NCAA DIVISION II VALUES STUDY
JANUARY, 2008

HARDWICK DAY
EXECUTIVE SUMMARY

Hardwick-Day was engaged by the NCAA to help its members and prospective members in Division II better understand both the real cost of the investments made by Division II institutions and the value they receive in return for their investments. The NCAA asked Hardwick-Day to answer several significant questions in conducting this study:

- What are the non-financial implications of Division II athletic programs in areas such as cultural diversity, gender balance, campus culture and student life?
- What is the net financial impact of membership in Division II including net tuition revenue in a calculation of total expenditures and revenues?
- How might adjustments to their athletic scholarship programs accrue financial benefits to current NCAA Division II member institutions, and what gains might be achieved through adoption of the Division II partial scholarship model by institutions that don’t currently offer athletic scholarships?

One important aspect of the study to underscore is that we sought to specifically assess the benefits of the partial scholarship model unique to Division II. We did not seek to measure benefits that would be common to athletic programs across athletic associations and divisions.

Included in the study were 18 institutions, including nine public and nine private, representing a wide range of size and geography, as well as athletic programs that included and excluded football.

Our initial analysis assessed the recruitment impact of athletic scholarships on enrollment. And while the data provided by some of our study participants were incomplete, we were at least able to conclude that athletic scholarships did indeed significantly increase institutions’ success in enrolling these students. We concluded, therefore, that the characteristics more likely to be found among recipients of athletic scholarships would be enhanced through the use of athletic scholarships.

Through this analysis, we reached the following conclusions:

**Impacts on Campus Culture**

- Athletic scholarships tend to bolster enrollment near the middle of the academic profile, and most notably, not at the bottom of the profile.
- Athletic scholarships offered to females are especially helpful to institutions’ academic profiles.
- Athletic scholarships are beneficial in building male enrollment as a share of new students.
Athletic scholarships recipients increase ethnic diversity among new students.

Athletic scholarships increase the geographic diversity of new students.

Athletic scholarship recipients exhibit more involvement in community service and volunteer activities than non-recipients.

**Financial Impacts**

- The net cost of operating Division II athletic programs, excluding the cost of athletic scholarships, tends to be lower than for programs of similar size in Division III, primarily due to larger operating revenues generated by Division II programs.

- Athletic scholarship recipients at Division II institutions most frequently include other Division II institutions among their choices, as opposed to NCAA Division I or III or non-NCAA schools. This suggests that not offering athletic scholarships would place Division II institutions at a competitive disadvantage in recruiting these students.

- A portion of athletic scholarship expenditures at private institutions replaces grant aid commitments to students that would otherwise be based on need or academic performance if these same students had not received athletic scholarships. This indicates that, for these institutions, the cost of athletic scholarships is actually smaller than the amount they’ve allocated for athletic scholarships in their budgets.

- Athletic scholarship expenditures at public institutions are almost entirely new funds that would not otherwise be offered as other forms of gift aid, suggesting that the budget allocation for athletic scholarships at public institutions is a more accurate measure of their actual cost.

- Institutions that emphasize fewer and larger scholarships would be likely to increase net tuition revenue by reducing the average amounts of athletic scholarships and offering them to more students. Total elimination of athletic scholarships may increase net tuition revenue for some of these institutions, but probably not as much as an approach that reduces award amounts per student, and may well result in a loss of non-tuition revenues associated with athletics.

- Institutions that offer smaller athletic scholarships to more students are more likely to generate optimal net tuition revenue. For these institutions, eliminating athletic scholarships might well reduce net tuition revenue, and non-tuition revenues associated with athletics may also be expected to decline.

