A NATIONAL OVERVIEW OF INTERCOLLEGIATE ATHLETICS IN PUBLIC COMMUNITY COLLEGES

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This dissertation explores the topic of intercollegiate athletics at public community colleges in the United States. This study is national in scope and includes members of the three major community college athletic associations: the National Junior College Athletic Association (NJCAA), Commission on Athletics (COA), and the Northwest Athletic Association for Community Colleges (NWAACC). Community colleges that were not members of any of these organizations are also included.

The sources of data are the Institutional Postsecondary Educational Data System (IPEDS) surveys as well as Equity in Athletic Disclosure Act (EADA) survey data and the Katsinas Community College Classification Scheme. The population for this study was the 567 public community colleges which submitted IPEDS data in 2001 and 2002 and EADA data in 2002.

The geographic classification scheme for public community colleges used in this study revealed differences in the role of athletics in rural, suburban, and urban colleges. Rural community colleges place a larger emphasis on intercollegiate athletics. Urban colleges had a lesser emphasis on intercollegiate athletics.

Topics that are examined include the extent of college sponsorship of athletics, athletic associations, student participation, sport sponsorship, athletically-related aid, divisions of competition, athletic revenues and expenses, state reimbursement, recruitment expenses, and staffing requirements. The dissertation includes six findings and four conclusions. There are fifteen recommendations for further research and eight recommendations for practice. Maps showing the locations of teams for each men's and women's sport played in the NJCAA, COA, and NWAACC are included in an appendix.

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CHAPTER 1

INTRODUCTION

The role of intercollegiate athletics in colleges has received increased scrutiny over the past ten years (Thelin, 1994; Gerdy, 2000; Zimbalist, 1999; Telander, 1996; Bailey and Littleton, 1991; Sack and Staurowsky, 1998). Little of the attention has been positive. Concerns with the graduation rates of athletes, the balance of academics and athletics, governance and oversight issues, and inappropriate inducements made by supporters of athletic departments have been the areas of greatest concern. The mindfulness of the American media and academics, however, has focused almost exclusively on the elite sports teams that are concentrated in Division I of the National College Athletic Association (NCAA).

Congress has even taken a close look at intercollegiate athletics, although the focus of attention tends to be with NCAA members rather than the junior college intercollegiate athletics (GAO, 1992, 1996a, 2001). The issue has also caught the interest and comment of faculty, as evidenced by the various American Association on University Professors (AAUP) publications on this matter (1999, 2003). There is no claim that community colleges are immune to the lure of cheating in order to produce winning teams, just a recognition that the pressure is not the same (Greene, 1981; Thornton, 1972)).

Calls for the reform of NCAA Division I have come from internal and external constituencies. The AAUP (1999, 2003) and NCAA represent internal voices while the external concerns come from the Knight Commission on Intercollegiate Athletics (Dempsey, 2002; Knight Foundation, 2001). More recent scholarly inquiry has turned to

the academic achievement or cognitive development of student athletes compared to non-athletes (Pascarella, 1991; Kanter & Lewis, 1991).

Little scholarly work exists about community college intercollegiate athletic programs even though community colleges account for a majority of students enrolled in public higher education. According to the *Digest of Educational Statistics*, in the Fall of 2000 public 2-year colleges accounted for nearly 5.7 million of the 10.5 million students enrolled in public higher education institutions (USED, 2002a). The lack of attention to this area means that many important questions about the role and vitality of intercollegiate athletics at the community college have gone unanswered.

Of even greater concern however, is a fundamental lack of even basic descriptive information about community colleges with intercollegiate athletic programs. This omission is not surprising to Cohen and Brawer (2003). They note, “according to those that study the effects of postsecondary schooling, nearly 40 percent of America’s college students, the proportion enrolled in the community colleges, are not even important enough to tabulate” (pp. 349-350). Yet research into the early history of the American Association of Junior Colleges reveals that, “one sticky problem in the early years of this organization [the AAJC] was intercollegiate sports” (Witt, Wattenbarger, Gollattscheck, and Suppiger, 1994, p. 80). The issue in those early years was whether community college graduates would have to sit out a year of play after transferring to the four-year college.

When researchers study human populations, it is essential to know the demographic characteristics of the population. Where individuals live, the size of the population, typical family structures, income, education level, and social integration are

basic descriptors that help the researcher frame the inquiry and give the reader a context for understanding the direction of the research.

When researchers study community colleges, the questions are parallel but different. The analogous descriptors for colleges include how many colleges are included in the defined group, enrollment, location, college budget, and student body composition. In the case of examining intercollegiate athletics, one must also know how many teams are sponsored by the college, what sports are offered, and how many of those sports offer scholarships. Additionally, the researcher must know how many athletes participate and the level of funding for the athletic department and athletic scholarships. Little basic descriptive research exists in this area, and many unanswered questions remain.

Statement of the Problem

No single research study has been completed which includes all public community colleges in the United States that sponsor intercollegiate athletics. Conducting a truly national study is enhanced by looking at variations by college types. Using the Katsinas et al. classification scheme will provide a useful tool for community college presidents, athletic directors, and coaches, as well as researchers and policymakers concerned with the fields of community colleges and intercollegiate athletics (Katsinas 1993; 1996; 2003; Katsinas and Hardy, 2004). Factors described will include student participation, location, teams sponsored, amount of athletically related student aid, staffing requirements, athletic revenues, and expenses.

Purpose of the Study

This study will describe the extent of intercollegiate athletics in 2001-2002 at public community colleges in the United States by college type.

Research Questions

To meet the purposes of the study, the following research questions will be answered:

1. What is the involvement of public community colleges in intercollegiate athletics?
2. How does community college involvement in intercollegiate athletics vary by college type?

These questions will be answered through reporting on the extent of college sponsorship of intercollegiate athletics, student participation levels, availability of individual sports, availability of athletic scholarships, financial investment, and staffing levels required for intercollegiate athletics. Because community colleges are not a heterogeneous group, the Katsinas et al. community college classification scheme (Katsinas 1993; 1996; 2003; Katsinas and Hardy, 2004) will be used to report variability by institutional type.

Significance of the Study

There has been no national study that describes the extent of intercollegiate athletics at community colleges. This research will provide the first truly national overview of athletics in the community college and provide a foundation for further research. Unlike other studies, this research will focus on the entire population of public community colleges. Community colleges will be classified using the Katsinas et al.

typology, which includes location (rural, suburban, urban), size (small, medium, and large for rural colleges) and governance (multi- and single-campus for suburban and urban colleges). The classification may reveal patterns of participation that stimulate further exploration. This study will add to both the literature on community colleges as well as that on intercollegiate athletics and be of value to those pursuing research in either area.

This study will provide information on the expenses related to sponsoring intercollegiate athletics including amounts spent on individual men's and women's sports, athletic scholarships and on intercollegiate athletics overall. Information on average coaching staff size and coaching salaries will also be reported. This study may be of assistance to community college athletic directors and presidents as they make determinations on the future directions of their colleges' intercollegiate athletic programs. College presidents and athletic directors can compare their institutions to similar community colleges and make informed decisions regarding the future direction of their college's athletic programs. Information gathered here may also be used either to support expansion or retrenchment of intercollegiate athletic offerings. In either case, an appropriate peer comparison will be possible regarding the level of financing, extent of intercollegiate athletics offered, and the level of athletic scholarship funding at like institutions.

Definition of Terms

For the purposes of this study, the following terms are defined:

1. Public community college- A college identified by the Department of Education as being a public, two-year college, and classified by Katsinas et al. as a rural, suburban or urban college of any size or governance.
2. Community college with intercollegiate athletics - a community college identified as having intercollegiate athletics by an athletic association, the *Blue Book on Senior, Junior and Community College Athletics* (published annually by the Athletic Publishing Company), or by the US Department of Education, Equity in Athletic Disclosure Act Survey.
3. Athletically-related student aid- is defined in this study using the US Department of Education definition, which is as follows:

> Any scholarship, grant, or other form of financial assistance, offered by an institution, the terms of which require the recipient to participate in a program of intercollegiate athletics at the institution. Other student aid, of which a student-athlete simply happens to be the recipient, is not athletically related student aid. (USED, 2004a).

4. National Junior College Athletic Association (NJCAA)- The NJCAA is a voluntary membership organization that acts as the governing and regulatory body for intercollegiate athletics for member community colleges. Chartered in 1938, originally with schools only in California, the NJCAA now includes over 505 member colleges in 44 states (NJCAA, 2003). Athletic teams are classified into one of three divisions, described below.

5. Division I - An NJCAA Division I sport indicates that full athletic scholarships may be awarded to students in that sport. Full scholarships may include tuition, room, board, fees, books, supplies, and travel to/from home (NJCAA, 2002).
6. Division II - An NJCAA Division II sport may award partial scholarships. Partial scholarships are limited to room and board (NJCAA, 2002).
7. Division III - An NJCAA Division III sport may not award athletic scholarships (NJCAA, 2002).
8. Commission on Athletics (COA) - The Commission on Athletics of the California League of Community Colleges was founded in 1929 and is, "the single administrative governing entity responsible for statewide rules and policies for intercollegiate athletic programs [in California]" (COA, 2004). None of the California community colleges offer athletic scholarships, so all sports compete at the equivalent of NJCAA Division III classification.
9. Northwest Athletic Association of Community Colleges (NWAACC)- This conference originated in 1946 with community colleges in Washington and now includes colleges in Oregon and Idaho. A few nearby Canadian community colleges are also NWAACC members. Athletic scholarships are limited and vary by state. Oregon allows a maximum scholarship of $1,200 per student in addition to a maximum $1,000 work-study job. The colleges in Washington allow a maximum scholarship of $600 per student in addition to a maximum $1,000 work-study job. Waiver of out-of-state tuition for athletes is determined by each participating college, there is no conference-

wide rule (McClain, personal communication, January 27, 2004). Consequently, sports played by NWAACC members are the approximate equivalent of the NJCAA Division II level.

10. The Equity in Athletic Disclosure Act (EADA) – First passed in 1994, the EADA was incorporated into the 1996 Higher Education Act Reauthorization. The EADA requires

> Co-educational institutions of postsecondary education that participate in a Title IV, federal student financial assistance program, and have an intercollegiate athletic program, to prepare an annual report to the Department of Education on athletic participation, staffing, and revenues and expenses, by men's and women's teams (USED, 2004a).

The EADA survey data was first collected online in 2001 and is available at the US Department of Education's website. The reports contain information on all intercollegiate sports, the number of students on each team, as well as information on athletic scholarships by gender, race, and sport. Revenue and expense information on major sports such as baseball, basketball, and football are also available (USED, 2004b). It is believed that EADA data are virtually complete because any colleges that receive federal funds are required to respond to the surveys.

11. Integrated Postsecondary Educational Data System (IPEDS): IPEDS is a database of surveys administered and collected by the US Department of Education. IPEDS can be accessed over the internet and allows the user to request information on specific institutions by specifying which variables to report (USED, 2004c). IPEDS is a comprehensive source of information

because colleges that receive federal funds are required to respond to the surveys.

12. Full-time equivalent (FTE) – To compare different college types the US Department of Education uses a multiplier to equate students that are enrolled part-time with those that are enrolled full-time. A full-time student is one enrolled in at least 12 credit hours. The FTE is calculated by adding the number of full time students to the number of part-time students multiplied by a specific factor as indicated here:

    FTE enrollment = # of full-time students + .35737 x # of part-time students

    The formula above indicates that approximately three part-time students are considered equivalent the equivalent of one full-time student (US Department of Education, 2004d).

13. Unduplicated headcount - The actual raw number of students registered for classes. Full and part-time students are each equally counted.

14. Title IX - One part of the Education Amendments of 1972 was Title IX, which stated that “no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance” (USED, 2003b). This provision paved the way for student initiated lawsuits claiming discrimination in the area of opportunity to participate in intercollegiate athletics. Title IX is credited with bringing

about a great expansion in opportunities for women and girls to participate in athletics.

15. State allocation per student- The state allocation per student is a dollar amount that captures the amount of money states appropriate to public community colleges per full-time student. This amount is based on complex funding formulas that vary from state to state, but are primarily tied to student full time equivalents (FTEs). For this study, the state allocation per student has been simplified as follows:

$$\frac{\text{State Appropriation (\$)}}{\text{Per Student (FTE)}} = \frac{\sum \text{State Appropriations Fiscal Year 2002}}{\sum \text{Student FTE Academic Year 2001-2002}}$$

The state allocation per student is derived using IPEDS data from the Finance and Enrollment surveys. This item can be found on the 2002 IPEDS Finance survey (USED, 2004c). For colleges using the Government Accounting Standards Board (GASB) regulations this item is found in Part A - Current Funds Revenue by Source, Line 4 “Government Appropriations-State.” For colleges using the Financial Accounting Standards Board (FASB) regulations this item is found in Part D - Revenues and Investment Return, Line 3 “Government Appropriations-State.”

16. Katsinas et al. classification - The Katsinas et al. classification scheme is a typology that categorizes community colleges into college types according to their location (urban, suburban, rural) as well as size (rural colleges) or governance (multi- and single-campus suburban and urban colleges)

(Katsinas & Lacey, 1996; Katsinas, 2003; Katsinas & Hardy, 2004). The Katsinas et al. classification identifies colleges as urban, suburban or rural based on population, defined as the 102 statistical metropolitan areas (SMAs) of the nation with more than 500,000 in population as defined in the 2000 Census. Rural colleges lie outside those 102 SMAs, and are divided into three sizes based on actual student headcount using 2001 IPEDS data. A small rural college has an unduplicated headcount of less than 3,500 students in the 2000-2001 academic year. A medium rural college has an unduplicated headcount of 3,500 to 7,499 students in the 2000-2001 academic year. A large rural college has an unduplicated headcount of greater than 7,500 students in the 2000-2001 academic year. Urban and suburban campuses are subdivided into campuses that are stand alone (single) or have more than one site or college (multiple). The seven categories of public community colleges were the primary focus of this analysis.

Delimitations

This study was limited to publicly controlled community colleges in the United States that have completed both the IPEDS and EADA surveys. Publicly controlled community colleges as defined in this study do not include tribal colleges, special use institutions, or 2-year colleges under the control of 4-year colleges. This study did not address issues of academic success of scholarship athletes, oversight, or amateur versus professional status of student athletes. While this study strives to be

comprehensive, it is by no means an exhaustive study of the characteristics of community colleges with athletics.

This dissertation does not address attempts or strategies to reform college athletics or diagnose its ills. That has been done elsewhere, although studies have focused on the highly visible NCAA Division I, and not on the institutions who participate in NJCAA, COA or NWAACC (Zimbalist, 1999; Gerdy, 1996). Although the topic of the role of athletics in community colleges will be covered in the literature review, exploring this topic is not an aim of the research in this study.

Limitations

The focus of this study on public community colleges limited the ability to generalize the findings. Findings cannot be generalized to private non-profit or proprietary two-year colleges. These findings may not be applicable to tribal colleges, special use institutions, or two-year institutions that operate under four-year colleges, as they were excluded from this study. Findings cannot be generalized to institutions other than publicly controlled two-year colleges or to colleges outside of the United States.

This study relied on data elements collected by the United States Department of Education. Any errors in the data entry of these data items may have resulted in erroneous findings. As Zimbalist (1999) noted, a major limitation in interpretation of data, including that collected by the EADA, is a lack of common accounting conventions. This limitation was also articulated by Duderstadt (2000) who noted that among the Big Ten institutions there were no standard and accepted athletic accounting practices, and that various accounting schemes were used to improve the financial profile of athletics.

A further limitation is related to the way the colleges are coded. Some colleges with multiple campuses have one institutional code in IPEDS. Having the enrollment figures for multiple campuses combined may dampen the actual data for student participation in intercollegiate athletics and also affect the classification of colleges by size. Colleges that report under one IPEDS number but have intercollegiate athletics at more than one campus may report inflated team sizes, cause an increase in the average team size for each sport, and raise the average number of sports per campus.

The time period for this study was academic year 2002-2003. However, there was no standardization in what calendar period is considered an academic year (AY). In IPEDS colleges were allowed to define the academic year in any way they choose as long as it was a continuous 12-month calendar period. There was concomitant variability in what calendar period was considered a fiscal year (FY). For the sake of simplicity, no distinctions were made in how fiscal and academic years were measured. Fiscal year 2002 was equated with AY 2001-2002 based on the start and end dates given for the FY 2002. It is unlikely that this lack of conformity was of any significance.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

In the past two decades an increasing number of studies addressed a variety of topics within intercollegiate athletics. The majority of these inquiries focused on NCAA Division I schools and amateurism, economic benefits, role of athletics within higher education, and governance issues (Thelin, 1994; Gerdy, 2000; Zimbalist, 1999; Telander, 1996; Bailey and Littleton, 1991; Sack and Staurowsky, 1998). While these works did not focus on athletics at the community college level, they provided a context for the study of intercollegiate athletics.

This review of the literature begins with the broad issues such as general concerns about intercollegiate athletics, the mission of the community college, and community college classification typologies. Next, the focus narrows to the college level with a review of the literature on the role of intercollegiate athletics in the community college and community college athletic associations. Finally, the literature on athletics and its relationship to institutional size, location, student diversity, housing and food service is explored in detail.

Concerns about Intercollegiate Athletics

In the 1990s, several significant works identified concerns about intercollegiate athletics. Sack and Staurowsky in *College Athletes for Hire* traced the decline of amateurism in athletics and the rise of women's sports (1998). In particular, this work detailed the evolution of athletic scholarships awarded within the NCAA. *Athletics and Academe* (Bailey & Littleton, 1991) was based on interviews with 22 college CEOs

primarily from Division I of NCAA. This work used the medical metaphor of illness and epidemic to describe the current state of intercollegiate college athletics. Telander (1996) in *The Hundred Yard Lie* offers a searing indictment of competitive college football. While Telander's work does not take an academic approach, it is a compelling piece of the literature that offers anecdotes of the darker side of college athletics (1996). None of these works specifically referenced community college athletics.

Financial and economics issues were also addressed extensively in the literature. Lawrence in *Unsportsmanlike Conduct: The National Collegiate Athletic Association and the Business of College Football* provided a history of the NCAA and a convincing case for how that organization functioned as a cartel (1987). Lawrence only included two references to community college athletics. The first addressed eligibility of transfers to four-year colleges. The second highlighted that community college transfers are sought after because they already have proven records in college level athletics and can play immediately. Gerdy (1997) echoed this concept of community college athletic transfers:

> Coaches and athletic administrators from both two- and four-year institutions view junior college transfers differently from student-athletes who enroll in an NCAA institution directly from high school. Because most will be in the athletic program only two years, junior college transfers are viewed not as students or even student-athletes, but rather as *athletic* "quick fixes" [italics included in original text] (p. 142-3).

Hart-Nibbrig and Cottingham's work *The Political Economy of College Sports* focused on the similarities between intercollegiate college athletics and business (1986). They used the term *corporate athleticism* to describe "the influence of the business ethic on the new sports system" (Hart-Nibbrig and Cottingham, 1986, p. 1).

