

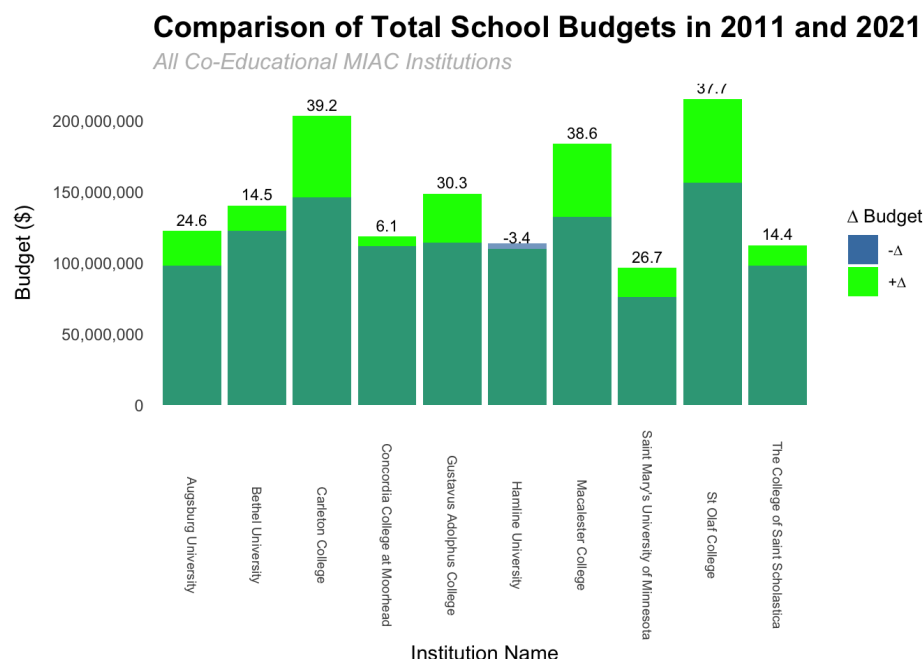
Final Project: MIAC Athletic Expenses

Eric Wentz, Nick Strezo, and Jake Korde

Our project focused on the athletic expenses of schools in the Minnesota Intercollegiate Athletic Conference (MIAC), how the expenses have changed over time, and how they affect the success of specific athletic programs. We decided to only focus on co-educational schools in the MIAC as we thought it would be more relevant to compare co-ed schools to other co-ed schools. Comparing non-co-ed schools to co-ed schools would not be particularly enlightening as non-co-ed schools don't have to spend their athletic budgets in the same way co-ed schools do. An all-women's school doesn't have a men's basketball team so more of their athletic expenses will go toward the women's basketball team. For comparing expenses over time, we decided to compare expenses in 2021, which was the most recently available year to us, and 2011, a decade prior.

