

The Center

The Sports Imperative in America's Research Universities

John V. Lombardi
Elizabeth D. Capaldi
Kristy R. Reeves
Diane D. Craig
Denise S. Gater
Dominic Rivers

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The Sports Imperative in America's Research Universities

Introduction

Among the many factors that distinguish American colleges and universities from their counterparts elsewhere in the world, intercollegiate athletics occupies a place of prominence. Every observer of American university life must engage the pervasive, ubiquitous institution of intercollegiate athletics that occupies so many students, faculty, staff, alumni, and friends and consumes substantial institutional resources. Some critics see this American passion for organized college sports competition as an egregious attachment to the body academic whose removal should be the goal of every serious person. Some partisans of intercollegiate sports see the pursuit of athletic competition as an essential component of superior higher-education institutions. Neither of these evaluations is correct, for athletics in America's colleges has a long and enduring tradition that represents a fundamental construct within the activities of almost every type of higher-education institution, and sustains its vitality and significance in the face of substantial fiscal and managerial challenges.

In our continuing exploration of America's top research universities, we seek to identify those elements within the university that help explain institutional success. We have looked at issues of student size, we have compared public to private institutions, we have considered the impact of medical schools, and we have explored the financial base and organizational structure of research institutions. In this essay, we look at the impact of college sports with a particular emphasis on major sports, especially football.

Our perspective here is to neither celebrate nor muckrake the intercollegiate athletic enterprise but rather to understand the organization and operation of intercollegiate sports and assess their likely value for institutions with superior records of research and academic performance. We explore the possibility that sports are simply an activity of high visibility cultivated on the margin of university life for reasons of history and public relations, and we consider the argument that college athletics provides a substantial context for the support and development of superior research institutions and those that seek to become superior.

The Origins

Our conversation begins with a historical perspective, for sports has been a part of our major academic centers since at least the beginning of the 20th century, and organized intercollegiate sports have presented challenges and opportunities much like those we see today since at least the late 1920s. As universities have grown ever more complex and diversified throughout the 20th century, so too have their athletics programs. Where once universities competed in a relatively informal way with ad hoc rules in contests organized on an occasional basis, today their sports programs compete in a highly organized structure with standardized rules of play and complex regulation of acceptable athletic and athletically related behavior of all participants. This evolution from essentially amateur, student-organized competitions to the professionalized structure and operation of intercollegiate athletics we observe at the beginning of the 21st century has attracted considerable study and analysis on which we draw for much of what follows.*

Yet in spite of the excellent scholarly and popular work available, the public conversation about this topic tends to degenerate rapidly into hyperbolic argumentation about the virtues and evils of intercollegiate sports. Some believe that sports build character, provide essential training for success in the modern world, and develop the individual values of teamwork, self-sacrifice, discipline, and achievement. Others see college sports as a corrupting influence on academic life that distort good values, teach students and sports fans to cheat to win, and undermine the university's core values of quality and integrity. Both perspectives are partially right. Our purpose here is not to resolve the issue of values but to understand how sports have come to have such a highly visible collegiate presence even in some of the most secure and academically powerful of America's research institutions. In this edition of *The Top American Research Universities* we

Our perspective is to understand the value of intercollegiate sports to superior research universities.

* An introduction to some useful items in the extensive literature on intercollegiate sports, including studies that fit into the scholarly, hagiography, muckraking, government report, and journalistic modes, appears in the Appendix.

explore the context for college sports and offer some observations on the relationships the data illustrate between the college sports enterprise and research universities.

Football – The quintessential college sport is football. Football is neither the first college sport nor the one with the longest history (rowing, among others, has a longer trajectory), but football captured the American collegiate imagination and the management of football provided the center around which the organizational structure of college sports evolved. The history of the rise of football in the early years of the 20th century and its ability to inspire the enthusiasm of large numbers of fans for Harvard and Yale, for Michigan and Columbia, and for other early participants in the game are now canonical. By 1905, the type of play characteristic of these early

games so challenged the sport that universities began to reconsider their sponsorship of these games. The plays lined up the offensive team some distance behind the line of scrimmage, grouped the players together in the shape of a wedge,

and ran this formation at full speed against the opposing team with such force and momentum and with so little protection for the players that serious injuries and even death became almost commonplace. A similar play involved another mass formation with the ball carrier (a smaller player) in the center of the offensive team's formation. Just when the forward motion of the play appeared to come to a halt, the ball carrier's teammates would pick him up and throw him bodily forward to gain more ground, an often-effective if always highly dangerous maneuver. In 1905 Theodore Roosevelt gave the colleges an ultimatum: fix the game's rules to improve its safety or see it banned by federal action.

This early 20th-century beginning set an important pattern for the future development of college sports. It demonstrated that sports had a drawing power for college alumni and friends that exceeded almost any other activity the university could generate. The number of people who showed up and cheered for a football contest made this activity a major event for the institutions and prompted college administrations to take over what had originally been

a student-driven activity. That university leaders and the American president would come together to resolve an issue of collegiate football competition clearly marked this game as a national topic of significance as early as 1905. The solution proposed – to limit some elements of competition to preserve the continuation of this popular sport – fixed the pattern of managing intercollegiate sports through an inter-institutional negotiation of rules and standards of play with the tacit and sometimes active blessing and endorsement of the nation's highest authorities.

College Sports as Symbol and Theater

This beginning also identified some other important characteristics of college athletics. Football and other college sports may well have reinforced values of teamwork, strategy, conditioning, discipline, and sacrifice, but their principal purpose remained competition to win. Indeed, the violent play that injured or killed players in these early years, even though eventually regulated out of existence, nonetheless improved a team's chances of winning. Although it may appear obvious, because every college sport in America keeps score, we emphasize the fundamental importance of this principle of competing to win because everything that develops around college sports – the regulations, the organization, the championships, the money, the cheating and corruption, the heroics and awards – serves the purpose of identifying winners.

College sports are about winning because they rely on competitions that produce relatively unambiguous outcomes. The competition of sports is, of course, a universal human activity, and every society has its games – some ceremonial, some symbolic of social values, some designed to highlight class structure, and others purposeful in training for war or other real-life challenges. The American college version of sports speaks to all these issues. Nonetheless, because by tradition and rule it can engage only participants belonging to the student body of a college, many of those who attend and follow these games take sports success as symbolic of the college's enduring value as an educational institution.

Organized sports provide an opportunity to test strength, skill, strategy, and competitive values in a highly stylized and structured venue where outcomes produce clear winners and losers. The games themselves recur repeatedly, each time starting from a new beginning. We cannot rewind and start anew the competition of life that sports model, but we can participate vicariously in the endlessly renewed process of sports where each episode, game, or season

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begins fresh, with no predetermined winners or losers and with an expectation of success undiminished by prior failures.

This charming conceit makes sports appear somewhat theatrical, as if they were a drama whose story repeats over and over again. Unlike the theatrical production, however, the audience does not know the outcome of the sports story before the play begins. In sports, we know that we will see a drama played out within rigidly specified boundaries of time, space, rules, and other constraints that define the artificial context of competition. For all its rigidity and repetitive formalism, the drama of sports, unlike theater, uses athletes who compete in real time, whose athletic action reflects not the simulated behavior of an imaginary character but the actual behavior of specific unique individuals.

In the drama of sports, the athletes are not actors at all; they are real competitors. Their wins and losses are real just like those in our own lives; their injuries, triumphs, and defeats affect them as individuals just as ours affect us. While the games repeat in a highly formalized pattern and college teams with their ever-renewed players compete each season in a reenactment of this standard drama, the audience gains substantial satisfaction through their vicarious participation in these real, yet artificially constructed and endlessly repeating, contests. Each sport appears within its own carefully built model of the real world – a model that represents some portion of life experience and plays that experience out for the audience's satisfaction. Every organized sport appeals to different audiences for whom the model fits some understanding of their personal life's competition, their definitions of success and failure, and their satisfaction in living and reliving the performance of the live theater of a particular sports competition.

College sports, however, add an additional and powerful element to this general enthusiasm. College sports are not just about the competition represented by all organized athletics; they are about the competition of a special group of young people defined by a socially powerful ritual of becoming. College itself is a ritualized and structured process for creating adults from adolescents – a rite of passage in America that originally defined elites and has come to define entry into American economic opportunity. To observe sports contests whose competitors must be students living through this rite of passage adds significance to the already powerful symbolism of sports. The players, teams, and contests not only act out the competition of life but do so within a framework limited to perpetually young competitors who as they

compete to win in sports also prepare themselves to compete to win in life. Their perpetual youth increases the power of the sports symbolism of constant rebirth. The games not only start over each season but their players (the students) are themselves constantly renewed on a regular scheduled linked to the academic graduation cycle. College sports display perpetually young and endlessly promising talent.

The large and enthusiastic crowds assembled for college sports events often merge their enthusiasm for the college's sports teams and their loyalty to the academic college or university in part because they understand the allegories of sports. The more complex and less easily defined messages of college education and university research defy instantly comprehensible expression. No matter whether they love or hate sports, almost everyone believes they understand sports. They may not care about the subtleties of offensive and defensive strategies in football, but if they have an affiliation with a major college athletic power, they know whether their college's teams are winning or losing. By a transference that drives true academics to distraction, the fans, alumni, and the public often equate the success of these recurring athletic competitions with the presumptive academic quality of the sponsoring institution.

The importance of these relationships should not be underestimated. While the muckraking literature on college sports decries the overemphasis, the rabid fans, the sports-crazed trustees, and the weak presidents in thrall to boosters who contribute substantial sums to support their favorite teams, this critique misses the main point. The power that sports has over colleges and universities is significant because sports are important to many people who are inspired by the association of athletics and college and who may care more about college teams than they do about the sponsoring institutions. The promotion and exploitation of this attitude come from the colleges and universities themselves, whose consistent and purposeful policy over generations has enhanced and developed the sports component of their institutions to produce exactly the result achieved. College sports are a great success for the institutions that have relentlessly pursued their expansion and organization for more than a century. We have, at the beginning

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of the 21st century, a college sports enterprise designed by the colleges and universities themselves.

The Amateur Student-Athlete – If we can accept some version of this story without necessarily

lending it our approval, we can then better understand how universities and colleges operate the sports enterprises they created. Several issues illustrate these themes rather well, perhaps none better than the intense effort of

Ensuring that college athletes function as students maintains the unique attractiveness of college games.

American colleges and universities and their primary sports organization (the National Collegiate Athletic Association – NCAA) to give substance to the concept of the amateur student-athlete.

Students competing athletically on behalf of their college represent the fundamental requirement of the American college sports enterprise. At the same time, the driving principle of all sports, competing to win, challenges this value. When a winning score is the definition of success, the college sports enterprises must exert every effort toward collecting the highest level of athletic talent on their college teams. Superior athletic talent, like all superior talents, is rare; therefore, to win, colleges and universities have competed ferociously since the earliest days for the athletically talented individuals who, once enrolled as students, can win games. This competition for talented athletes who can function as students leads inevitably to difficult distinctions. Many skilled athletes may have superior athletic talent but often have little aptitude for the academic study required of regular students. College teams composed of athletes who do not qualify as students may improve the quality of play but seriously compromise the fundamental requirement of college sports: students competing athletically for their college.

The inevitable pressure to engage athletically talented people in college sports emerged early in the 20th century. As the 1929 Carnegie Report makes clear, the colleges themselves quickly recognized that unfettered competition for athletic talent without regard to the athletes' academic standing posed a threat to the student-defined quality of the remarkably popular college sports contests. If the players were not really students, but semiprofessionals labeled with the college's colors, then the special character of the collegiate sports experience could be lost and the competitions would become but minor versions of professional

games. Almost everyone recognizes that college sports' unique attraction derives not from displaying the highest possible levels of athletic performance but from the engagement in a student competition.

The NCAA, the organization the universities created to manage college sports competitions, early in its history began regulating the characteristics that would properly identify an athlete as a college student. Eventually labeled as student-athlete to recognize the dual character of athletes who qualify as students, the regulations serve to preserve the core quality of college sports: genuine students participating in these competitive sports as genuine representatives of their college's student body.

The history of this regulatory process offers a continuing lesson in one of the fundamental principles of human competitive behavior. If the prize is sufficient, people seek an edge in the competition, whatever the constraints regulation places on behavior. If universities must have student-athletes to compete, they enroll high-talent players with academic deficiencies and then hire tutors. If the student-athletes must be amateurs, universities pay the full cost of their time at the university. If the student-athletes must remain free of commercial taint, universities compensate them indirectly with high visibility in televised contests and large stadiums, expensive coaches, exceptional facilities, and other services that enhance their post-collegiate market value as professional athletes. This effort to ensure that college athletes function as students maintains the unique attractiveness of college games and creates a special entertainment product within an increasingly crowded sports commodity market.

The Intercollegiate Sports Franchise – Most of the other elements of the sports enterprise derive from these principles of the amateur, student, collegiate competition. Maintaining the quality, consistency, and integrity of the college sports enterprise proved complicated. As the higher-education business in America expanded, many more colleges and universities of widely differing size and character emerged, and with them came an increasing number of institutions in pursuit of high-visibility intercollegiate sports. To manage this, almost all colleges and universities gradually transferred substantial portions of their institutional control over college sports programs into the hands of external organizations, primarily the NCAA and secondarily the regional associations known as conferences.

By the mid-20th century, if not somewhat earlier, intercollegiate sports became a centrally controlled but

operationally distributed business enterprise managed on behalf of colleges and universities. Individual institutions acquire licenses to operate what appear to be sports franchises. The academic institutions do not control the overall intercollegiate sports business, which has professional managers like any other major corporation. Instead, universities participate in the governance of the business by virtue of operating licensed intercollegiate sports franchises of varying size and character. The central corporation, the NCAA, sets the operating standards and practices under which colleges and universities can operate intercollegiate sports. While the universities have the equivalent of stockholder voting rights, they must accept the results of corporate governance and may not choose to manage their sports programs in ways that violate the rules created by the central licensing corporation, the NCAA.

This redistribution of authority and responsibility for college sports from the institution to the NCAA allowed colleges and universities to guarantee the sustainability of the essential elements of amateur, college-student competition. It had become clear early in the development of college sports that, if left to themselves, institutions would compete so intensely that they would eventually destroy the sports enterprise through violent play, non-standard rules, and various forms of recruiting scandals involving players of dubious academic or amateur standing. The universities transferred control of college sports to an external organization, the NCAA, in which each institution holds an interest, and delegated the responsibility for maintaining quality standards. This arrangement restricts the competitive drive of individual university sports programs within boundaries designed to ensure the quality and value of college sports for all institutions.

A consequence of this system is that intercollegiate athletic departments operate primarily in response to the rules of the NCAA and their conferences and secondarily in response to particular values or circumstances of their own institutions. When the NCAA accepts a university at one level of competition or another, it awards a franchise that allows the institution to operate various teams that compete in the university's name. Through extensive and detailed regulation, the NCAA guarantees certain levels of quality and consistency in the competition; the universities, in turn, develop their franchise sports programs under highly individualized identities but compete within a stable and quality-controlled context.

Successful universities invest heavily in the development of their part of the NCAA-sanctioned sports business. They create alliances with other successful

institutions using the conference mechanism to control markets and share costs and revenues, and they seek additional income from every imaginable source to sustain the constant reinvestment this business requires. Other colleges and universities, seeing value in successful sports programs, seek to enter the business. Before they can do so, however, they must gain permission from the NCAA and invest in becoming a licensed college

sports franchise at one of the levels of investment defined by the NCAA division structure.

College or university participation in the system requires institutions to implement the NCAA rules before applying any local or college-specific rules related to sports or student-athletes. If the university's rules and practices conflict with the NCAA's rules, the larger organization's rules take precedence in every sports-related matter. If a college does not accept these conditions, it cannot run a sanctioned program, engage in competitions with other colleges that have NCAA programs, or enjoy the promotional and other benefits of a nationally competitive sports program.

In other forms of corporate franchising, the value provided by the parent is a standardized brand and product delivered in exactly the same fashion everywhere. In the collegiate sports version, the NCAA standardizes the sports product but allows the university to tailor the presentation, branding, and context within which it delivers the standard product to enhance the university's unique identity and brand name. A major part of the value of the NCAA franchising program is the university's ability to apply its individualized brand image to the successful delivery of the standardized product.

The NCAA ensures that individual institutions, in their pursuit of winning, will not diminish the value of college sports as student programs integral to the educational process of American colleges and universities. Every participating institution maintains a complete college sports program specifically defined by NCAA regulations. This broad context of athletic competition offers contests highlighting many different skills and abilities, different sports, and different student-athletes. The rules prevent universities from offering only basketball or football, as is the case in the professional sports business, or from sustaining only one or two sports at the highest competitive levels.

