Introduction

I analyzed the data provided by the Department of Education's College Scorecard, it was introduced with the aim of enhancing transparency and enforcing accountability among colleges regarding aspects such as value and quality. This comprehensive dataset encompasses nearly 8,000 educational institutions across the United States, ranging from community colleges to undergraduate and post-graduate establishments like law and medical schools. Furthermore, it comprises a wide array of information, with over 1,500 variables included.

1. Institution Type: Refers to whether the school is publicly funded, privately nonprofit, or privately for-profit in terms of its governance structure.

2. Net Tuition Revenue: This is calculated by subtracting discounts and allowances from tuition revenue and then dividing the result by the total number of full-time students.

3. Average Cost: The average annual expense for attending the institution, which encompasses tuition, fees, books, supplies, and living costs for all students receiving federal aid.

4. Median Earnings: The middle point of earnings for students who receive federal aid. This data is accessible from six years after a student enrolls in college up to a decade after enrollment (for this specific analysis, I used earnings data from the ten-year mark).

5. Median Graduate Debt: The central value of the loan debt taken on by student borrowers with federal loans at the institution (debt acquired by students who left before completing their studies is accounted for separately).

6. Default Rate: The percentage representing the cohort default rate over a three-year period at the institution.

Research Inquiries:

1. In my analysis, I concentrated on colleges offering four-year bachelor's degrees and centered on factors associated with expenses and achievements after graduation. I aimed to address the subsequent inquiries:
2. Optimal Value Institutions: Which educational institutions combine lower costs with superior post-graduation earning prospects? Additionally, which schools exhibit elevated overall expenditures but lackluster outcomes?
3. Regional Disparities: Is there variation in college expenses and outcomes based on geographical location? What states demonstrate the highest and lowest student earnings?

4. Achievements Based on Institution Type: Does the data corroborate recent discussions concerning private for-profit schools? More specifically, do these schools tend to target economically disadvantaged students and yield subpar outcomes?

Data Observations:

My initial objective was to gain insights into the income and employment opportunities of alumni, juxtaposed with the typical expenses of each institution. This analysis aimed to assist potential students contemplating loans for their education in identifying institutions that offer the most favorable returns on their investment – specifically, institutions with modest average costs coupled with comparatively elevated earnings among their graduates. To visualize this, I created graphs plotting the average costs of various schools against the median earnings over a 10-year period, differentiated by the type of school.