More recently, James J. Duderstadt, former president of the University of Michigan, released *Intercollegiate Athletics and the American University: A University President's Perspective* (2000). He asserted that rather than being a revenue generator, athletics drove up costs. In the Big Ten, 95% of revenue was due to football (72%) and basketball (23%) (Duderstadt, 2000). Football and men's basketball combined accounted for 57% of all expenditures. Meanwhile, all of women's sports combined accounted for only 24% of total expenditures. Duderstadt confirmed that cost hiding occurred through state subsidies for athletics, the granting of in-state tuition, and in the case of Northwestern University, a private university, direct subsidy from the academic side of the house (2000).

Duderstadt's findings are corroborated by Zimbalist in *Unpaid Professionals: Commercialism and Conflict in Big-Time College Sports* (1999*).* Zimbalist takes an economic approach to examining and providing solutions for intercollegiate athletics by seeking to reduce negative externalities and increase positive externalities. Zimbalist, like Lawrence (1978) before him, also argues the NCAA is like a cartel and does not find that intercollegiate athletics in general produce revenue. "Indeed with few exceptions, it is clear that only Division IA football and basketball ever run surpluses; the other sports are all supported by net income from football and basketball and any other institutional subventions and outside support" (Zimbalist, 1999, p. 151).

Solutions range from the modest to the extreme. Telander (1996) makes a proposal to end the charade of amateurism in college football and professionalize the sport. Gerdy (2000) calls for higher education to make high stakes athletics separate from the educational mission by making athletics an auxiliary enterprise. Gerdy also

recommends that athletics be reframed and treated like a bookstore which supports the mission of the school and which pays its employees (2000).

Duderstadt (2000) called for athletic programs and their participants to be mainstreamed. He noted that football and basketball are different because in these sports, “any educational mission-indeed, relevance of these programs to the rest of the university has been subverted if not destroyed entirely” (Duderstadt, 2000, p. x). Echoing Gerdy (2000) and Telander (1996), Dudrestadt concluded that perhaps college football and basketball should “become truly independent and professional activities” (p. xii).

Meanwhile, in his earlier work Gerdy (1997) stressed that college athletics must contribute overall to higher education and not be seen as simply entertaining. He proposed legislation that would support and forward this vision. He included what may be viewed as a radical proposal to eliminate athletic scholarships by moving to need-based financial aid.

The Mission of the Community College

To understand how athletics fits into the community college, we must explore the mission of this unique institution. Several articles attempted to characterize the missions or in some cases priorities for community colleges. Reitano (1998) suggested that there are four missions for the community college: “compensatory, career, community, plus the collegiate or transfer function” (p. 125). Cohen and Brawer’s *The American Community College* (2003) identified the same four missions as Reitano and added general education as the fifth mission. Levin (1995) in a qualitative study of seven colleges in the United States and Canada argues that the revised community college

mission is focused on two areas: new vocationalism and globalization. He argued that globalization has meant a reorientation of college settings to a business model. Steinberg's (1999) dissertation provided an interesting review of twenty-five California community college missions and supported Levin's findings. Steinberg found the most prevalent concept in mission statements was that of creating a diverse community or meeting the needs of a global or international community. Student development and community engagement were also found to be components of missions but occurred less frequently (Steinberg, 1999).

McCartan provided an analysis of five works regarding the future mission and orientation of community colleges (1983). Her report identified the same five missions as Cohen and Brawer. Her analysis of the future trends in community college missions identified two divergent trends. One trend is that college missions take on the "whole range of educational and related services, based on response to local community needs" (p. 682). The second prognostication urged colleges to refocus on the "more traditional functions of community colleges" (McCartan, 1983, p. 682).

Other work on missions included a 1989 article by Cross and Fideler in which they reexamined Cross' earlier work from 1982 to see if community college missions had changed. Using the Community College Goals Inventory (CCGI) that was initially administered in 1979 and again in 1985 the authors identified the community colleges' goals and assessed for change. Cross and Fideler concluded that not much change occurred during the six-year time period based on the prevalence of the original goals in both years of the survey's administration. The top five goals established were consistent from the first to the second administration: general education, vocational/technical

education, developing a college community, developmental/remedial education, and intellectual orientation. The CCGI was structured around 20 goals each with four supporting statements, plus 10 miscellaneous statements for a total of 90 items. None of the twenty goals specifically mentions athletics or student services, although one might make a case that athletics is covered in student services or creating a college community (Cross and Fideler, 1989).

There was a general agreement about the five missions of the community colleges offered by Cohen and Brawer: general education, vocational/technical education, transfer function, community education, and compensatory education (2003). Other missions such as globalization and career education are not as widely supported in the literature on community college missions. A focus on student development was not listed as a primary mission of the community college in the literature. In none of the discussions, however, was intercollegiate athletics cited or considered.

Intercollegiate Athletics in the Community College

The classic texts that chronicled community college history and development scarcely mentioned athletics. There were no index entries for athletics or sports in either Koos' (1925) *The Junior College Movement* or Medsker's 1960 classic, *The Junior College: Profile and Prospects*. However, Koos did reference athletics in the section on student activities, noting "each of the four divisions of activities—athletic, literary, musical, social and religious—shows an increase from the smallest to the largest junior colleges, an increase reflected in the average total numbers [of groups or teams]" (1925/1970, p. 183). In Fields' (1962) *The Community College Movement*, two of the

four colleges featured athletics. The profile of Tyler Junior College in particular cited intercollegiate athletics as important to developing student and community life.

By comparison, Thornton (1972) in *The Community Junior College* dedicated over one page of text to intercollegiate athletics in his section on student activities. Thornton identified intercollegiate athletics as a special kind of student activity, "because of their inherent attraction for many junior college students as participants and as spectators and because of their appeal to the public at large" (p. 274). Other positive aspects of athletics such as student development, school spirit and publicity opportunities are cited in Thornton's work. Thornton noted that football, track, baseball, and basketball were the most common sports in community colleges but encouraged adding others as interest warrants. Thornton did not cite any studies in announcing his findings about athletics, but rather seems to have relied on anecdotal evidence. In this era before the advent of Title IX Thornton comments, "For women, too, the lessons of sportsmanship are important and should be encouraged by appropriate *intramural* competition in suitable sports" [emphasis added] (p. 274).

Even in more contemporary community college texts there was little attention to athletics. Cohen and Brawer in the third and fourth editions of *The American Community College* (1996, 2003) mentioned athletics or sports only twice. The first mention of athletics occurred in the chapter on finance in which reducing athletics is mentioned as a strategy community colleges have taken to control expenditures. The role of athletics is more directly addressed in their chapter on student services in which Cohen and Brawer dedicated exactly one full paragraph to the topic of sports. Of that paragraph, only one sentence addressed intercollegiate athletics stating, "Athletic programs are

presumptively planned so that student athletes can enjoy the benefits of extracurricular activity along with their academic programs" (2003, p. 209). With this, Cohen and Brawer moved onto a discussion of intramural athletics, and then onto other types of student services. The index in their book did not include entries for athletics, sports or intercollegiate activities.

Broad agreement seems to exist regarding the roles that intercollegiate sports can play in community colleges. Agreement also is apparent in the areas of the primary purpose, the role in relationship to academics, and the visible and invisible benefits to the college such as enhanced publicity, school spirit, and benefits to individuals regarding their individual development. The place of intercollegiate athletics at the community college was perhaps best stated by Raepple, Peery and Hohman in 1982,

> Unless athletics sponsored by the college are truly a part of the college education process and support and promote the goals of the institution, then the entire mission of the institution is in jeopardy and the athletic program has no basis for existence (p. 162).

Steiner and Milander (1978) backed guidelines reinforcing the primacy of academics including aligning sports seasons with semesters, shortening season length, and limiting practice time before the first event. Fink and Kirk (1979) argued the challenge was to "establish programs that have educational value and that focus on the success of the individual, not on the team" (p. 441). There was a consensus that intercollegiate athletics must be aligned with the educational mission of the college (Bennion, 1992; Berson, 1996; Campion, 1990). In California, where awarding of athletic scholarships was not permitted, Greene (1991) argued that the emphasis must be on creating a "team consisting of students who had athletic skills" (p. 9).

The literature on intercollegiate athletics in community colleges can be conceptualized as a two-by-two matrix. Table 1 presents a listing of ways intercollegiate athletics benefit the community college and its students. The locus of the concept is either internal or external. Internal factors are those which affect the community college campus or its students. External factors impact the areas beyond the college campus. The focus is either on the college level or student level.

Table 1

Study of Benefits of Intercollegiate Athletics at the Community College

	Locus	
Level	Internal	External
Student	Supporting Activities Personal Development Access to College	Athletic Transfer Scholarships
College	School Spirit Enrollment Growth State Reimbursement	Community Linkages Publicity/Marketing

Among the internal benefits at the student level were individual student development, access to college and availability of supporting activities such as band, cheerleading, and dance or drill teams. Thornton (1972), Bennion (1992) and Campbell (1988) all note that intercollegiate athletics provides opportunities for students who might not otherwise be able to attend college. This concept appears in Gerdy's (1997) work although he views the role of the community colleges more skeptically. He states that "high school prospects who fail to meet NCAA initial eligibility standards are 'farmed out' to junior colleges and after two years of usually suspect academic remediation are admitted to four-year institutions as transfers" (Gerdy, p. 142).

Athletics provides opportunities for individual student development. Athletics can also provide a socializing function and leadership, team, and sportsmanship opportunities for participants (Thornton, 1972; Bennion, 1992; Brooks, 1988). Stokes (1979) concluded that athletics, "must have as their end, human development" (p. 432). Monroe (1972) acknowledged that the opportunity to participate in student activities, like intercollegiate athletics, may be the primary reason that some students come to the community college. For Monroe, the benefits of student activities were evident and indisputable, "Innumerable students poorly motivated in academic areas become motivated sufficiently to remain eligible for participation in athletics or some other activity" (p. 43). Yet even with these broad claims Monroe did not cite any evidence or make reference to any studies that supported this assertion.

The internal benefits for a community college that has intercollegiate athletics are increased full-time enrollment, school spirit, and potentially additional revenue. Enhancement of the college environment is a by-product of intercollegiate athletics (Campbell, 1988). Bennion's (1992) work indicated that "the spirit of the student body is enhanced by the athletic competition. Related groups, such as pep bands and drill teams, also enjoy their involvement" (p. 27). Even in a community college system in which the three campuses played only each other, sports were attributed with enhancing school spirit (Pollock & Pingley, 1986). Stokes (1979) in her article, "Presidential Role in Community and Junior College Athletics," postulated that, "[e]specially at community colleges, sports provide a rallying point and help students develop pride in their institutions" (p. 432).

External and intangible benefits such as enhanced publicity and community-building are associated with intercollegiate athletics. Intercollegiate athletics can be used to enhance and build marketing efforts by the college (Smith, 1987; Campbell 1988; Berson, 1996; Pollock & Pingley, 1986). Stokes (1979) also cited image building as an important reason for CEOs to be attentive to and involved in intercollegiate athletics. Although he was discussing four-year colleges, Zimbalist (1999) asserted that weaker academic schools rely more heavily on the advertising function of their athletic programs. Zimbalist proposed more broadly that "an athletic program, whether or not it runs a surplus, may benefit a school economically by attracting additional applicants, by encouraging donations to the general academic fund, or by arousing legislative largesse among sports-crazed representatives"(p. 152).

Intercollegiate athletic events provide an opportunity for creating linkages with the local community. Toma (2003) in *Football U* described home football games using the social exchange model. To summarize Toma, home football games are times when the college opens up its doors so anyone in the community can have equal status with those attending or employed by the institution. In this way, athletic contests helped colleges build linkages that the colleges hoped would enhance future revenues and endear them to local constituencies. The role of community linkages was also found by Fields (1962) in his case study of Tyler Junior College. However, Fink and Kirk (1979) warned there is reason for caution. "If community college athletics programs are designed and administered to build public relations, student morale, and alumni loyalty, then the problems of large institutions may be duplicated. The focus will no longer be on the athlete but on the event and the fans" (Fink and Kirk, p. 440).

The traditional role of the community college as an “open door” institution may pose special problems regarding competitive intercollegiate athletics. Some community college researchers identified an inherent contradiction between the philosophy of universal access and having selective athletic teams. Campion (1990) contended that limiting the size of athletic teams was contradictory to the community college cornerstone of open participation. Fink and Kirk (1979) leveled their criticism that intercollegiate athletic programs only available to the talented few went against the mission of open access that grounds public community colleges. Fink and Kirk went even further by advocating for opening participation for men and women on the same teams whenever possible.

A related criticism of intercollegiate athletics was directed at scholarships. The arguments here were of two general varieties, one that opposed any aid that is not need-based, and another which is directed at providing college resources to students from outside of the college’s community. Fink and Kirk (1979) suggested that the purpose of community colleges was to be “an integral part of their community, not above or outside their geographic location. With one glaring exception, the development of collegiate athletic programs,” they have met that goal (p. 437). They also explicitly advocated for the elimination of athletic scholarships.

Steiner and Milander’s (1978) study “Changing the Emphasis upon Community College Athletics,” centered on implementing changes in the State of Washington regarding accommodating women’s athletics during a difficult budget situation. Their eleven guidelines centered on making athletics affordable and making sure academics

are the first priority for athletes. Two of their guidelines are especially relevant to the study at hand:

1. There shall be no outside recruiting.
2. There shall be no athletic grants (Steiner and Milander, 1978, pp. 32-3).

Steiner and Milander argued that recruitment outside the service area runs contrary to the community centered mission of the colleges and that athletic grants run counter to the practice of allocating financial aid based on academic ability and/or financial need. Meanwhile Stokes (1979) appealed to presidents to ask themselves, “Should a policy of limiting scholarships to the geographic area of the college be established? Are there educational reasons to recruit in other states?” (p. 436). This article was an opinion piece rather than a research study and did not provide definitive answers to this question.

Community College Athletic Associations

Two community college athletic associations accounted for the lion’s share of community colleges that sponsor intercollegiate athletics: the National Junior College Athletic Association (NJCAA) and the Community College League of California’s Commission on Athletics (COA). A third association, the Northwest Athletic Association of Community Colleges (NWAACC), operates out of the Pacific Northwest. The NJCAA has 502 members sponsors competition at three levels in most sports. These divisions are identified as I, II, and III and correspond, respectively, with the availability of full, partial, or no scholarships for students in those sports. The membership of COA is restricted to the 107 public community colleges in the state of California and one member that is a private two-year college. In COA the awarding of athletic scholarships

is not permitted, thus sports are the equivalent of NJCAA Division III. Meanwhile, the 37 members of the NWAACC operated most closely along the lines of the NJCAA Division II level of competition, with partial but not full, scholarships available.

Of the three primary community college athletic associations, the NJCAA was the most frequently cited in the literature. The McAninch study was based on a survey of community college chief executive officers (CEOs) and commissioned by the American Association of Community Colleges (née American Association of Community and Junior Colleges). This study focused on student eligibility, national governance and CEO involvement in intercollegiate athletics (McAninch, et al., 1987). Criticism of NJCAA regarding the lack of presidential input and eligibility guidelines had been previously identified by Stokes (1979) and may have aided in organizing the McAninch study. The recommendations arising from the study were modified slightly and adopted by the AACJC on April 22, 1987. Among the recommendations was the creation of a national advisory board of community college presidents and chancellors to the NJCAA (AACJC, 1987). In 1987, the NJCAA Board of Directors voted to add four AACJC-selected community college CEOs to the Board (NJCAA, 2004; Campion, 1990). The impact was significant. According to the NJCAA, “presidential participation and the ensuing discussion in raising academic requirements for athletes made the annual meeting one of the most important in the history of the organization” (NJCAA, 2004h). The other study on the NJCAA was Brown’s (1988) doctoral dissertation. Brown’s study, an ambitious work that provided the most comprehensive review of athletics among NJCAA member colleges yet available, will be examined more closely below.

Only one published work cited the Commission on Athletics. This report preceded a major reorganization of the California Community and Junior College Association (CCJCA) in 1990. The report was drafted in response to the California Legislature in the aftermath of Proposition 13, a measure that capped property taxes in California (California Community Colleges, 1980). This reorganization resulted in the merger of the California Association of Community Colleges, the California Community College Trustees, and the Chief Executive Officers of the California Community Colleges. The Commission on Athletics has oversight responsibility for intercollegiate athletics among community colleges in California (Community College League of California, 2004). Prior to 1984, there had been no need to even consider offering athletic scholarships, since there had been no tuition charged at California colleges until that point (Fountain and Tollefson, 1989). Perhaps seeing the handwriting on the wall in California, the Commission on Athletics enacted "Section 1.032 of the State Athletic Code [which] states: 'No scholarships or grants-in-aid may be awarded … if athletic competence is the principal criterion for selection'" (Greene, 1981, p. 6). By 1983, the Athletic Code of the California Association of Community Colleges had expanded and reworded its statement regarding grants-in-aid to athletes. Section 7.02, Subsidizing of the Athletic Code reads,

> 7.021 - Subsidizing is defined as the furnishing of financial assistance to amateur athletes in return for their athletic services. Such subsidy is strictly forbidden. This term does not apply to remuneration for a bona fide job wherein work value is received. (7/7/84) [*sic*]
>
> 7.022 - The giving of special privileges to athletes, such as free or reduced rate housing, free or reduced rate meals, or any financial aid in the form of loans or grants *that are not available to all eligible students*, free or reduced rates for book sand supplies, free or reduced rates for

> transportation, or for the establishment of funds for athletes *when it is not the policy of the college to give such services to every student in the college*, is classified as illegal subsidizing and is strictly forbidden [emphasis in original]. (p. 7-1)

The 1983 Athletic Code also forbade recruiting outside the individual college's district. Furthermore students were barred student participation in athletics at colleges other than their local community college unless their local college did not offer athletics (California Association of Community Colleges, 1983).

No direct references to the NWAACC were found. However, part of the philosophical underpinnings of community college athletics in the Pacific Northwest was captured by Steiner and Milander in their 1978 article "Changing the Emphasis upon Community College Athletics." This article detailed recommendations of how to create and operate low cost intercollegiate athletic programs in the face of extreme budget cuts.

A Detailed Examination of the McAninch and Brown Studies

Two works in the area of intercollegiate athletics in the community college were of major significance and merit close review and critique. The first was McAninch's (1987) report *Two-year intercollegiate athletics: student eligibility, national governance and CEO Involvement*. The second key study was Ronald Brown's doctoral dissertation, *The Current Status of Two-year College Athletic Programs in Non-gender Specific and Non-football Playing Schools of the NJCAA*. These two studies are the only two previous works found that attempted to examine intercollegiate athletics at the community college on a national basis.

