

## *ASSUMPTIONS AND ESTIMATES*

It was hard gathering information and data for this website, given Colgate's very limited/outdated disclosure and unwillingness to share information. I relied on external data sources and reasonable assumptions. My estimates are intended to be conservative. I have tried to note facts, opinions, estimates and assumptions. If any errors are discovered, I will update the web site.

## *INDEX*

I chose a 70% S&P 500 and 30% bond index because it is a reasonable benchmark for a U.S. based endowment, according to my research. It provides diversification and a reasonable risk-return tradeoff. This index also makes the analysis straightforward, easy to understand and verify.

One of the biggest apparent simplifications of the index is that it has no cash. Colgate's endowment needs cash for operations. It turns out adding cash to the index increases the complexity of the analysis without having material impact. From 2006-24, the average Treasury Bill rate was 1.3% versus the average annual bond return of 2.7%. If the index held 25% bonds and 5% cash (vs 30% bonds), this would reduce the endowment gain by an average of a little less than \$1 million per year – not material relative to other simplifying assumptions and the overall thesis.

The 70%/30% stock/bond index historical returns on this website are based on a performance blend of Vanguard's 500 Index Fund (70% VFIAX) and Total Bond Market Index Fund (30% VBTLX). Returns were calculated using <https://dqydj.com/mutual-fund-return-calculator/> I assumed the endowment could be periodically rebalanced back to 70/30 by investing gifts, income and returns of capital, as the calculator implicitly does.

## *GROWTH PROJECTIONS*

I projected endowment growth assuming no future gifts and 5% annual spending. Fundraising will obviously impact endowment growth for Colgate and all its peers. Importantly, how those gifts are invested will have a significant growth impact on all endowments. I estimated the future growth of each endowment and the index using its corresponding average annual return from 2014-2024. Do not interpret these estimates as predictions. From Colgate's 2022-2023 President's Report, it appears annual spending for operations is 5% of average endowment assets over multiple years. Since the endowment has been growing, this translates into less than 5% of the current year's endowment. (All of the years on this website reflect June fiscal years, to line up with Colgate's.)