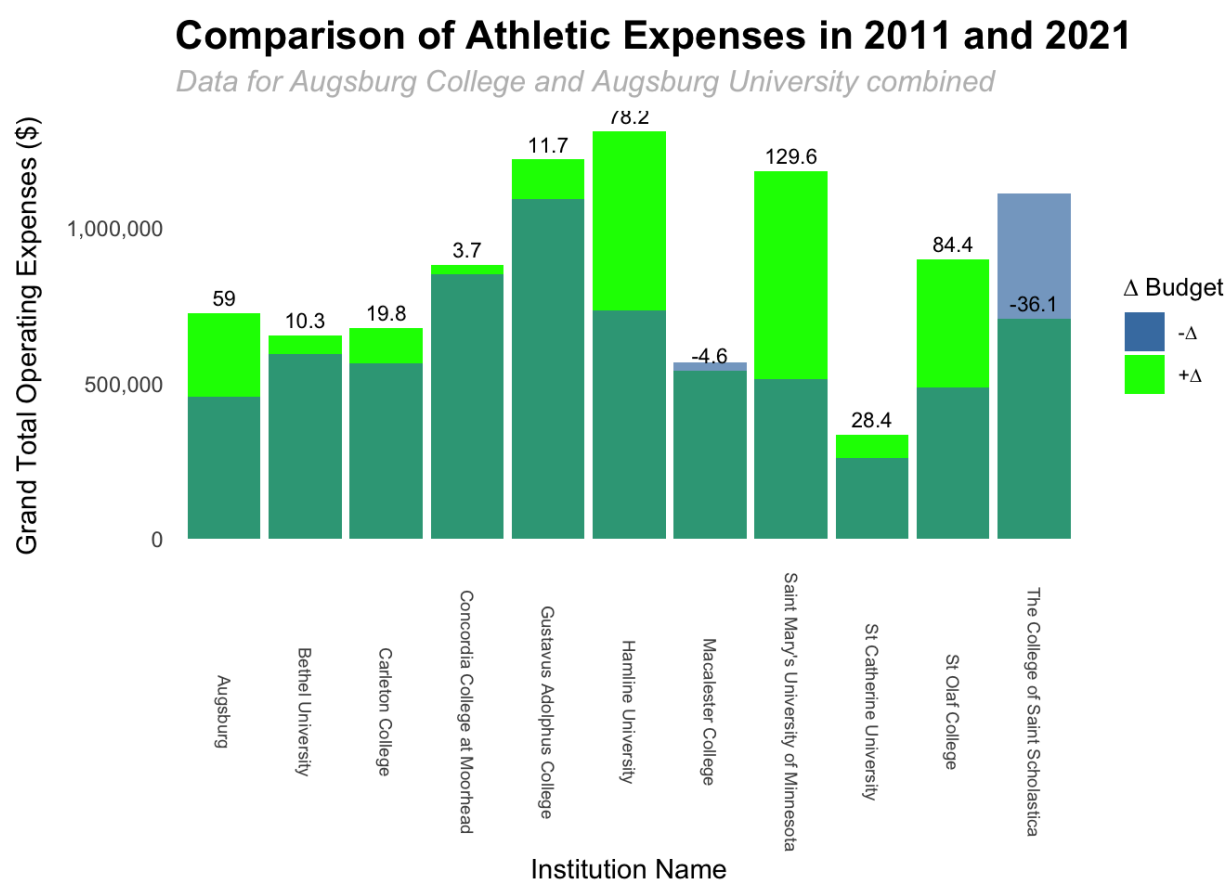
Our data came from the Office of Postsecondary Education of the U.S. Department of Education. All of the co-ed schools in the MIAC are federally funded institutions which means that they have to report their athletic expenses and revenues to the government due to the Ethics in Athletics Disclosure Act (EADA). The EADA is a federal law passed in 1994 to give the public information about athletic spending for each sport with clear information about spending by gender.

To first get some context about each school, we looked at the overall budget of each school in 2011 and 2021.



This visualization shows the difference in overall institutional budget between 2011 and 2021. The bright green indicates a positive change in the budget while the blue represents a negative change. Only one school, Hamline University, had a negative change in budget. While we are not focusing on the entire budget and just athletic expenses, we think that it is important to provide context for each school's overall budget. Some schools have changes in athletic expenses which closely match their overall budget changes whereas others have vastly different changes.

Our first step was looking at a comparison of athletic spending by each MIAC school from 2011 to 2021.