The McAninch Study

The American Association of Community Colleges (née American Association of Community and Junior Colleges) commissioned Harold McAninch, then president of College of DuPage, a large multicampus suburban community college outside of Chicago, Illinois, to lead a survey of community college CEOs from across the United States regarding athletics. The survey focused on "student eligibility, national governance and CEO involvement in intercollegiate athletics" (McAninch, et al., 1987, p. 1). Using the AACC database, the McAninch study sent out 969 surveys to community college CEOs in every state. Since this study was commissioned by the AACJC, it is likely that the surveys were sent only to AACJC members. A total of 552 surveys were returned, a 57% return rate. Of the surveys returned, 67% of the respondents indicated that their college offered at least one intercollegiate sport (Table 2).

McAninch tabulated responses by NJCAA region and separately reported responses from Oregon, Washington and California because the primary athletic affiliation for colleges in these states was not the NJCAA. As noted earlier, community colleges in Oregon and Washington were part of the (NWAACC) while the colleges in California were part of the Commission on Athletics (COA). Of those that offered intercollegiate athletics in 1987, 81% belonged to the NJCAA according to McAninch. However, in California, Oregon, and Washington combined, only 16% of the respondents with athletics were NJCAA members.

Key tables from McAninch's work are those that reported institutional size by region, as well as participation in intercollegiate athletics by region. McAninch's "Institutions by size within region (Headcount) (%)" reports that intercollegiate athletics

are found at small, medium and large colleges at rates of 70%, 22% and 8% respectively (p. 41). Small colleges were defined as those with headcount enrollment of less than 5,000. Medium colleges had a headcount enrollment of 5,000 to 14,999 students and large colleges had enrollment of 15,000 or more students.

Respondents were asked, “Is it desirable to have one intercollegiate athletics national governance structure for all two-year colleges in the country?” (McAninch, 1987, p. 31) The majority (70%) answered yes, while 14% answered no, and 16% reported that they were undecided. Once again, California, Oregon, and Washington had a different pattern, with 33% answering yes, 46% answering no, and 20% reporting they were undecided.

Figure 1

Key to National Junior College Athletic Association Regions, 1987

Region	States
I.	Arizona, California, and Nevada
II.	Arkansas and Okahoma
III.	Upper New York State
IV.	Upper Illinois
V.	New Mexico and West Texas
VI.	Kansas
VII.	Kentucky and Tennessee
VIII.	Florida
IX.	Colorado east of the Continental Divide, Eastern Montana, Nebraska, and Wyoming
X.	North Carolina, South Carolina, Virginia, and West Virginia
XI.	Iowa
XII.	Indiana, Lower Michigan Peninsula, and Ohio
XIII.	Minnesota, North Dakota, and South Dakota, Upper Michigan Peninsula, and Wisconsin
XIV.	Eastern Texas
XV.	Lower New York
XVI.	Missouri
XVII.	Georgia
XVIII.	Alaska, Idaho, Oregon, Washington, Western Montana, Colorado west of Continental Divide, and Utah
XIX.	Delaware, Eastern Pennsylvania and New Jersey
XX.	District of Columbia, Maryland, and Western Pennsylvania
XXI.	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont
XXII.	Alabama
XXIII.	Mississippi
XXIV.	Lower Illinois

Source: From *Two-year Intercollegiate Athletics: Student Eligibility, National Governance and CEO Involvement* (p. 9), by Harold McAninch et al., 1987. Washington, DC: American Association of Community and Junior Colleges.

Table 2

Public Community Colleges With Intercollegiate Athletics by National Junior College Athletic Association Region, 1987

NJCAA Region	Sponsor Athletics Yes		Sponsor Athletics No		Total
I.	7		6		13
II.	15		4		19
III.	12		1		13
IV.	18		3		21
V.	18		16		34
VI.	12		2		14
VII.	10		13		23
VIII.	23		2		25
IX.	19		6		25
X.	12		49		61
XI.	8		3		11
XII.	21		14		35
XIII.	24		7		31
XIV.	14		11		25
XV.	8				8
XVI.	9				9
XVII.	3		6		9
XVIII.	3		7		10
XIX.	11		1		12
XX.	18		2		20
XXI.	16		7		23
XXII.	13		6		19
XXIII.	11				11
Hawaii (XXIV.)			5		5
NJCAA Subtotal	316	65%	171	35%	487
California	37		4		41
Oregon	7		4		11
Washington	10		3		13
Other Association Subtotal	54	83%	11	17%	65
Grand Total	370	67%	182	33%	552

Notes: 1. Community colleges in Hawaii do not offer intercollegiate athletics, so McAninch created an NJCAA region number for this state. 2. California was reported separately due to dominance of the Commission on Athletics (COA). 3. Washington and Oregon were reported separately due to the Northwest Athletic Association of Community Colleges (NWAACC).

Source: From *Two-year Intercollegiate Athletics: Student Eligibility, National Governance and CEO Involvement* (p. 38), by Harold McAninch et al., 1987. Washington, DC: American Association of Community and Junior Colleges. Copyright 1987 by Harold McAninch. Adapted with permission.

Table 3a.
Men's Intercollegiate at Public Community Colleges Sport By Institutional Size Using Headcount, 1987

	College Size			
	Small	Medium	Large	Total
Sport	1 - 4,999	5,000 - 14,999	15,000+	
Baseball	173	71	26	270
Basketball	230	76	28	334
Bowling	11	4	3	18
Cross Country	51	38	20	109
Football	47	22	15	84
Golf	108	48	23	179
Ice Hockey	6	2	1	9
Lacrosse	5	2	1	8
Marathon	1	3	2	6
Skiing	6		1	7
Soccer	51	38	20	109
Swimming & Diving	15	16	14	45
Tennis	96	44	24	164
Track and Field, Outdoor	53	32	20	105
Track and Field, Indoor	25	10	6	41
Wrestling	30	16	18	64
Other	13	5	6	24
Total	921	427	228	1576

Table 3b.
Women's Intercollegiate Sport at Public Community Colleges By Institutional Size Using Headcount, 1987

	College Size			
	Small	Medium	Large	Total
Sport	1 - 4,999	5,000 - 14,999	15,000+	
Basketball	195	65	24	284
Bowling	9	3	4	16
Cross Country	40	32	20	92
Field Hockey	4	2		6
Golf	23	11	6	40
Skiing	6		1	7
Soccer	12	10	9	31
Swimming & Diving	15	15	12	42
Tennis	88	45	22	155
Track and Field, Outdoor	39	25	19	83
Track and Field, Indoor	20	11	7	38
Volleyball	134	61	23	218
Other	9	3	5	17
Total	594	283	152	1029

Note: McAninch uses unduplicated student headcount to classify college size. Colleges that did not report their headcount were classified as small colleges.
Source: From *Two-Year Intercollegiate Athletics: Student Eligibility, National Governance and CEO Involvement* (pp. 39-40), by Harold McAninch et al., 1987. Washington, DC: American Association of Community and Junior Colleges. Copyright 1987 by Harold McAninch. Reprinted with permission.

McAninch found the most common men's sports were basketball, baseball, golf, and tennis (Table 3a). For women, the most popular sports were basketball, volleyball, tennis, and fast-pitch softball (Table 3b.) (McAninch, 1987). Ninety percent of the colleges offered men's basketball while nearly 77% offered women's basketball. Tables for sport sponsorship by institutional size are provided but interpretation is difficult since the data is not reported as a percent of institutions of that size.

The Ad Hoc Committee on Intercollegiate Athletics of the American Association of Community and Junior Colleges, now the AACC, was convened in 1986 and commissioned McAninch's study to investigate the linkages between intercollegiate athletics and college chief executive officers involvement. Although it is not implicitly stated in the report, the recommendations implied that the AACJC sought to have greater influence and control over intercollegiate athletics. Evidence for this was found in the following recommendations that stemmed from the report:

1. The committee recommends that AACJC and NJCAA jointly work to obtain greater CEO involvement in the formation and oversight of policies related to intercollegiate athletics.
2. The committee recommends that a National Advisory Board of CEOs to the NJCAA Governing Board should be formed. (McAninch, 1988, p. 3)

While McAninch's work was a huge step forward in advancing what was known about intercollegiate athletics at the community college and served its purpose well, it suffers from some weaknesses. First, while McAninch samples nationally, no report is made about the statistical confidence or power of these findings. Next, findings are reported by NJCAA region. Yet, the NJCAA region is not a useful classifier when one considers the variation of colleges by local geographic settings (urban, suburban, and rural). Also, this study does not report on student level participation, coaching staff size,

Table 4

Community Colleges Participating in Intercollegiate Athletics by Region and College Size, Using Headcount Enrollment, 1987

	College Size						
	Small		Medium		Large		Total
NJCAA Region	1 - 4,999		5,000 - 14,999		15,000+		
I.	2		3		2		7
II.	14		1				15
III.	11		1				12
IV.	9		8		1		18
V.	16		1		1		18
VI.	10		2				12
VII.	10						10
VIII.	11		8		4		23
IX.	16		3				19
X.	12						12
XI.	7		1				8
XII.	15		3		3		21
XIII.	20		1		3		24
XIV.	11		3				14
XV.	4		3		1		8
XVI.	4		4		1		9
XVII.	3						3
XVIII.	3						3
XIX.	7		4				11
XX.	13		3		2		18
XXI.	13		3				16
XXII.	11		2				13
XXIII.	8		3				11
Hawaii (XXIV.)	9		2				11
NJCAA Subtotal	239	76%	59	19%	18	5%	316
California	11		17		9		37
Oregon	4		2		1		7
Washington	5		5				10
Other Association Subtotal	20	37%	24	44%	10	19%	54
Grand Total	259	70%	83	22%	28	8%	370

Notes: 1. Community colleges in Hawaii did not offer intercollegiate athletics, so McAninch created an NJCAA region number for this state. 2. California was reported separately due to dominance of the Commission on Athletics (COA). 3. Washington and Oregon were reported separately due to the Northwest Athletic Association of Community Colleges (NWAACC).

Source: From *Two-Year Intercollegiate Athletics: Student Eligibility, National Governance and CEO Involvement* (p. 37), by Harold McAninch et al., 1987. Washington, DC: American Association of Community and Junior Colleges. Copyright 1987 by Harold McAninch. Adapted with permission.

salaries, and expenses and revenues of intercollegiate athletic programs. Another shortcoming is that colleges which did not report enrollment were included in the small college category by default.

The Brown Dissertation

Ronald Brown's (1988) doctoral dissertation at Oklahoma State University is the second attempt to characterize the involvement of community colleges in intercollegiate athletics. His study, *Current Status of Two-Year College Athletic Programs in Non-Gender Specific and Non-football Playing Schools of the NJCAA*, was limited to NJCAA member colleges that did not offer football. Colleges that only sponsored intercollegiate athletics for one gender were also excluded from the study. Brown divided the NJCAA members into 6 regions and conducted a stratified random sample for his survey. He sampled 25% of the colleges in the population sending out 95 surveys. Brown received a total of 78 complete surveys for a response rate of 70%.

Brown's work is impressive in its scope. His topics of study are "Program Demographics, CEO Involvement/Institutional Philosophy, Athletic Department Staffing, Funding/Budgeting/Expenditures, Academic Standards/Governing Associations" (p. 3). Brown reported on three levels: institutional participation, student athlete characteristics, and individual sport level information.

In its institutional demographics section, Brown offered demographic characteristics related to control (public, private), enrollment, and city size. Nearly 90% of his sample responded that they were public institutions. Enrollment information, presumably headcount, was also collected. Brown used four size classifications as indicated in Table 5. Combining size classifications, 82% of the colleges that responded

had an enrollment of 5,000 students or less. Larger colleges were less likely to have athletics. Approximately 11% of the responding colleges had 5,001 to 10,000 students and approximately 6% of respondents reported enrollment over 10,000. This trend mirrors that found by McAninch (1987).

Brown did not find a clear trend on city size and intercollegiate athletics. The largest percentages of respondents were from either small towns of less than 10,000 or towns of greater than 50,000 at 33.8% and 32.4% respectively. However, Table 5 seemed to reveal that there was as much variability within regions as overall. Brown also found that "schools located in regions which represented the fewest number of schools, in the population of interest, had higher budgets" (p.79). This finding, combined with the percentage in towns with populations of 10,000 or less, may be construed as support for the greater incidence of athletics in rural areas.

Figure 2
Key to Regions Used in Brown's Dissertation, 1988

Region	State
I.	Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming
II.	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas
III.	Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota
IV.	Illinois, Indiana, Michigan, Ohio, and Wisconsin
V.	Alabama, Georgia, Florida, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia
VI.	Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, Pennsylvania, New Jersey, New York, Rhode Island, and Vermont

Note: California, Alaska, and Hawaii were not assigned to a region. California is omitted because public community colleges compete under the auspices of the Commission on Athletics. No community colleges in either Alaska or Hawaii sponsored intercollegiate athletics.
Source: *From Current status of two-year college athletic programs in non-gender specific and non-football playing schools of the NJCAA*, by R.G. Brown, 1988. Dissertation Abstracts International, 0 (05), 1189A. (UMI No. 8914987).

Table 5

Community Colleges Participating in Intercollegiate Athletics by Region and College Size, Using Headcount Enrollment, 1988

	College Size				
Region	0 to 1,000	1,000 to 5,000	5,001 to 10,000	Over 10,000	Total Schools
I.	2	3	0	1	6
II.	1	7	2	0	10
III.	6	4	1	0	11
IV.	0	8	3	1	12
V.	4	7	2	1	14
VI.	6	11	0	1	18
Total and Percent	19 27%	40 56%	8 11%	4 6%	71

Source: From *Current Status of Two-Year College Athletic Programs in Non-Gender Specific and Non-football Playing Schools of the NJCAA* (p. 30), by R.G. Brown, 1988. Dissertation Abstracts International, 0 (05), 1189A. (UMI No. 8914987). Copyright 1988 by R.G. Brown. Adapted with permission of the author.

Table 6

Community Colleges Participating in Intercollegiate Athletics by Region and City Size, 1988

	City Size				
Region	0 to 10,000	10,000 to 30,000	30,001 to 50,000	Over 50,000	Total Schools
I.	2	2	0	2	6
II.	5	2	0	3	10
III.	3	5	1	2	11
IV.	3	3	1	5	12
V.	6	3	3	2	14
VI.	5	3	1	9	18
Total and Percent	24 34%	18 25%	6 9%	23 32%	71

Source: From *Current Status of Two-Year College Athletic Programs in Non-Gender Specific and Non-football Playing Schools of the NJCAA* (p. 31), by R.G. Brown, 1988. Dissertation Abstracts International, 0 (05), 1189A. (UMI No. 8914987). Copyright 1988 by R.G. Brown. Adapted with permission of the author.

Brown's findings on student demographics are more limited. While he reported that minority athletes accounted for 19.1% of all full-time athletes at colleges which responded to his survey, he did not report what percentage of all full-time students these athletes represents. He also reported that non-resident athletes (out-of-state and international combined) accounted for 14.6% of all student athletes. The average number of student athletes per college was 53.5 men and 29.2 women. No total participation rates for men or women were reported.

Brown reported information on coaching staff demographics including minority status and teaching duties as well as information on athletic trainers. While important, these results were not pertinent to the current study. Average athletic budgets for men and women were reported. The findings were that the average budget for women's sports was $29,475 while the men's budget average was $44,023. Regarding coaches' salaries Brown wrote, "it was interesting to note than coaches for women's sports had higher salaries in 5 of the eight categories of coaches" (p. 50). The exclusion of football from his study may have impacted his findings in this area.

The incidence of sport by city size is reported and gives a measure of the popularity of certain sports (Tables 7a and 7b). Baseball and basketball were tied in popularity for men's sports, with 54 colleges hosting each of these two sports. For women, basketball was the leader with 63 colleges sponsoring that sport. Volleyball and softball were a distant second and third place, with 38 and 36 colleges sponsoring these women's sports, respectively. "Athletic directors reported institutional participation in five sports on a consistent basis. Basketball in both men's and women's sports programs,

Table 7a.
Men's Sport Offered by City Size, 1987

	Population				
Sport	0 to 1,000	1,000 to 5,000	5,001 to 10,000	Over 10,000	Total
Basketball (Division I)	9	13	6	16	54
Basketball (Division II)	3	4	0	5	12
Baseball	19	11	6	18	54
Wrestling	2	0	0	1	3
Ice Hockey	2	1	0	0	3
Soccer	6	2	2	7	17
Volleyball	1	0	0	1	2
Track & Field	5	3	0	4	13
Cross Country	8	5	0	5	18
Lacrosse	1	1	0	1	3
Swimming and Diving	0	0	0	3	3
Tennis	7	1	2	11	21
Golf	9	4	2	9	24
Bowling	0	0	0	3	3
Other [a]	0	1	0	1	2
Total	72	46	18	85	232

Note: [a] Other sports offered: 10,001 to 30,000 = 1 Rodeo, Over 50,000 = 1 Skiing

Source: From *Current Status of Two-Year College Athletic Programs in Non-Gender Specific and Non-football Playing Schools of the NJCAA* (p. 40), by R.G. Brown, 1988. Dissertation Abstracts International, 0 (05), 1189A. (UMI No. 8914987). Copyright 1988 by R.G. Brown. Adapted with permission of the author.

Table 7b.
Women's Sport Offered by City Size, 1987

	Population				
Sport	0 to 1,000	1,000 to	5,001 to	Over	Total
Basketball	23	17	5	18	63
Softball	12	9	4	11	36
Volleyball	12	9	3	14	38
Field Hockey	1	0	0	0	1
Soccer	3	1	1	2	7
Track & Field	5	3	0	4	12
Cross Country	7	3	0	4	14
Tennis	7	1	2	11	20
Swimming and Diving	0	0	0	2	2
Golf	0	2	0	1	3
Bowling	0	0	0	4	4
Total	70	45	15	71	200

Source: From *Current Status of Two-Year College Athletic Programs in Non-Gender Specific and Non-football Playing Schools of the NJCAA* (p. 42), by R.G. Brown, 1988. Dissertation Abstracts International, 0 (05), 1189A. (UMI No. 8914987). Copyright 1988 by R.G. Brown. Adapted with permission of the author.

baseball, women's volleyball, and women's softball appear to be the most popular sports among schools" (Brown, 1988, p. 78). Men's and women's basketball were reported as having the highest expenditures of all sports.

Brown reported on scholarship availability by sport. The measure of scholarship availability was correlated to the NJCAA Division level at which these sports were played. More colleges offered partial scholarships than either full or no scholarships. Basketball was the sport most likely to offer full or partial scholarships. That was true for both men and women.

Brown undermined his own attempt at comprehensiveness through three acts: excluding from his sample community colleges that play football, restricting his study to the NJCAA, and excluding colleges that sponsor sports for only one gender. In restricting his study to the NJCAA, he overlooked the extensive involvement in intercollegiate athletics of community colleges in Oregon, Washington, Idaho, and in particular California. By excluding football, Brown's attempt to characterize athletics was again weakened. While he reported that only 12% of NJCAA members participate in football, the nature of football teams is unique and important. Football is the most expensive sport as well as the sport with the largest team roster of participants. Excluding football hampers attempts to report on gender equity, expenses and mean coaching salaries. At the time of this report, 17% of the NJCAA members offered sports for only men or only women. While that is a limitation in his study, Title IX today virtually assures that such exclusion would not be necessary today.