- Simulations of alternatives are challenged by the reality that student athletes lost when athletic scholarships are reduced or eliminated would, at least in part, be replaced by less-recruited student athletes. Our assumption is that these prospective student athletes could also be recruited with no change in the athletic scholarship program if the institution chose to do so.
Simulation Model

To assist institutions in reviewing their athletic scholarship programs, we have constructed a model designed to estimate the results of changes made to the athletic scholarship program. The model incorporates these elements:

- User-entered information, including
  - Roster sizes by sport
  - Full scholarship equivalents by sport
  - Scholarship recipients by sport
  - Non-athletic financial aid expenditures for student athletes
  - Non-tuition revenues and expenditures by sport
- The ability to adjust the number of full scholarship equivalents and scholarship recipients for each sport
- Based on these adjustments, estimated roster sizes that account for enrollment gains resulting from additional scholarships or losses resulting from reductions
- Resulting changes in net tuition revenue
- Changes in non-tuition revenue and expenses that might be expected with significant changes in the athletic program
- The ability to model scenarios more conservative or more optimistic than projected from the base model

Clearly, each institution’s results will differ from others so the precise results of the model’s simulations should not be interpreted too strictly, but the general patterns illustrated by the model will still provide effective guidance for improving revenue outcomes or avoiding decisions that would result in net revenue losses.
The national context within which all colleges and universities in the United States find themselves is one fraught with financial pressures that increase every year. The rate of increase in college and university tuition is second only to healthcare over the past twenty years. Federal and state support have not kept pace with costs and the number of high school graduates available for enrollment nationally is about to plateau for the first time in over twenty years. These financial and market forces have already begun to squeeze institutional operating budgets, and the challenge to balance annual budgets will only get bigger in the years to come. It is not surprising, then, that the leaders of some campuses, in seeking ways to conserve financial resources or capture scarce dollars for other uses, have looked at athletic scholarships as an expenditure that could be spent in other ways.

In asking Hardwick-Day to study the benefits of membership in Division II, the NCAA asked that we assess the net financial gain or loss that accrues to members as a result of participation at this level of athletic competition. Just as important, though, is the assessment of the non-financial contributions made by students recruited to Division II campuses with offers of athletic scholarships. If Division II athletic programs ultimately result in a net cost rather than gain in financial resources, as it appears they may for many institutions, it is appropriate to ask whether athletic participation is consistent with the missions of these institutions and whether the benefits are sufficient to warrant the magnitude of the investment. We believe the answer to the first question is answered by the nearly unanimous choices of colleges of many different sizes, types and levels of resource to include athletic competition in their offerings. We believe the answer to the second question is also a convincing “yes” as we illustrate in the following pages.

We are tremendously grateful for the assistance of the NCAA staff members who provided and helped us interpret the data collected by the NCAA. We are also extremely appreciative of the commitment and effort invested in this study by our eighteen participants that have completed the submission of data. These institutions are evenly divided between the public and private not for profit sectors, and include a mixture of institutions that sponsor football as a sport and those that do not.

Augustana College, SD
California State University Monterey Bay
Christian Brothers University
Clarion University of Pennsylvania
Clayton State University
Fairmont State University
Franklin Pierce College
Henderson State University
Pfeiffer University

Quincy University
Saint Leo University
St. Thomas University
University of Indianapolis
University of Minnesota Crookston
University of Minnesota Duluth
University of West Florida
Upper Iowa University
Valdosta State University
Impacts of Division II Athletic Scholarship Recipients on their Campuses and Surrounding Communities

Student athletes, like their classmates, bring to college with them their unique backgrounds and experiences, contributing in ways that go beyond their athletic pursuits. In our study of the benefits derived from NCAA Division II membership, we sought first to quantify the intangible benefits athletic scholarship recipients bring to their campus communities. In general, we found that athletic scholarship recipients are valuable contributors toward a number of institutional goals.

Our assessment of athletic scholarship recipients begins with their academic characteristics. We received unit record admission and financial aid data about all students offered first-time admission for Fall 2006 from the study participants. We constructed a holistic scale based on a combination of previous classroom performance and standardized tests to measure overall academic credentials, and used that scale to create five roughly equal quintiles of academic performance for each institution.