Universities operate licensed intercollegiate sports franchises of varying size and character.

Such a specialized program would damage the value of college sports because it would appear semiprofessional at best and detract from the image of college sports as a determinedly amateur enterprise.

The NCAA's control of most aspects of college sports also ensures high-quality competitions conducted among mostly comparable programs, although an exception exists for Division III programs that can offer one Division I sport with scholarships (lacrosse and hockey are common examples). The NCAA has an ongoing discussion about eliminating this loophole. Indeed, much of the difficulty the NCAA periodically encounters results from

imbalances that appear in the competitive context that lead to the adjustments that produced the current divisional structure and discussions such as today's concerns about imbalances in the Division I-A football competition.

The creation of the student-athlete concept helps sustain some of the beliefs that underlie the sports enterprise. For example, in men's basketball and football at the top level many student-athletes participate for almost entirely sports-related reasons. But in the other sports required of institutions that choose to participate in the various NCAA divisions, the participants may well have few or no professional sports ambitions after college. In many of these sports, the participants may dream of Olympic appearances and may participate in other tournaments after graduation, but they know that their lives will depend on the intellectual and professional skills acquired in the academic programs pursued during their time in college.

They, or at least many of them, remain true to the idealized type of student with athletic talent who competes but also pursues an academic career and earns good grades in significant subjects. These poster children for the student-athlete legitimize the entire sports enterprise and provide protective coloration against the overwhelmingly commercial characteristics of big-time football and men's basketball. The NCAA and the conferences devote much effort to sustaining broad participation in multi-sport programs. By demonstrating the commitment to all sports and all student-athletes, the regulations that require multi-sport sponsorship help reduce the perception that college sports are only about the revenue sports of

football and men's basketball. The wide variety of sports and the significant number of student-athletes participating in non-revenue sports provide substance to the premise that college sports focus on the value of the student-athlete's experience rather than only on the issues of football and men's basketball.

The NCAA provides a wide range of services to its members. Most importantly, it runs an extensive series of tournaments that allow the institutions to determine champions in most sports. It sustains an elaborate public relations campaign to promote the image of college athletics and enhance the value of NCAA sports for building institutional image. It provides training for coaches and athletic administrators. In short, the NCAA is an effective, powerful, and successful intercollegiate sports conglomerate. It serves its members well and is a powerful actor in support of the operation and maintenance of the college sports enterprise.

Colleges present their relationships with the NCAA in many ways. Universities portray their sports operations as entirely a part of the institution's mission. They always treat their sports enterprise as if it were a university-controlled activity and often criticize their parent, the NCAA, for the rigidity of its rules, complexity of its regulations, and constraints it places on unbridled competition. This positioning is somewhat disingenuous because, having delegated the regulatory responsibility for college sports to the NCAA, the individual universities voluntarily gave up control over the requirements for operating a college sports program.

Universities and colleges can have successful NCAA programs or not, they can invest sufficiently or not, but they cannot decide how their sports program will operate. As individual institutions, they can cease to belong to the NCAA, and no longer compete, or they can invest more or less and change their competitive division within the organization. But as individual institutions, they do not control the requirements for delivering college sports on their campus. They control only how well they will compete within the constraints and follow the rules of the NCAA. Numerous examples exist of institutions that upgrade their NCAA division or trade down to a less expensive division. However, relatively few institutions choose to give up their NCAA membership completely, and none have in our category of major research universities since the realignment of Division I-A in 1982.

The Level Playing Field and the NCAA Divisions – An inspection of the rules and regulations, presented in Table 1 on page 12, that define the operation of

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NCAA divisions can help illustrate this operation. Every division of the NCAA has a set of rules that defines what a university or college must do to become a participant at that level. Whether it involves number of scholarships, size of stadium and average attendance, number of sports, or expenditures, these requirements define the different amounts of university investment necessary for each category of athletic franchise. These distinctions maintain an approximate parity among sports programs in each division that is critical to the success of the NCAA sports business.

The parity requirement ensures that sports programs within each divisional level represent equivalent collegiate contexts. However, because the universities that support programs within any division are actually quite diverse in terms of size and resources, the NCAA requirements attempt to equalize the competitive contexts by setting minimum and maximum levels of commitment to the sports teams within each division. This is an approximate notion. For example, within Division I, and even within Division I-A, institutions vary widely in type, size, revenue, student and faculty characteristics, and every other imaginable measure. Over time, to adjust for the differences in the institutional contexts of the colleges and universities within a division, the NCAA regulations that guarantee comparable sports programs within the same division become quite complex. These definitions are essential because the competitions – the primary product of college sports – must appear to take place among approximately equivalent competing teams. In most cases, the divisional rules effectively limit expenses or restrict other forms of sports competition among institutions.

These rules sustain the carefully crafted balance expressed by the cherished notion of a level playing field. The level playing field expresses the ideal contest between the teams of two institutions, each of which brings the same capacity for assembling a team to the field. In an ideal competition on the level playing field, the outcome of the game depends not on the economic resources of the sponsoring academic institutions but on the skill, determination, and commitment of the players assembled from among the students. If the outcome depends on the size of an institution's investment in its sports, wealth of its alumni, or some other characteristic external to the game, then the ideal type fades from view, and the contests become more about money and resources than about students and their skill and commitment.

The development of the divisional structure itself and its continual refinement over time reflects the NCAA's struggle to maintain this level playing field as the complexity of the university marketplace for sports continues to grow. However, the importance to universities of delivering high-quality sports products, especially in football and men's basketball, challenges the NCAA's efforts to control costs and create standardized level playing fields within each division.

Sports, to repeat a constant refrain, are about winning above all other values. Universities will do almost anything imaginable to gain an advantage in the competition because it is by winning that sports deliver value to their university investors. The NCAA Division I Manual, to take one example, expands yearly with items that speak to controlling or prohibiting the endless series of inventive techniques that the universities devise to gain a competitive advantage and tilt the level playing field. The NCAA has had considerable success in this effort by constantly modifying its rules to capture each successive round of competitive initiatives devised by its members. The measure of this success is the continued survival and prosperity of the total enterprise of college sports. The NCAA's regulatory effectiveness naturally creates constant conflict with individual universities as their creativity in undermining the rules for a temporary advantage clashes with the organization's insistence on leveling the playing field.

The rules that define the reasonably level playing fields for the various collegiate divisions also define what constitutes cheating. The success of the NCAA in homogenizing the playing environment and in controlling many aspects of recruitment and retention of athletic talent also enhances the incentives to cheat. When most teams are relatively similar and when the academic requirements and the recruiting and support opportunities are also similar, the fundamental competitive advantage of one team over another becomes small. Minor improvements in a team's talent or other competitive advantage often can translate into a significant advantage in winning games. A few student-athletes of high athletic talent and perhaps no academic interest can, if permitted to play, tilt the level playing field, and universities will from time to time cheat to gain that advantage.

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Table I. Summary of NCAA Divisional Requirements (2003-2004)¹

Division (# of Institutions)	Minimum Number Sports	Minimum Football Scheduling	Minimum Football Attendance	Minimum Men's Basketball Scheduling	Minimum Women's Basketball Scheduling	Financial Aid Requirement
I-A (N=117)	14 ²	60% against Division I-A members	17,000 average home game (or 20,000 average for all games) over last four years - OR 30,000-permanent seat stadium and 17,000 average home game (or 20,000 average for all games) over last four years - OR Member of conference in which 6 or more members sponsor football and meet above criteria ³	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	50% of maximum allowable grants in each sport - OR minimum of \$771,000 ⁴ - OR equivalent of 50 full grants in sports other than basketball and football ⁵
I-AA (N=121)	14 ⁶	More than 50% against Division I members	NONE	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	50% of maximum allowable grants in each sport - OR minimum of \$771,000 ³ - OR equivalent of 50 full grants in sports other than basketball and football ⁵
I-AAA (N=89)	14 ⁶	No Football (N/A)	No Football (N/A)	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	Provisional member: all but two games against Division I teams; Active member: all but four games against Division I teams and 1/3 of all games are in home arena	50% of maximum allowable grants in each sport - OR minimum of \$771,000 - OR equivalent of 50 full grants in sports other than basketball and football ⁵
II (N=282)	8 ²	NONE, other than contest minimums ⁷	NONE ⁷	NONE, other than contest minimums ⁷	NONE, other than contest minimums ⁷	NONE ⁷
III (N=430)	10 ²	NONE	NONE	NONE	NONE	No Athletic Scholarships

¹ Requirements for membership in the NCAA's Divisions I, II, and III appear as reported in the 2003-2004 NCAA Divisions I, II, and III manuals.

² Half of these sports must be female-only. Minimum will increase from 14 (7 female only) to 16 (8 female only) in 2004-2005 for Division I-A and from 8 (4 female only) to 10 (5 female only) in 2004-2005 for Division II

³ Beginning in 2004-2005, these loopholes will be eliminated and all Division I-A schools will need to demonstrate average actual attendance of at least 15,000 for all home games.

⁴ Beginning in 2004-2005, Division I-A schools must offer a minimum of 200 athletics grant-in-aids or expend at least \$4 million on athletics grant-in-aids to student-athletes.

⁵ Member institutions that do not award any athletically related financial aid in any sport as of January 11, 1991, shall be exempted from the minimum requirements. Minimum grants differ for schools not sponsoring basketball.

⁶ Divisions I-AA and I-AAA currently have a 7-sport female-only requirement, but the minimum will NOT increase to 16 total sports in 2004.

⁷ Beginning in 2005-2006, athletic scholarships will be required in Division II: 50% of maximum allowable grants in four sports, two of which must be women's sports - OR minimum of \$250,000, with at least \$125,000 in women's sports - OR equivalent of 20 full grants (10 in women's sports).

Because sports success depends in the first instance on the acquisition of athletic talent, much of the cheating tends to focus on acquiring and retaining the services of athletes whose eligibility as students under the NCAA rules is questionable.

The Rules and Enforcement – The multi-layered model of athletic governance that involves the NCAA, the conferences, the institutions, the athletic departments, and the individual sports sometimes inhibits effective management of the college sports enterprise. Accountability for failure to adhere to the critical rules that maintain the essential character of the student-athlete and the required level playing field belongs to everyone, and the location of responsibility often proves difficult. The NCAA has always struggled with the enforcement and punishment of infractions (the technical term for violations of the rules). Everyone acknowledges that the institutions have primary responsibility for the operation of the programs, but the imposition of penalties for failure to follow rules challenges college sports management.

The system directly or indirectly punishes everyone involved or associated with a sports program found in violation. The punishments vary but basically have two purposes. One is to punish directly individuals (students, coaches, boosters) who misbehave, and the second is to punish the institutions involved in infractions. The student can be expelled from athletics, the coach can be banned from coaching at an NCAA institution, and the booster can be excluded from participation in the institution's athletic programs or attendance at games.

The institution's punishment usually involves a reduction in the competitive opportunities for the sports program found in violation of rules, and this often results in lost revenue. A college can lose the right to offer athletic scholarships for a period (which weakens the competitive strength of its sports), it can lose the right to compete in post-season bowl games (which means a major loss of revenue), it often must fire an offending coach (which produces a lag in program development and recruitment), and so on. The conferences can also impose financial penalties on institutions within their membership whose misbehavior reduces the revenue the conference would otherwise share from bowl games and other conference activities.

However, these sanctions frequently damage the innocent. Students and coaches who had no participation in the misbehavior (which may have occurred

well before their tenure at the university) find themselves prohibited from competing in championships their athletic performance would otherwise have earned them. Fans and boosters who had no involvement in a scandal find

their teams crippled in competition by sanctions imposed for behaviors of people no longer affiliated with the university. Institutions and their supporters resist and resent these penalties and project them as unfair. The NCAA, as the guardian of the amateur, student-athlete, level playing field requirements for college sports

success, must nonetheless impose significant penalties or the pursuit of winning will undermine the fundamental elements in this successful system.

Other observers think the penalty system too mild, but the task of assigning responsibility proves difficult precisely because college sports operate on such short time cycles. Many violations deal with payments or other prohibited activities related to student-athletes. Often, by the time the infraction is identified, investigated, and the NCAA assesses a penalty, the student-athlete is out of school and beyond the reach of the NCAA, which has no legal authority to impose sanctions on individuals not associated with college athletics. For example, even when the NCAA finds a substantial violation of its rules because of the behavior of a student-athlete, it may end up penalizing the university because it cannot reach the guilty student-athlete who has left the institution to become a famous, wealthy, and much-praised professional athlete.

Such circumstances seriously challenge the NCAA's ability to define fair and effective sanctions for rules violations. At the same time, the NCAA seeks to guarantee substantial compliance with its rules, not necessarily complete purity. It calibrates its sanctions to make the most serious violations more expensive to the institutions than the benefit they might gain by cheating. For the most part, the NCAA has succeeded in sustaining the quality of the game and controlling the majority of the worst abuses, but not without considerable controversy and from time to time spectacular cases of truly remarkable cheating.

Because sports success depends on athletic talent, cheating tends to focus on acquiring and retaining the services of athletes.

The Value of College Sports: Audiences and Image

If this description captures the essential relationship between the academic university and the national intercollegiate sports business, what then motivates

institutions to spend substantial sums on athletics and, in the overwhelming majority of cases, sustain their athletics programs even when they produce substantial annual losses? What is the value of this activity to any university and, in particular, a research university?

Although the rhetorical context of college sports speaks of the activity in terms of spirit, values, leadership, and the like, much of the

continuing value of college sports is more prosaic if nonetheless significant. Intercollegiate sports address a wide range of audiences, capture public enthusiasm for the institutional name and image, and attract large numbers of people to the campus. Even though many students participate, in most intercollegiate athletics programs and certainly in the major sports, the student-athletes represent a special class of individuals distinct from the regular students admitted to participate in the institution's academic programs. The athletes may be good students, and many of them are, but their relationship to the university – especially in the major sports of football and men's (and increasingly women's) basketball – begins with their sports interest. As a result, while regular students care about sports, attend sporting events, and often participate on recreational or intramural teams, college sports (especially at the Division I level) exist primarily to reach audiences beyond the campus, although external interest varies significantly by sport.

The Alumni – The alumni constitute the classic audience for college sports. Sports, alone among university activities, speak to all generations and groups of alumni. Not always in the same way and not always with the same intensity, almost all alumni understand one or another of the college's sports, and the number of alumni willing to engage with a college or university around its sports program is often larger than any group willing to engage around almost any other recurring university activity. This is the fundamental audience for the sports enterprise, and the returning alumni, drawn by sports contests (especially by football and men's basketball), repre-

sent such an attractive market that most colleges and universities embrace these sports. While the returning alumni surely enjoy their football and basketball games, the real value to the university comes from their presence on campus, their constant and recurring engagement with the university and its representatives through the sports events, and their reinforced identification with the institution, continuously updated and modernized by the repeated visits prompted by the games.

Alumni represent the strongest and most natural group of institutional supporters for any university, but maintaining their interest and allegiance after graduation has always posed a challenge. A gap of some 10 to 15 years or more separates the college experience from the significant influence and support that alumni can give. In many cases, the gap is much larger, reaching 30 or 40 years between the time of graduation and the moment when a graduate thinks of giving back to the institution. If the university loses touch with its alumni in the interim, reconnecting them to the institution and making the institution once again a living part of their emotions and commitments often pose difficult tasks. If, however, the graduates return again and again to observe the games and if they interact with the current generation of students, follow the changes in university life, see the new buildings emerge and the university change character over time, then the alumni may recognize the modern university as their own. Their frequent visits to campus, motivated by sports, constantly update their mental image of the place. Although other visits – motivated by academic issues, theatrical performances, or other activities – would have done the same, no other university or college activity demonstrates the unifying impact and the popular draw of college sports.

Fund-Raising – Some considerable effort has gone into studying the link between college sports and an institution's fund-raising for academic and student purposes, but the data on this relationship do not provide much support. Most of the studies find relatively small effects on general university fund-raising from the activities of a sports program. While it appears that highly successful athletic programs can enhance giving to sports, it is not at all clear that sports success contributes to academic fund-raising.