Institutional Size, Location, and Athletics

Rooney's landmark book, *A Geography of American Sport* provided a comprehensive, if now somewhat dated analysis of how sports were organized, what sports were played where, where the athletes came from and where they went to compete (1974). Over one-third of Rooney's book focused on three sports: football, baseball, and basketball. However, other sports such as golf, soccer, wrestling, tennis, track and field, and others were covered briefly in the context of mapping high school participation. Just two years after the passage of Title IX, he even devoted a short chapter to women's athletics (1974).

Rooney also devoted a small section to two-year colleges, which he refers to as junior colleges, and their participation in intercollegiate athletics. "Almost all junior colleges support some kind of athletic program. However, those which field football teams, or take their basketball seriously, are confined to just a few regions" (p. 95). He then provides the only national mapping of community college athletics that this author found in her literature review (see Figure 1).

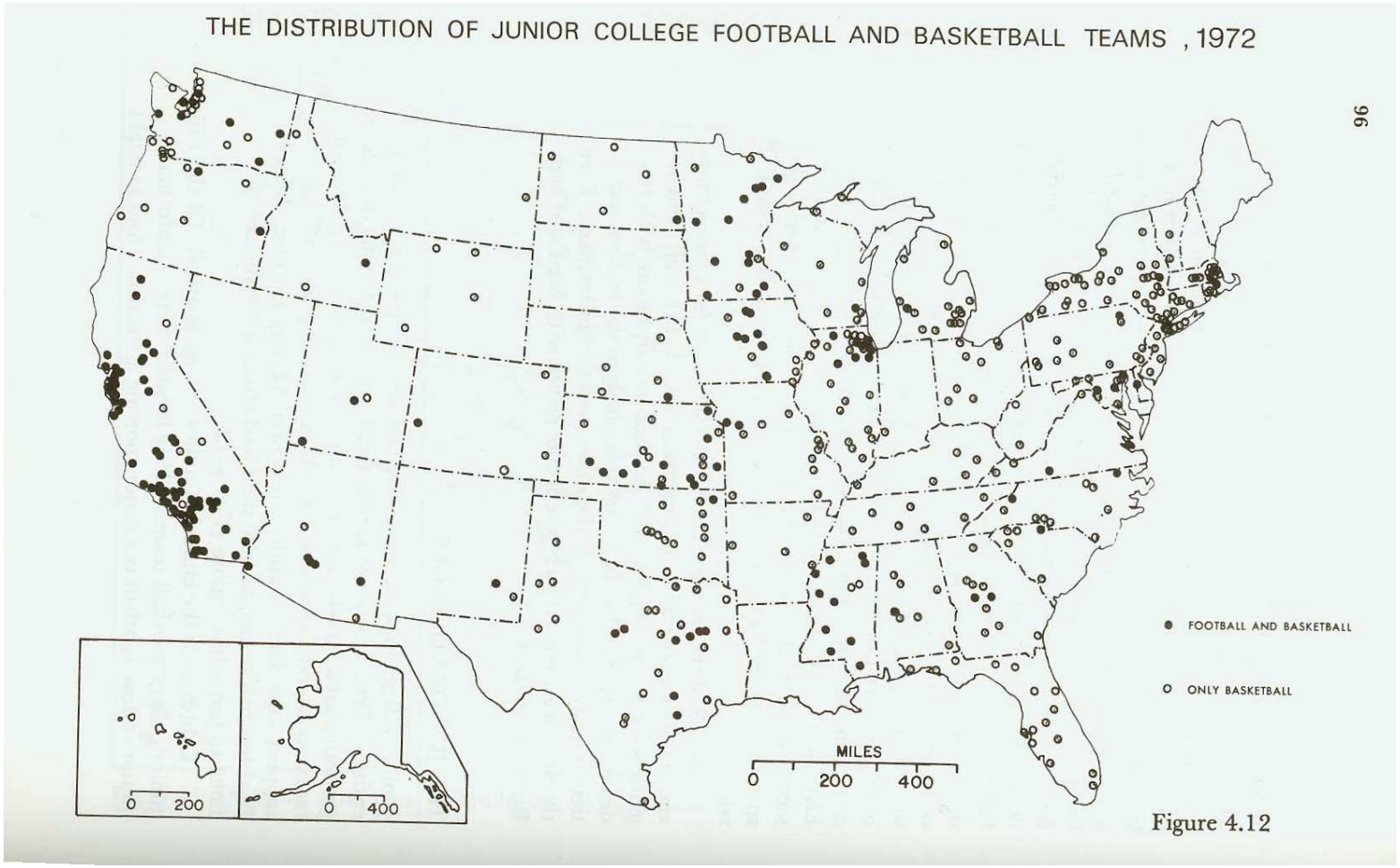
Rooney reported that California accounted for 72 of the 186 football programs at community colleges nationwide. Concentrations of football were also found in Kansas, Minnesota, Texas, Iowa, Illinois, and Mississippi. Rooney's research also found that basketball was far more common than football, with 478 community colleges sponsoring teams. Attempting to explain the extent of intercollegiate athletics in California, but apparently unaware that the first community college was founded in Illinois, Rooney stated "the junior college concept is indigenous to California [and] probably accounts for the more complete athletic programs there" (p. 97).

Outside of Rooney (1974), no other large-scale studies of athletics and geography exist. The scarce references to location and intercollegiate athletics that exist were anecdotal. Monroe's (1972) work asserted that rural colleges were more likely to have competitive athletics due to their critical role in the community and the dearth of competing activities, but provided only anecdotal evidence. Feather River College in California, a rural college, reported that 26% of all of their full-time students were athletes (Thein, 2001).

Perhaps related to location is Brown's (1988) finding that colleges in regions with a lower college density were more likely to sponsor intercollegiate athletics. Low college density may be related to rural locations and thus a link may be inferred. The only other reference regarding institutional location and athletics was a survey conducted at a rural college that queried students regarding what type of event they were most likely attend on campus (Stolar, 1990). More people rated sporting events first compared to any other type of event. Regarding high school participation in athletics overall, Rooney (1972) noted, "In general, the densely populated sections are providing far less opportunity to participate" (p. 285).

Both McAninch (1987) and the Brown (1988) provided evidence that school size, as measured by student headcount, may be related to intercollegiate athletics. In both studies, colleges with enrollment of less than 5,000 students reported having athletics less frequently than colleges with higher enrollment.

Figure 3. *The Distribution of Junior College Football and Basketball Teams, 1972*



Note: Map from *A Geography of American Sport* (p. 96), by J. F. Rooney, Jr., 1974, Reading, MA: Addison-Wesley Publishing Company. Copyright 1974 by John F. Rooney. Reprinted with permission

Gender Equity in Athletics

Title IX was passed by Congress and signed into law in the 1972 Education Amendments. Title IX was passed to eliminate gender discrimination within institutions of higher education that accepted federal financial aid funding (Gavora, 2002; USED, 2003b). The effect on both men's and women's athletics that has resulted from Title IX have been profound and oftentimes controversial. There have been increased opportunities for women athletes at all levels since 1972 (GAO, 1996b; USED, 2003a; Carpenter and Acosta, 2004; Messner, 2002). However, there has also been some concern that men's athletics have contracted as a direct result of expansion of opportunities for female athletes (GAO, 2001; USED, 2003b; Suggs, 2004).

While there has been extensive research on gender equity in athletics, as in other areas much of the work focuses on four-year colleges and universities (Carpenter and Acosta, 2004; NCAA, 2002; Resick and Erickson, 1975; GAO, 1992, 1996a, 1996b, 2001). Of the 80 postsecondary institutions listed in the index of Gavora's (2002) *Tilting the playing field: schools, sports, sex, and Title IX,* only one was a community college. Only two works were found which addressed intercollegiate athletics at public community colleges (Owiesny, 2000; RMC Corporation, 2004). Owiesny's dissertation focused on gender equity in California community colleges and found that gender equity has not been achieved. These findings were corroborated by the RMC report (2004), commissioned by the California Postsecondary Education Commission, found that,

> community colleges' greatest gender disparity in athletics was in the area of participation. In fact, only 8% of the 91 responding community colleges were in compliance with Title IX based on proportionality—that is, had participation rates that were within five percentage points of the enrollment rates for each gender—and 84% were considerably outside the range of acceptability. (p. xi).

Inequities in the number of male and female coaches, athletic directors, average number of coaches per men's and women's teams were also found by RMC and Owiesny.

Diversity and Athletics

A review of the literature did not yield a relationship between intercollegiate athletics and increased student diversity. However, the attendant references to athletic scholarships provided earlier suggested that awards were frequently made to students who were out-of-district, if not out-of-state or country. For example, Stokes (1979) suggested scholarships should be limited to the state-assigned geographic area of the college, and questioned the educational purpose of recruiting in other states. Steiner and Milander (1979) argued that recruitment outside the service area runs contrary to the community-centered mission of the colleges. Perhaps indicating past abuses, the NJCAA regulations capped at 25% the number of athletic scholarships that can be awarded to foreign students participating in Division I sports.

Out of state and international students represented 14.6% of all community college athletes in 1988 (Brown, 1988). He also found that that 19.1% of all athletes at colleges that completed his survey were people of color. Athletes of color accounted for 15.5% and 21% of all female and male athletes, respectively, in Brown's study.

Housing, Food Service, and Athletics

Zimbalist (1999) identified filling residence halls at less competitive state schools as a potential boon to campuses. Using an economic argument, he stated that the,

> actual marginal cost to the school of a grant-in-aid is much lower than the reported cost. As such, the real costs of their athletic program are lower. These schools, likely to be both state and private universities that are

> weak academically, will have smaller net losses (or higher net gains) from their athletic programs than schools that do operate at their capacity constraint" (Zimbalist, p. 164).

In simplified language, colleges that cannot attract enough students based on their academic programs might well give away athletic scholarships in order to attract students. While the scholarships represented a revenue loss, colleges recouped that revenue and more by filling their residence halls and receiving reimbursement from the state based on the instructional contact hours generated by those same students (Zimbalist, 1999).

Feather River College (FRC), in California, was forthright in detailing the intended benefits of an expansion in their intercollegiate athletics offerings:

> New full-time students gained from the new sports programs will boost the full-time core base from outside Feather River College's service area. FRC needs these residential students in order to bridge the gap in the number of students needed to successfully fund the construction and contribute to the dormitory bond payments through their student rents. (Thein, 2001, p. 1)

In the feasibility study, Feather River College was described as a rural college with a declining base of full-time students.

Intercollegiate Athletics and Finance

There are numerous subtopics within intercollegiate athletics and finance. These subtopics included ways of financing intercollegiate athletics, the link between fundraising and intercollegiate athletics, athletic booster clubs, and corporate sponsorship of athletics. More specific inquiries regarded funding levels of particular programs or average coach salaries, were related areas to this subject. As in other areas, little work exists that examined or considered the community college.

Research exploring the potential net revenues or expenditures related to intercollegiate athletics had been conducted, particularly at the NCAA Division I level, but such inquiry has not been pursued at the two-year college level. The rest of the literature relating to finance and athletics has centered around debates regarding whether fundraising or alumni giving is related to athletic success. Leslie's 1988 study found positive evidence of a link between fundraising and athletics at four-year institutions. Anecdotal evidence of such a link was also found in Cady (1978), Sturrock (1985) and Zimbalist (1999). However, in earlier research examining the win-loss records in basketball and football in NCAA Division I schools, Sigelman and Carter (1982) found that alumni giving is not tied to team performance. Perhaps as Sigelman and Carter concluded, "the lack of any relationship between success in intercollegiate athletics and increased alumni giving probably matters a good deal less than the fact that so many people believe that such a relationship exists" (p. 219).

Colleges have used booster clubs and corporate sponsorship to counteract budget cuts in athletics. Booster organizations focus exclusively on raising funds for the athletic functions of the college (Fuller, 1985; Sturrock, 1985). In California, to offset declining budgets, community colleges have started accepting corporate sponsorship for athletic championships (Burstein, 1996).

Classification Typologies

The Carnegie Classification has long been the most accepted typology of higher education institutions. Over the years, the Carnegie Classification has been updated several times (1970, 1973, 1976, 1987, 1994, and 2000). However, while the categories of institutions of 4-years and above have been consistently refined and redefined, the

two-year college classification has remained stagnant since the original Carnegie Classification was developed by Clark Kerr in 1970 (Katsinas, 1996). Another weakness of the Carnegie classification is the typology's initial use of full-time enrollment (FTE) as a factor. Part-time students dominate most community colleges and using FTE as a key factor did not allow for an accurate portrayal of the community college's unique student demographics. Furthermore, the Carnegie classification considers only the associate of arts (AA) and the associate of science (AS) as transfer degrees. Experience has shown, however, that students with other types of degrees also transfer and that students frequently transfer without attaining a degree at all. As a result of these oversights and with an aim at improving community college research, Katsinas and Lacey (1996) set about creating a useful typology of community colleges.

In the Katsinas et al. typology, Table 8, within the publicly controlled classification, the primary factor was institutional geographic location. This is justified, they argued, because states generally *assign* (either by statute or regulation) service delivery areas to their public community colleges. The category of geographic location was further subdivided into rural, suburban and urban. Location category is determined by proximity to the top 102 statistical metropolitan areas (SMAs) with a half-million or more in population as determined by the 2000 US Census.

Table 8

Katsinas et al. Community College Classification Scheme, 2004

Classification	Descriptor
Rural	Size
Small	headcount enrollment of less than 3,500
Medium	headcount enrollment of 3,500 to 7,499
Large	headcount enrollment of 7,500 or greater
Suburban	Governance
Single Campus	single college campuses or single campus districts
Multicampus	more than one college campus or colleges in a district
Urban	Governance
Single Campus	a single college campus or single campus districts
Multicampus	more than one college campus or colleges in a district

Source: Katsinas and Hardy, 2004.

The secondary factor for the typology was dependent on the first (Table 8). Rural community colleges are subdivided into three categories: small, medium, and large colleges. Unduplicated headcount makes more sense than FTE for community colleges because it more closely reflects the resource allocation reality that community colleges face. Physical resources such as parking, classroom space, computer labs, and library materials must be available to all of the students enrolled at peak attendance times. Likewise, advising and counseling staff must be available to meet with all current and prospective students not the hypothetical FTE figure. Suburban and urban colleges are subdivided by governance, that is whether they are single or multicampus colleges.

Unanswered Questions in the Literature

No references were found in the research literature regarding possible relationships between full time enrollment and intercollegiate athletics. However, since

the rules of play for the NJCAA, COA, and NWAACC require athletes to be full time students, a relationship is likely. This may be the case more at community colleges in which the preponderance of students tend to be enrolled part-time than at other types of colleges or universities. Another gap in the literature extends to finances and athletics in the community college. There was no research examining whether intercollegiate athletics has a positive, negative or neutral financial impact on community colleges. Finally, and perhaps most relevant to the study at hand, there is no baseline quantitative data and mapping of intercollegiate athletics at public community colleges generally or further examination of participation by type (rural, suburban, urban).

CHAPTER 3

METHODOLOGY

Introduction

The work of the researcher is always simplified if a population is used rather than a sample. This study encompassed the entire population of public community colleges in the United States that sponsored intercollegiate athletics, and so reports percentages and frequencies without a need for more complex statistical procedures. The Katsinas et al. community college classification scheme was used to determine institutional types and to identify differences in intercollegiate athletics participation among them. Information presented at the level of individual sports includes distinctions among programs that offered full, partial, or no athletically related student aid.

Definition of the Population

The population of the study was public community colleges in the United States that sponsored intercollegiate athletics in academic year 2002-2003. The population was determined using a variety of sources including membership in any one of the following three intercollegiate athletic associations: the National Junior College Athletic Association (NJCAA), the Commission on Athletics (COA), or the Northwest Athletic Association of Community Colleges (NWAACC). *The Blue Book of College Athletics for Senior, Junior and Community Colleges* (*Blue Book*) published by the Athletic Publishing Company was also used to identify public community colleges that sponsored intercollegiate athletics, but did not hold memberships in the NJCAA, NWAACC, or COA (2001). The US Department of Education's Integrated

Postsecondary Educational Data System (IPEDS) and Equity in Athletic Disclosure (EADA) surveys also identified colleges that sponsor intercollegiate athletics.

The community college athletic associations differed in the number of members, the states they covered, and the sports they sponsored. The membership characteristics of community colleges in athletic associations are presented in Table 10. The NJCAA had the broadest reach with members in 43 states (NJCAA, 2002). Meanwhile the COA was limited to California, and the NWAACC included representation primarily from Oregon and Washington, with one member from Idaho and two from British Columbia, Canada (NWAACC, 2004a). The NJCAA was the only one of the three conferences that claimed to be national. There are other athletic associations that community colleges belonged to, but they are not limited in membership to community colleges. Examples of these organizations include the Northern New England Small College Conference and the Yankee Small College Conference. Of the colleges in this study 5%, 27 colleges, belonged to an association other than the NJCAA, COA, or NWAACC. This study included the colleges that were not part of the three major community college athletic associations.

Overlapping memberships by colleges was occasionally found, however, it was confined to sports that have little participation in one league. For example, some colleges in California, Idaho, Oregon, and Washington that are primarily members of COA and NWAACC also had membership in NJCAA, but only competed in wrestling. According to the Executive Director of NWAACC, this dual membership is allowed when a sport does not have enough teams within the conference to field a championship. In the case of wrestling, only four colleges in the NWAACC sponsored wrestling, so

Table 9

Characteristics of Major Community College Athletic Associations, 2002-2003

Association	Number of Members	States Represented	Men's Sports	Women's Sports	Divisions
NJCAA	502	43	14	11	3
COA	107	1	12	11	1
NWAACC	37	3	8	8	1
Unduplicated Total	639	43	15	15	

Note: NJCAA is the acronym for the National Junior College Athletic Association, COA is the Commission on Athletics, and NWAACC is the Northwest Athletic Association for Community Colleges.

Source: 2002-2003 NJCAA, COA, and NWAACC publications.

those colleges were allowed to join NJCAA to increase competition opportunities for their teams (McClain, 2004, personal communication). In the case of overlapping memberships, the institution was classified by its primary membership as determined by the association in which the majority of the athletic teams competed.

The community college athletic associations sponsored a total of 19 sports with participation as indicated in Table 11. NJCAA recognized competition at three different tiers that are associated with the level of athletic scholarships available. The NJCAA classification of divisions was the basis of comparison used to report individual sport information such as expenditures and revenues, staffing levels, and athletically-related student aid. The *NJCAA Handbook and Casebook 2003-2004* provided definitions for Divisions I, II, and III as follows in Article VI, Section 9 of its Constitution:

> Division I - A maximum of tuition and fees, room and board, book and course related materials and transportation costs one time per academic year to and from the college by direct route.

> Division II - A maximum of tuition, fees and books. (Division II scholarships can not include room and or/board through a fee or any other system.)
>
> Division III - No athletic scholarship aid of any kind. (NJCAA 2003, p. 49).