[Diagram showing distribution of athletic scholarship recipients and non-recipients by academic rank]

Chart 1: Distribution of Athletic Scholarship Recipients and Non-Recipients by Academic Rank (Quintile)
Source: NCAA Division II Values Study Participant Data

Chart 1 shows a comparison of academic rank distributions between athletic scholarship recipients and non-recipients. Students in academic rank 5 (shown on the far right in the
chart) are in the top quintile among those offered admission to the institution they chose to attend. Notably, athletic scholarship recipients are somewhat more likely than their classmates to be found in academic ranks 3 and 4, placing them near the middle and just above the middle of the academic profile. Conversely, they are slightly less likely to be found in the bottom two academic ranks overall.

Chart 2: Distribution of Female Athletic Scholarship Recipients and Non-Recipients by Academic Rank (Quintile)
Source: NCAA Division II Values Study Participant Data

In Chart 2, we examine the distribution of female athletic scholarship recipients in comparison with other female students. Females generally present stronger academic credentials than males, and when compared to other female students, female athletic scholarship recipients were significantly more likely to be found in the top two academic ranks and much less likely to be found in the bottom academic rank. This pattern proved to be common to most institutions in the study.
Our review of male students revealed a significant dichotomy between one group of ten institutions where male athletic scholarship recipients helped strengthen academic profile and another group of eight where the athletic scholarship recipients lowered the academic profile for male students. This range of experiences makes it more difficult to draw a firm conclusion about the contributions to academic profile made by male athletic scholarship recipients.

Chart 3: Distribution of Male Athletic Scholarship Recipients and Non-Recipients by Academic Rank (Quintile) at Ten Selected Institutions

Source: NCAA Division II Values Study Participant Data

Chart 3 was prepared for ten institutions selected based on a positive contribution to academic profile made by athletic scholarship recipients. When compared to female athletic scholarship recipients, male recipients at these ten institutions made a somewhat less obvious contribution to academic profile, but a positive one nevertheless. Though they were less likely to be found in the top academic rank than their non-recipient counterparts, they were considerably more likely to show up in the middle and fourth academic ranks and less represented in the lower academic ranks, especially the bottom rank.
Chart 4: Distribution of Male Athletic Scholarship Recipients and Non-Recipients by Academic Rank (Quintile) at Eight Selected Institutions
Source: NCAA Division II Values Study Participant Data

Chart 4 illustrates the academic profiles of male athletic scholarship recipients and non-recipients for the eight institutions excluded from Chart 3. In contrast to Chart 3, Chart 4 shows a substantially lower academic profile for male athletic scholarship recipients than male non-recipients, and an especially high percentage of athletic scholarship recipients in the bottom academic rank.
We divided all students offered admission by our study participants for Fall 2006 between those that applied for need-based financial aid and those that did not. Students who applied for aid were divided into four equal groups at their institutions, based on their demonstrated need.

Chart 5 illustrates that athletic scholarship recipients were considerably less likely to show up in the non-aid applicant category. This may in part relate to institutional directives that students apply for need-based aid in order to receive athletic scholarships. Among those applying for need-based aid, athletic scholarship recipients were somewhat more likely than non-recipients to demonstrate low need or very low need.
In Chart 6 we show that female athletic scholarship recipients were much more likely to demonstrate very low need, and less likely to demonstrate high need, than their non-recipient classmates.
Chart 7: Distribution of Male Athletic Scholarship Recipients and Non-Recipients by Category of Demonstrated Need
Source: NCAA Division II Values Study Participant Data

Male scholarship recipients, as displayed in Chart 7, show a considerably different pattern of need, with a significantly greater likelihood than male non-recipients to demonstrate high need.
Because many institutions seek to approach gender balance by increasing male enrollment, and to increase diversity with increased enrollment of students of color, we studied the contributions of athletic scholarships in furtherance of these goals. We excluded from the gender analysis institutions where equal representation of male students has already been achieved (or exceeded) with enrollments of 50% or more males among new students. Similarly, we excluded for the assessment of diversity institutions where at least 50% of new students were students of color.