We had the occasion to review data that link football season ticket holders to academic and sports fund-raising at a university with a top-level Division I-A program during a national championship era in football and a major institutional fund-raising

Sports address a wide range of audiences, capture public enthusiasm for the institution, and attract large numbers of people to the campus.

campaign. These data from 1996 (see Table 2) appear to show almost no relationship between sports ticket holders and academic fund-raising. Season ticket holders averaged gifts to athletics and non-athletics of almost the same relatively low amount. Non-ticket holders, however, gave little to athletics but substantially to academics. In addition, it is useful to note that this institution had about 14,700 season ticket holders but about 39,400 non-ticket holders in the total donor pool. The non-ticket holders gave more to the university's academic activities (as we would expect) and gave larger gifts than the season ticket holders gave to either academics or athletics. The ticket holders gave to both athletics and to non-athletics, but this is likely to be something of an exaggeration because some of the gifts to athletics actually reflect the required gifts for premium seats. Although these are indeed gifts, they actually reflect not philanthropy as much as they reflect a premium price for preferred seats expressed through philanthropy. Our experience also indicates that the university cannot usually divert donors who give to athletics in large amounts to academic giving, and the institution cannot change academic donors into patrons of athletics. These donor pools appear to be, for the most part, mutually exclusive.

Large Audiences and Brand Differentiation –

Alumni may be the prime audience for universities and colleges, but success in the highly competitive business of higher education requires access to other audiences. As the American enthusiasm for all sports grew ever more pronounced throughout the 20th century, and as the college version of sports gained increasing visibility thanks to television, the original purpose of connecting the alumni to the institution gained an added dimension. Universities found it possible to connect total strangers to their institutional interests through the common power of inter-collegiate sports. The expansion of popular national

audiences for college sports accelerated the transition from institutionally driven sports contests designed to speak to institutionally defined audiences to sports enterprises subsidized by institutions to reach national and previously unaffiliated audiences. Although this trend accelerated in the second half of the 20th century, it appeared significant to commentators well before mid century.

The dramatic growth of college sports audiences, evidenced by the growth of stadium audiences and especially accelerated by the dramatic expansion of television coverage, made the college sports enterprise ever more professional. Television required high production values, and college sports worked closely with the television networks and their corporate sponsors to bring the games, especially football but also basketball, to higher levels of performance quality. The spectacle of today's top-level college sports contests equals professional sports in production values, quality of presentation, and organizational and marketing sophistication. This is what the sports enterprise offers the colleges in exchange for Divisions I and I-A NCAA participation, and, of course, this prompts the cynicism and dismay of many college sports critics.

By reaching large audiences of alumni and strangers, universities and colleges found a mechanism to differentiate their images and their products in the public mind. This marketing function of college sports has more power and reach than we might initially expect. While each university and college believes itself to have a unique product to provide its students, most college and university academic programs are, in content, virtually indistinguishable. They have almost identical courses offered to students in similar patterns sanctioned by standardized accreditation requirements. Not only do they offer standardized general education and majors in the arts and sciences, but most professional associations in such fields as engineering and manage-

Table 2. Football Season Ticket Holders and Gifts to Athletics and Non-Athletics*

Ticket Holders	Gifts to Athletics	Gifts to Non-athletics	Total Gifts
Average Gift	\$623	\$685	\$1,308
Total Gifts	\$9,134,774	\$10,034,695	\$19,169,469
Non Ticket Holders	Gifts to Athletics	Gifts to Non-athletics	Total Gifts
Average Gift	\$99	\$1,428	\$1,527
Total Gifts	\$3,882,127	\$56,249,090	\$60,131,217

*Data for 1996 Division I-A Public University.

*Sports project distinctive images
onto the apparent uniformity of
institutions' undergraduate
academic profiles.*

ment also impose even more rigid definitions for degree requirements on these institutions.

Residential colleges offer mostly 120-credit hour degrees in programs whose ideal period is four years. They all offer study-abroad programs and service learning, along with the standard curriculum, and residential colleges have similar housing arrangements and student activities.

Although the qualifications and credentials of the faculty differ substantially among the institutions, these differences prove difficult to explain or demonstrate to many audiences, especially parents and students. Even the campus advertisements shown on television at halftime look almost identical, one university to another, and it is almost impossible to tell which university the ad highlights until the name appears on-screen.

The convergence of content and context, especially among residential colleges and universities, increases the value of activities like intercollegiate sports that can project distinctive images onto the apparent uniformity of many institutions' undergraduate academic profiles. In encouraging students to choose a college or university, helping donors decide where to invest their gifts, and persuading legislators to invest in public higher education, the institutions need symbols that identify their uniqueness. They want their campus to stand out in a crowded marketplace of what many might consider mostly interchangeable academic institutions.

Sports help create brand identity for colleges and universities. This important purpose enhances the value of the NCAA's quality control that allows the university to project its own unique symbols and values onto a high-quality product seen and experienced by thousands to millions of individuals. Nothing else a university does gains the exposure provided by intercollegiate sports. Even at the lower levels of Divisions II and III, where game attendance may reach only a thousand or so, few other campus events draw the same attention. At the top level, where the competition is most visible, where the universities market themselves on a national scale, and where the distinctions among institutions are most difficult to dramatize, the power of sports to create image is overwhelming.

As a minor but telling indicator, the national media report on no other university activity of any

kind regularly except sports. No other university activity except sports has a defined place within a special section of every daily newspaper in America. Even local teams of small colleges receive regular coverage in their local media outlets, not to mention the network news coverage of big-time college sports that occupies a special segment on most news shows throughout the year.

The universities support sports to get the visibility and then use sports visibility to highlight the distinctiveness that defines their academic programs. This helps explain the tremendous effort expended on defining the student-athlete, on advertising the campus during televised games, and on always presenting the football or basketball stars with their class standing and their academic major. The NCAA parent organization, the conferences, and the universities all work diligently to project the university onto the canvas of sports although, in comparison to the intense focus on winning, the academic context projected by college sports often fades to a mere shadow.

Nonetheless, the competitive marketplace for universities (for students, alumni support, legislative attention, corporate interest, and general name recognition) is so difficult and the academic products universities sell have become so standardized that few institutions believe they can forgo the identity creation value of a sports franchise. In the positioning critical to all image creation, universities and colleges use sports to align themselves with other institutions that have high academic standing. They hope that by playing football against Michigan, its reputation of high academic quality will transfer to them. They hope that by moving from the company of smaller, sometimes less academically prestigious public universities who play Division I-AA football into the level of Division I-A football the public will assume that they, too, have joined the ranks of major research institutions.

When a public university moves from Division I-AA to I-A it hopes that its audiences will see the institution as comparable in some way to Illinois, UCLA, Berkeley, Michigan, Washington, and other academic and athletic powerhouses. Quality by association is the goal. The actual academic differences between major and minor research universities do not appear easily to the public on casual inspection – a fact that fuels the endless ranking industry publications on colleges and their programs. However, for many university constituencies, the sports association becomes not only the most visible but also the most intelligible and interesting university relationship. Many university leaders and support-

ers explain their sports enthusiasm in these terms, and this almost irresistible attraction encourages them to invest in the highest level of sports performance they can persuade their trustees to approve.

The associational game involves two levels of engagement. The first relates to the level of sports program the institution can buy (Division I-A being the most expensive). The second relates to the group of institutions within a divisional category with which a sports program can associate. Premier conferences such as the Big Ten or the Pac-10 or the Ivy League set the standard, with member institutions of similar academic aspirations if not always-similar academic achievements. Other conferences have cachet for their athletic prowess, such as the SEC. These associations of institutions serve to maximize revenue and create identities for their members. Over time, what had been regionally driven collections of schools became sub-corporations in search of ever-greater competitive opportunities and ever-greater media exposure and revenue.

Whatever else we can say about the intercollegiate sports business, we know that it has a large, enthusiastic, and committed audience. This was the original goal of the college sports enterprise, and, by every measure we can find, it has succeeded beyond anyone's most optimistic expectations. Alumni, students, parents, friends, legislators, donors, and strangers – all see and hear about academic institutions through sports as well as through other communications from the institution. University faculty might prefer that the chemistry faculty's remarkable scientific success reach the constant attention of the media, programs in musicology be featured every day in the newspaper, student accomplishments in creative writing appear on the nightly national news, but they do not.

Instead, the media show the sports programs, the student-athletes, the coaches, the stadium expansions, the errors of commission and omission in sports management. This is the return on investment in college sports. While there is some benefit in terms of student recruitment and alumni interest that may lead to fund-raising opportunities, these do not justify the expense. The attention, the image, the media, and the university brand promotion provide the best justification for whatever investment in sports the university must make.

As a final comment on the audience, most university people also know that aside from the instrumental value of sports as image creators and enhancers, college athletics has an audience that believes passionately in the intrinsic value of college sports. This audience cares about sports as a univer-

sity product – not as a symbol for the real university and not as a surrogate for the academic quality that takes place on campus but rather for the sports competition itself.

Sports are the university's most important and valuable products for these university citizens: some faculty and staff, some students, many alumni, many trustees, many legislators, some donors, and many external observers.

American universities, public and private, have a long tradition of responding to the enthusiasms and values of American life. High-level competitive sports are one of America's premier activities. Whether as participants or audience, Americans love their sports, they buy sports information, and they consume sports products at prodigious rates. As a result, America's higher-education institutions, attuned as always to the American dream because the university lives as a creator of America's dreams, devote substantial resources, time, energy, and creativity to the delivery of major sports products that carry their names and embody a stylized version of their presumed values.

College Sports and the Research Universities

Within this context, the subset of institutions we define as research universities participates significantly in intercollegiate sports. Some of the nation's most productive academic research institutions also support exceptionally high-profile sports programs that compete at the top level of football, men's basketball, and other sports. At the same time, many top research universities have sports programs of much less prominence.

If we look at the distribution of all research institutions listed in Table 3 on page 18 (defined as any institution reporting federal research expenditures, by their athletic classification), we can see that institutions with federally funded research fall into every level of sports activity. This table shows 108 institutions that do not participate in the NCAA athletic universe, primarily because they are stand-alone medical campuses or other specialized institutions, do not sustain undergraduate populations of significance, or have chosen to stay out of the mainstream of college sports programs by belonging to the National Association of Intercollegiate Athletics (NAIA). The NAIA is a conference of small colleges

When moving from I-AA to I-A, a university hopes its audiences will perceive it as becoming an academic as well as an athletic powerhouse.

Table 3. Athletic Classification of Institutions Reporting Any Federal Research from 1991-2000

NCAA or Athletic Membership	Number of Institutions	Percent
Division I-A*	115	18.7%
Division I-AA	95	15.4%
Division I-AAA (no football)	67	10.9%
Division II	94	15.3%
Division III	121	19.6%
NAIA Member	16	2.6%
Neither NCAA nor NAIA Member	108	17.5%
All Institutions	616	100.0%

*Of the 117 Division I-A institutions, two do not report any Federal Research.

Table 4. NCAA or NAIA Institutions Reporting Any Federal Research from 1991-2000

Classification	Number of Institutions	Percent
Division I-A	115	22.6%
Division I-AA	95	18.7%
Division I-AAA (no football)	67	13.2%
Division II	94	18.5%
Division III	121	23.8%
NAIA Member	16	3.1%
Total	508	100.0%

Note: The other 108 institutions that reported federal research out of the 616 total were neither NCAA nor NAIA institutions. Of the 117 Division I-A institutions, two do not report any federal research.

that compete in intercollegiate athletics outside of the NCAA. If we exclude the 108 institutions that do not compete in the NCAA or NAIA, the percentages change only slightly (Table 4).

Our interest in these issues focuses on the relationship between top performance in intercollegiate athletics and top performance in research university competition. Figure 1 shows the distribution of the 115 institutions supporting Division I-A franchises by their level of research performance. Note that the figure shows 115 Division I-A universities because, although the NCAA qualifies 117 institutions within Division I-A, two of these institutions do not report any federal research (Troy State University and the United States Military Academy). Some 66% of the major Division I-A institutions also fall into *TheCenter's* definition of top research universities, which are those universities reporting more than \$20 million in annual federal research expenditures. The rest of the I-A institutions have much lower levels of research performance, and 5% fall into the lowest category (\$1 million or less of federal research expenditures). Clearly, a substantial number of institutions that support Division I-A sports also have substantial research performance, but many Division I-A institutions have relatively modest research success.

While it is certainly the case that the group of Division I-A institutions includes top research performers, it is also helpful to note that of 160 institutions capturing more than \$20 million of federal research, more than half (84) do not support Division I-A sports (see Figure 2). All the other institutions with some sports affiliation account for about a third (54), and the institutions with no sports affiliation (30) account for the remainder. Clearly, these data indicate that there is no necessary relationship between sports investment and research success.

Figure 1. Division I-A Institutions by Level of Federal Research 1991-2000

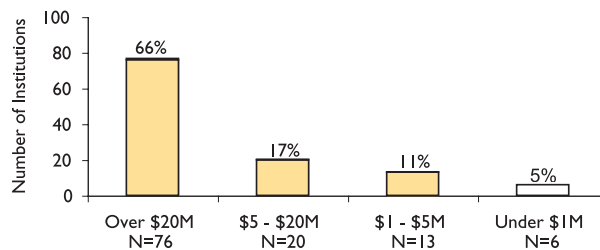
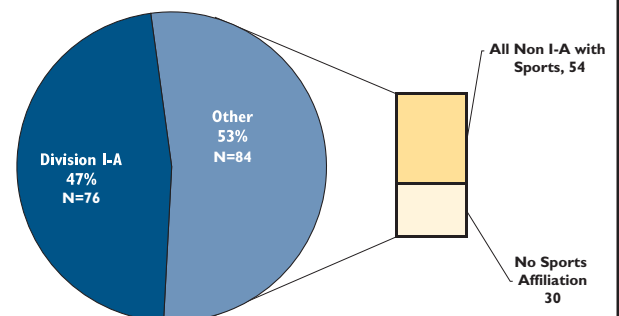


Figure 2. Universities with over \$20M Federal Research and Sports Status



We also conducted an analysis of variance of federal research expenditures including NCAA athletic division, enrollment, and control (public vs. private) for those institutions with any federal research expenditures that also belonged to an NCAA division. This analysis showed that NCAA athletic division had no significant effect on federal research, while both enrollment and control had significant effects. Athletic division had no significant effect whether Division 1A was contrasted with all other divisions or all five divisions were compared (see Table 5 for the effects of enrollment and athletic division). Federal research expenditures were higher for private than public institutions (\$35 million for private vs. \$29.3 million for public institutions) in this analysis, which considered only those institutions that belong to a division of the NCAA.

Athletics at Public and Private Research Universities

– For the purposes of exploring these relationships a bit more, let us look at the institutions with more than \$20 million of federal research that support an NCAA program. This universe of 130 institutions excludes those 30 institutions whose mission is not compatible with an investment in an intercollegiate sports program, primarily as we have indicated earlier stand-alone medical centers and other highly specialized institutions. Of this group of 130 top research universities, public institutions number 89 and privates 41. We discussed the strength of public research universities in a previous edition of *The Top American Research Universities*, but of particular interest here is the relationship we identified between institutional size (in terms of undergraduate student population) and research success among public but not private institutions.