Sports sponsored by NWAACC members were classified as equivalent of NJCAA Division II, since this association did not offer full scholarships and the decision to award scholarships rested with each college. Community colleges in Oregon were allowed to offer a maximum of $1,200 in athletic scholarship per student while the colleges in Washington were allowed to offer a maximum of $600 in athletic scholarship per student. NWAACC members in both Oregon and Washington could have offered up to $1,000 in a work study arrangement for athletes (McClain, 2004, personal communication). The status of athletically-related aid within NWAACC is a result of this association's history as a merger between the Washington State Junior College Athletic Conference and the Oregon Community College Athletic Conference in 1983-1984 (NWAACC, 2004b).

None of the colleges in California's athletic association, COA, are allowed to award aid that is tied to athletics. As a result all sports that are sponsored by COA were considered the equivalent of NJCAA Division III (COA, 2004). The resulting table of sport offerings by association can be found in Table 10.

Table 10

Sport and Division Level of Major Community College Athletic Associations, 2002-2003

Sports	Teams	NJCAA	COA	NWAACC
Badminton	W		X	
Baseball/Softball	M/W	X	X	X
Basketball	M/W	X	X	X
Bowling	M/W	X		
Cross Country	M/W	X	X	X
Football	M	X	X	
Golf	M/W	X	X	X
Ice Hockey	M	X		
Lacrosse	M	X		
Soccer[a]	M/W	X	X	X
Swimming	M/W		X	
Swimming & Diving	M/W	X		
Tennis	M/W	X	X	X
Track & Field , Cross Country	M/W		X	X
Track and Field, Indoor	M/W	X		
Track and Field, Outdoor	M/W	X		
Water Polo	M/W		X	
Wrestling	M	X	X	X
Volleyball[b]	M/W	X	X	X

Notes: NJCAA is the acronym for the National Junior College Athletic Association, COA is the Commission on Athletics, and NWAACC is the Northwest Athletic Association for Community Colleges.

[a] NJCAA recognizes only women's volleyball.

[b] NJCAA recognizes only men's soccer.

Source: NJCAA, COA, and NWAACC publications, 2002-2003.

Research Instrument

The United States Department of Education (USED) administers numerous surveys to institutions that participate in federal financial aid programs. Survey completion is one of the requirements for an institution to maintain eligibility in federal financial aid programs, so a near 100% participation rate is attained. Data from the 2001-2002 administrations of these survey instruments was used in this study. Colleges that did not complete either survey or provided incomplete data were removed from the

study. Four surveys were of particular use to this researcher. Each instrument is discussed here in turn.

The USED administers the Equity in Athletic Disclosure Act (EADA) Survey annually. This survey is limited to information regarding intercollegiate student athletics. The EADA survey is a direct result of legislation by the same name that was passed in 1996, the first year the survey was administered. The survey instrument is currently made available to colleges online. The data are to be reported by the colleges each October and are available to the public by December of the same year. The data collected are public information and are easily accessible. USED provides a glossary, a "frequently asked questions" page, and includes a contact person within the department whom colleges can reach for further information (USED, 2004b).

This EADA Survey collects data from intercollegiate athletic programs at all colleges that receive federal funding. A copy of the instrument can be found in Appendix A. Information regarding number, type, and student participation in intercollegiate athletics programs by gender is available. There is an entire section of the survey dedicated to resource allocation for athletics by sport including expenses and revenue. Information on the number of coaches, their salaries, and their gender are collected at the institutional level and are not available on a sport -by-sport basis. This survey provided a significant portion of the data required for analysis (USED, 2004b).

Another survey by the Department of Education is the Integrated Postsecondary Education Data System (IPEDS), which was used to supplement the EADA data. The IPEDS surveys have been administered since 1981 and are a primary source of data for higher education policymakers and researchers. IPEDS is composed of nine or ten

subject-area specific surveys, depending on whether or not it is an even or odd year. Data for this study will come from the Graduation Rate, Enrollment, Institutional Characteristics, and Finance surveys for 2001-2002. The Graduation Rate survey provides information on athletically-related student aid awarded by sport. The Enrollment survey was used to provide enrollment information regarding full-time students at the community colleges. The Institutional Characteristics survey data was used by Katsinas and Hardy (2004) to determine the location of the colleges.

Data Collection

The data set used was primarily a combination of three data files that have already been collected or prepared. One component of the data was from the IPEDS surveys. The IPEDS data can be easily accessed and downloaded by policymakers, researchers, students, and the public at large. This study used IPEDS data from the 2001-2002 administrations of Institutional Characteristics, Graduation Rate, and Enrollment Surveys (USED, 2004c). These data were electronically downloaded as SPSS ® data files (SPSS is a registered trademark of SPSS, Inc.) and imported into SPSS.

The second data set was the EADA survey. The EADA Survey data cannot be downloaded in the same way as IPEDS. However, the author requested and received the 2002-2003 and 2003-2004 EADA Survey data directly from USED as an SPSS ® data file (USED, 2002b; USED, 2003a). Lastly, the classification codes of community colleges according to the Katsinas et al. typology was added to the data set. The matching variable for combining the data rested on the unique six-digit institution code,

or UNITID, assigned by the US Department of Education. The UNITID is contained in each of the three data sets described above.

Several fields were added to the master data set. One field was “athletic association.” This field was coded according to the community college association, if any, to which each college belonged. The field “division” was added to the records regarding individual sports, and refers to the three NJCAA divisions in athletics that are linked to athletic scholarship availability. Sports at colleges that are members of NWAACC and COA were coded as Division II and Division III, respectively. This field was be coded as 1, 2 or 3, corresponding to the extent of athletically related student aid (full, partial or none respectively) available for that sport in that college. A field called “offer aid” was added to the data file. This field was coded as a one if the college offered any athletically-related aid or as a zero if the college did not offer athletically related aid as reported in the EADA 2002-2003 survey.

Statistical Procedures

The data from the IPEDS and EADA surveys as well as the Katsinas-Lacey classification codes for each community college were entered so each line of data pertained to one community college. However, with the EADA data each sport that a college sponsored also generated individual sport level data. These sport level data were contained in a secondary EADA data file. Because the entire population of community colleges that sponsored intercollegiate athletics in 2002-2003 was used, only simple descriptive statistics, such as frequencies and percentages were used to report the findings. The software used for reporting the descriptive statistics was Microsoft Excel ® (Microsoft Excel is a registered trademark of the Microsoft

Table 11

Data Field, Type and Source

Data Field	Data Type	Source
Katsinas et al. Classifications	Categorical-ordered	Katsinas and Hardy, 2004.
Sponsorship of intercollegiate athletics	Categorical-ordered	EADA, *Blue Book of Senior, Junior and Community College Athletics (Blue Book)*
Conference participation*	Categorical-ordered	NJCAA, COA, NWAACC, *Blue Book*
Division of competition*	Categorical-ordered	NJCAA, COA, NWAACC, EADA, IPEDS
College address	String	IPEDS
Number of athletes	Numerical-continuous	EADA
Gender of athletes	Numerical-continuous	EADA
Individual sports sponsored	Categorical-ordered	EADA
Number of teams offered by gender*	Numerical-continuous	EADA
Full-time degree seeking student enrollment	Numerical-continuous	IPEDS
All full-time enrollment	Numerical-continuous	IPEDS
Provide athletically related student aid	Categorical-dichotomous	EADA, IPEDS
Amount of athletically related student aid	Numerical-continuous	EADA
Athletes receiving athletically related student aid	Numerical-continuous	IPEDS
Sports offering athletically related student aid	Numerical-continuous	IPEDS
Athletic revenues and expenses	Numerical-continuous	EADA
Recruiting expenses	Numerical-continuous	EADA
Coaching staff size	Numerical-continuous	EADA
Coaching salaries	Numerical-continuous	EADA

Note: *These are the only variables that were added to the existing data.

1. NJCAA is the acronym for the National Junior College Athletic Association, COA is the Commission on Athletics, and NWAACC is the Northwest Athletic Association for Community Colleges.

2. IPEDS is the Institutional Postsecondary Educational Data System. EADA is the Equity in Athletic Disclosure Act.

Corporation) and SPSS® (SPSS is a registered trademark of the SPSS, Inc.). The data items that were the source for the descriptive statistics are listed in Table 11.

Answering the Research Questions

The entire population of public community colleges that sponsored intercollegiate athletics were the basis for this research. The intent of this study was to provide a national overview of the extent of intercollegiate athletics at public community colleges and to uncover any variations that existed by institutional type according to the Katsinas et al. classification scheme. Because data were available on the entire population, only descriptive statistics such as frequencies and percentages were required to accomplish this goal. The broad research questions were as follows:

1. What is the involvement of public community colleges in intercollegiate athletics?
2. How does community college involvement in intercollegiate athletics vary by college type?

While there were two overarching research questions, there were different areas that were addressed to answer the larger questions posed:

Research Topic 1: Extent of college participation

Hypothesis 1a. Less than half of all public community colleges sponsor intercollegiate athletics.

Hypothesis 1b. Over 90% of public community colleges with intercollegiate athletics participate in one of the three dominant community college athletic associations.

The data to answer questions in Topic 1 come from the EADA and IPEDS surveys, the *Blue Book for Senior, Junior and Community College Athletics*, and the

athletic associations themselves. Frequency counts, totals, and percentages were used to describe the data.

Research Topic 2: Relationship between location, size, and intercollegiate athletics

Hypothesis 2a. More rural community colleges sponsor intercollegiate athletics than either urban or suburban community colleges.

Hypothesis 2b. Smaller community colleges are more likely to offer athletics than larger colleges.

Hypothesis 2c. Rural community colleges offer more sports on average for both men and women than urban or suburban colleges.

The data to answer questions in Topic 2 came from the EADA and IPEDS surveys as well as the Katsinas et al. classification database. Frequency counts and percentages were used to report the findings.

Research Topic 3: Extent of student participation in intercollegiate athletics

Hypothesis 3a. Less than 10% of students enrolled full-time in public community colleges participate in intercollegiate athletics.

Hypothesis 3b. Male athletes will represent a higher proportion of full-time male community colleges students than female athletes of full-time female community college students.

Hypothesis 3c. More men than women participate in intercollegiate athletics at public community colleges.

Hypothesis 3d. The ratio of male to female athletes at public community colleges is 3:2.

Hypothesis 3e. Public community colleges that sponsor football will have a higher ratio of male to female athletes than colleges without football.

The data to answer questions in Topic 3 came from the EADA and IPEDS surveys. Frequency counts, totals, ratios, and percentages were used to describe the data as indicated.

Research Topic 4: Incidence of sponsorship for individual sports

Hypothesis 4a. Basketball and baseball are the most commonly sponsored sports for men at public community colleges.

Hypothesis 4b. Basketball and softball, followed closely by volleyball are the most commonly sponsored sports for women at public community colleges.

Hypothesis 4c. Basketball and baseball account for the greatest numbers of individual participants in men's sports at public community colleges.

Hypothesis 4d. Basketball and softball account for the greatest numbers of individual participants in women's sports at public community colleges.

The data to answer questions in Topic 4 came from the EADA and IPEDS surveys. Frequency counts, totals, and percentages were used to report the findings.

Research Topic 5: Extent of athletically related student aid

Hypothesis 5a. Rural community colleges are more likely to offer athletically-related student aid than either suburban or urban community colleges.

Hypothesis 5b. Urban community colleges are the least likely to offer athletically-related student aid.

Hypothesis 5c. Rural community colleges spend more money on athletically-related student aid than do suburban or urban community colleges.

Hypothesis 5d. Less than half of all public community college athletes receive athletically-related student aid.

Hypothesis 5e. The average amount of athletically-related student aid per person is the same for men and women at public community colleges.

Hypothesis 5f. The ratio of total amount spent on athletically related student aid by gender is the same as the ratio of male to female athletes at public community colleges.

Hypothesis 5g. Basketball for both men and women is the sport that is most likely to offer athletically related student aid at public community colleges.

The data to answer questions in Topic 5 came from the EADA and IPEDS surveys. Frequency counts, totals, averages, and percentages were used to describe the data.

Research Topic 6: Extent of financial investment in intercollegiate athletics

Hypothesis 6a. Rural community colleges have higher total and average expenses and revenues related to intercollegiate athletics than urban or suburban community colleges.

Hypothesis 6b. The average and total of each expenses and revenues related to intercollegiate athletics for men exceed that for women at public community colleges.

Hypothesis 6c. In sports that both and women play (ie, basketball, golf, track) average and total each of revenues and expenses related to intercollegiate athletics for men will be higher than for women at public community colleges.

Hypothesis 6d. The average and total recruiting dollar amounts related to intercollegiate athletics for men exceed that for women at public community colleges.

Hypothesis 6e. State appropriation per capita exceeds average spending related to intercollegiate athletics per capita at public community colleges.

The data to answer questions in Topic 6 came from the EADA survey and the IPEDS Graduation Rate survey. Averages and totals were used to report the findings.

Research Topic 7: Staffing requirements for intercollegiate athletics

Hypothesis 7a. More full and part-time coaches are employed for men's athletics than women's athletics at public community colleges.

Hypothesis 7b. Football will have the greatest number of full and part-time coaches followed by men's and women's basketball, respectively at public community colleges.

Hypothesis 7c. In sports where both genders compete, average salaries for coaches of men's teams are higher than for women's teams at public community colleges.

Hypothesis 7d. Football provides coaching salaries higher than any other sport at public community colleges.

The data to answer questions in Topic 7 came from the EADA survey. Averages and totals were used to describe the data.

CHAPTER 4

ANALYSIS OF RESULTS

Introduction

Two basic research questions guided this study. The first question was, “What is the involvement of public community colleges in intercollegiate athletics?” The second question was, “How does community college involvement in intercollegiate athletics vary by college type?” These will be addressed in turn in this analysis of results. This chapter will start with an examination of the population studied, proceed to key cuts in the data that were conducted, and then present the findings. Where helpful, maps and tables are used to present the findings. The analytical program SPSS 12.0 and Excel were both used in the analysis of the data.

Population

The study began with the entire population of public community colleges in the United States as identified and classified by geography (rural, suburban, urban) and governance (single or multicampus) by Katsinas et al. (1993; 1996; 2003). The typology has been revised over the years, most recently using the 2000 US Census information and Institutional Postsecondary Educational Data System (IPEDS) Institutional Characteristics and Enrollment Survey data for the 2000-2001 academic year (Katsinas and Hardy, 2004).

In the most updated classification Katsinas, et al. identified 860 community college districts and institutions. However, given that many rural colleges and all suburban and urban multicampus districts by definition have more than one campus the

Table 12

Intercollegiate Athletics at Public Community Colleges in the United States by Katsinas et al. Classification, 2002-2003

College Classification	Number in Population: Districts/Single Campuses	Number in Population: Individual Campuses	IPEDS Identifiable Campuses	*Districts* with Intercollegiate Athletics	*Campuses* with Intercollegiate Athletics
Rural					
Small	140	206	167	52	54
Medium	303	499	330	170	170
Large	110	217	116	87	94
Rural Subtotal	553	922	613	309	318
Suburban					
Single Campus	122	122	122	78	84
Multicampus	73	206	94	51	67
Suburban Subtotal	195	328	216	129	151
Urban					
Single Campus	44	44	44	24	25
Multicampus	68	258	143	46	91
Urban Subtotal	112	302	187	70	116
Total	860	1,552	1,016	508	585

Notes: These figures include 18 campuses for which Equity in Athletic Disclosure Act (EADA) 2002 Survey data was missing.

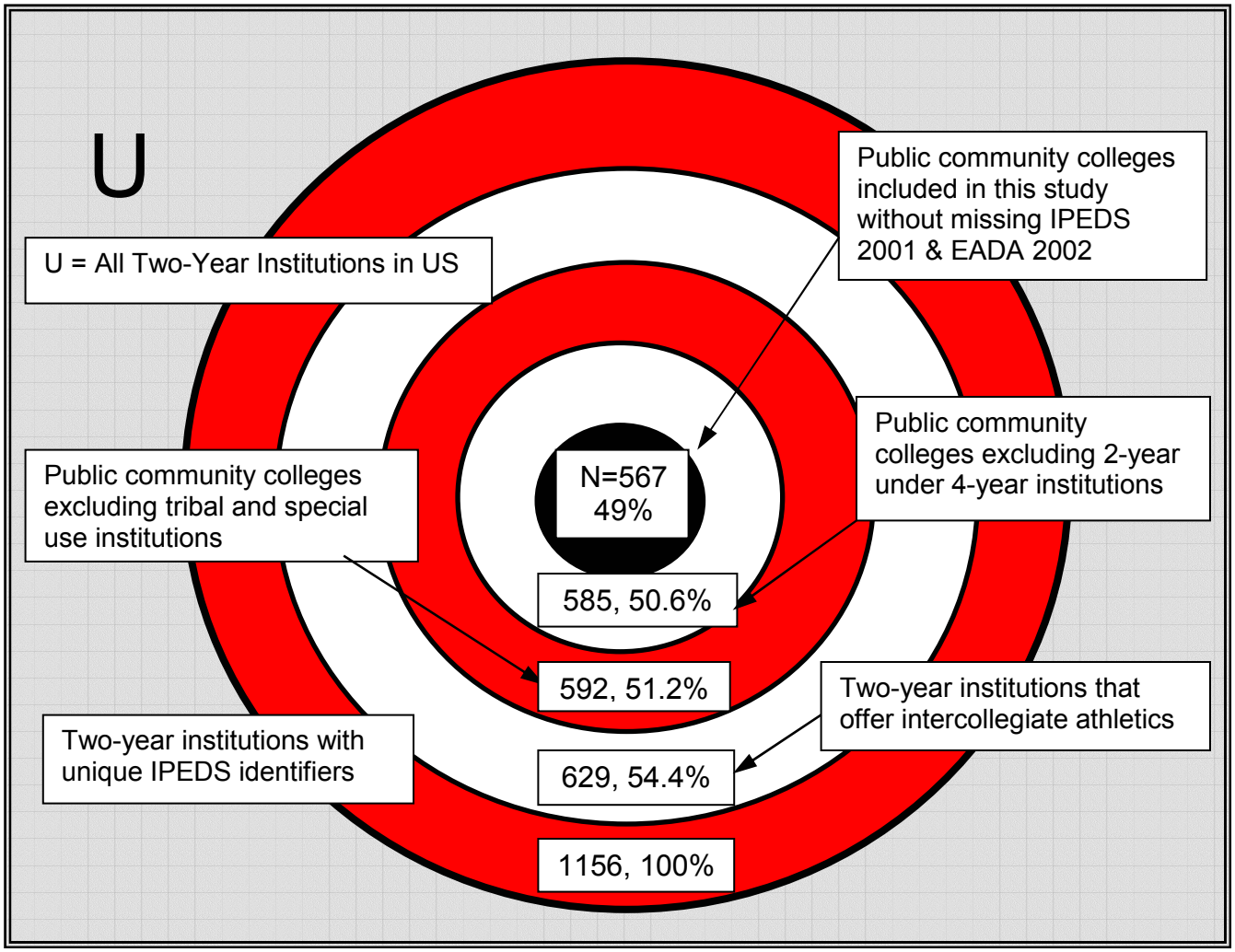
Source: IPEDS 2001 Survey data, National Junior College Athletic Association, Commission on Athletics, and Northwest Athletic Association of Community Colleges publications for 2002-2003. Classification from Katsinas and Hardy, 2004.

number of identifiable individual campuses is much higher and totals 1,552 as seen in Table 12. While 1,552 may represent the total number of identifiable individual campuses when looking at colleges' Internet home pages, IPEDS only assigns unique identifiers to 1,156 or 69.3% of those campuses. Fortunately, the proportion of rural, suburban and urban colleges that have unique IPEDS identifiers closely mirrors the representation of colleges that were individually identified. The greatest discrepancy is in the suburban single campus category with 11.4% in the total population versus 8.1% in the population with unique IPEDS identifiers. This allows for an extrapolation of the analysis to all publicly controlled community colleges.