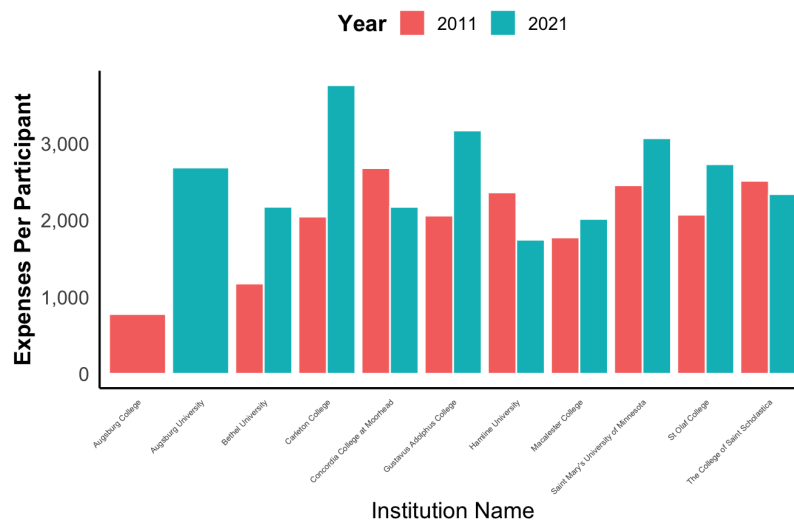


The graph above shows the comparison between athletic spending by schools in the Minnesota Intercollegiate Athletic Conference between 2011 and 2021. Each school has seen changes in spending over this time. For the most part, schools have dramatically increased their spending on athletics except the College of Saint Scholastica and Macalester College. As we investigate the correlation between team success and spending it was important to evaluate the change in spending for athletic programs because we can get a holistic understanding of athletic funding in the conference. It is noteworthy to mention that our data excludes information on donations given to programs. Many schools rely partially on donations to fund their programs. This information however is not public and was not accessible for our research. Though the data in

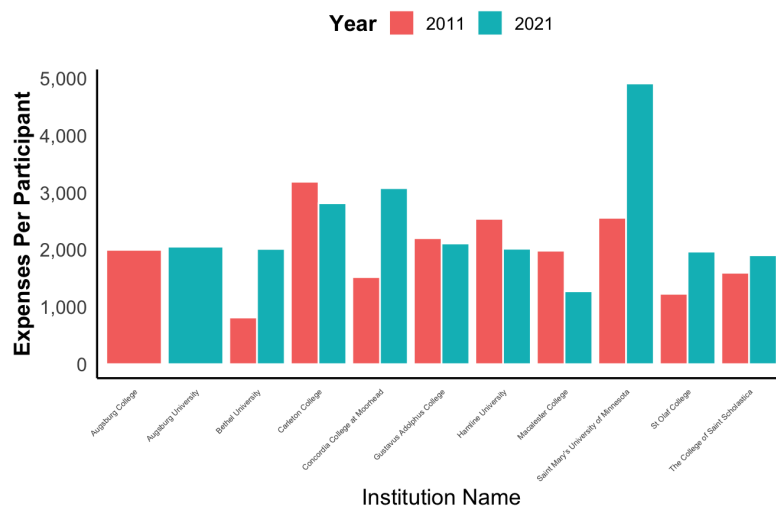
our research is not entirely complete, lacking expenditure of donations, it is still relevant to examine the data provided as it gives insight into the prioritization of athletics by college institutions. Understanding how money is used in college sports is vital for grasping the bigger picture of student-athletes experiences across various conferences. Colleges and universities face the challenge of managing their finances wisely to fulfill both fiscal responsibilities and create fulfilling athletic experiences. Continuous conversations and research can guide thoughtful decision-making that aligns with the diverse goals and priorities of institutions involved in collegiate sports.

Next, we wanted to look at how the changes in total athletic expenses showed up in specific programs. We decided to look at men's and women's basketball. The reason for choosing these sports is because we can more easily compare them to each other, they have a good way to indicate success (win %), and they are important programs across all 10 schools. We looked at both total expenses and per-participant spending to get a better grasp of the data.