Among the 89 top public research institutions, 65 have Division I-A intercollegiate athletic programs; of the 41 top private institutions, only 11 have Division I-A franchises. Clearly, a majority of the top public research institutions make a significant commitment to

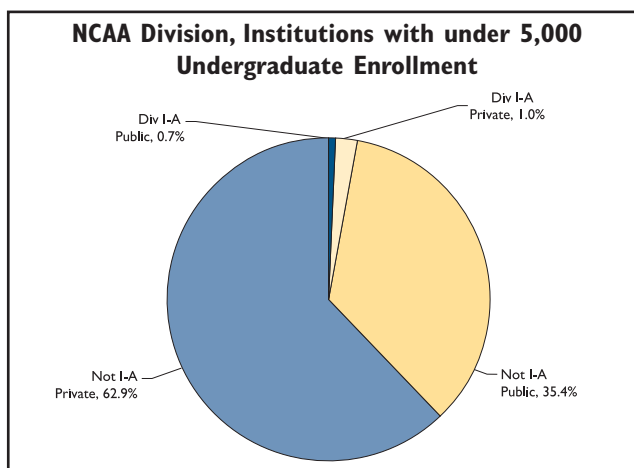
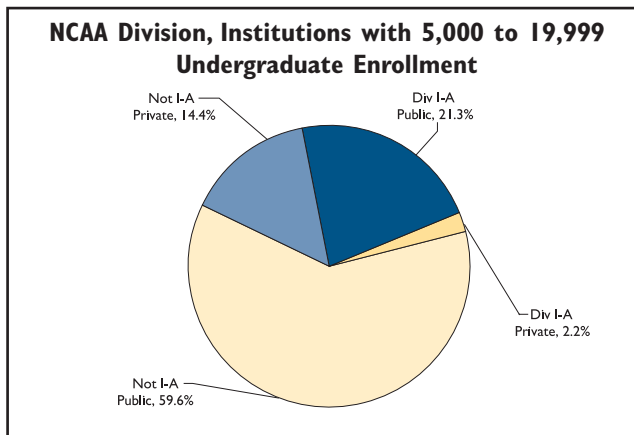
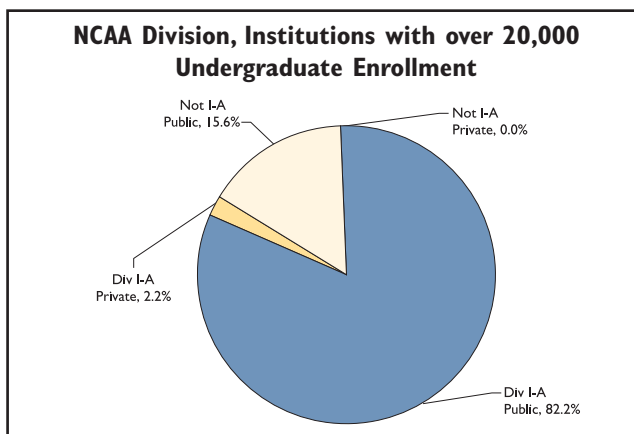
intercollegiate athletics. The private universities, however, do not appear to have the same commitment, and most succeed without investing in the top level of sports competition. Most of the private institutions that do invest in Division I-A sports do so in close collaboration with public universities through conferences that have strong football-related public members. A few private universities, however, stand within the range of the powerful public institutions. For example, in the data included in the Appendix, the University of Southern California – a football power in its own right – shows an annual total of almost \$43 million for its athletic program. Notre Dame comes in at almost \$39 million, Boston College at \$33 million, Stanford at \$33 million, and even Duke – with a modest football program – spends about \$32 million annually. All of these major private university sports programs play in conferences participating in the Bowl Championship Series (BCS, see the description below in the text and additional information in the Appendix) except for Notre Dame, which has a special opportunity to participate in the BCS as an independent. Even Notre Dame, however, depends on the existence of the major public football powers for much of its athletic success, even if not within a formal conference framework for football.

Part of the difference between the sports commitment of public and private research universities has to do with the size of the undergraduate population. Large student populations help sustain major sports programs, partly because in the public sector students often pay dedicated athletic fees and partly because a large student body creates a built-in audience from

Sixty-five of the 89 top public research institutions have Division I-A athletic programs; only 11 of the 41 top private research institutions have I-A franchises.

Table 5. FY2000 Federal Research Expenditures (\$1,000) as a Function of Athletic Division and Undergraduate Student Enrollment

Division/Enrollment	III	II	I-AAA	I-AA	I-A
20,000	\$62,907	\$108,456	\$38,308	\$102,637	\$94,501
5,000-19,999	\$50,297	\$4,175	\$7,855	\$20,863	\$44,724
Under 5,000	\$3,821	\$2,186	\$1,119	\$1,399	\$11,979



enrolled students and large alumni contingents. Table 6 with its accompanying figures shows the number of institutions reporting any federal research (public and private) in three groups by undergraduate student size.

Among the large universities with more than 20,000 undergraduates, 84% have Division I-A programs. Brigham Young, the only private university of this size, also has a Division I-A program. In the middle-sized universities with 5,000 to 19,999 undergraduates, only 26.3% of the public and 24.5% of the private universities have Division I-A programs. Small universities with undergraduate populations less than 5,000 have the fewest Division I-A programs. Only 5 of nearly 300 schools, 188 of which are private, fall into this category. Further reinforcing the importance of a large undergraduate population for a successful big-time intercollegiate athletic program, the median and average undergraduate enrollments of BCS institutions exceed those for non-BCS Division I-A programs, as illustrated in Table 7 on page 21.

While the distribution of high-profile football programs among significant research universities offers a useful perspective, we have a particular interest in the elements that contribute to research university success. The more than \$20 million in federal research group, which identifies those institutions that capture about 92% of the reported federal research expenditures, includes universities whose research expenditures vary. The median research performance of the top 10 research universities in the group is about \$319 million, and the median research performance of the bottom 10 performers is about \$21 million. If we look at those institutions with \$20 million in federal research that also have a Division I-A football program, their median federal research performance is about \$65 million.

One way to look at these high-performing research institutions is to group them by deciles and within deciles by the number of Division I-A and other sports levels. Figure 3 shows that the number of high-level

Table 6. Undergraduate Enrollment of Institutions Reporting Any Federal Research by Public/Private and Division I-A Status (1991-2000), Number and Percent

Undergraduate Headcount (2000)	Number of Institutions	Div I-A Public	Div I-A Public	Div I-A Private	Div I-A Private	Not I-A Public	Not I-A Public	Not I-A Private	Not I-A Private	Percent
		#	%	#	%	#	%	#	%	
20,000+	45	37	82.2%	1	2.2%	7	15.6%	0	0.0%	100%
5,000-19,999	277	59	21.3%	13	4.7%	165	59.6%	40	14.4%	100%
Under 5,000	294	2	0.7%	3	1.0%	104	35.4%	185	62.9%	100%
Total N=	616	98		17		276		225		

football programs among the universities in each decile varies, but note the first group. In the highest decile of federal research, the presence of exceptional private research universities without Division I-A football is evident in the low number of I-A institutions. However, in the rest of the deciles, it becomes clear that high-level sports programs coexist with all levels of research performance among the nation's top research universities. While many of the most competitive research universities appear to have high-profile sports programs, no clear relationship exists between research performance and operation of a Division I-A athletic program.

Another view that tends to reinforce these conclusions looks at the athletic commitment of the universities that appear among the top 50 research universities defined by *TheCenter's* measures. (Note that 84 institutions rank among the top 50 on *TheCenter's* indicators because many institutions tie at the various levels of performance.) Here, shown in Table 8 on page 22, the results demonstrate that just under half of the high-quality institutions ranked in the top 50 on one or more of the *TheCenter's* measures do not support a Division I-A football program.

As we reviewed the relationship between general athletic program success and top overall research university performance as expressed in *TheCenter's* measures, it became clear that the data do not easily support simple generalizations. High levels of sports engagement and high levels of research university performance appear to respond independently to different but sometimes-related institutional, geographic, and historical circumstances. The existence of a high-level football program neither precludes nor enhances the competitive success of

Table 7. BCS and Non-BCS Division I-A Institutions 2000 Undergraduate Enrollment

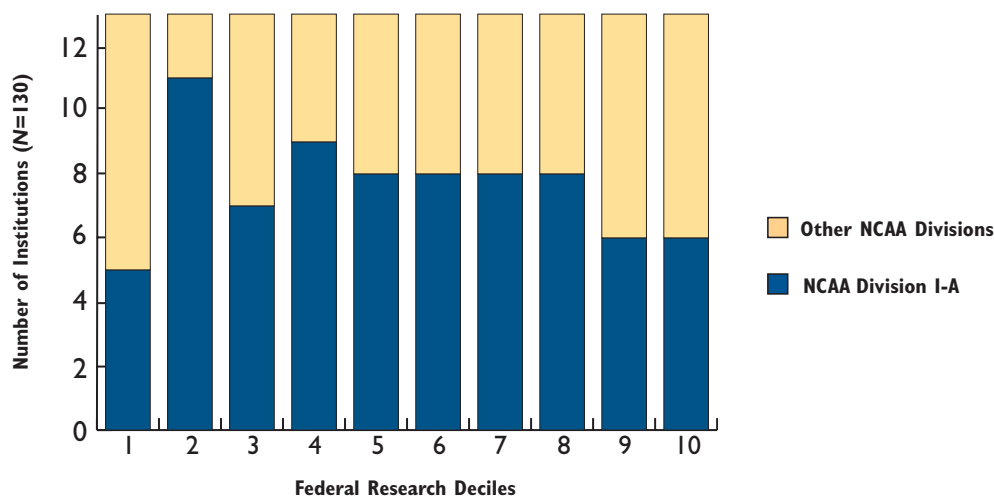
Measure	BCS	Non-BCS
Average Undergraduate Enrollment	20,200	14,432

research universities. Instead, under some circumstances (often when a university is rich, large, public, and has a long-standing successful commitment to major intercollegiate sports competition) a financially successful sports program can be a competitive asset for universities that are already effective as research institutions. In other cases, highly effective research universities, such as MIT, choose not to participate in Division I-A.

Some universities, mostly public, have traditions of competing at the top of the football hierarchy since the early days of college football at the turn of the 20th century – such as Michigan, Pittsburgh, or Illinois. Others have winning traditions that date from before or just after World War II (again, mostly public institutions), and they continue at top levels of athletic performance up until the present time, including such powerhouses as Oklahoma, Nebraska, and Texas. A number of institutions, usually private in ownership, had their football glory days in the early part of the 20th century, falling to lower levels of sports competition as the NCAA subdivided the competition into football-related divisions to accommodate the rapidly expanding audiences and programs at what had become much larger public universities.

Some private universities, like Vanderbilt, Northwestern or Duke, maintained their Division I-A

Figure 3. Universities with More Than \$20 Million in Federal Research and NCAA Athletic Program by Research Deciles; Division I-A and Other



Almost all intercollegiate sports require a subsidy from the parent institution's discretionary funds.

programs by virtue of participating in powerful conferences with major public football powers or an emphasis on basketball. Private universities, most with substantial undergraduate populations like Stanford and especially

Notre Dame and the University of Southern California, sustained their competition at the top levels of college football on a par with their public counterparts. Institutions like Harvard, Yale, or Penn in the Ivy League left the top level of football because their institutions could no longer

meet the attendance requirements for Division I-A football and could not compete in the same division with the major public institutions. This complex history, and the particular circumstances that influenced each institution's choice of whether to sustain a particular level of NCAA program, makes one-dimensional relationships linking university sports success with the institution's academic success difficult to establish.

The Relative Cost of Divisions I and I-A Sports

The somewhat idiosyncratic process of decision making that leads universities to choose to invest at one level or another in a particular sports program persuades us to believe that the key questions for any high-quality research university contemplating its sports program's future deal with opportunity costs. That is, if we can establish the true cost of operating an NCAA sports program at any level, what opportunities do research universities lose by investing discretionary dollars in a sports program rather than an academic activity? With a reasonable estimate of this opportunity cost, an institution can consider whether the return on an investment in sports will compensate for the lost value of the return on an equivalent investment in higher-quality teaching or research.

To approach this question we need to look at a number of components of an intercollegiate sports program:

- A careful and full accounting of the true cost.
- An understanding of the role of conferences and the Bowl Championship Series (BCS) in the finances of Division I-A intercollegiate athletics.
- An understanding of the relationship of the net cost of an NCAA sports program to the university's total discretionary income.

Financing the Sports Enterprise – Almost all intercollegiate sports require a subsidy from the parent institution's discretionary funds. A few programs earn enough money from athletically related fundraising, ticket sales, student athletic fees, endorsements, TV and radio revenue, and other income to pay the full cost of their operations, but most do not. The publicly reported financial information on college sports rarely provides full, reliable, and accurate data. (See the Appendix, *Athletic Dollars: Selected Definitions and Frequently Asked Questions from the Department of Education*, for a discussion of the financial data available.) Many universities manage their athletic programs as if they were ordinary academic departments of the university, allocating university funds for current operations and paying many forms of overhead out of central accounts not attributable to athletics. Table 9 on page 23 illustrates a model for full accounting of an intercollegiate sports program and identifies elements often missing from published reports.

Some of the confusion may come from an understandable desire to underreport expenses and overreport income to present a more favorable picture of the net cost of sports to various audiences. Much of the confusion, however, comes from thinking of intercollegiate sports as an integral part of the university's academic and service mission, with

Table 8. NCAA Division Membership of Universities in TheCenter's 2002 Top 1-25 or 26-50

NCAA Division	Number of Institutions	Average Undergraduate Enrollment
Division I-A	44 (52.38%)	21,830
Division I-AA	12 (14.29%)	9,823
Division I-AAA (no football)	5 (5.95%)	17,586
Division II	2 (2.38%)	18,442
Division III	13 (15.48%)	5,388
Stand Alone Health or Medical (No NCAA Membership)	8 (9.52%)	361
Total Number Institutions	84 (100%)	

Table 9. Intercollegiate Sports Accounts
Income less Expenses = Net University Investment in Sports Franchise

Income	
	Ticket sales
	Premium seat sales
	Luxury box or skybox sales
	Additional payments from athletic donors or boosters
	Concession sales and other game-day income
*	Revenue from leasing facilities to other users
	Annual giving
	Endowment income
*	Interest on retained athletic balances
*	Dedicated student fees
	Licensing fees
	Commercial payments for advertising
	Television and other media revenue received directly
	Television and other media revenue received from conference payouts
	NCAA payments
*	Other payments received directly for athletic appearances
	Apparel contracts and all other payments to ccoaches
*	Income from summer camps and other athletically related programs
Expenses	
(Direct Expenses of operating individual sports programs)	
*	Cost of weight rooms, training rooms, medical facilities, and other athlete welfare
	Travel costs for direct participants in all athletically related activities
	Salaries of coaching staff
	Salaries of office staff
*	Salaries of fund-raising staff related to athletics
*	Fringe benefits for all salaries paid on behalf of athletic employees
*	Extra compensation for coaches and other athletically related employees, (however paid)
*	Summer camps and other athletically related programs
*	Sports information and other university publicity related to sports
*	Legal services related to athletic issues
*	Accounting services for athletically related programs
*	Information technology services for athletically related activities
*	Insurance services for athletically related activities
*	Operations and maintenance of all sports facilities
*	Operations and maintenance of all sports-related office facilities
*	Operations of all parking, landscaping, and other space related to sports facilities
*	Debt service on all athletic facilities
*	Debt service on all office and other athletically related facilities
*	Depreciation expense on all athletically related facilities
	Scholarship costs for student-athletes
	Housing costs for student-athletes
*	Academic support services provided specifically to student-athletes
*	Special expenses bowl games,VIP support, and donor support
*	Allocated cost of administration, faculty, and other employees for sports-related activities
*	Payments to university activities unrelated to athletics (library and other campus subventions)

* The items marked often do not appear in the published totals delivered to the federal government or provided to other audiences. In some instances, part of the item indicated may appear.

Fan, trustee, and alumni enthusiasm for high-level competition encourages universities to underestimate the subsidy required.

consolidated and shared expenses accounted for in traditional university ways. For most universities their NCAA sports business is really an auxiliary operation, like residence halls or parking garages, even when the institution does not fully allocate all the costs and revenues attributable to it.

An unusual example of a complete accounting model exists at the University of Florida, which has its athletic enterprise operating as an independent not-for-profit corporation controlled by the university but completely independent financially. Every payment, subvention, and almost all university-related costs must be charged to athletics by the university and paid by athletics to the university. The result is a much clearer picture of the true balance between income and expenses. Such a model has the additional benefit of encouraging the athletic operation to be self-supporting because any payments from the university to athletics appear in both entities' public records, and any subsidy becomes a matter of instant public debate on and off campus.

The key item for us in this discussion is the net number that represents the investment of the university's discretionary dollars in sports. Some relatively expensive programs may also generate sufficient revenue to reduce their net deficit to zero or less than a million dollars a year. Some relatively inexpensive programs may generate so few external dollars in support of athletics that the net subsidy required from the university's general fund could rise into the range of \$10 million.

Universities seeking to enhance their NCAA divisional level, in most cases by attempting to move from Division I-AA to Division I-A, must plan to subsidize this expansion until the newly achieved level provides sufficient revenue to cover the extra cost. In most cases, the institution's expectations prove overly optimistic and the subsidy extends indefinitely, although in a few instances the university may see the subsidy requirement decline over time. The tremendous enthusiasm of fans, trustees, alumni, and friends of the university for high-level athletic competition often encourages universities to underestimate the amount of subsidy required to compete at the level they choose, primarily because the variations in reporting standards for intercolle-

giate athletic expenditures and income make accurate assessments of expenses and income elusive. The poor data inhibit an accurate calculation of the relative value of an investment in enhancing athletic competitiveness compared to the value of an investment in enhancing academic performance.