Chart 8 illustrates that athletic scholarship recipients were more likely to be male and more likely to be students of color. This demonstrates the contributions athletic scholarships make to gender balance and cultural diversity as strategic enrollment objectives.
Taking the analysis in Chart 8 a step further, Chart 9 shows the representation of athletic scholarship recipients and non-recipients by ethnicity. Athletic recipients were more likely to be African American, Latina(o) or of unknown ethnicity than non-recipients.
As shown in Chart 10, athletic scholarships are not merely coincidental with male enrollment and enrollment of students of color, but do in fact contribute much more significantly to the total award amounts for students of color than those of Caucasian or unknown ethnicity, and more significantly to male than female students in each of these two general ethnic categories. Among athletic scholarship recipients, male students of color receive the largest share of their gift financial aid through athletic scholarships. Female students of color receive the next-highest share of their gift aid as athletic scholarships.
Athletic scholarships also bring another kind of diversity to Division II campuses by attracting students from greater distances. A much smaller share of athletic scholarship recipients than non-recipients came from homes within 20 miles of their chosen institutions and a much larger share came from a distance greater than 300 miles.
Chart 12: Distribution of Athletic Scholarship Recipients and Non-Recipients by Estimated Median Household Income of Home Zip Codes
Source: NCAA Division II Values Study Participant Data and Claritas, Inc.

Based on zip code-based data licensed from Claritas, Inc. we studied the relative affluence of the areas producing athletic scholarship recipients in comparison with the areas from which non-recipients came. The results of this analysis appear in Chart 12. Athletic scholarship recipients were slightly less likely to come from zip codes with estimated median household incomes less than $55,000 and more likely to come from areas with estimated incomes above $55,000, especially those in the $55,000 to $85,000 range.
National Survey of Student Engagement (NSSE)  
2004-07 Results for Freshmen and Seniors at NCAA Division II Institutions

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<td>Non-Athletes</td>
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The Center for Postsecondary Research at Indiana University provided data from the National Survey of Student Engagement (NSSE) allowing us to investigate whether student athletes were more or less likely to be involved in community or volunteer activities. Data from the most recent NSSE administered at NCAA Division II Institutions (2004-2007) showed that participants in school-sponsored athletics are significantly more likely to participate or plan to participate in community service or volunteer activities than non-athletes.

Financial Costs or Benefits of NCAA Division II Athletic Scholarships

We noted at the outset that participation in intercollegiate athletics fits within the educational missions of most colleges and universities. If this is so, then it also follows that some level of financial investment in intercollegiate athletics is appropriate, just as investments in other avenues of co-curricular involvement warrant investment of an institution’s resources. We expect that athletic participation is offered by most institutions not to generate revenue, but instead to make the overall college experience more complete (and broadly attractive to prospective students). On that basis, we believe most institutions that ask whether their investment in Division II athletics is worthwhile ask this question for assurance that their investment is in proportion to the benefits created by it, not to prove it financially profitable.

Within that context, we set out in this study to quantify the financial investment in athletics made by members of NCAA Division II, and compare the level of investment with an alternative approach, one in which the institution would continue to offer participation in athletics, but without a commitment to athletic scholarships (such as in NCAA Division III).
Direct Costs and Revenues

To begin our assessment of the financial impact of Division II membership, we compared Division II institutions with those in Division III. For this first step in the analysis, we compared Division III revenues and expenditures to those in Division II, excluding athletic scholarships. This allowed a comparison of the investments made in direct support of athletic programs with similar numbers of participants, whether or not athletic scholarships are used to assist in the recruitment of student athletes.

Chart 13: Athletics Expenditures by Number of Student Athletes
Source: NCAA FY2005 Data

Our comparison of net cost (expenditures minus revenues) shown in Chart 13 indicates that, on average, members of Division II make smaller net investments in their athletic programs than do members of Division III (though both divisions exhibited a wide range of values). While total expenditures at Division II institutions are in many cases larger, so too are the revenues generated in these programs, resulting in a smaller average net expenditure.
In Chart 14 we show a comparison of the net expenditures for football programs in Divisions II and III. (We examined football separately to control for the wide ranges in roster sizes.) Most institutions spend more in support of their football teams than they collect in the various forms of revenue, but Division II institutions had lower net expenditures in all except one of the ranges of roster sizes we examined.
Charts 15 and 16 provide a sport by sport examination for women’s and men’s sports, with smaller net expenditures for Division II institutions in most, but not all sports. We confined our analysis to sports offered by at least ten Division II institutions and ten Division III institutions.
Chart 16: Men’s Sports Expenditures by Sport
Source: NCAA FY2005 Data
Tuition Discounts and Net Tuition Revenue