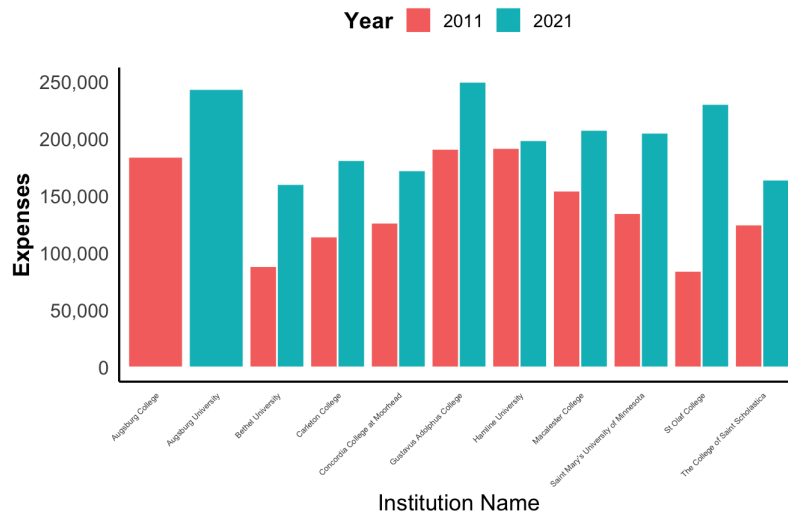
Women's Basketball Analysis - Expenses per Participant



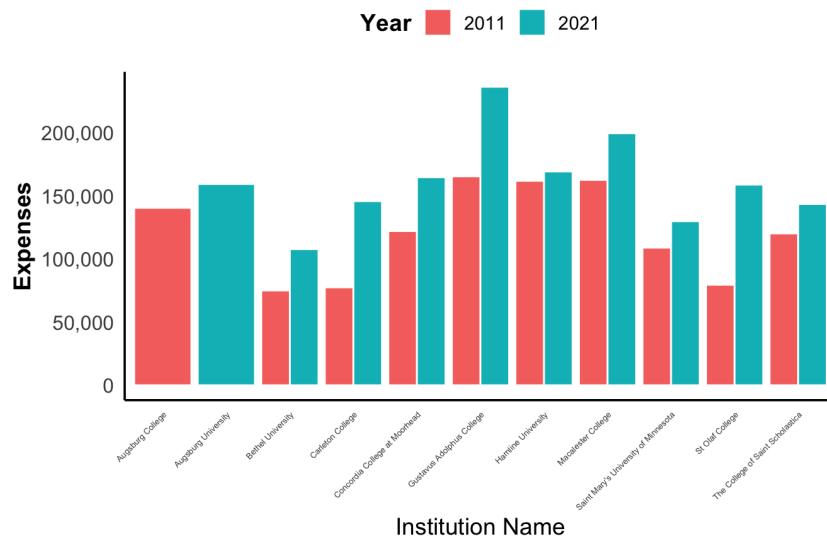
Men's Basketball Analysis - Expenses Per Participant