Nonetheless, to take a very recent example, Florida A&M University has reported plans for a \$55 million investment in facilities (some of which may involve academic space) that will expand its stadium to 40,000 from its current 22,500. In addition, by 2004, the NCAA has indicated it will require Division I-A institutions to spend \$4 million on or offer a minimum of 200 athletic scholarships. The Division I-AA scholarship requirement is about \$775,000. In addition, in 2004, each Division I-A institution must average 15,000 per game in actual attendance (this eliminates a technical loophole in previous rules that allowed institutions to count other people as attendees and use average attendance figures for a conference, even if the individual institution did not meet the attendance rules). Division I-AA has no attendance requirement. In many cases, public universities plan on legislatively approved subsidies to support the costs of athletic expansion, and often legislatures oblige. In the Florida A&M initiative mentioned previously, the press reports indicate a request for \$30 million of state financing for the stadium expansion. In all these cases, it is difficult to know whether legislative enthusiasm would be as strong for academic facility expansion as it has proven to be in many instances for investment of public funds in athletic facilities.

Conferences, Stadiums, and the BCS – We often discuss an institutional investment in athletics as if the university independently controlled sports revenue and expenses. The finances of most intercollegiate athletic programs and especially those in Division I-A, however, depend greatly on their participating in conferences, size of the stadiums of each of the members of the conference, NCAA requirements, participation in the NCAA basketball tournament, and the conference's relationship to the Bowl Championship Series, or BCS.

The NCAA sets the standards that determine many of the investments required for a given divisional status, but the NCAA does not control large parts of the revenue generated or expenses assumed by the institutions in pursuit of winning programs. The NCAA manages much of the revenue associated with basketball, especially the money from the national basketball championship

tournament, but football revenue in Division I-A belongs to the institutions and their conferences. The NCAA originally tried to control the appearances of university football games on television, which would have also allowed the association to control the revenue from television, but two institutions (Oklahoma and Georgia) sued in federal court and established the right of individual institutions to manage football appearances on television.

Conferences – The conferences, which came into existence primarily to group similar institutions within geographic regions to manage the logistics of organizing competitive schedules and sustaining rivalries that enhance audience appeal, emerged as the key managers of football revenue on behalf of their members. Football is central to the conference's concerns because it is football that commands large amounts of revenue from stadium gate receipts and

Table 10. Major College Football Stadiums Prior to 1930

School	Year Built	Capacity in 1920s*	Stadium Name	Notes and Sources
U Penn.	1895	78,205	Franklin Field	Once the nation's premier football facility, hosting the Army-Navy game for multiple years beginning in 1899. [http://pennathletics.ocsn.com/sports/m-football/spec-rel/franklinfield1.html]
Harvard	1903	57,166	Harvard	Harvard is the nation's oldest stadium according to Harvard's athletic department. True capacity of stadium is slightly more than 30,000. But construction of steel stands increased capacity to 57,166 until their removal in 1951. [http://gocrimson.ocsn.com/facilities/stadium.html]
Yale	1914	80,000	The Yale Bowl	Despite later being the home of the NFL's New York Giants in 1973-1974, the Giants never matched the 80,000 attendance for the Yale vs. Army game on November 3, 1923. [http://www.sfo.com/~csuppes/NCAA/Ivy/index.htm?Yale/index.htm]
Ohio State	1922	71,835	Ohio Stadium	Built at a cost of \$1.34 million. Capacity has increased over the years to more than 100,000. [http://www.sfo.com/~csuppes/NCAA/Big10/OhioState/index.htm]
Illinois	1923	50,000+	Memorial Stadium	Financed by \$1.7 million in donations from more than 200,000 students, alumni, and others. Capacity has increased to more than 70,904. [http://fightingillini.ocsn.com/trads/ill-trads-memorial.htm]
Minnesota	1924	60,000	Memorial Stadium	The second game against Michigan in 1926 drew 60,000 fans, even though various sources list capacity as being in the low 50 thousands. [http://www.msfc.com/ann_before_memorial_stadium.cfm http://www.sfo.com/~csuppes/NCAA/Big10/Minnesota/index.htm]
Pittsburgh	1925	50,000+	Pitt Stadium	Stadium cost \$2.1 million to build. Capacity increased as high as 56,150 before stadium's demolition in 1999. [http://www.sfo.com/~csuppes/NCAA/BigEast/Pittsburgh/index.htm]
Northwestern	1926	45,000	Dyche Stadium	Built at a cost of \$1.425 million. [http://www.sfo.com/~csuppes/NCAA/Big10/Northwestern/index.htm]
Michigan	1927	84,401	Michigan Stadium	Stadium was financed with an issue of 3,000 bonds at a par value of \$500 at 3-percent interest. These bonds guaranteed the right to purchase a ticket between the 30-yard lines for 10 years. Capacity has increased over the years to more than 100,000. [http://www.umich.edu/~bhl/stadium/stadtext/bonds.htm]

* In some cases, these totals represent the largest over-capacity crowds in the 1920s.

television, plus the associated revenue from sales of merchandise, endorsements, and similar income derived from large audiences either physically present or tuned in on television and radio.

The strongest conferences organized groups of institutions with successful sports programs operating at similar levels in most or all sports. The conference goal is to have all members play the same sports so that scheduling and rivalries develop in a consistent and revenue-producing way. The key conference competitions are in

football and, to a lesser extent, men's basketball. A successful, well-managed conference with highly competitive programs offers significant financial benefits to the universities that belong to it. The most successful conferences today, such as the SEC, the Big Ten, or the Pac-10, buffer the volatility of sports performance and its associated revenue. The systems for revenue sharing among the institutions within a conference vary by conference. Conferences share revenue from the television packages negotiated on behalf of the conference, the regular season television package for conference games, the income from conference championship games, and post-season bowl appearances. Conferences negotiate much better terms for television packages and bowl appearances than most individual teams can achieve on their own.

In football and basketball (the "money sports"), as well as in other competitions, success runs in cycles. No university's sports program is always successful at the top level in both football and basketball. Sometimes a program will have a run of a decade or more, but eventually every top program falls out of the top competition. This can happen because of the departure of star coaches or players, scandals and corruption that produce sanctions inhibiting the successful recruitment of talented athletes, or the accidental impact of injuries or mistakes.

When a university conference member has a number of poor performing years in football or men's basketball, the shared revenue from the successful performance of the other conference members sustains the poor performer's income stream and allows it to continue to pay debt service on its facilities, rebuild its programs, and after a few years return to top performance. A modest sports program,

embedded in a high-powered conference, will receive revenue year after year that reflects the earnings of its more powerful members. Often a modest program over time can build its program to much higher levels of performance, thanks to the revenue shared from the other members.

Over the years, the conferences reorganized and realigned their memberships. New conferences emerged and others disappeared to meet the competitive needs of the college sports marketplace, but enhancing revenue remains the purpose of all conference activities. While most conferences perform a variety of other services for their members, the key value of the conference is its ability to generate revenue on behalf of its members. As an example, the SEC, followed by other conferences, expanded to 12 members in 1992 so that it could play football and basketball in two divisions and then have conference championships (tournament in basketball, game in football). The addition of conference championships generated an extra game in football and several extra games in basketball beyond the regular season, providing an additional opportunity for television broadcasts and enhancing the value of each member's franchise through the additional revenue distributed from the extra games.

Stadiums – Although it may appear that high-powered football is predominantly a public university enterprise, the elements that define football at the top have remained constant since its inception in the early decades of the 20th century. Penn, Harvard, Yale, along with Michigan and Ohio State, for example, stood at the pinnacle of football success in the 1920s by virtue of the large crowds they drew to their games, the size of their stadiums, and the commercial scale of their athletic success. (See Table 10 on page 25 for some of the largest college stadiums before 1930.)

Audience is the key, for it is the audience, delivered in person or eventually via television and radio and the print media, that sustains a top competitive football program. The sale of football to non-students has been the foundation of intercollegiate sports since their inception, and the rise of large public universities after World War II made them not only formidable competitors for research, student, and teaching talent but also successful competitors for athletic talent and visibility.

Today, stadiums represent a small portion of the college football audience that a major university program can attract through national television and radio exposure. Nonetheless, the ability of a univer-

*The ability to build and fill
a stadium of 75,000 to
100,000 is a clear indicator
of financial strength.*

sity to build and fill a stadium of 75,000 to 100,000 is a clear indicator of financial strength. (See Table 11 for a list of the ten largest college football stadiums as of 2002.) Attendance at home games that fills stadiums of this size produces a sizeable revenue stream essential for recovering the capital cost of these expensive facilities. A university that musters only 35,000 to 40,000 fans for big games, and perhaps averages 15,000 to 25,000 for all home games, has a much different financial base than a university that fills an 85,000-seat stadium for every single home game, rain or shine, good opponent or not. Stadiums partially filled represent a financial loss, even if subsidized in various ways by municipalities, state government subventions, or university debt service. Partially filled stadiums also usually indicate a team that rarely wins, a team that fails to appear on television unless a top-ranked team is visiting from elsewhere, a team whose fans will not pay premiums for good seats, and a team whose contribution to its conference's shared revenue will be minimal.

Those football programs that fill the 85,000-plus-seat stadium for the six home games a year almost always have seat premiums, extra payments to the athletic program that earn the purchaser points toward the much-sought-after better seats that also cost more money. These stadiums have skyboxes or luxury suites and higher-quality chair-back seating sold at premiums over the regular seat price, and they earn substantial revenue from the concessions sold to the 85,000 fans. In a clear case of the successful building on their success, these sold-out stadiums also attract the most money for advertisements on their walls, fields, and scoreboards, and television

producers much prefer to broadcast a game in a large, sold-out arena than one in a smaller half-empty stadium. In short, a university athletic program that cannot fill its football stadium is likely to be at a serious financial disadvantage compared to those programs filling 85,000 seats. Unless it is in a very rich conference, a Division I-A football program that fails to fill its seats and fails to win many games is sure to lose a great deal of money, however it expresses its official accounting.

Within this context, as mentioned previously, the size of the student population not only bears some relationship to the size of the institution's football stadium but also creates an independent and reliable revenue stream of its own. Many public universities have dedicated student athletic fees that assign a fixed amount per credit hour to support the sports franchise. This number can range from \$2 to \$10 or perhaps a bit more. If we take \$5 per semester credit hour as a modest intercollegiate athletic fee, and apply it to the 30 hours a full-time equivalent student needs to take each year to graduate in four years, the annual revenue per student is \$150 per year. For a small public university of 20,000 students this generates \$3 million a year to athletics. For a large public university of 40,000 students, the yield on a fee of this amount to athletics is \$6 million. As a result of student size, the level field for Division I-A programs is not so level because the large institution has a guaranteed \$3 million more to invest in its sports activities than the smaller institution. Considerations such as these help explain the success of many large universities in sustaining Division I-A programs.

Table 11. Ten Largest Division I On-Campus College Football Stadiums, 2002 Season

School	Year First Built	2002 Capacity	Stadium Name
Michigan	1927	107,501	Michigan Stadium
Penn State	1960	107,282	Beaver Stadium
Tennessee	1921	104,079	Neyland Stadium
Ohio State	1921	101,568	Ohio Stadium
LSU	1924	91,600	Tiger Stadium
Georgia	1929	86,520	Sanford Stadium
Auburn	1939	86,063	Jordan-Hare Stadium
Stanford	1921	85,500	Stanford Stadium
Alabama	1929	83,818	Bryant-Denny Stadium
Florida	1929	83,000	Florida Field

Sources: <http://www.infoplease.com/busbp.html>

BCS – The emergence of the BCS (Bowl Championship Series) represents another conference initiative. The traditional bowl games originally matched the champions from two conferences in an

The BCS is a major financial success, driving revenue into the participating conferences.

end-of-the-season game during the winter break of late December and early January. The Rose Bowl, which pitted the winner of the Big Ten against the winner of the Pac-10, is a classic example. Bowls allowed large municipal stadiums to create Christmas-to-New Year's football extravaganzas, the television industry promoted these games as excellent entertainment values during the holiday season, and the universities earned extra revenue and an additional opportunity for high visibility. However, the bowl system had a significant defect as college football continued to grow into a national television product.

The traditional bowls identified only bowl champions, not national champions. In the incessant drive to identify the number one football team in any given year, the most aggressive football conferences (led by the SEC) and the bowl promoters themselves, with the support and encouragement of the television networks, reorganized the end-of-season bowls into a pseudo national championship competition. They identified the top bowl games and the most competitive conferences that traditionally played in those bowl games, and then they formed a coalition in 1992. The coalition lasted for three years and was replaced for the 1995 championship by a similarly constructed alliance. The current arrangement, known as the Bowl Championship Series, appeared in 1998 and established a process for determining the best football teams at the end of the regular season through a complex, controversial, and ever-changing system of weighted rankings derived from polls and mathematical formulas related to win-loss records. (See Appendix 2 *History of the Bowl Championship Series (BCS)*, for a summary of the various iterations of this series and its ranking system.) At the end of the season, the two top-ranked teams play in one of the coalition bowls. The venue for the top bowl game rotates among the various stadiums participating in the coalition according to a fixed schedule so that each bowl in the coalition has the top game at predictable intervals.

Since its inception, the participants have modified the BCS several times, most importantly to include the Pac-10 and the Big Ten along with their traditional bowl venue at the Rose Bowl. The methodology of the rankings has changed frequently as well, and the selection of participants in the coalition bowls that do not have the championship game has varied over the years in relation to the BCS rankings that determine the two top teams. The BCS coalition sells the rights to televise these games as a package to eager network buyers for large sums.

This innovation is a major financial success, driving revenue into the hands of the participating conferences and teams. Payouts for participation in the top BCS bowl reached the level of more than \$13 million per team in recent years. The cost of participation in such a bowl for an individual team is high – perhaps \$2 million for airplane charters, housing for the week or so before the game, events on behalf of alumni and boosters, and VIP support for significant political and institutional actors – but the added revenue from a major bowl easily supports these expenses. With the exception of Notre Dame, which has frequently competed in the bowl coalition as an independent and need not share any of the revenue, the other participating teams generally share bowl revenue with their conferences. In the case of premier conferences that may have more than one team in a BCS bowl, the amount of revenue shared within the conference naturally increases, although a rule limits the second team's payout to \$4.5 million under this special circumstance, with the rest distributed to the other BCS participant conferences.

Currently, the following conferences form part of the BCS, and their champion receives an automatic bid to one of the bowls in the coalition:

- Pac-10,
- Big 12,
- Big Ten,
- Southeastern Conference,
- Atlantic Coast Conference, and the
- Big East.

In addition, Notre Dame, if it wins nine games (regardless of its ranking), and two at-large teams following certain ranking criteria also receive bids to coalition bowls. As an indicator of the importance of these conference arrangements, the Division I-A franchises not included automatically in the BCS have encouraged their institutions to sue for admission into the competition on the grounds of an anti-

trust violation. Indeed, in the history of the BCS, no member of a non-BCS conference except Notre Dame has played in a BCS bowl. Nothing more clearly establishes the fundamental economic risks assumed by universities when they launch a Division I-A sports franchise than this brutal economic warfare currently (2003) being waged among higher-education institutions on behalf of the economic viability of their football operations.

Non-BCS bowl games, which still exist in significant numbers, bring lesser performing teams together for end-of-season games that often draw good crowds, some television coverage, and a sense of closure. On many occasions, however, they do not generate significant net revenue to the participating institutions and, in some cases, the institutions lose money on these bowl games. If it costs \$1 million to participate in a bowl game that requires extensive travel (to Hawaii or to an opposite coast), and if the payout on the bowl is only \$800,000, then the university participates at a loss. The university may also need to share its bowl revenue with its conference, but these smaller bowl games may not generate much profit to share. NCAA universities can participate only in NCAA-sanctioned bowl games. The parent ensures that the bowl game is legitimate, conforms to all NCAA rules pertaining to student-athletes, insists on a variety of minimum financial guarantees, and otherwise attempts to protect its members from unscrupulous bowl promoters. The NCAA also sanctions the BCS system. Periodically, the NCAA increases the requirements for bowl games in an effort to ensure that its members will not lose money because of their participation in such events.

These football arrangements display the financial value of the conferences' commercial enterprises in perhaps the most visible ways, and explain the intensity of the controversies around the membership and operation of the BCS. Universities work very hard to capture a place within one of the high-revenue conferences, and those that fail to do so complain bitterly about the commercialism of college sports (as they negotiate to gain entry into the highest level of commercial college sports operations in a better conference).

The various financial arrangements that support top-level Division I-A football and often help support the entire sports program at an institution create a formidable entry barrier. Other universities, either operating at lower levels of Division I-A or with football programs at the Division I-AA level, find it prohibitively expensive to try to match the resources earned and invested by the top programs. This helps

explain the intense interest of many lower-level programs in revenue redistribution plans and legal actions that might reduce the financial entry barrier that separates their football programs from those at the BCS level of operation.