Katsinas and Hardy (2004) identified 1,805 individual campuses of publicly controlled two-year institutions in the United States. However, only the 1,156 public community colleges in the United States with a unique IPEDS identifier, or UNITID, were considered the population for the study. Figure 4 below illustrates the paring down of the colleges that defined the population. Of the population, 629 of the colleges offered intercollegiate athletics in 2002. The population for the study was narrowed further eliminating tribal colleges and special use institutions. Tribal colleges and the special use institution categories were removed due to low participation rates in intercollegiate athletics. The resulting total was 592 colleges.

The third and final category of college that was eliminated was the 2-year under 4-year category. Two-year under 4-year colleges, commonly called regional campuses, operate under the four-year college or university. Examples of 2-year under 4-year

Figure 4: Population of Public Community Colleges with Intercollegiate Athletics



Source: U.S. Department of Education, Integrated Postsecondary Educational Data System (IPEDS) 2001 and Equity in Athletic Disclosure Act (EADA) 2002 surveys. Classification from Katsinas and Hardy, 2004.

colleges include the regional campuses of Kent State, the University of South Carolina, Ohio University, Ohio State University and Pennsylvania State University. The factor that led to this removal was the low participation in any of the three major athletic associations specifically: National Junior College Athletic Association (NJCAA), Commission on Athletics (COA), and Northwest Athletic Association for Community Colleges (NWAACC). Over 85% of 2-year under 4-year colleges belonged to associations other than the above named, which made it impossible to determine what level of competition their teams participated in or the level of athletic aid those teams provided. In contrast, only 5% of the seven remaining public community college categories belonged to an association other than NJCAA, COA or NWAACC.

The remaining seven categories of community colleges resulted in a population of 585. The next cut was the 18 colleges, 3% of the total, which did not submit Equity in Athletics Disclosure Act (EADA) data in 2002. The result was a final population of 567 colleges that offer intercollegiate athletics for which IPEDS 2001 and EADA 2002 data were filed. Most of the analysis includes only those 567 colleges and any exceptions were noted.

Table 13 lists the number and percentage of public community colleges that sponsored intercollegiate athletics in 2002-2003. This table includes 18 more colleges than the total used in most other analyses in this study. These additional colleges were determined to have athletics according to COA, NWAACC, or NJCAA publications, but did not file an EADA survey in 2002. Overall, 57.6% of all public community colleges with a unique IPEDS identifier sponsored intercollegiate athletics.

Table 13

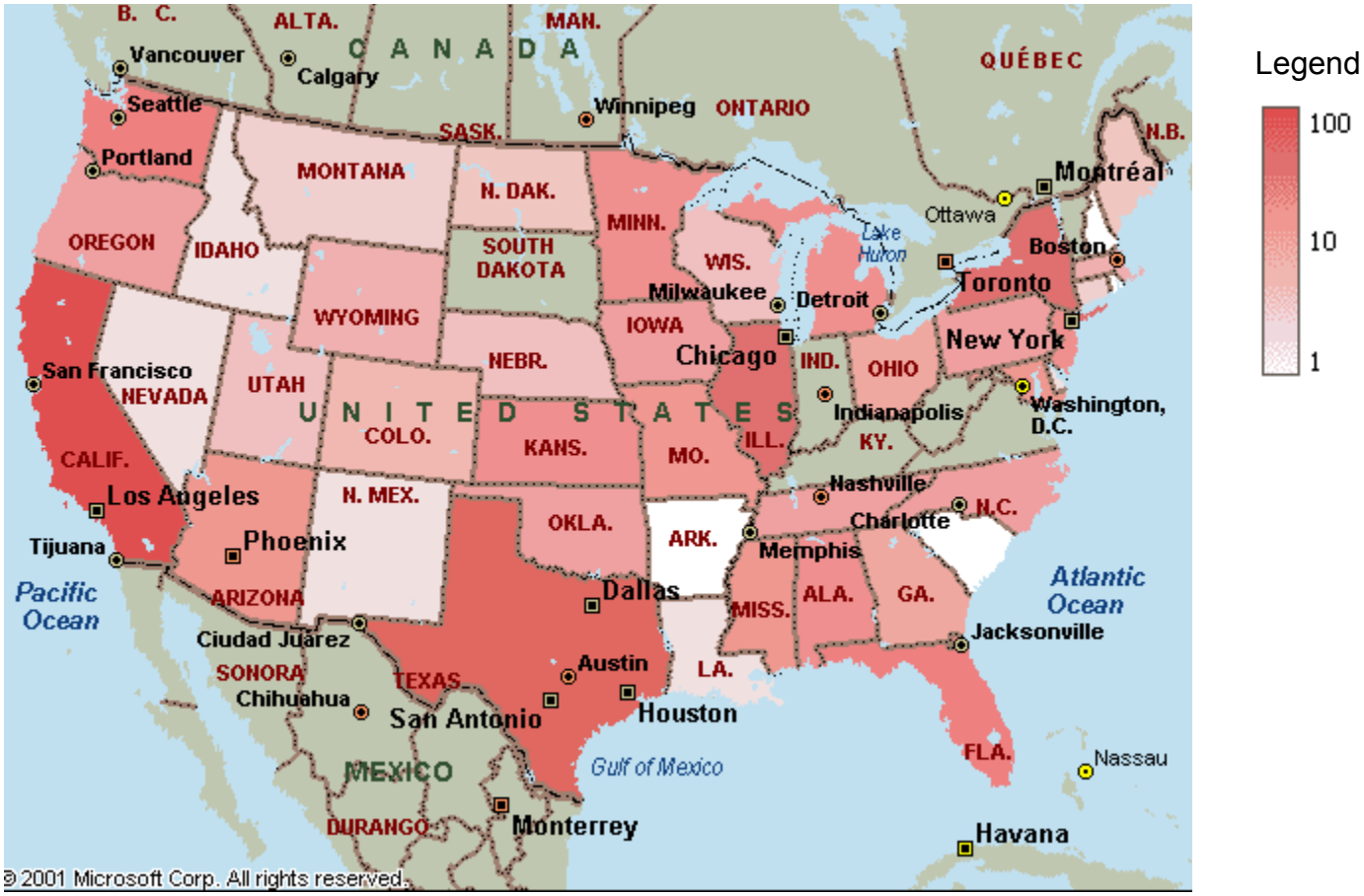
Public Community Colleges by Classification and Athletic Sponsorship, 2002-2003

College Classification	Total	Number that Offer Athletics		Percent that Offer Athletics	
		Yes	No	Yes	No
Rural					
Small	167	54	113	32	68
Medium	330	170	160	52	48
Large	116	94	22	81	19
Rural Subtotal	613	318	295	52	48
Suburban					
Single Campus	122	84	38	69	31
Multicampus	94	67	27	71	29
Suburban Subtotal	216	151	65	70	30
Urban					
Single Campus	44	25	19	57	43
Multicampus	143	91	52	64	36
Urban Subtotal	187	116	71	62	38
Total	1,016	585	431	58	42

Note: The 585 colleges that are reported as having athletics includes 18 colleges that did not sumbit Equity in Athletic Disclosure Act (EADA) Surveys for 2002. These colleges were excluded in later reporting that was dependent on EADA data.
Source: Athletic sponsorship determined by NWAACC, COA, and NJCAA 2002-2003 publications. Classification from Katsinas and Hardy, 2004.

Figure 5 presents the distribution density of public, two-year colleges with intercollegiate athletics in the 2002-2003 academic year. Intercollegiate athletics are not equally distributed across the country. Some states have many public community colleges that sponsor intercollegiate athletics while others have no teams at all. California has the highest participation rate in athletics with over 95% of the colleges offering at least one sport. Other states with many teams are Illinois, New York, Texas, Florida, and Washington. States such as Alaska, Hawaii, Kentucky, and Virginia have community colleges but none of them offer intercollegiate athletics.

Figure 5: Distribution of Athletics at Public Community Colleges, 2002-2003



Note: NWAACC is the Northwest Athletic Association of Community Colleges. COA is the Commission on Athletics. NJCAA is the National Junior College Athletic Association.

Source: Athletic sponsorship determined by NWAACC, COA, and NJCAA 2002-2003 publications.

During data verification, errors in the data were detected and corrected, most frequently by the removal of erroneous data. For example, one college reported having 4,500 head coaches for their baseball team. In cases where the data had conflicting information, such as participation in an athletic association, the association and college web sites were consulted to determine which association was the primary organization. The association was determined to be the primary association if more than 50% of all teams sponsored by the college were played under the association's overview.

As the analysis progressed, it became evident that multiple years of data would be needed to answer certain research questions. Uniformity in year was not attainable however, due to the lagged nature of some of the data sources. For example, IPEDS data lags about two years from collection to its public availability. In this case the number of athletes that received athletically-related aid is reported in the IPEDS Graduation Rate Survey but not in the EADA survey. The most recently available IPEDS Graduation Rate survey, which was from 2001-2002, was used to determine how many students received athletically-related aid. Data from the 2001 administration of the IPEDS Enrollment, Institutional Characteristics, and Finance surveys were also used in this research.

Completing IPEDS is considered compulsory for any college that wishes to receive federal funding and in particular, federal student financial aid. The EADA is also required of colleges that offer intercollegiate athletics; only 18 colleges in the defined population of public community colleges with intercollegiate athletics did not submit EADA surveys for 2002-2003. A copy of the EADA survey is available in Appendix A. The EADA survey, first implemented in 1996, is much more recent in its inception than

IPEDS, which was implemented in 1981. Consequently, the EADA survey is still changing with additional items being added from one year to the next and a notable increase in the automated calculation of some fields. As a result, some data fields were overwhelmingly unreported or not collected by the survey in 2002. The missing or underreported data for 2002-2003 included:

1. number of unduplicated student athletes
2. athletic revenues
3. athletic expenses
4. athletically-related aid allocated by gender

The unduplicated number of student athletes was collected directly from the EADA website and manually entered into the database. For the remainder of the items, 2003-2004 EADA data were used instead. These substitutions in data year are noted in the presentation of the results. In some cases involving ratios and averages of athletically-related student aid, data from multiple years were used. These combinations are noted as applicable.

The reliability of the data provided by the colleges proved to be an issue. The lack of reliability was most evident in the reporting of athletically-related revenues and expenses. Colleges were asked to report the institutional allocation, or budget, as revenue. However, athletically-related aid was sometimes higher than the reported revenue, which made the revenue figures suspect. In addition, coaches can hold regular full-time faculty positions and receive a salary supplement for their coaching duties. Since these salaries are not reported in the EADA survey there may be hidden costs that are not reflected in this data.

Presentation of Findings

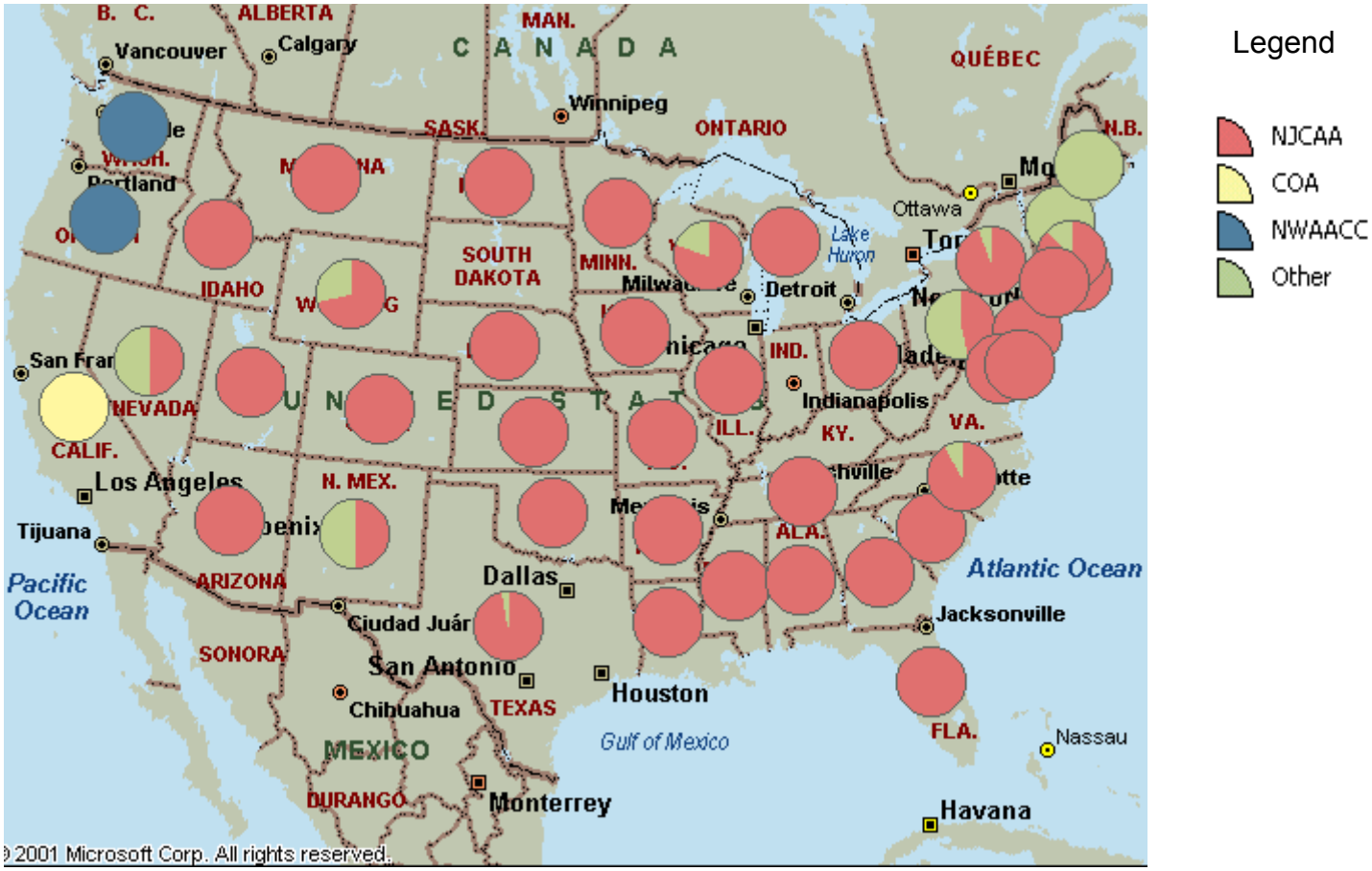
Extent of College Sponsorship

Over 57% of all public community colleges in the United States with unique IPEDS identifiers sponsored intercollegiate athletics in the 2002-2003 academic year. Katsinas and Hardy (2004) identified 860 community college districts or single campuses. At the district level, 59% of these entities sponsor intercollegiate athletics.

Most of these colleges with athletics held membership in an athletic association that regulates the rules of play, player eligibility, and conference championships. Athletic associations specify divisions of competition and conditions for awarding athletically-related student aid as applicable. There are three primary athletic associations for community colleges: NJCAA, COA and NWAACC. Over 95% of the community colleges that sponsor intercollegiate athletics belong to one of these three associations.

Table 14 below reflects that NJCAA is the largest of the three community college athletic associations. Over 71% of all the public community colleges that sponsor intercollegiate athletics held membership with NJCAA in 2002-2003. This percentage is lower than the 81% membership rate for NJCAA reported by McAninch (1987). The other two major community college athletic associations are geographically concentrated (Figure 6). COA is restricted to California community colleges, while NWAACC is composed primarily to colleges in Oregon and Washington, which limits these associations' potential membership. California has an extensive community college system with a high degree of intercollegiate athletic sponsorship and accounts for 17.5% of all public community colleges with athletics. Meanwhile, NWAACC

Figure 6: Public Community College Association Membership, 2002-2003



Note: NWAACC is the Northwest Athletic Association of Community Colleges. COA is the Commission on Athletics. NJCAA is the National Junior College Athletic Association. This map illustrates the dominance of NWAACC in Washington and Oregon and of COA in California. Also colleges in the Northeast belonged to organization other than COA, NWAACC, and NJCAA.

Source: Athletic sponsorship determined by NWAACC, COA, and NJCAA 2002-2003 publications.

Table 14

Public Community Colleges by Classification and Athletic Association Membership, 2002-2003

	Colleges in Athletic Association					Percent in Athletic Association			
College Classification	NJCAA	COA	NWAACC	Other	Total	NJCAA	COA	NWAACC	Other
Rural									
Small	45	0	1	8	54	83	0	2	15
Medium	149	3	11	7	170	88	2	7	4
Large	65	17	10	2	94	69	18	11	2
Rural Subtotal	259	20	22	17	318	81	6	7	5
Suburban									
Single Campus	56	22	2	4	84	67	26	2	5
Multicampus	33	28	4	2	67	49	42	6	3
Suburban Subtotal	89	50	6	6	151	59	33	4	4
Urban									
Single Campus	18	1	5	1	25	72	4	20	4
Multicampus	53	33	2	3	91	58	36	2	3
Urban Subtotal	71	34	7	4	116	61	29	6	3
Total	419	104	35	27	585	72	18	6	5

Notes: 1. Colleges with multiple memberships were counted in the association in which 50% or more of their sports were played. 2. NWAACC is the Northwest Athletic Association of Community Colleges. COA is the Commission on Athletics. NJCAA is the National Junior College Athletic Association.

Source: Athletic sponsorship determined by NWAACC, COA, and NJCAA 2002-2003 publications. Classification from Katsinas & Hardy, 2004.

accounts for only 6% of all community colleges with athletics and the remaining 4.6% belong to an association other than the three previously mentioned. The COA members, all in California were heavily concentrated in the suburban and urban categories. However, only one California community college was classified as an urban single campus.

Sponsorship of intercollegiate athletics varied by college type. Large rural community colleges offered athletics at a rate of 81%. More than 50% of colleges in categories other than small rural colleges sponsored intercollegiate athletics. Only 32.3% of small rural colleges sponsored intercollegiate athletics. Among rural colleges, the larger the college, the more likely they were to sponsor intercollegiate athletics.