Men's Basketball Analysis - Total Expenses

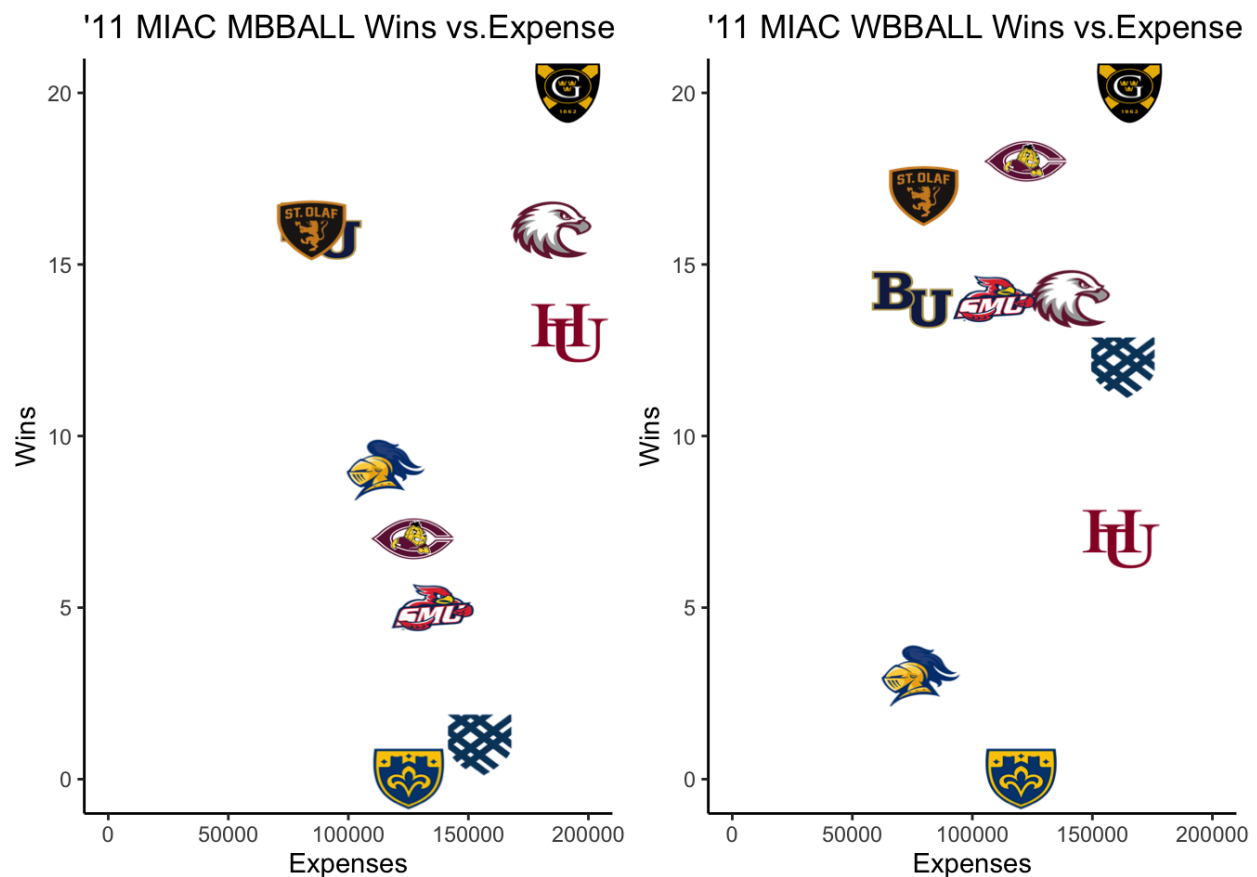


Women's Basketball Analysis - Total Expenses



From these graphs, we can see a clear uptick in overall expenses across all schools for both men's and women's basketball. These changes follow a similar pattern to the overall changes in athletic expenses that we looked at previously. Interestingly, these changes are much more different when we look at per-participant expenses. We can see a much higher uptick of spending across the women's teams, likely due to the 2011 spending being significantly lower than the men's teams. Additionally, the per-participant graph shows that some teams, Macalester included, actually spend less on specific programs on a per-participant basis. Even though Macalester is spending more on the men's basketball team, because there has been an increase in the number of players, each player is receiving a smaller amount of the money spent.

Another idea that we wanted to tackle was to show how athletic spending affects the success of an athletic program. We decided to look at men's and women's basketball not only because basketball is traditionally one of the more expensive sports collegiately but it is also easy to look at the comparison across genders. The first visualization represents the 2011 MIAC basketball season. On the left we have the men's expenses plotted against wins and on the right we have the women's. Based on this graph there really is not any visible correlation between the amount spent on a team and the success. There is a certain outlier with Gustavus being that they are at the top of spending and success on both the men's and women's sides. So there could be an argument about if you spend a certain amount of money it is more likely than not going to correlate to wins.



This next graph is the same however it looks at the 2021 season. Here, there is more of a correlation between spending and success. On both sides, there is somewhat of a line of best fit. As spending goes up most teams seem to win more games. Of course, there are certain outliers but overall, this seems to be the case. I think it would be interesting to look at win totals across the 10 years and the same for spending. That way we can consider "bad seasons" and look overall at spending and success across the period. I believe this would give us a better understanding of how much of an effect it has.

