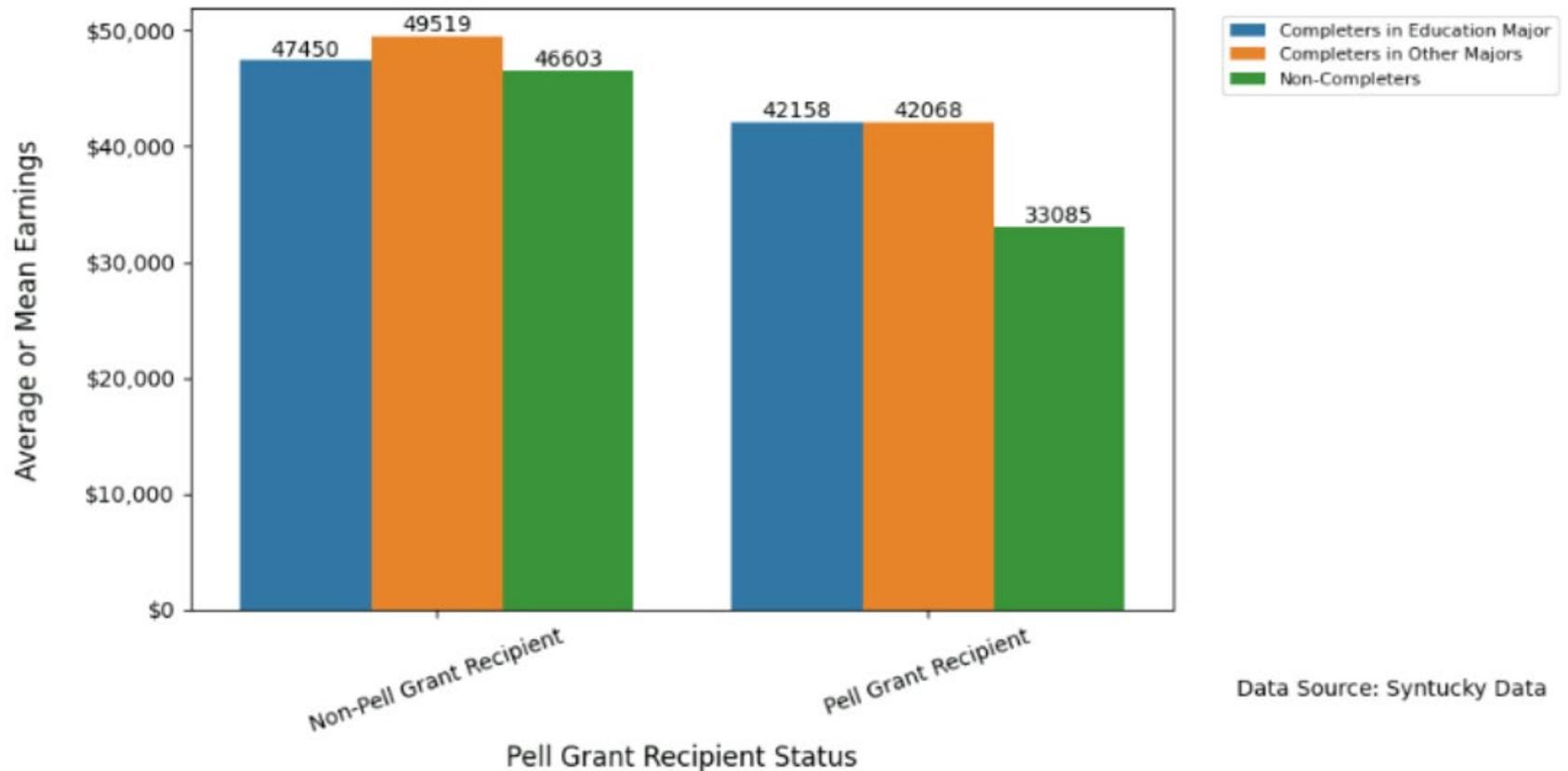
Missing Values

Year 7:
49%
Year 8:
56%
Year 9:
63%

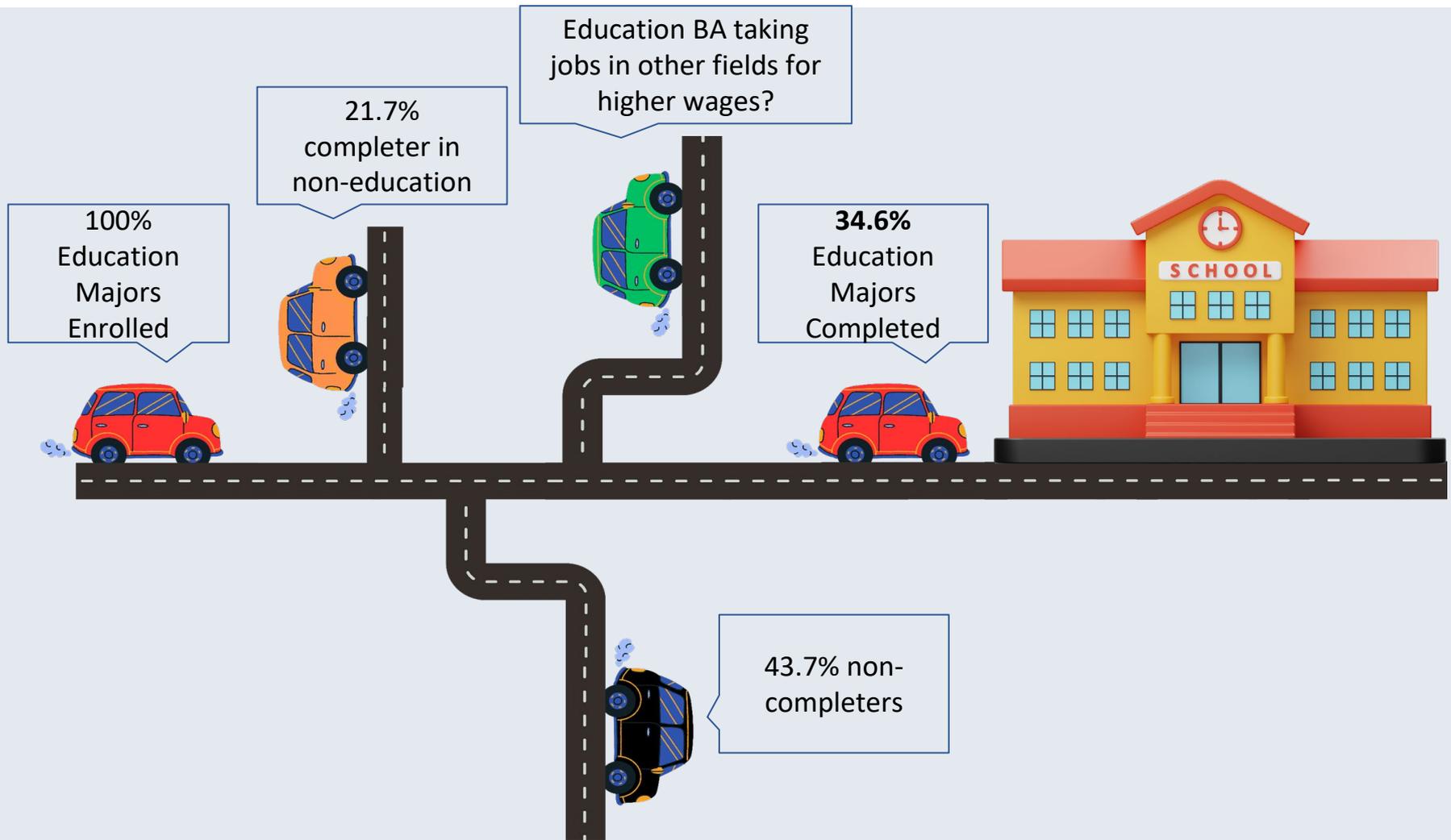
Data Source: Syntucky Data

WAGE HYPOTHESIS: PELL RECIPIENTS EARN LESS, BUT THE EDUCATION / NON-EDUCATION GAP IS MINIMAL

Year 9 Earning Outcomes of Students Enrolled in Education Major in 2013
by Pell Grant Status



TWO-THIRDS OF ENROLLEES EXIT THE TEACHER SUPPLY HIGHWAY



QUESTIONS?

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