Within rural colleges, the larger the college size, the greater the average number of sports (Table 15). The number of sports offered was near equal for men and women, ranging from near three sports for each men and women at small rural colleges, to four sports and nearly four sports for men and women respectively at large rural colleges. Yet in each college category, the average number of men's teams was higher than the number of women's teams. Suburban community college campuses offered more sports for men and women than urban community colleges.

Table 15

Average Number of Teams Sponsored by Classification at Public Community Colleges, 2002-2003

College Classification	Number of Teams		Average Number of Teams	
	Men	Women	Men	Women
Rural				
Small	52	48	3.1	2.8
Medium	166	163	3.2	3.1
Large	88	90	4.0	3.9
Rural Subtotal	*306*	*301*	*3.4*	*3.3*
Suburban				
Single Campus	80	78	5.0	4.7
Multicampus	67	67	4.8	4.6
Suburban Subtotal	*147*	*145*	*4.9*	*4.6*
Urban				
Single Campus	24	24	4.0	3.7
Multicampus	88	88	4.3	4.2
Urban Subtotal	*112*	*112*	*4.2*	*4.1*
Total	565	558	4.0	3.8

Source: Equity in Athletic Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

Athletic Associations

There were differences in the membership in athletic association by college type (Table 16). In 2002-2003, most of the Northwest Athletic Association of Community Colleges members were medium and large rural colleges. California colleges, all members of the Committee on Athletics, were largely suburban and urban, with less than 20% in any of the three rural categories. Over 61% of National Junior College Athletic Association members were rural colleges of any size in 2002-2003.

Table 16

Public Community Colleges by Classification and Athletic Association Membership, 2002-2003

	Number in Athletic Association					Percent within Athletic Association				
College Classification	NJCAA	COA	NWAACC	Other	Total	NJCAA	COA	NWAACC	Other	Total
Rural										
Small	45	0	1	8	54	11	0	3	30	9
Medium	149	3	11	7	170	36	3	31	26	29
Large	65	17	10	2	94	16	16	29	7	16
Rural Subtotal	259	20	22	17	318	62	19	63	63	54
Suburban										
Single Campus	56	22	2	4	84	13	21	6	15	14
Multicampus	33	28	4	2	67	8	27	11	7	12
Suburban Subtotal	89	50	6	6	151	21	48	17	22	26
Urban										
Single Campus	18	1	5	1	25	4	1	14	4	4
Multicampus	53	33	2	3	91	13	32	6	11	16
Urban Subtotal	71	34	7	4	116	17	33	20	15	20
Total	419	104	35	27	585	100	100	100	100	100

Notes: 1. Colleges with multiple memberships were counted in the association in which 50 or more of their sports were played. 2. NWAACC is the Northwest Athletic Association of Community Colleges. COA is the Commission on Athletics. NJCAA is the National Junior College Athletic Association.

Source: Athletic sponsorship determined by 2002-2003 NWAACC, COA, and NJCAA publications. Classification from Katsinas & Hardy, 2004.

Extent of Student Participation

Athletes accounted for 6.3%, or 73,926, of all public community college students reported as full-time undergraduates in the IPEDS Fall 2002 Enrollment survey at campuses that offered intercollegiate athletics in 2002-2003. Female athletes accounted for 27,382, or 4.4% of all full-time females. Male athletes accounted for 46,544, or 8.8% of all full-time male students.

These numbers became more pronounced when the denominator was reduced to comply with the NJCAA, COA, and NWAACC requirement that athletes must be degree-seeking as well as enrolled full-time. In this case, the percentage of students that were athletes increased to 7.7% overall. Male and female athletes accounted for 10.9% and 5.3% of all male and female full-time degree-seeking enrollments, respectively.

Far more men than women participated in intercollegiate athletics in 2002-2003. Nationwide, the total unduplicated number of men participating in intercollegiate athletics was 46,554, while the number of women was 27,382. Note that this number only includes athletes on first or varsity teams. However, few colleges reported athletes other than on first teams. As a percentage, men accounted for 63% and women for 37% of all athletes. This ratio was not much different than the 65% male and 35% female participation rates reported by Brown in 1988.

Table 17

Impact of Football Programs on Athlete Gender Ratios at Public Community Colleges With and Without Football, 2002-2003

Category	Number of Colleges Reporting		Average Number and Percent All Sports Combined			
	Male Athletes	Female Athletes	Male Athletes		Female Athletes	
Colleges with Football	429	421	55	58%	40	42%
Colleges without Football	136	136	165	70%	72	30%
Total	565	136	81	63%	48	37%

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

Colleges sponsoring football had a greater imbalance in athlete gender ratios than colleges that do not have football teams (Table 17). Women account for only 30% of athletes at colleges sponsoring football. There was a higher percentage of women athletes at colleges without football, at 42%%. Colleges with football also demonstrated a higher average number of male and female athletes than did colleges without football.

Participation in intercollegiate athletics varied broadly by college classification. The percentage fluctuated depending on which measure is used in the denominator. When all full-time undergraduate students was used as the denominator, the percent of female student-athletes varied from a low in urban multicampus institutions of 2.4% to a high of 10.4% at small rural community colleges (Table 18). For men the percent of athletes on campus ranged from a low of 4.5% at urban single campuses to a high of 19.7% at small rural community colleges.

Table 18

Athletes as a Percent of All Full-time Students at Public Community Colleges, 2002-2003

College Classification	Number of Colleges Reporting			Percent of Full-Time Students		
	Male	Female	Total	Male	Female	Total
Rural						
Small	51	47	51	20%	10%	14%
Medium	166	163	166	11%	5%	8%
Large	87	89	89	7%	4%	5%
Suburban						
Single Campus	80	78	80	7%	4%	5%
Multicampus	67	67	67	6%	3%	5%
Urban						
Single Campus	24	23	24	4%	2%	3%
Multicampus	88	88	88	6%	2%	4%
Total	563	555	565	9%	4%	6%

Notes: Full-time students in ths table includes, degree, non-degree, and certificate- seeking students as reported in the Institutional Postsecondary Educational Data System (IPEDS) 2002 Enrollment Survey.
Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey and IPEDS 2002 Survey. Classification from Katsinas & Hardy, 2004.

Table 19

Athletes as a Percent of All Full-time Degree/Certificate Seeking Students at Public Community Colleges, 2002-2003

College Classification	Number of Colleges Reporting			Percent		
	Male	Female	Total	Male	Female	Total
Rural						
Small	51	47	51	22%	11%	16%
Medium	166	163	166	12%	6%	9%
Large	87	89	89	8%	4%	6%
Suburban						
Single Campus	80	78	80	8%	4%	6%
Multicampus	67	67	67	9%	4%	6%
Urban						
Single Campus	24	23	24	6%	3%	4%
Multicampus	88	88	88	10%	5%	7%
Total	563	555	565	11%	5%	8%

Notes: Full-time students in ths table includes only those reported as degree or certificate seeking students in the Institutional Postsecondary Educational Data System (IPEDS) 2002 Enrollment Survey.
Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

However, athletes are required to be degree or certificate seeking in order to be eligible to play intercollegiate athletics at community colleges. When the denominator was changed to this more narrow measure of full-time degree/certificate seeking students, the percentages of students athletes increased (Table 19). The effect was most pronounced for urban multicampus colleges where the percentage of students athletes nearly doubled from 3.7% to 7.0% of all full-time degree/certificate seeking students.

Individual Sport Sponsorship and Participation

The sport that accounted for the most male participants was baseball (Table 20). Over 12,000 men played on intercollegiate baseball teams. Football accounted for the next highest number of male athletes at 9,761, with basketball in third place with 7,349 male participants. The top five sports accounted for 83.1% of all male athletes in 2002-2003. Overall, there were roughly 46,500 male athletes at community colleges. However, these figures may include duplicated counting of athletes that play in more than one sport and the result may be an overstatement of athletic participation rates.

The leading sport for female athletes was softball with 6,575 participants in 2002-2003. Basketball was next most popular at 5,904 players (Table 20). Volleyball ranked third with 4,795 female participants. The top five sports accounted for 86.3% of all female athletes in 2002-2003. The total number of female athletes in community colleges totaled over 27,300 with the possibility of duplicate counts.

Table 20

Top Five Sports for Men and Women at Public Community Colleges by Number of Participants, 2002-2003

Men		Women	
Top Five Sports	Number of Participants	Top Five Sport	Number of Participants
1. Baseball	12,360	1. Softball	6,575
2. Football	9,761	2. Basketball	5,904
3. Basketball	7,349	3. Volleyball	4,795
4. Soccer	5,056	4. Soccer	3,694
5. Track (all combined)	4,169	5. Track (all combined)	2,670

Note: These data may contain duplicate counts due to student participation in more than one sport.
Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

Table 21

Top Five Sports for Men and Women at Public Community Colleges by Number of Teams, 2002-2003

Men		Women	
Top Five Sports	Number of Teams	Top Five Sport	Number of Teams
1. Basketball	509	1. Basketball	462
2. Baseball	463	2. Softball	419
3. Golf	256	3. Volleyball	405
4. Soccer	237	4. Soccer	210
5. Track (all combined)	167	5. Track (all combined)	165

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

The list of top sports for men changed if one ranks by the number of teams offered in each sport (Table 21). When ranked by number of teams, basketball came in the lead for men with 509 teams, and baseball came in second with 463 teams. Football, which accounted for the second highest number of athletes, fell to a tie for

sixth place with tennis in number of teams available per sport. The top five sports by number of teams accounted for 74.4% of all team sports for men in 2002-2003.

For women, the same five sports remain on the top five list but basketball advanced to first place with a greater number of teams than softball. The top five women's sports by number of teams accounted for 79.7% of all women's intercollegiate athletic teams.

Sports that were not sponsored by any of the three major athletic associations, such as rifle and archery for men and field and ice hockey for women, had fewer participants and teams.

Athletically-Related Student Aid

Reporting comparisons of athletically-related aid required mixing data from different years. The number of students receiving athletically-related aid is only reported in the IPEDS Graduation Rate Survey. The most recent year available of this survey was 2001-2002. However, the amount of athletically-related aid, number of athletes per team, and unduplicated athlete count were reported in the EADA Survey, and the closest matching year available was 2002-2003.

The actual number of students that received athletically-related student aid in 2001-2002 was 22,868, as reported in the IPEDS Graduation Rate survey. This total included 13,263 men and 9,605 women, or 58% and 42% of the total, respectively. Unfortunately, a direct comparison to 2001-2002 EADA data was not possible so 2002-2003 EADA survey data was used to make the comparisons. The allocation of athletically-related aid between men and women did not reflect the proportion of male to female athletes. Male athletes accounted for 63% of all athletes, and received 55.6% of

the athletically-related aid in 2002-2003. Women accounted for 37% of all athletes, and received 44.4% of all athletically-related aid in the same time period.

Because the total amount of athletically-related student aid in 2001-2002 was unavailable, the amounts from the 2002-2003 administration of the EADA were used to calculate an estimate for the average amount of athletic awards in 2001-2002. The average athletic aid awarded was $2,951 for men and $3,225 for women. Overall, public community colleges awarded over $27.1 and $21.6 million in athletic aid to men and women, respectively, for a total of $48.7 million in 2002-2003. Thus, 56% of total aid went to male athletes, and 44% went to female athletes.

The total amount of athletically-related student aid in 2001-2002 was unavailable, so the amounts from the 2002-2003 administration of the EADA were used to estimate the average amount of athletic awards in 2001-2002. In all college categories, except for urban single campus, women received a higher average amount of athletic aid than men. The estimated average women's aid was highest for those at small rural colleges at $6,500, and lowest for rural medium colleges at $2,393. Small rural colleges had the highest average awards for men at $5,471, while the lowest estimated average aid for men was at urban multicampus colleges with an average award of slightly more than $2,000. Suburban colleges had the greatest difference in the means for men's and women's average athletic aid. The female athletes at these colleges were awarded an average of $1,100 more than their male counterparts.

Table 22

Estimated Average Athletic Aid by Community College Classification, 2002-2003

College Classification		N		Mean	
		Men	Women	Men	Women
Rural					
	Small	35	33	$5,471	$6,500
	Medium	127	127	$2,636	$2,393
	Large	65	64	$2,892	$3,198
Suburban					
	Single Campus	28	29	$2,205	$3,384
	Multicampus	20	21	$3,048	$4,181
Urban					
	Single Campus	14	14	$3,236	$2,838
	Multicampus	32	30	$2,036	$2,559
Total		321	318	$2,951	$3,225

Note: The amount of aid was extracted from the Equity in Athletics Disclosure Act (EADA) survey, the number of recipients was from the Integrated Postsecondary Educational Data System (IPEDS) survey.
Source: IPEDS 2002 Graduation Rate Survey and EADA 2002 Survey. Classification from Katsinas & Hardy, 2004.

Rural colleges spent a greater amount on athletically-related aid than did suburban and urban institutions with one exception (Table 22). The exception was that urban multicampus colleges awarded more athletically-related aid to women than did the small rural colleges. Medium-sized rural colleges had an aggregate spending of over $18.8 million on athletically-related student aid. The lowest aggregate amount was the urban single campus colleges, which totaled nearly $1.4 million dollars.

Table 23

Total Number of Athletic Aid Recipients at Public Community Colleges by Classification and Gender, 2002-2003

	Men		Women		All Athletes
College Classification	Total	Percent	Total	Percent	Total
Rural					
Small	1,510	63	896	37	2,406
Medium	5,999	60	4,004	40	10,003
Large	2,777	57	2,136	43	4,913
Suburban					
Single Campus	698	51	672	49	1,370
Multicampus	809	53	722	47	1,531
Urban					
Single Campus	394	57	300	43	694
Multicampus	1,076	55	875	45	1,951
Total	13,263	58	9,605	42	22,868

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

Table 24

Total Amount of Athletic Aid Awarded at Public Community Colleges by Classification and Gender, 2002-2003

College	Men		Women		All Athletes
Classification	Total	Percent	Total	Percent	Total
Rural					
Small	$2,284,245	58	$1,631,978	42	$3,916,221
Medium	$11,002,805	59	$7,803,968	41	$18,806,773
Large	$7,178,244	55	$5,876,143	45	$13,054,388
Suburban					
Single Campus	$1,266,357	48	$1,347,876	52	$2,614,233
Multicampus	$2,769,674	54	$2,364,611	46	$5,134,285
Urban					
Single Campus	$733,318	53	$648,889	47	$1,382,207
Multicampus	$1,875,487	49	$1,976,204	51	$3,851,690
Total	$27,110,130	56	$21,649,669	44	$48,759,797

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

Divisions of Competition

The NJCAA is the only one of the three public community college athletic associations that recognizes more than one division of competition. Three divisions of competition, defined by the potential availability of athletically-related aid, are recognized by the NJCAA. Colleges that sponsor teams at the Division I level are allowed to award full athletic aid (which includes tuition, fees, room, board, and transportation) to a maximum number of student athletes that is determined by the NJCAA for each sport. However, individual conferences within the NJCAA are allowed to set a lower maximum number of full scholarships if they choose.

The NJCAA Division II level allows for the award of partial scholarships (covering tuition and fees) with the same maximum number per sport as for Division I. Since colleges that are NWAACC members may only award partial scholarships, all NWAACC teams were classified as Division II level teams.

Teams in Division III of the NJCAA are not allowed to award any athletically-related aid. In California, the COA regulations prevent any award of athletically-related student aid therefore, all intercollegiate sports in played at California community colleges were classified as equivalent to NJCAA Division III.

It is important to note that track (indoor, outdoor, and cross country) was excluded from these calculations due to the variability in the way track has been reported. In the IPEDS Graduation Rate Survey, all track athletes are reported in one category of students receiving athletically-related aid. In the EADA survey, however, colleges have two options for reporting participation in track. One option has been for colleges to choose to report track participation altogether, that is total number of

athletes in indoor, outdoor, and cross country combined. Alternatively, colleges could choose to report participation in each track venue individually. Thus a college that sponsors indoor, outdoor, and cross country events could have one or three entries in the EADA data, but would only have one entry in the IPEDS data on athletically-related student aid.

Overall, 63.1% of the colleges that sponsored intercollegiate athletics in 2002-2003 had at least one sport in which they could have chosen to award athletically-related student aid. For women, the greatest number of teams in Division I or II, and thus potential scholarship availability, was basketball at 295 teams. Women might also have found athletic aid more easily for softball at 263 and volleyball at 226.

Male basketball players had more opportunities to compete for athletic aid than athletes in any other sport (Table 25). There were184 Division I and 133 Division II men's basketball teams for a total of 317 teams at which aid may be available to athletes. Baseball ranked second in number of teams at which athletically-related aid may have been available with 294 teams at the Division I and II level combined. Golf and soccer were additionally popular potential scholarship sports, with 119 and 101 teams respectively.

The ranking of potential athletic scholarship opportunity changes when the percentage of teams that may offer aid is the ranking criteria. Sports that were only played in the NJCAA at the Division I level produced 100% potential scholarship availability. These sports include bowling and lacrosse. Ice hockey was only played as a league sport in NJCAA. Except for one community college in California that offered ice hockey, all of the other teams may offer full scholarships. Thus there is a

Table 25

Top Five Ranking Sports for Full and Partial Athletic Scholarships Awarded at Public Community Colleges Ranked by Number of Teams, 2002-2003

Men's Teams		Women's Teams	
Sport	I & II	Sport	I & II
1. Basketball	317	1. Basketball	295
2. Baseball	294	2. Softball	263
3. Golf	119	3. Volleyball	226
4. Soccer	101	4. Soccer	128
5. Football	65	5. Tennis	71

Note: Division I sports in the National Junior College Athletic Association (NJCAA) may award full scholarships, that include room, board, tuition, fees, and limited travel expenses to student athletes. Division II of the NJCAA may award partial scholarships not to exceed tuition and fees. Colleges in the Northwest Athletic Association of Community Colleges (NWAACC) award aid up to a maximum of $1,200 in a work-study arrangement. The Commission on Athletics (COA) does not allow any athletically-related aid to be awarded.
Source: 2002-2003 NJCAA, COA, and NWAACC publications.

Table 26

Top Public Community College Sports for Athletic Scholarships Ranked by Percent of Teams in Division I & II, 2002-2003

Men's Division I & II			Women's Division I & II		
Sport	Number	Percent	Sport	Number	Percent
1. Bowling	14	100	1. Bowling	11	100%
2. Lacrosse	19	100	2. Lacrosse	8	100%
3. Ice Hockey	9	90	3. Swimming	34	77%
4. Baseball	294	65	4. Basketball	295	66%
5. Basketball	317	64	5. Softball	263	66%

Note: Division I sports in the National Junior College Athletic Association (NJCAA) may award full scholarships, that include room, board, tuition, fees, and limited travel expenses to student athletes. Division II of the NJCAA may award partial scholarships not to exceed tuition and fees. Colleges in the Northwest Athletic Association of Community Colleges (NWAACC) award aid up to a maximum of $1,200 in a work-study arrangement. The Commission on Athletics (COA) does not allow any athletically-related aid to be awarded.
Source: 2002-2003 NJCAA, COA, and NWAACC publications.