Given the complexity of the arrangements for funding university-based intercollegiate athletics (football and basketball at the top level), clear descriptions of the flow of dollars prove challenging. Nonetheless, it may help to capture some of the orders of magnitude here. From press

reports it appears that the BCS bowls generate about \$165 million, of which about 90% stays with the teams and conferences that participate. The rest is distributed by a formula to other, non-BCS institutions and conferences. While the NCAA basketball tournament generates considerably more, perhaps \$271 million in 2001 with even more anticipated in future years, the association distributes the dollars to many more participants than receive payments from the BCS. Our best guess is that football generates about twice as much from the BCS to its participants as the NCAA basketball tournament generates for the many recipients from that activity. This kind of estimate, however, is greatly dependent on the individual circumstances of each institution, its performance in past basketball tournaments, membership in a particular conference, participation in the bowl games in football, and the rules of its conference about the distribution of revenue.

Opportunity Cost of University Sports Programs

Given what we understand to be the different economic models for public and private research universities, this discussion offers an opportunity to better understand the mechanisms that encourage many, but by no means all, research universities to invest heavily in sports franchises. For a public university, the exceptionally high visibility accorded intercollegiate sports performance at the top levels in football and men's basketball likely has value for the institution, although this value needs to be evaluated in light of the cost of the commitment – a question we consider in detail below. This commitment can mobilize public support, create brand identity in a crowded marketplace, and emphasize the popularity

Universities try to enter or remain in high-revenue conferences at the same time they complain about the commercialism of college sports.

of institutions whose research products are invisible to many important public constituencies critical for political and financial support. Public universities frequently find themselves subject to intense pressure from constituencies who believe the university has an obligation to deliver a high-profile sports program as part of its service to the communities that provide state revenue.

Intense pressure comes from constituencies who believe public universities have an obligation to deliver a high-profile sports program.

Given the perceived importance of high-profile sports among the quality brand-name public institutions, many observers see these activities as markers for the academic characteristics of excellence otherwise invisible to the public eye.

Universities such as Michigan and the other members of the Big Ten, the high-quality members of the ACC, the football campuses of Berkeley, UCLA, and the University of Washington – all these and other significant institutions that manage top-level NCAA programs validate this popular presumption, even if no causal relationship between sports and academic quality exists.

The private research universities do not show the same relationship between research productivity, student size, and sports investment. Nonetheless, the presence of distinguished private research institutions within the top sports group – a Stanford or USC or Duke, for example – along with other private institutions' high investment in programs of somewhat lesser athletic prowess all combine to validate the popular sense that first-rank academic colleges and universities and expensive, highly visible sports activities are at least compatible. That a significant number of universities with quite modest research productivity also support top-level sports programs does not weaken this popular assumption. The core notion is that first-rate sports and first-rate academic institutions can and do coexist, and the cognitive leap that sees this combination as mutually reinforcing is easy for many people to make.

As is often the case in these broad generalizations, the relationships between sports investments and research productivity are probably more complex than the available data can reveal. Individual circumstances and the history of individual institutions have much more to do with the coexistence of sports performance and research performance than simple comparisons reveal.

For example, there is a world of difference between the circumstances of a large public university whose sports operation costs \$50 or \$60 million to operate and generates \$50 to \$60 million in revenue and a similarly large public university whose sports activities cost \$30 million to operate and generate \$22 million. Both may inhabit the top I-A football division, although the first institution probably holds membership in a high-revenue BCS conference and the second does not.

Recognizing the deficiencies in the data and understanding that some portion of the reported revenue of the first institutional example may reflect a subvention through dedicated student fees or direct payments from university general revenue, the first program probably comes close to breaking even financially. As a result, it does not represent a substantial direct charge to the university's general operating fund. For such a university, a major sports franchise at this level likely includes a stadium with 100,000+ seats, elaborate practice facilities, a basketball field house, first-rate physical venues for the non-revenue sports, high-profile coaches, constant media visibility, and the other attributes of such an enterprise. This program is essentially a self-supporting auxiliary.

This university's argument that major intercollegiate athletics is a positive good, a fine thing, and an asset to the institution is relatively persuasive. Most negative effects from such a program involve value issues. The sports teams may need to admit student-athletes with low academic standards (although such admits will represent a very small percentage of the large public university's student population). Many faculty members and other observers will resent the distortion of values inherent in the size and scale of this high-visibility, non-academic, extracurricular activity. Some will reflect on the cost to the university's high academic reputation of the scandals that almost inevitably inflict such programs even at first-rank academic research universities such as Michigan or Minnesota.

Universities like those in our second example support sports programs that operate at a net financial loss and require a constant and significant subsidy from the university's general fund. For a university in these circumstances, the question of the value of intercollegiate sports becomes more difficult to resolve. Our second example is a university with a Division I-A program operating in the second tier, outside the BCS revenue-generating conferences. Such an institution likely will need a subsidy of at least \$8 million from its general funds to sustain its athletic competition. The consequence of this investment for the university, even

if it has a strong research presence and demonstrates competitive performance in the research marketplace, is significant.

Every dollar from the university's general fund spent to sustain its sports program is a dollar unavailable for investment in student quality, faculty quality, or research competitiveness. To put the opportunity cost into perspective, it would take an increase in the athletic endowment of approximately \$160 million to replace the university's yearly subsidy of \$8 million from general revenue for its sports teams. Few universities can hope to generate private giving at this level for athletics, and, to sustain the viability of its sports program, the institution will continue to divert general funds from teaching, research, and other academic and service functions.

The almost-desperate plight of the Division I-A second-tier institution appears repeatedly in the popular press where representatives from these universities bemoan the commercialism of the top tier of football powers at the same time they lobby or litigate to gain access to the benefits of the commercial revenue from competition at this level. The conflict and the confusion of values this represents seriously inhibit a clear calculation of the opportunity cost of choosing to participate at this level and encourage the cynicism with which many observers regard intercollegiate sports.

Although much visibility attends the struggles of second-tier programs to compete with the first tier within the football world of Division I-A, the same opportunity costs apply to research universities much lower on the athletic food chain. Division I schools in the Ivy League that do not support scholarship football teams, and many other institutions below the top football scholarship conferences, find themselves spending substantial amounts of general revenue on intercollegiate sports – in many cases much more general revenue than top BCS football programs in Division I-A. This characteristic often disappears in the high-visibility conversation about the cost of top-level football. The critical number for evaluating the cost of intercollegiate sports, we must emphasize, is not the total cost but the net cost after a full accounting of both income and expenses.

Institutions with lower-cost programs also may have lower-revenue opportunities. They have fewer fans, fewer seats to sell, fewer purchasers of their logo merchandise, no television revenue, and small athletic endowments. At the same time, they often support more sports, even if at lower levels of expense, and often sustain high-profile men's basket-

ball programs to generate some revenue. Whatever their economic strategy, these programs will consume \$7 to \$10 million of general funds, representing an opportunity cost equivalent to an endowment of \$140 to \$200 million. Few institutions have a clear strategy that explains why an investment in an extracurricular sports activity at this order of magnitude is the highest and best use of institutional resources.

Cost of Program vs. Endowment Equivalent –

Another way to look at these data is to consider the relationship between the cost of a sports program and various proxies for the university's disposable revenue. The significance of the opportunity cost involved depends greatly on the amount of the institution's budget from which it pays the sports' net subsidy required by accounting fully for expenses and income. The following two hypothetical cases illustrate this point.

- In a major public university with a budget of about \$1 billion, a Division I-A sports program with revenue of \$58 million and expenses of \$60 million and a net subsidy requirement from the university of \$2 million represents an opportunity cost of only 0.02% of the total institutional budget.
- In a public research university with a \$700 million budget, a Division I-AA sports program with revenue of \$10 million and expenses of \$18 million and a net subsidy requirement from the university of \$8 million represents an opportunity cost that reaches 1.14% of the institutional budget – almost 6 times as great as the first example.

It is no wonder that so many colleges in the lower-level competitive divisions seek to upgrade to the next higher level, especially in the public sector where the interest and value of sports visibility may be particularly great. If the institution is already paying an opportunity cost of 1.14% of its budget, its leadership may imagine that upgrading to a Division I-A football program could bring sufficient

Every dollar a university chooses to spend from its general fund on sports is a dollar it cannot spend on student quality, faculty quality, or research competitiveness.

additional revenue to reduce the subsidy or, even if the subsidy stays the same, provide much more value.

Another way to look at this is to use the estimated adjusted endowment equivalent table presented in last year's *The Top American Research Universities* as a rough proxy for institutional resources available for investment. The endowment equivalent represents the amount of endowment required to produce the university's total revenue from all sources. The adjusted endowment equivalent discounts the endowment equivalent for the amount required to pay for the basic cost of student instruction that, of course, varies greatly by the size of an institution's student body. The adjusted endowment equivalent number serves as a rough proxy for the university's discretionary income that, after paying for instruction, remains available for investment in programs and activities to enhance quality in teaching and research.

For the purposes of this illustration, let us take \$8 million as an estimated median net cost of an athletic program at any level of Division I. We then convert this annual cost into its endowment equivalent of \$160 million by calculating the amount of endowment needed to produce \$8 million annually, assuming a 4.5% payout. The relative opportunity cost of a median athletic program then becomes the percentage of the available adjusted endowment equivalent required to support the program.

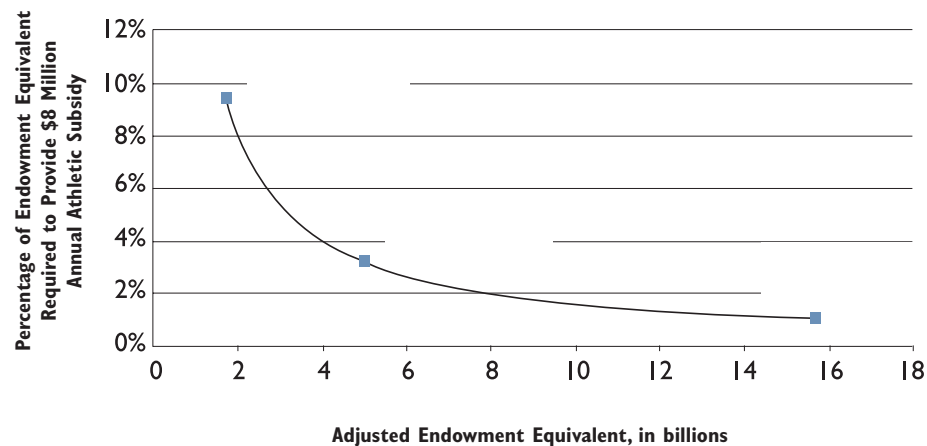
If we calculate this opportunity cost at a top, middle, and bottom level of adjusted endowment equivalent from our data, we get the following results (displayed in Figure 4).

- The median of the top 10 universities' adjusted endowment equivalents in 1999 is about \$15.7 billion. In this group, the opportunity cost of an \$8 million annual subsidy for athletics (calculated as a \$160 million endowment equivalent) is low, representing an investment of 1.02% of the income from the university's adjusted endowment equivalent.
- For the median university in this group of research institutions, with an adjusted endowment equivalent of about \$5 billion, an athletic program that requires an endowment equivalent of \$160 million (to generate the \$8-million-a-year subsidy) represents a 3.2% opportunity cost to the income from the adjusted endowment equivalent.
- Among the bottom 10 within our group of research universities, the median adjusted endowment equivalent is about \$1.7 billion and the athletic program with a subsidy requirement of the income from an endowment equivalent of \$160 million (\$8 million a year) represents a high-opportunity cost of 9.4%.

Clearly, understanding the financial impact of intercollegiate sports requires two calculations and a final evaluation of alternatives:

- The first calculation is an accurate accounting of the full net cost of the program to the institution (including capital and other forms of university overhead), and

Figure 4. Opportunity Cost for a Hypothetical Athletic Program
Requiring an \$8 Million Annual Subsidy at Varying Levels of Adjusted Endowment Equivalent for \$20M and above Research Universities



- The second calculation establishes the relationship of this net cost to the university's total discretionary resources.

Depending on the circumstances of the institution, the right index for this second calculation might be something other than the adjusted endowment equivalent. For example, a public university might index the opportunity cost to a percentage of the state appropriation received, and a private university might index it to a percentage of the student fee income received.

The final evaluation is more complicated and perhaps subjective and requires balancing the immediate high-visibility reward of intercollegiate athletics against the longer-term success in the competition for high-quality students and faculty and the performance of high-quality teaching and research. This evaluation requires universities to make clear and well-informed choices about the best and highest use of their discretionary dollars.

* * *

Universities that succeed in the competition for research faculty and superior students invest a large

portion of their financial base in attracting and retaining these superior faculty and students, and then invest even more in the acquisition of research grants, contracts, special student

programs, and other quality-enhancing elements. We believe that the data presented in our previous reports demonstrate that the amount of discretionary university dollars invested in faculty, student, and research competition is the critical element in successful competition for quality.

It is likely, then, that university activities like intercollegiate athletics, which consume discretionary dollars without enhancing the university's academic competitive success, will inhibit the acquisition of quality.

By consuming discretionary dollars without enhancing academics, activities like intercollegiate athletics inhibit the acquisition of academic quality.

Appendix 1: Some Readings on Intercollegiate Sports in America

Background

As should be clear by now, the institutional commitment to intercollegiate athletics in America is a phenomenon that is at least a century old. From early 20th-century stadiums with stadium capacities many times larger than the student body to the extensive recruiting of student-athletes after World War I, the American university has long emphasized and subsidized intercollegiate athletics, especially football. An essential early primer on the American university's relationship with intercollegiate athletics is in Howard J. Savage et. al., *American College Athletics* (New York: Carnegie Foundation for the Advancement of Teaching, 1929), a comprehensive study with chapters on such topics as "The Coach in College Athletics," "The Recruiting and Subsidizing of Athletes," "The Press and College Athletics," and "Values in American College Athletics." This work, combined with two recent studies sponsored by the Mellon Foundation – James Shulman and William Bowen, *The Game of Life: College Sports and Educational Values* (Princeton: Princeton University Press, 2001) and William C. Bowen and Sarah A. Levin, *Reclaiming the Game: College Sports and Educational Values* (Princeton: Princeton University Press, 2003) – offer an exceptional view of the development and challenges of college sports. The Shulman and Bowen books, moreover, represent one of the strongest and most significant critiques of the impact of intercollegiate sports on values and behavior, especially among America's elite colleges and universities. See also Craig Lambert, "The Professionalization of Ivy League Sports," *Harvard Magazine* (100:1997, 35-49). A general survey of college sports is in Donald Chu, *The Character of American Higher Education and Intercollegiate Sport* (Albany, NY: State University of New York Press, 1989). The definitive reference on legal issues is Glenn M. Wong, *Essentials of Sports Law* (3rd ed., Westport, CN: Praeger, 2002). Of particular interest to many observers has been the rise of women's sports, a trend greatly enhanced by the federal legislation known as Title IX after the section of the Higher Education Act of 1972. For a comprehensive history of women in sports see Allen Guttmann, *Women's Sports: A History* (New York: Columbia University Press, 1991) and a now somewhat-dated bibliography in Mary L. Remley *Women in Sport: an Annotated Bibliography and Resource Guide*, 1900-1990. Boston: G.K. Hall, 1991.

The Critiques

College sports critiques abound. Commissions often appear to address controversial issues such as the Knight Commission, which published a variety of reports calling for reform: *Keeping Faith with the Student Athlete: A New Model for Intercollegiate Athletics*, 1991; *A Solid Start: A Report on Reform in Intercollegiate Athletics*, 1992; *A New Beginning for a New Century: Intercollegiate Athletics in the United States*, 1993; *A Call to Action: Reconnecting College Sports and Higher Education*, June 2001 (Miami: John S. and James L. Knight Foundation, 1991-2001). These reports received much attention in the press, and various NCAA reform activity appeared to respond to the recommendations.