In studying the financial commitment made by Division II institutions, we sought to place the scholarships in the context of the overall financial aid program. To be sure, athletic scholarships in and of themselves represent a significant financial commitment. But the athletic scholarship itself often does not represent the full extent of the institution’s commitment to the student athlete. Conversely, the amount of aid offered as an athletic scholarship may partially offset aid that would have been offered on the basis of need, talent or academic merit, if an athletic scholarship had not been offered.

![Chart 17: Comparison of Total Institutional Gift for Athletic Scholarship Recipients and Non-Recipients by Category of Institution](chart)

We show in Chart 17 the significant difference between the total amount of institutional gift aid offered to athletic scholarship recipients and other new students at the institutions participating in the study. Notably, the differential is much larger for private institutions than public institutions, as would be expected given the difference in pricing between the two categories of institutions.
In turn, the differential in expenditures translates to a significant differential in net tuition revenues. Chart 18 shows the relative impact on net tuition revenue for public and private institutions, with athletic scholarships eliminating most of the difference in price between the two categories of institutions for scholarship recipients.
Though private institutions fund their student athletes more generously than their public counterparts, this difference is partially mitigated when one considers the amount of institutional gift aid these students would have been likely to receive had they not received athletic scholarships. To assess this factor, we compared the awards received by athletic scholarship recipients with those received by other students with similar academic and need characteristics. Chart 19 indicates that the average athletic scholarship at the public institutions in our study serves entirely to improve upon the awards students would have received without athletic scholarships. (This is also true when state residents and non-residents are analyzed separately.)

The athletic scholarships offered by the private institutions in our study, while significantly larger on average than those at public institutions, appear to be partially offset by the awards these students would have received had they not been offered athletic scholarships. Student athletes at the private institutions in our study received an average athletic scholarship of $8,800. Of that amount, we estimate that $1,819 replaced other forms of aid that would have been offered had these students not received athletic scholarships.
As shown in Chart 20, there is wide diversity in the way private institutions award athletic scholarships. Among the 9 private institutions included in our study, four awarded athletic scholarships to 19% or more of their new students in Fall 2006. Two of these four offered the lowest average athletic scholarship amounts, suggesting a widely dispersed, low intensity approach to athletic scholarships. The other five private institutions offered larger athletic scholarships to 10% or fewer of their entering freshmen. One institution was near the top in both average athletic scholarship and the percentage of new students receiving athletic scholarships, challenging its ability to generate the maximum possible net tuition revenue.
Chart 21 provides our assessment of the size and pervasiveness of athletic scholarships at the public institutions in our study. As is the case for private institutions, public institutions with larger average awards tend to offer athletic scholarships to smaller shares of their new students. The bifurcation is less pronounced than was the case for our private study participants, in part due to the lower tuition levels against which scholarships provide the discount. This circumstance is not significantly biased by differences in the institutions’ enrollments.
To this point, we have described the impact of athletic scholarships among enrolled students. A crucial element of this study is to understand the impact of athletic scholarships on students’ enrollment decisions. Too often, decision makers think of institutional financial aid in general and athletic scholarships in particular as fungible budget line items. Through this study, we seek to measure the enrollment impact and net gain or loss in revenue as a result of discounts offered in the form of athletic scholarships.

Chart 22 offers an initial insight into the competitive markets within which the study participants operate. We tabulated the other institutions entered on the FAFSA by new athletic scholarship recipients at the study participant institutions. The most frequent entries were codes for other Division II institutions. This is not a “smoking gun” in that we don’t know how many of the other Division II institutions offered these students athletic scholarships, nor does this prove that not receiving an athletic scholarship would have changed any of these enrolled student athletes’ decisions. It does provide a sense of the competitive context, however.
The ultimate goal in this project is to estimate for each of the participating institutions the effect a change in offering athletic scholarships would have on their enrollments and net tuition revenue. In our request for data, we requested complete information about awards accepted by enrolled students, as well as those declined by students choosing not to enroll.

