

# Heterogeneous Paths Through College: Detailed Patterns and Relationships with Graduation and Earnings

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“The conclusions of this research do not necessarily reflect the opinions or official position of the Texas Education Agency, the Texas Higher Education Coordinating Board, or the State of Texas.”

- Introduction and Motivation
- Data
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- Conclusion

- A considerable fraction of college students and bachelor's degree recipients attend multiple postsecondary institutions.
- Despite this fact, there is scant research that examines the nature of the paths and the relationship between the path to degree and subsequent outcomes.
- Using data from the THECB, TEA, and TWC, we examine in detail the paths that students take towards a bachelor's degree and estimate how contact with multiple institutions is related to degree completion and subsequent earnings.

- 1982, only 46.9% of students attended one institution. This proportion fell to 43.5%—a 7.2% decline—among the high school class of 1992. This trend has increased since the 1990s.
- Despite the prevalence of multi-institutional contact, we know very little about why students engage in such behavior.
- The point of this paper is to examine in detail, the paths that students take to a bachelor's degree and to offer some suggestive evidence on the relationship between the path to a bachelor's degree and subsequent earnings.

- We show that transferring is prevalent and that "traditional" transfer pathways—for example attending a two year school and then attending a four-year college or transferring once between four-year colleges—are inadequate to capture the multitude of ways that students progress through the postsecondary education system.
- We find that transfers to flagships are more likely to graduate than are direct attendees; however, students who transfer to the flagship institutions from community colleges are less likely to graduate.

- We uncover a great deal of heterogeneity with respect to how the path to degree affects earnings.
- For example, among UT-Austin graduates, direct attendees earn 15% to 17% more than transfers from non-flagship public universities and community colleges.

- Two Samples
- Transfer Sample: Students who graduate from Texas public high schools between 1992 to 2000 and who start their college education in Texas public colleges or universities within two years after high school graduation. We have a total of 894,886 attendees and 344,946 BA recipients in our sample.
- Earnings Sample: Graduates from Texas's public high schools and Texas's Public Colleges who meet Four criteria: 155,345 graduates.

- Stratification students by the first institution attended and trace their path through Texas's Public Higher Education System.
- We use simple regression to estimate the impact of transfer on the likelihood of obtaining a BA.
- Regression analysis: We estimate earnings as a function of the path to degree. We include a rich set of observable characteristics to account for other determinants of differences in earnings.

- Attendees: 21.33% of students transfer once. 6.84% of attendees transfer twice. 3.85% of attendees transfer three or more times.
- Bachelor Degree Recipients: More than 33.18% of bachelor degree recipients transfer once. 10.63% transfer twice. 6.45% of bachelor degree recipients transfer three or more times.

- UT-Austin: 7.55% of attendees transfer once. 7.51% of attendees transfer more twice. 2.47% of attendees transfer three or more times. 3.83% of bachelor recipients transfer once. 6.82% of bachelor recipients transfer twice. 1.77% of bachelor recipients transfer three or more times.
- Texas A&M-College Station: 8.63% of attendees transfer once. 9.02% of attendees transfer more twice. 2.48% of attendees transfer three or more times. 3.78% of bachelor recipients transfer once. 8.54% of bachelor recipients transfer twice. 1.88% of bachelor recipients transfer three or more times.

# Stratified Results: Non-Flagship Public and Community Colleges



- Non-Flagship Four Year Public Universities: 20.7% of attendees transfer once. 13.2% of attendees transfer more twice. 4.79% of attendees transfer three or more times. 11.05% of bachelor recipients transfer once. 15.78% of bachelor recipients transfer twice. 4.83% of bachelor recipients transfer three or more times.
- Community Colleges: 23.96% of attendees transfer once. 3.40% of attendees transfer more twice. 3.61% of attendees transfer three or more times. 82.3% of bachelor recipients transfer once. 5.93% of bachelor recipients transfer twice. 11.77% of bachelor recipients transfer three or more times.



- At UT-Austin 50.58% transfer to a non-flagship four year schools and 45.55% transfer to community college. A similar pattern holds for Texas A&M-College Station.
- The 20.7% of the attendees who both begin at a non-flagship public university and transfer once primarily transfer to community colleges or other non-flagship public universities. Among the 11% of eventual graduates who transfer once, however, over 25% transfer to a flagship university. Thus, for over a quarter of these students, transferring is associated with an increase in college quality, while the rest of these students transfer laterally.
- Most Community college students who transfer once switch to a non-flagship university. However, 12% of attendees and nearly 15% of BA recipients transfer to a flagship university.

- Pattern of students eventually returning to the the first institution attended.
- 11.7 % of BA recipients who start at a community college transfer to a flagship and then to a non-flagship public university.

- After adjusting for observable characteristics, students who begin college at a flagship institution and then transfer to a non-flagship are more likely to graduate than non-flagship direct attendees. (13.3%)
- Students who begin at non-flagship institutions and transfer to another non-flagship institution, conditional on observables, are more likely to obtain a bachelor's degree relative to direct attendees. (17.2%) Students who transfer from a community college to a non-flagship four year public university, conditional on observables, are more likely to obtain a bachelor's degree relative to direct attendees. (26.7%)
- After adjusting for observable characteristics, Students who start at a non-flagship and transfer into a flagship are more likely to graduate than flagship direct attendees. (16.3% for UT-Austin and 8.1% for Texas A & M)

- Earnings Regression where we specify path by using the first and last institution attended.
- Direct Attendees at the flagships earn more than students who transfer in. At UT-Austin, transfers earn 15.6% less with no controls and 6.5% less once controls for non-flagship public transfers relative to direct attendees.
- The difference is 20% less for community college transfers without controls and 8.4% less with controls relative to direct transfers.

- For Texas A&M, transfers earn 6.9% less from a non-flagship four year public university and while transfers from a community college earn 6.0% less relative to direct attendees.
- There are no significant differences for either comparison once controls are included, -1% and .9 % respectively.
- There is a small difference in earnings, -1%, for transfers from a community college once controls are included.

- Examining either where a student begins college or finishes college is an insufficient metric of exposure to college quality.
- We provide evidence that the path to a degree earnings.
- At a minimum, this work suggests that contact with multiple institutions impacts outcomes that we care about.
- Given the prevalence of transferring and its potential effects, multi-institution contact should be a consideration in any policy that aims to improve the efficacy of post-secondary education.