T. Derek Bok's *Universities in the Marketplace: The Commercialization of Higher Education* (Princeton: Princeton University Press, 2003) includes a critique of the negative impact of athletics on the university within the context of the general commercialization of universities. Andrew Zimbalist's *Unpaid Professionals: Commercialism and Conflict in Big-Time College Sports* (Princeton: Princeton University Press, 1999) focuses on the financial compromises and decreased academic standards universities accept in order to support a major athletic program. Other critical perspectives from different points of view appear in Wilford S. Bailey, who called for reform a decade ago in *Athletics and Academe: An Anatomy of Abuses and a Prescription for Reform* (New York: American Council on Education, Macmillan, 1991). Almost 10 years later, a former university president echoed many of these themes in his explanation of college athletics in James J. Duderstadt, *Intercollegiate Athletics and the American University: A University President's Perspective* (Ann Arbor: University of Michigan, 2000), and a sitting president's explanation of a governance model to maintain functional integrity is in John V. Lombardi, "Sports Medicine," *The Journal of the Association of Governing Boards of Universities & Colleges* (1992, 34:1). A reminder of the pervasive nature of scandal in college sports is in Albert J. Figone, "Gambling and College Basketball: The Scandal of 1951," *Journal of Sport History*, (1989:1) 44-61, and in John R. Thelin, *Games Colleges Play: Scandal and Reform in Intercollegiate Athletics* (Baltimore: Johns Hopkins University Press, 1996).

Student Impact

A sociological study of student-athletes is in Peter Adler and Patricia A. Adler, "From Idealism to Pragmatic Detachment: The Academic Performance of College Athletes," *Sociology of Education* (1985, 58:241-250), and they have another article on the qualitative experiences of student athletes during and after college in Patricia A. Adler and Peter Adler "College Athletes and High-Profile Media Sports: The Consequences of Glory" in *Inside Sports*, Jay Coakley and Peter Donnelly, eds. (London and New York: Routledge, 1999). This latter ethnographic study followed athletes at one elite college basketball program from their playing days at the university through several years of their post-graduation experience. Another view of the impact on student-athletes is in Walter Byers and Charles H. Hammer's *Unsportsmanlike Conduct: Exploiting College Athletes* (Ann Arbor: University of Michigan Press, 1995), which contributes to a continuing conversation about the trade-off between the benefits and costs of participating in college athletics. This trade-off existed at the very beginning of the modern era in college sports, see Henry Beach Needham, "The College Athlete: How Commercialism is Making Him a Professional," *McClure's Magazine* (1905:2-3) 115-128, 260-273.

Some critics focus intensely on the negative impact of college athletics on non-student-athletes, the faculty, and the university at large. Murray Sperber connects the rise of high-profile college athletics to a declining quality of undergraduate education and the student experience in a variety of contexts including *Onward to Victory. The Crises that Shaped College Sports* (New York: Henry Holt, 1998) and *Beer and Circus: How Big-Time College Sports Is Crippling Undergraduate Education* (New York: Henry Holt, 2000). A critique of the culture of winning appears in the work of Alfie Kohn, whose *No Contest: The Case Against Competition* (Boston: Houghton Mifflin, 1986) cites a variety of studies suggesting that competition is inherently destructive to work, play, relationships, and creativity in people of all ages. Charles M. Young applied Kohn's theory to the players on the perennial losing Prairie View University football team in his article "Losing: An American Tradition," *The Best American Sports Writing* (Boston: Houghton Mifflin, 2001), pp. 319-333.

Football

As we would expect, football attracts many critics and observers. These include the classic study in David Riesman and Reuel Denney's "Football in America: A Study in Culture Diffusion," *American*

Quarterly, Vol. 3, No. 4. (Winter 1951), pp. 309-325. Riesman and Denney's essay, in addition to providing a primer on the origins of football in England and America, demonstrates that the financial competition to field winning football teams had already begun by the early 1950s. See also John Sayle Watterson, *College Football: History, Spectacle, Controversy* (Baltimore: Johns Hopkins University, 2002), and Mark F. Bernstein's study, *Football: The Ivy League Origins of an American Obsession* (Philadelphia: University of Pennsylvania Press, 2001). The unique example of a major football school that abolished the game is in Robin Lester, *Stagg's University: The Rise, Decline, and Fall of Big-Time Football at Chicago* (Urbana: University of Illinois Press, 1999). For a current view of the challenges of football in smaller institutions, see Welch Suggs, "Swarthmore Kicks Football out of the College," *The Chronicle of Higher Education* (December 15, 2000). This article notes that Swarthmore worried about the disproportionate impact of football on a small campus of some 1,500 students.

Of particular interest is the vision of football at the beginning of the century in Bill Reid, *Big-Time Football at Harvard, 1905: The Diary of Coach Bill Reid*, ed. Ronald A. Smith, (Urbana: University of Illinois Press, 1994), and the early review of football in Parke-Hill Davis, *Football, the American Intercollegiate Game* (New York: C. Scribner's Sons, 1911). See also: Scott A. McQuilkin and Ronald A. Smith's discussion of the controversial early days of football in "The Rise and Fall of the Flying Wedge: Football's Most Controversial Play," *Journal of Sport History* (1993: 57-64). A classic comment on football is in Frederick Jackson Turner's "To the Alumni on Football, 1906 Address to the University of Wisconsin Alumni," republished in *The Chronicle of Higher Education* (July 9, 1986).

The NCAA

The NCAA publishes its own studies on the fiscal health of college athletic programs. See Daniel L. Fulks, *Revenues and Expenses of Divisions I and II Intercollegiate Athletics Programs: Financial Trends and Relationships – 2001* (Indianapolis: NCAA, 2002), and Daniel L. Fulks, *Revenues and Expenses of Division III Intercollegiate Athletics Programs: Financial Trends and Relationships - 1999* (Indianapolis: NCAA, 2000). These studies, as well as those from some prior years, are available online at <http://www.ncaa.org/library>. This information provides some rough indications of the relative size of athletic expenditures and income but, given the diffi-

culties with the data described elsewhere in this report, the usefulness of the data is limited.

Kay Hawes of the *NCAA News* wrote several articles in 1999 as part of “The NCAA Century Series” that serve as an excellent primer on the official history of the NCAA (see the archive at the association’s Web site <http://www.ncaa.org/news>). The articles address four chronological periods (1900-1939, 1940-1979, 1980-1989, and 1990-1999) and contain articles on topics such as President Teddy Roosevelt’s role in the reform of football and college athletics, antitrust legal challenges faced by the association, and athlete exploitation. The alleged history of NCAA athlete exploitation, and its evolution toward athletic professionalism, is the subject of Allen L. Sack and Ellen J. Staurowsky’s, *College Athletes for Hire: The Evolution and Legacy of the NCAA’s Amateur Myth* (Westport, Conn.: Praeger, 1998). Of particular note, Arthur A. Fleisher III, Brian L. Goff, and Robert D. Tollison’s *The National Collegiate Athletic Association: A Study in Cartel Behavior* (Chicago: The University of Chicago Press, 1992) provides an effective description of the NCAA as a classic economic cartel and traces the development of the cartel from its origins as a rule-making body in the early 20th century to its full development as a cartel organization by the end of the century. A modern critique of the NCAA’s management of football is in Paul R. Lawrence’s *Unsportsmanlike Conduct: The National Collegiate Athletic Association and the Business of College Football* (New York: Praeger, 1987).

The *NCAA News* also covered two reforms that are crucial in explaining the NCAA’s current structure – the association split into Divisions I, II, and III, and the highly controversial Division I split into I-A and I-AA in 1978. For more information, see “Special Convention Approves NCAA Reorganization,” *NCAA News*, August 15, 1973, p.1 and “Delegates Realign Division I Football,” *NCAA News*, February 15, 1978, p. 1 (available on-line at <http://www.ncaa.org/news>). The *NCAA News* also publishes short summaries of rules violations and sanctions applied to institutions that serve as a useful running tally of various forms of violations in college athletics at all levels.

Finances

An NCAA-sponsored study appeared in August 2003 by Robert E. Litan, Jonathan M. Orszag, and Peter R. Orszag, *The Empirical Effects of Collegiate Athletics: An Interim Report* (Washington, DC: Sebago Associates, 2003). This work examined Division I college athletics’ impact on higher education, with a particular focus on finance. The NCAA’s Division I

Board of Directors Task Force commissioned this study in 2001 as part of its academic and athletics reform efforts. Although the study addressed a variety of popular hypotheses about college athletic finance, the data used, drawn from the Equity in Athletics Disclosure Act (EADA), do not permit the definitive conclusions the study asserts. As a result, the study is less useful than its title might indicate (see the online version at <http://www.ncaa.org/releases/temp/baseline.pdf>).

In spite of its many limitations, the EADA information is the most comprehensive publicly available data. *The Chronicle of Higher Education’s* database (<http://chronicle.com/stats/genderequity>), which is particularly helpful, contains strikingly fewer obvious errors than the one maintained by the U.S. Department of Education (available at <http://ope.ed.gov/athletics/Search.asp>). *The Chronicle’s* database not only appears more accurate but contains data on several prior years while the Department of Education’s Web site maintains only the most recently disclosed information for each institution. Unfortunately, *The Chronicle’s* database covers only NCAA Division I institutions, while the Department of Education’s Web site covers all NCAA Divisions, NAIA Divisions, and other athletic associations, provided the institution was coeducational and received federal funds. See the Notes on Intercollegiate Sports Data in Appendix 3. Among the many deficiencies of these data, the absence of accurate accounting for capital costs is clearly a major defect recognized by all who use these data.

Many others have written about the finances of college sports in venues from popular magazines – see Louis Menand, “Sporting Chances: The Cost of College Athletics,” *New Yorker* (January 22, 2001) 84-88 – to studies in academic and professional journals on various topics. See R. W. Brown, “Incentives and Revenue Sharing in College Football: Spreading the Wealth or Giving Away the Game?” *Managerial and Decision Economics* (1994:15) and Arthur Padilla and David Baumer, “Big-Time College Sports: Management and Economic Issues,” *Journal of Sport and Social Issues* (1994, 18:2). Other examples in the public press include William C. Rhoden, “At Conference Tournaments, the Colleges Major in Money,” *The New York Times* (March 15, 2003) and Michael Sokolove, “Football Is a Sucker’s Game” [University of South Florida], *The New York Times* (December 22, 2002).

Many people have looked at the issue of college sports as an incentive for private donations. See, for examples, Sarah E. Turner, Lauren A. Meserve, and William G. Bowen, “Winning and Giving: Football

Results and Alumni Giving at Selective Private Colleges and Universities,” *Social Science Quarterly* (2001: 82(4)), 812-826; Robert A. Baade and Jeffrey O. Sundberg, “Fourth Down and Gold to Go? Assessing the Link Between Athletics and Alumni Giving,” *Social Science Quarterly* (1996: 77), 789-803; Paul W. Grimes and George A. Chressanthi, “Alumni Contributions to Academics: The Role of Intercollegiate Sports and NCAA Sanctions,” *The American Journal of Economics and Sociology* (1994: 53), 27-40; Douglas Lederman, “Do Winning Teams Spur Contributions? Scholars and Fund Raisers are Skeptical,” *The Chronicle of Higher Education* (January 13, 1988); and Lee Sigelman and Robert Carter, “Win One for the Giver: Alumni Giving and Big-time College Sports,” *Social Science Quarterly* (1979: 60), 284-294. Useful for putting the modern fascination with college football stadiums into perspective is George P. Morris, “The Harvard Stadium,” *The Overland Monthly* (May 1903), 344-345.

For thorough coverage of college sports in general, but in particular columns pertaining to the financial struggles and successes of athletic departments, see *The Chronicle of Higher Education*, which has a long tradition of thorough reporting on college sports issues.

For some examples, see these columns by Welch Suggs: “How Gears Turn at a Sports Factory” (November 25, 2002), which is about Ohio State, and “Wave of Indecision: As Tulane U. Struggles with the Cost of Sports, Officials Weigh the Unthinkable” (June 13, 2003). Another periodical that closely follows the financial aspects of college sports is *Street & Smith’s Sports Business Journal* (SBJ). While SBJ also follows professional sports issues, the publication has provided close coverage of key college athletics issues such as the recent dispute between the Atlantic Coast and Big East Conferences and the 2001 Knight Commission on Intercollegiate Athletics. Jennifer Lee’s weekly column “Campus Beat” covers business and media issues related to intercollegiate athletics.

* * *

This brief introduction to the resources on intercollegiate athletics barely scratches the surface of the literature on this topic. America’s fascination with all things sporting is reflected in the writings of its scholars, journalists, and other commentators. A somewhat larger list appears on the Web site for the course, The History of Intercollegiate Athletics in America: 1900-2003 (at <http://courses.umass.edu/lombardi/his03/bib.html>), offered at the University of Massachusetts Amherst.

Appendix 2: The Bowl Championship Series (BCS)

The Bowl Championship Series (BCS) serves to “determine the national champion for college football while maintaining and enhancing the bowl system that’s nearly 100 years old.” (<http://bcsfootball.org/>)

The top division of intercollegiate football has never finished its season with a tournament. Instead, between the first Rose Bowl game in 1902 and the BCS’s inception in 1998, college football seasons ended with as many as 40 of the nation’s football teams (20 different bowls in 1997) receiving invitations to various bowl games. Some of these bowl games had relatively large payouts and were recognizable by name by non-sports fans – such as the Orange Bowl or Rose Bowl. Other bowl games had smaller payouts and less name recognition (such as the Carquest Bowl).

Certain bowls belonged to the top teams in certain conferences, without exception. For example, the Rose Bowl traditionally matched the top Pacific 10 (Pac-10) Conference team against the top Big Ten Conference team. Consequently, if the nation’s undeniable “number one” regular season finisher happened to be a Pac-10 or Big Ten team, that team would receive an invitation to the Rose Bowl, even if the clear “number two” team received an invitation to the Fiesta Bowl. In pre-BCS days, The Ohio State University and the University of Miami could not have met in a national championship game in January 2003 because, before the BCS, Ohio State (a Big Ten team) would have been required to play in the Rose Bowl.

The BCS consists of only four bowl games (the Rose Bowl, Nokia Sugar Bowl, FedEx Orange Bowl, and Tostitos Fiesta Bowl) and does not replace the bowl system. As of 2002-2003, there were 24 other (non-BCS) bowl games – such as the SBC Cotton Bowl and the Outback Bowl – for a total of 28 bowl games. This arrangement ensures that each year almost half of the nation’s 117 Division I-A college football teams can play in a bowl game. Every season, 28 teams end the season as bowl winners, and 28 local economies can enjoy the economic impact of thousands of fans congregating for a major event. Even those teams that lose in a bowl game may nonetheless benefit financially and athletically from the opportunity. At the same time, the BCS bowls bring the college football season to its natural and more desirable conclusion for its television consumers by pitting a relatively undisputed #1 vs. #2.

BCS Quick Facts

- Parties to the 1998 BCS agreement (11 entities):
 - Four bowls: Rose Bowl, Tostitos Fiesta Bowl, Nokia Sugar Bowl, FedEx Orange Bowl
 - Six conferences: Big Ten, Pac-10, Big East, ACC, SEC, and Big 12
 - University of Notre Dame
- Agreements currently in play (4):
 - A contract between the Big Ten, Pac-10, and the Rose Bowl
 - A contract between the Rose Bowl and ABC
 - The BCS agreement with seven conferences, Notre Dame, and three bowl games
 - A contract between the BCS and ABC
- The six BCS conferences are guaranteed one berth in the BCS, and the remaining two at-large bids may come from inside or outside the BCS conferences
- If Notre Dame wins nine regular season games, it automatically receives one of the two at-large bids
- Total estimated revenue for 2004: \$89,920,000
 - 2004 Share for Both the Big Ten and Pac-10 Conference: \$3,128,889 (these conferences have separate financial agreements with the Rose Bowl, paying them directly)
 - 2004 Share for Each of the other four BCS Conferences: \$21,515,555 if two teams earn a BCS bid and \$17,015,555 if one team earns a BCS bid
 - 2004 Share for a non-BCS conference team earning an at-large bid: \$13,886,666
 - 2004 Share for all non-BCS I-A conferences: \$480,000-\$1,000,000
 - 2004 Share for I-AA conferences: \$190,000 if the conference averaged 60 full scholarship grants over the previous four-year period. Otherwise: \$0
 - 2004 Share for College Hall of Fame: \$600,000

The formula for the BCS standings has evolved somewhat, eliminating a “margin of victory” category that may have encouraged certain teams to run up the score against inferior opponents. For 2003-2004, a complicated point system uses five categories to calculate the standings: Polls (one media poll and one coaches poll), Computer Rankings (based on seven different statistical reporting systems), Strength of Schedule, Team Record, and Quality Wins. The complete explanation of the scoring system is more

than 1,700 words long and appears on-line at <http://bcsfootball.org/standings.shtml>.

The BCS arrangement affects different football participants in different ways and generates proposals for its maintenance, elimination, or modification. The interested parties include but are not limited to (1) the NCAA, (2) Division I-A schools in BCS conferences, (3) Division I-A schools in non-BCS conferences, (4) education critics, and (5) fans of televised football and sports in general.

