## A Longitudinal Study of Earnings Outcomes for UT System Graduates: Break Even



How many years do UT graduates have to work to catch up to a high school graduate's cumulative earnings?

All dollars are inflation-adjusted to 2021.

To explore the Break Even concept, we use the "story" of four young people graduating from a Texas high school: Jake, Brittany, Maria, Carlos. Obviously, these are not real people—but they are representations of the medians of the populations used for this study.

- All four represent students who graduated from high school.
- Jake represents Texas workers with only a high school diploma. He did not go to college and instead entered the workforce immediately after high school.
- The remaining three represent students who entered a UT academic institution in Fall 2003 through Fall 2016 as first-time-in-college students who graduated within six years.
  - o Brittany represents graduates who completed within 4 years (adjusted cost of \$20,600) working in Texas.
  - o Maria represents graduates who completed within 5 years (adjusted cost of \$21,500) working in Texas.
  - o Carlos represents graduates who completed within 6 years (adjusted cost of \$20,600) working in Texas.
- Assumption throughout: No one experiences significant unemployment that disrupts earnings.

## Breaking Even: How long does it take?

Jake started working in Texas right after he graduated high school. In his first full year, he earned \$8,532. In the following years he earned \$12,611; \$15,371; \$17,194; and \$18,113.

Brittany represents nearly 82,500 four-year UT graduates working in Texas one year after graduation.

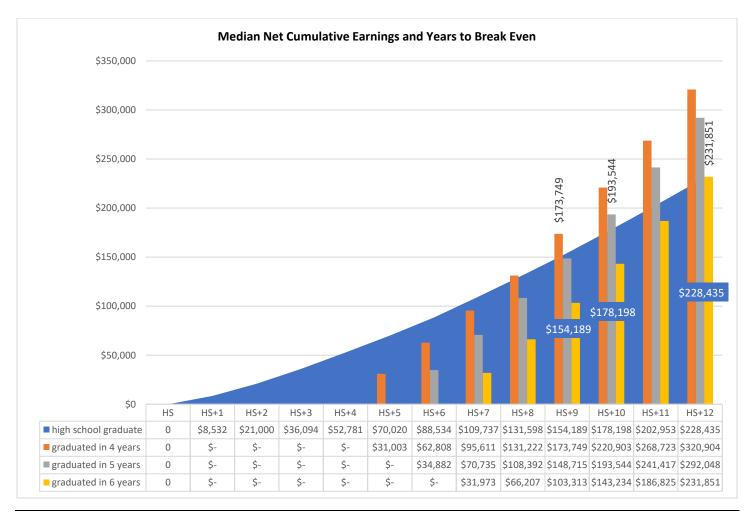
- By the time Brittany starts earning post-graduation income (\$31,003 in the first year after deducting 10% of total adjusted cost), Jake has worked for five years and earned a cumulative \$70,020.
- It takes Brittany **five years** of work to catch up to Jake—to break even. By the end of her fifth year after graduation (at which point she represents more than 68,000 graduates), she will have made a net cumulative \$173,749, compared to Jake's \$154,189 cumulative from nine years of work. Each year an additional 10% of Brittany's adjusted cost is deducted from her income, so that by the fifth year, her net cumulative income includes a total deduction of 50% of her total adjusted cost.

Maria represents more than 45,900 five-year UT graduates working in Texas one year after graduation.

- By the time Maria has post-graduation income (\$34,882 in the first year, deducting 10% of total adjusted cost), Jake has worked for six years and earned a cumulative \$88,534.
- It takes Maria **five years** of work to catch up to Jake—to break even. But by the end of her fifth year after graduation (at which point she represents nearly 40,000 graduates), she will have made a net cumulative \$193,544, compared to his \$178,198 from ten years of work.

Carlos represents more than 15,100 six-year UT graduates working in Texas one year after graduation.

- By the time Carlos has post-graduation income (\$31,973 in the first year, deducting 10% of total adjusted cost), Jake has worked for seven years and earned a cumulative \$109,737.
- Carlos takes six years of work after earning his degree to catch up to Jake—to break even. But by the end of
  his sixth year after graduation (at which point he represents more than 10,400 graduates), Carlos made a
  cumulative \$231,851, compared to Jake's \$228,435 earned over 12 years. At this point, they have all been
  out of high school for 12 years.



## **A FEW KEY TERMS**

The following terms are important to understanding the analysis. Additional details can be found in the "Methodology" section at the end.

**Population.** For each entering cohort (Fall 2003 through Fall 2013), only first-time, full-time students who graduate from the same University of Texas institution in four, five, or six years are included.

**Average adjusted cost.** The average adjusted cost is calculated by first determining each graduate's total academic cost, prorated based on number of Semester Credit Hours enrolled. To calculate the adjusted cost, any free aid (e.g., grants and scholarships, tuition exemptions and waivers) the graduate received is deducted from that total cost.

**Median cumulative earnings.** Earnings for high school graduates are based on Integrated Public Use Microdata Series (IPUMS) median wages in Texas for high school graduates by year and age. The earnings for the college graduates were calculated based on individual-level Texas Workforce Commission UI wage records.

**Median net cumulative earnings** is calculated by deducting the average adjusted cost from the median cumulative earnings. To do this, we amortized the cost over ten years (similar to paying off student loans), assuming evenly distributed "payments." This is deducted from the cumulative earnings, creating net median cumulative earnings.

**Break-Even Point (BEP)** is the first full year a college graduate has recouped the cost of their degree and the opportunity cost of not entering the workforce full time after high school.

**Return on Investment (ROI)** is the difference between the median net cumulative earnings of graduates and the estimated cumulative earnings of the high school graduate.

For more information: data.utsystem.edu/break-even2025