With this data, we performed econometric analyses to measure the relationship between athletic scholarships and matriculation. In order to create these analyses, we performed logistical regression analysis for individual institutions to estimate the impact of athletic scholarships on matriculation, and one overall analysis with a combined data set. We used the coefficients from this analysis to estimate new probabilities of enrollment for athletic scholarship recipients assuming their athletic scholarships were taken away. For many students, the full financial value of the athletic scholarship was not removed, as we anticipated that some of the athletic scholarship money would be replaced by other forms of institutional gift aid.

In these analyses, a few patterns emerged. First, as noted earlier, there is great diversity in the approaches followed by institutions in their strategic use of athletic scholarships. Our analyses suggest that institutions following an intensive approach, with fewer but larger athletic scholarships are most likely to see net tuition revenue gains through a reduction of athletic scholarships. Conversely, those with a larger number of smaller awards are more likely to see little or no gain – if not a loss – in net revenue when athletic scholarships are reduced. There is not, therefore, a monolithic conclusion suggesting that Division II athletic scholarships either do or do not always result in a better net tuition revenue outcome. Rather, individual circumstances and strategic choices about the way athletic scholarships will be used are important factors in the ultimate net tuition revenue outcome.

These analyses only illustrated changes in net tuition revenue. Gains in net tuition revenues could be offset by potential losses in auxiliary revenues from housing and revenues related to the operation of athletic programs.

Finally, a prospective student athlete lost with the reduction or elimination of an athletic scholarship may not necessarily equate to a net enrollment loss. A comparison of Division II and Division III institutions with similar market positions does not show a prevailing pattern of larger rosters of athletes at Division II institutions. This is undoubtedly true in some cases because of conscious decisions to keep roster sizes within specified limits and different approaches to recruitment. But it is also the case that recruitment time and financial resources at all institutions are limited. This means that a coach recruiting athletes at the Division II level would undoubtedly shift recruitment efforts to a different group of student athletes if athletic scholarships were reduced or made unavailable as an aid in recruitment.
The Simulation Model

To help institutions assess their own approaches, we have developed an interactive simulation model which will be made available to institutions later this year. This model is designed to estimate the enrollment impacts of changes in scholarship levels and resulting net tuition revenue. The model is also designed to show projections based on a change from a non-scholarship model, as in Division III, to a partial scholarship model, as employed in Division II or vice versa. Because each institution’s circumstance is unique, the model allows adjustments to the underlying assumptions about enrollment responses so that the institutions using it can explore a range of possible outcomes both more conservative and more optimistic than those generated from the base model. In addition, the model is designed to estimate the impact on athletic program revenues and expenditures not related to net tuition, ultimately resulting in overall projections of impacts on enrollment and net revenue.

Conclusion

The recipients of athletic scholarships are beneficial to their campus cultures in many different ways. In most instances we observed in our study, they contribute favorably to academic profile, gender balance, cultural diversity and geographic diversity, while presenting a range of affluence (noting that affluence may or may not be seen as a positive contribution depending on one’s point of view).

We are also convinced on the basis of our analysis that athletic scholarships are an important recruitment tool, and that an institution choosing to eliminate them would indeed lose the opportunity to enroll a significant share of the student athletes it is currently able to enroll. In some cases, however, these enrolled students are coming at a tremendous discount, and on the simple measure of net tuition revenue, some NCAA Division II institutions could expect to make gains if they altered the use of athletic scholarships.

Our study presents an aggregate picture of athletic scholarships in Division II settings. Though we believe this view is broadly representative of Division II members in general, individual institutions exist in widely varying contexts. Their use of, and results from, the partial scholarship approach of Division II are certain to differ in some respects from our findings. Nevertheless, we believe that the majority of Division II members receive benefits well worth the investments they make in NCAA Division II membership.