Some believe that the NCAA would benefit financially from substituting an NCAA football championship tournament for the BCS games. This might involve a 4-week tournament of the top 16 teams. Currently, Division I-AA, the second-highest division of college football, finishes its season with a 16-team tournament. The NCAA has grown increasingly reliant on "March Madness," the Division I men's basketball tournament. This three-week basketball tournament currently provides the NCAA with most of its total revenue. The premise of this argument is that an NCAA Division I-A *football* tournament might generate an equivalent revenue stream to the NCAA. Many fans of televised sports find the "March Madness" basketball tournament to be among the most exciting sporting events of the year, and a football equivalent with 16 teams could be equally popular. The BCS does not produce a true tournament, of course, because each pair of teams simply plays to win that bowl game. The championship designation is an artifact of the ranking system that creates the top seed but does not allow lower-seeded teams a chance to beat the top two ranked teams.

Education critics of postseason football resist extending the football season for an additional three-

or four-week period. This would almost certainly extend games into most universities' second semester, or require the football season to start earlier in the summer. Additionally, most universities in BCS conferences and even some Division I-A schools that are not in BCS conferences prefer to keep the current system, rather than assign the management and revenue of this postseason event to the NCAA bureaucracy. Representatives from these universities often use the rhetoric of educational critics about the danger of a prolonged football season for the student-athlete to resist the NCAA alternative postseason tournament.

As often happens in intercollegiate sports controversies, the federal government has become involved in this conversation. On July 17, 2003, Representative John Conyers, Jr., the Ranking Member on the House Judiciary Committee, sent a letter to the Chairman of the House Judiciary Committee requesting that the committee hold hearings on potential BCS antitrust violations. Quoting from his letter:

"The potential impact of this conglomeration of money and power is having a cascading impact far beyond major college football, as the de facto exclusion of non-BCS schools from major bowl games is causing those schools to have lower athletic budgets, inferior athletic facilities, and rising deficits. For example, many attribute the fact that in three out of the last four years, 14 of the 16 teams to make the third round of the NCAA men's basketball tournament were from BCS schools results from the disparity created by the BCS."

Whether or not the legal theories articulated in these hearings held on September 4, 2003, will prevail remains to be seen. The key players in this

Selected Information on Bowl Games and Payouts

Bowl Game	Estimated 2003-2004		TV Network
	Minimum Payout Per Team*	Conference Affiliation	
Each of The Four BCS Bowls	\$14,000,000	BCS vs. BCS	ABC
SBC Cotton Bowl	\$3,000,000	Big 12 vs. SEC	FOX
Chick-fil-A Peach Bowl	\$2,000,000	ACC vs. SEC	ESPN
Alamo Bowl Presented By Mastercard	\$1,450,000	Big Ten vs. Big 12	ESPN
Las Vegas Bowl	\$800,000	Mountain West vs. Pac-10	ESPN
Gaylord Hotels Music City Bowl	\$780,000	SEC vs. Big Ten	ESPN
Diamond Walnut San Francisco Bowl	\$750,000	Mountain West vs. Big East	ESPN2

*Depending on the team earning the bid, a team may be required to share none, some, or all of the payout with its conference members.

Sources: BCS numbers were obtained from <http://www.bcsfootball.org/facts.shtml>. Other bowl payouts were obtained from their official sites.

controversy are the conferences, rather than the individual institutions, because the BCS is an agreement among conferences about postseason bowl games. Conference alignments shift to improve the competitive position of their members as various universities demonstrated recently with a realignment of the Big East and Atlantic Coast Conference (ACC). When the University of Miami jumped to the ACC, five Big East Conference schools sued the Atlantic Coast Conference (ACC) and the University of Miami for fraud, accusing the entities of engaging in deceptive tactics in order to move teams from the Big East to the ACC. Miami and Virginia Tech eventually did switch to the ACC, thereby weakening the Big East as a football conference. The realignment not only strengthened the ACC as a football conference but may well have weakened the Big East so much that it could fall out of the BCS category. In any case, the main issue in all these discussions is television money to be derived from the BCS bowls themselves and from the better television coverage of football that would come from better teams within a conference and, if the conference has 12 members, a conference championship game as well. Time will sort out these controversies, but the importance of television revenue in Division I-A football becomes

undeniable when observing these maneuvers.

We considered whether a team belonged to a BCS conference when we explored the relationship between the institution's research performance and the scope of its athletic program.

- For more detailed information, see the BCS's official Web site at <http://bcsfootball.org/>
- The BCS's 2002-2003 media guide is available on-line at <http://www.sportswriters.net/fwaa/news/bcsguide03.pdf>
- A collection of critical articles and documents, both supporting and criticizing the BCS, can be found at <http://www.bcsorbs.com/articles.php>
- Welch Suggs' article on "Presidents of Colleges With Big-Time Sports Programs Defend Bowl Championship Series," *The Chronicle of Higher Education* (July 22, 2003), appeared shortly after Congressman Conyers' request for antitrust hearings.
- For a short summary of the precursor bowl alliances to the current BCS, see the Hickok Sports History site, especially <http://www.hickoksports.com/history/collbowl.shtml#bcs>

Appendix 3: Notes on Intercollegiate Sports Data

Introduction:

The full data collected for this report is presented in Appendix Tables 1 and 2.

This report discusses the unreliability of the athletic expense and revenue data colleges and universities disclose. This unreliability comes not from any effort to disguise information but primarily from the instructions of the U.S. Department of Education that specify different reporting requirements for expenses than it does for revenues. The Department of Education's full definitions appear at the end of this Appendix.

Hypothetically, take two Division I-A athletic departments that spend about \$8 million per year more than they make. This amount is probably close to the median of athletic deficits among Division I-A institutions if we can rely on experience and a variety of in newspaper accounts over recent years. Athletic Department #1 may report an \$8 million net loss in its Equity in Athletics Disclosure Act report to the Department of Education, while Athletic Department #2 may report a perfectly balanced budget. This discrepancy would be legitimate for accounting purposes if Athletic Department #2 received an infusion of cash from the university, perhaps in the form of a student activities fee for athletics. Further, a small minority of athletic departments are structured as 501c non-profit corporations, meaning that they will not receive financial support from the university. In essence, some athletic departments are reporting the *net* of their athletic dollars, others are reporting the *gross* of their athletic dollars, and many are reporting something in between.

These data do not permit a reliable calculation of the net cost of intercollegiate athletics (actual expenses minus actual revenue) for the institutions in this study. Good data usually do not appear in the published record of individual universities, even when public universities publish their budgets on-line, because many costs disappear into the university's general budget. For example, academic advising, many fringe benefits, sometimes utility and maintenance costs for office space, and the like, as well as debt costs, do not appear in a consistent and reliable form.

Since we are interested in the true cost of intercollegiate athletics (actual expenses minus actual revenue), these data are not reliable for our purposes. Ideally, we would have liked to uncover the true athletic *oppor-*

tunity cost for every institution (i.e. the amount of money that a university spent on athletics that it might otherwise have spent on something else). However, such information is usually impossible to uncover, especially for private institutions. Even in the case of public institutions, where a complete university budget is published, it is sometimes difficult to account for all of a university's expenses that are athletic in nature. For example, a university may spend \$20 million on a student academic support building. Even the most skilled and scrupulous accountant might not recognize this as an "athletic" expense, if he or she did not realize that one floor of the building often is devoted to an athletes-only study hall, and most of the offices in the building are inhabited by student-athlete support staff.

In our effort to calculate an approximate opportunity cost for supporting an athletic program we decided to use the *higher reported total* of expenses or revenues as the dependent variable to determine the relationship between the scope of an athletic program and the academic quality of research institutions. Because almost all institutions spend the revenue they earn, and most spend more than they earn, the highest reported number of revenue or expenses in the data is likely the closest to the actual expenditures and revenue of any given university's program.

The data from the U.S. Department of Education's Equity in Athletics Disclosure Act Web site appear to fit our needs (<http://ope.ed.gov/athletics/Search.asp>). However, we found many clear errors in the expense and revenue numbers posted on this Web site. For example, more than 100 institutions have a total expense amount less than the amount for total coach salaries. Because coach salaries form a part of total expenses, this should be impossible. It is unclear how often this error was the result of faulty reporting by the institutions and how often it was the result of faulty transcriptions by the Department of Education. Fortunately, *The Chronicle of Higher Education* maintains a database of Division I institutions at <http://chronicle.com/stats/genderequity>. In almost all cases, *The Chronicle* received financial information directly from the Division I institutions (exceptions listed below). *The Chronicle's* numbers did not show the obvious errors visible in the Department of Education's data.

The following identifies the data used in the text and tables:

- **Division II and III:** To determine the higher total of athletic expenses or revenue we used the U.S. Department of Education's Equity in Athletics Disclosure Act data. In almost all cases, 2001-2002 numbers were used, but in a few cases, 2000-2001 numbers were used when newer information was unavailable.
- **Division I:** To determine the higher total of athletic expenses or revenue we used *The Chronicle of Higher Education's* Equity in Athletics Disclosure Act numbers. However, *The Chronicle* did not receive financial data from some Division I institutions. We used the Department of Education's numbers for the following Division I schools: Alabama A&M University, Alabama State University, American University, Arkansas State University, Belmont University, Creighton University, Eastern Kentucky University, Florida A&M University, Gardner-Webb University, Georgia Southern University, Hampton University, Hofstra University, Howard University, Idaho State University, Louisiana State University at Baton Rouge, Marquette University, Mercer University, Morris Brown College, Quinnipiac University, Saint Joseph's University, Southeastern Louisiana University, St. John's University (N.Y.), Texas Southern University, Tulane University, United States Naval Academy, University of Central Florida, University of Houston, University of Memphis, University of New Orleans, University of Oregon, University of Wisconsin at Milwaukee, Vanderbilt University, Villanova University. In all cases, 2001-2002 numbers were used.

Finally, there were a few instances where *TheCenter* counted each campus of multi-campus institutions as a distinct entity in its publications, but the Department of Education or the NCAA counted them only as one entity. An example of this is the unique case of Columbia University and Barnard College. The Barnard/Columbia Athletic Consortium enables women from Columbia and Barnard to play on the same varsity teams. Consequently, in our tables, Barnard is listed as having \$0 in athletic revenues and expenses. All dollars spent on intercollegiate athletics for Barnard students appear under Columbia University.

Athletic Division Status:

All institutions were divided into seven athletic classifications (NCAA Division I-A, NCAA Division I-

AA, NCAA Division I-AAA, NCAA Division II, NCAA Division III, NAIA, and Neither NCAA Nor NAIA). These classifications reflect the U.S. Department of Education's Equity in Athletics Disclosure Act Web site: <http://ope.ed.gov/athletics/Search.asp>. The University of Alaska Fairbanks appears erroneously listed as NAIA by the Department of Education, although it appears correctly as NCAA Division II in our tables.

Conference Affiliation:

Conference affiliations are listed for all Division I-A and I-AA institutions. In cases where teams play in different conferences for different sports, we use the institutions' *football* conference. For example, Temple University is an Atlantic 10 team, but its football team plays in the Big East (a BCS Conference), so it appears as a Big East school. Conversely, Georgetown is a Big East team, but its football team plays in the Division I-AA Patriot League, so it appears as a Patriot League school.

Public and Private Ownership Definition:

To determine whether an institution was public or private, we used *TheCenter's* tables whenever possible. In the case of institutions reporting any federal research expenditures, we followed the *TheCenter's* classifications. In the case of institutions *not* reporting federal research expenditures, we used the U.S. Department of Education's Equity in Athletics Disclosure Act Web site: <http://ope.ed.gov/athletics/Search.asp>.

2000 Federal Research; 1999 Adjusted Endowment Equivalent; 2000 Undergraduate Student Headcount:

In all cases, we used *TheCenter's* data in its August 2002 publication, *The Top American Research Universities*.

Adjusted Endowment Equivalent totals are for universities reporting more than \$20 million in federal research in 1999. Of the 154 research institutions reporting more than \$20 million in federal research in 1999, 25 are stand-alone medical schools and 10 are institutions that did not provide student enrollment data or all four income measures (endowment assets, annual giving, state appropriations, and tuition and fees) and were excluded. Total Endowment Equivalent is the sum of these four variables, with the latter three converted to a comparable endowment equivalent (assuming a 4.5% payout rate, we divide each figure by .045). Adjusted Total Endowment Equivalent is equal to the Total Endowment Equivalent minus an adjustment for student enrollment.

Stadium Capacities:

Stadium capacities for Division I-A come from Football.com, Inc. (<http://www.football.com/college/confs/>) and are current to 2003. Stadium capacities for Division I-AA appear on the Web site of College Sporting News, Inc. (http://www.collegesportingnews.com/article_print.asp?articleid=3029) and are current to September 2001.

Sizes of Major College Football Stadiums Prior to 1930 and Ten Largest Division I On-Campus College Football Stadiums, 2002 Season (as referenced in Tables 10 and 11).

This is not an exhaustive listing of *all* large stadiums in the 1930s but displays a selected group of large stadiums to illustrate that long-standing commitment of colleges to build stadiums that greatly exceed their student populations. Most of the information for this chart came from historical data on each institution's athletic Web site. The Michigan site, in particular, contains much information on the evolution of Michigan Stadium.

Sources include:

- <http://pennathletics.ocsn.com/sports/m-footbl/spec-rel/franklinfield1.html>
- <http://gocrimson.ocsn.com/facilities/stadium.html>
- <http://www.sfo.com/~csuppes/NCAA/Ivy/index.htm?Yale/index.htm>
- <http://www.sfo.com/~csuppes/NCAA/Big10/OhioState/index.htm>
- <http://fightingillini.ocsn.com/trads/ill-trads-memorial.htm>
- http://www.msfc.com/ann_before_memorial_stadium.cfm
- <http://www.sfo.com/~csuppes/NCAA/Big10/Minnesota/index.htm>
- <http://www.sfo.com/~csuppes/NCAA/BigEast/Pittsburgh/index.htm>
- <http://www.sfo.com/~csuppes/NCAA/Big10/Northwestern/index.htm>
- <http://www.umich.edu/~bhl/stadium/stadtext/bonds.htm>
- <http://www.infoplease.com/busbp.html>
- http://www.collegesportingnews.com/article_print.asp?articleid=3029

Selected Definitions and Frequently Asked Questions on the Department of Education Equity in Athletics Disclosure Act (EADA):

The U.S. Department of Education uses broad definitions of expenses and revenues in requesting information on athletic financial information from

colleges and universities. In the tables and discussion of this report, and for reasons outlined in the essay and in this Appendix, we used the higher reported total of expenses or revenue as the dependent variable in examining the relationship between the scope of an athletic program and the academic quality of research institutions.

Coeducational academic institutions receiving federal funds are required to publish their expense and revenue data according to the Equity in Athletics Disclosure Act (EADA). This act focuses on gender equity rather than on the balance between income and expenses in college athletics. The U.S. Department of Education's definitions of revenues and expenses do not fully account for what colleges and universities earn and spend on athletics. The following definitions from the Department of Education's Web site illustrate the difficulty (<http://surveys.ope.ed.gov/athletics/glossary.asp> and <http://surveys.ope.ed.gov/athletics/faq.asp#2>):

- **Expenses:** Expenses attributable to intercollegiate athletic activities. This includes appearance guarantees and options, athletically related student aid, contract services, equipment, fundraising activities, operating expenses, promotional activities, recruiting expenses, salaries and benefits, supplies, travel, and any other expenses attributable to intercollegiate athletic activities.
- **Revenues:** Revenues attributable to intercollegiate athletic activities. This includes revenues from appearance guarantees and options, an athletic conference, tournament or bowl games, concessions, contributions from alumni and others, **institutional support**, program advertising and sales, radio and television, royalties, signage and other sponsorships, sports camps, **State or other government support, student activity fees**, ticket and luxury box sales, and any other revenues attributable to intercollegiate athletic activities. [*emphasis added*]

"An institution does not have to report capital expenses on the EADA. The data required by the EADA does not include data concerning capital assets. The EADA requires data concerning expenses and revenues that are akin to data from an income and expense statement. Such statements do not report capital assets (capital assets are generally presented on a balance sheet). Therefore, an institution should not include information about capital assets and related debts in its EADA report."

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TheCenter



UNIVERSITY OF
FLORIDA

PO Box 112012

Gainesville, FL 32611-2012

Phone: (352) 846-3501

Fax: (352) 392-8774

<http://thecenter.ufl.edu>

thecenter@ufl.edu