90% rate of potential scholarship availability for ice hockey. Conversely, sports that are only played in California, such as water polo and volleyball, resulted in 0% of teams offering athletic aid.

As with the men's sports, the order changes when the ranking criterion is the percentage of teams within a sport that offer athletic aid. For women, bowling and lacrosse are played only in the NJCAA and as Division I teams. As a result, 100% of all teams in bowling and lacrosse may have offered athletic aid. Sports played within all three associations, such as basketball, soccer, golf, softball, and tennis, ranged from 46% to 66% of teams potentially offering athletic aid.

Rural colleges in all three categories were more likely to sponsor competition in sports at the Division I or Division II level. The three categories of small, medium, and large rural colleges participated in scholarship athletics at a rate of 71%, 80%, and 75% respectively. Note that not all colleges which sponsor Division I and II teams choose to award athletic aid, even though they may do so. Suburban institutions showed the lowest sponsorship of sports with athletically-related aid, at 42%-43%.

Athletic Expenses and Revenues

In all college types, men's teams had higher average and total revenues than women's teams. Total revenues for all colleges with intercollegiate athletics in 2003-2004 were over $37.6 million, with an average of over $74,000 in revenues per college. Total average revenues, on the other hand, were $227,051 per college. The total annual revenues for the population reached only $125.3 million.

Table 27

Division of Competition by College Classification, 2002-2003

College Classification	Number of Colleges Sponsoring Teams			Percentage	
	Division I or II	Division III	Total	Division I or II	Division III
Rural					
Small	37	15	52	71	29
Medium	134	32	166	81	19
Large	68	22	90	76	24
Suburban					
Single Campus	34	46	80	43	58
Multicampus	29	38	67	43	57
Urban					
Single Campus	16	8	24	67	33
Multicampus	40	48	88	45	55
Total	358	209	567	63	37

Notes: 1. Colleges with more than one athletic association membership were counted as a part of the association in which more than 50% of their team competed. 2. Katsinas et al. Community College Classification (forthcoming). 3. NWAACC is the Northwest Athletic Association of Community Colleges. COA is the Commission on Athletics. NJCAA is the National Junior College Athletic Association.

Source: Athletic sponsorship determined by 2002-2003 NWAACC, COA, and NJCAA publications. Classification from Katsinas & Hardy, 2004.

Women had consistently lower team average expenses and aggregate expenses across all college classifications. Women's team expenses averaged $94,520 per college while men's team expenses averaged $132,532 per college. Men accounted for 56.8% of total expenses but comprised 63% of all athletes. Women accounted for 43.2% of all expenses and comprised 37% of all athletes.

Average revenues were the highest for football at an average of $30,756 per team (Table 29). Ice hockey came in second place with an average of $29,711 in revenues. Baseball ranked third at $24,907 in average team revenues. For women, the highest revenue sports were, in descending order, softball, basketball, and cross country. However, none of the women's teams had revenues over $16,400.

Table 28

Average Revenues and Expenses for Intercollegiate Athletics at Public Community Colleges, 2003-2004

	Men's Teams	Women's Teams	Total
	Revenues		
Average	$53,394	$36,867	$90,261
	Expenses		
Average	$132,532	$94,520	$227,052
Net Difference	Revenues - Expenses		
	$90,261	$227,052	-$136,791

Source: 2003 Equity in Athletic Disclosure Act (EADA) Survey.

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Table 29

Top Five Men's and Women's Revenue Sports at Public Community Colleges, 2003-2004

Men's Teams			Women's Teams		
Top Five Sports	Number of Teams	Avgerage Revenue	Top Five Sport	Number of Teams	Average Revenue
Football	128	$30,756	Softball	307	$16,396
Baseball	372	$24,907	Basketball	428	$16,118
Rodeo	36	$20,809	Track and Field, Cross Country	26	$15,261
Basketball	470	$18,085	Volleyball	299	$11,094
Wrestling	50	$15,063	Track and Field, Outdoor	43	$8,897

Source: Equity in Athletics Disclosure Act (EADA) Survey 2003.

With few exceptions, in sports for which both men and women played, revenues were higher for men. The notable exceptions to this rule were among cross country and swimming teams. In cross country, the women's teams averaged $15,261 compared with $11,834 for the men. In swimming the women's team netted an average of $5,325 to the men's average revenue of $3,783.

There was a wide range in the average expense of athletic teams both within and between genders. Football had the highest average expenses per team of any sport at $99,705. Football was more than double the next most expensive sport, baseball, which displayed $48,511 in average team expenses. Men's basketball ranked third place with $43,354 in average team expenses.

The most expensive women's sport was basketball, with an average of $39,703 in team expenses. At $34,388 and $25,810, softball and volleyball were second and third, respectively. The least expensive teams to field for both men and women were bowling teams, at less than $2,400 per team for both men and women. Women's indoor track and field was also economical, with $2,239 in average team expenses.

Table 30

Top Five Men's and Women's Expense Sports at Public Community Colleges, 2003-2004

Men's Teams			Women's Teams		
Top Five Sports	Number of Teams	Average Expenses	Top Five Sports	Number of Teams	Average Expenses
Football	129	$99,705	Basketball	444	$39,703
Baseball	438	$48,511	Softball	382	$34,388
Basketball	484	$43,354	Volleyball	358	$25,810
Rodeo	37	$38,516	Track and Field, Cross Country	34	$22,211
Ice Hockey	7	$36,798	Rodeo	34	$19,689

Source: Equity in Athletics Disclosure Act (EADA) 2003 Survey.

Data from the EADA 2003-3004 survey was used for athletic revenue and expense calculations. The data for 2002-2003 in these particular fields was deficient. For example, the “men’s team athletic expense” item yielded only eight responses, so that 559 values for this field went missing. There were only 13 missing values in this same field for the survey year 2003-2004, so this data was deemed more appropriate for the purposes of this study.

Large rural colleges had the highest average team revenues for men and women. Small rural colleges had the lowest average revenues for men and women. However, in total revenues medium rural colleges ranked the highest with urban single institutions having the lowest total revenues for men and women. Urban single campus colleges had the lowest aggregate revenues for both men and women.

Table 31

Average and Total Revenues for Intercollegiate Athletics at Public Community Colleges by Classification Type for all Teams Combined, 2003-2004

College Classification		Number Reporting	Average		Total		
			Men	Women	Men	Women	Grand Total
Rural							
	Small	49	$35,302	$21,782	$1,729,792	$1,067,329	$2,797,121
	Medium	165	$49,723	$30,882	$8,204,246	$5,095,455	$13,299,701
	Large		$74,485	$57,348	$6,629,122	$5,103,946	$11,733,068
Suburban							
	Single Campus	78	$55,563	$40,072	$4,333,949	$3,125,645	$7,459,594
	Multicampus	64	$44,080	$30,900	$2,821,149	$1,977,613	$4,798,762
Urban							
	Single Campus	23	$46,291	$26,200	$1,064,693	$602,595	$1,667,288
	Multicampus	84	$55,838	$40,214	$4,690,430	$3,377,961	$8,068,391
Total		463	$53,394	$36,867	$29,473,381	$20,350,544	$49,823,925

Source: Equity in Athletics Disclosure Act (EADA) 2003 Survey. Classification from Katsinas & Hardy, 2004.

Table 32

Average and Total Expenses for Intercollegiate Athletics at Public Community Colleges by Classification Type for all Teams Combined, 2003-2004

College Classification	Number Reporting	Average		Total		Grand Total
		Men	Women	Men	Women	
Rural						
Small	49	$107,835	$68,900	$3,376,120	$5,283,900	$8,660,020
Medium	165	$138,452	$91,279	$22,844,654	$15,060,955	$37,905,609
Large	89	$185,508	$139,672	$16,510,242	$12,430,785	$28,941,027
Suburban						
Single Campus	78	$112,050	$83,929	$8,739,914	$6,546,447	$15,286,361
Multicampus	64	$129,175	$101,083	$8,267,198	$6,469,320	$14,736,518
Urban						
Single Campus	23	$111,204	$76,260	$2,557,681	$1,753,982	$4,311,663
Multicampus	84	$106,596	$77,825	$8,954,039	$6,537,277	$15,491,316
Total	552	$132,532	$94,520	$71,249,848	$54,082,666	$125,332,514

Source: Equity in Athletics Disclosure Act (EADA) 2003 Survey. Classification from Katsinas & Hardy, 2004.

Within rural colleges, the larger the college, the higher the average teams expenses for both men and women. Urban single campus colleges had the lowest total team expenses of any college classification at $4.3 million for men and women combined. As a group, medium rural colleges spent $27.9 million in team expenses for intercollegiate athletics.

State Reimbursement and Intercollegiate Athletics

In addition to tuition and locally generated tax revenue, a critically important source of funding for community colleges is the state. Each state has complex funding formulas that take into account myriad variables. Most significant among those variables is student enrollment, which is measured in full-time equivalents (FTEs). The IPEDS survey data collected FTE enrollment and included a formula for translating headcount (the raw number of students on campus) into FTEs. For community colleges in 2001-2002 the multiplier was .335737 (US Department of Education, 2004c), which meant that approximately three part-time students were counted as one FTE.

For this study, the researcher developed a measure of state reimbursement per FTE student. The total state appropriation for each college with athletics was downloaded from the IPEDS data for fiscal year 2002. These items was treated as equivalent regardless of whether colleges used the Federal Accounting Standard Board (FASB) or General Accounting Standard Board (GASB) accounting principles. Inasmuch as the state formulas varied from one state to the next, a measure of state reimbursement per student FTE was developed. Figure 6 illustrates the formula used to estimate state reimbursement for community college students.

Figure 7

Formula for Estimating State Reimbursement per Community College Student FTE, 2001-2002

$$\frac{\text{State Appropriation (\$)}}{\text{Student (FTE)}} = \frac{\sum \text{State Appropriations FY 2002}}{\sum \text{Student FTE AY 2001-2002}}$$

Before estimating the state reimbursement per student FTE, careful assessment was conducted to ensure that colleges that reported data as a district or single campus were properly counted. The IPEDS surveys track the relationships between campuses and districts when a central unit reported data for all of the constituent campuses using a “parent/child indicator” (US Department of Education, 2004). After the initial download of data, colleges that were missing a state appropriation value were reviewed and IPEDS parent unit identification numbers, UNITIDs, were used to collect state appropriations for campuses and districts with a single reporting number. There were three districts that did not have athletics on each of their campuses. For those three colleges, the student FTE enrollment was added to the sum total FTE of campuses with intercollegiate athletics in order to produce a more accurate estimate for state appropriation per student.

The five SUNY community college campuses were removed because their state appropriations were reported in the aggregate with all SUNY campuses combined. Texas Southmost College, which reports under the University of Texas at Brownsville, was also excluded. After these corrections and exclusions there were 17 colleges that reported a state appropriation of $0 or had missing data; those campuses were

removed from both the numerator and denominator for these calculations. Twelve of the colleges that reported $0 in state appropriations were in the state of Texas.

Using the formula described above, the estimated state reimbursement per student FTE ranged from a high of $7,426 for Connecticut to a low of $1,319 for Arizona. Table 23c reports the Estimated State Reimbursement per FTE Student for AY 2001-2002. The global average reimbursement per FTE for public community college students in the US was $3,231.

When the aggregate revenues and expenses were compared on a state-by-state basis, 23 states had greater expenses than revenues, 4 states indicated a balance in revenue and expenses, and 16 states indicated a net financial benefit from athletics. Revenue reports from the colleges were frequently misreported as determined by a comparison of athletic revenue to athletic aid. Athletic aid is a subcategory of athletic revenue but errors in reporting were evident when athletically-related aid exceeded the total athletic revenues reported.

Next, the cost of athletics per student athlete in AY 2002-2003 was determined. Data from the EADA site on the US Department of Education home page was collected directly, because this item was underreported in the EADA database for 2002-2003. Why the EADA data were missing in is unknown, but such omissions may have been the result of operator error in downloading, coding, or sending of the data.

Athletic expense figures were used as the basis for calculating the average expenditures per student athlete. These data are reported in the EADA Survey and the closest match for the state appropriations data were used. In this case, the 2002-2003 academic year data were used for comparison. Expense figures were used exclusively

rather than the net of expenses and revenues combined, due to the lack of reliability of the revenue data as indicated earlier.

The range of average expenditures on student athletes was quite wide, ranging from a low of $797 to a high of $10,965, belonging to Maine and Nevada, respectively. Nevada's nearly $11,000 expenditure per student was an outlier, with the next highest average posted by Florida at $7,977. Only two states, Connecticut and Maine, reported average athletic expenses of less than $1,000. The Northeast does not have the same sports tradition that California, the Midwest and the South do as attested to by the number of colleges sponsoring intercollegiate athletics in those regions. Nationwide the average athletic expenditure per student athlete was $2,855.

Table 33

Estimate of State Reimbursement per Full-Time Equivalent (FTE) Student at Public Community Colleges, 2001-2002

	Number of Campuses Reporting		Aggregate Figures		
State	State Appropriation FY 2002	Student FTE Fall 2001	State Appropriation FY 2002	Student FTE Fall 2001	Estimated $/FTE
AL	19	19	$177,447,982	43,086	$4,118
AR	1	1	$7,547,616	1,352	$5,583
AZ	14	14	$99,231,985	75,251	$1,319
CA	82	102	$2,267,139,714	745,742	$3,040
CO	6	6	$34,706,651	9,614	$3,610
CT	3	3	$53,437,069	7,196	$7,426
DE	2	2	$42,041,200	5,934	$7,085
FL	25	25	$776,528,254	164,064	$4,733
GA	9	9	$126,887,875	22,042	$5,757
IA	11	11	$116,469,129	37,631	$3,095
ID	2	2	$30,161,503	6,824	$4,420
IL	38	40	$270,662,196	153,398	$1,764
KS	18	18	$95,237,900	37,975	$2,508
LA	2	2	$37,273,797	11,323	$3,292
MA	8	8	$160,974,100	28,333	$5,682
MD	13	13	$173,988,743	55,185	$3,153
ME	4	4	$26,076,025	4,086	$6,382
MI	17	17	$208,015,268	83,754	$2,484
MN	16	16	$170,006,769	33,262	$5,111
MO	11	15	$71,185,132	42,259	$1,684
MS	14	14	$153,953,712	47,806	$3,220
MT	3	3	$5,843,089	2,003	$2,917
NC	13	13	$137,469,088	27,882	$4,930
ND	4	4	$24,196,431	5,677	$4,262
NE	5	5	$48,320,861	14,753	$3,275
NH	1	1	$6,469,409	1,983	$3,262
NJ	16	16	$137,538,964	73,509	$1,871
NM	2	2	$9,708,300	2,186	$4,441
NV	2	2	$69,914,000	16,981	$4,117
NY	32	33	$386,201,176	157,450	$2,453
OH	9	9	$213,289,500	56,219	$3,794
OK	10	10	$76,551,015	17,435	$4,391
OR	10	10	$194,131,383	41,919	$4,631
PA	11	11	$134,049,282	42,965	$3,120
RI	1	1	$40,743,150	9,076	$4,489
SC	1	1	$6,107,746	1,464	$4,172
TN	10	10	$150,871,840	37,012	$4,076
TX	31	33	$390,570,514	111,685	$3,497
UT	5	5	$137,364,765	38,855	$3,535
WA	23	24	$348,073,402	84,601	$4,114
WI	5	5	$66,651,546	25,053	$2,660
WY	7	7	$57,702,650	10,646	$5,420
Total	516	546	$7,740,740,731	2,395,471	$3,231

Notes: 1. Differences in numbers reproting are due to colleges that report their Insitutional Postsecondary Educational Data System (IPEDS) Finance figures as a district rather than individual campus units. 2. One part time community college student is considered equivalent to approximately one-third (.35737) of a full-time student.

Source: IPEDS 2001 Finance and IPEDS 2001 Enrollment surveys.

Table 34

Estimated Average Expenditures per Community College Athlete by State, 2002-2003

State	Number Reporting	Aggregate Athletic Expenses	Number of Unduplicated Athletes	Average Expenditure per Athlete
AL	19	$6,166,607	1,627	$3,790
AR	1	$193,124	76	$2,541
AZ	14	$8,404,280	2,550	$3,296
CA	99	$44,165,932	22,294	$1,981
CO	6	$2,475,835	586	$4,225
CT	3	$138,998	143	$972
DE	2	$324,792	107	$3,035
FL	25	$15,276,530	1,915	$7,977
GA	9	$2,860,165	591	$4,840
IA	11	$3,944,987	1,314	$3,002
ID	2	$1,636,006	237	$6,903
IL	40	$12,169,353	4,533	$2,685
KS	18	$14,233,928	3,640	$3,910
LA	2	$602,557	171	$3,524
MA	8	$814,614	666	$1,223
MD	13	$2,996,056	1,776	$1,687
ME	4	$193,604	243	$797
MI	17	$4,889,884	1,564	$3,127
MN	16	$2,648,992	1,609	$1,646
MO	15	$4,548,278	992	$4,585
MS	14	$9,547,433	2,381	$4,010
MT	3	$594,206	241	$2,466
NC	13	$526,431	463	$1,137
ND	4	$798,079	260	$3,070
NE	5	$1,905,725	326	$5,846
NH	1	$130,000	128	$1,016
NJ	16	$2,976,611	1,455	$2,046
NM	2	$552,147	119	$4,640
NV	2	$789,445	72	$10,965
NY	32	$7,025,804	4,379	$1,604
OH	9	$2,273,469	732	$3,106
OK	10	$4,366,981	1,158	$3,771
OR	10	$3,800,683	1,145	$3,319
PA	11	$1,139,018	1,118	$1,019
RI	1	$201,498	177	$1,138
SC	1	$37,482	14	$2,677
TN	10	$3,007,546	722	$4,166
TX	33	$14,801,049	3,003	$4,929
UT	5	$3,353,010	700	$4,790
WA	24	$5,903,883	2,426	$2,434
WI	5	$1,037,039	416	$2,493
WY	7	$2,097,014	413	$5,078
Total	542	$195,549,075	68,482	$2,855

Source: Equity in Athletics Disclosure Act (EADA) 2002 and 2003 Surveys.

No direct comparison of athletic expenditures and state reimbursement was possible due to the different years from which data were available. State reimbursement per student FTE was for AY 2001-2002 and average expenditure per student athlete was 2002-2003. Average student athlete expenses are a good comparison, because students are required by all three athletic associations (NWAACC, COA, and NJCAA) to be enrolled as full-time students in order to retain eligibility.

Nevada, at -$6,847 led the states with the greatest loss of revenue due to high athletic expenses even with an above average state reimbursement per student (Table 35). Florida, at -$3,244, posted a large loss per athlete but that amount was less than half the amount of Nevada. The winners in this comparison were Connecticut and Maine, which posted a revenue gain of $6,454 and $5,585 per student athlete, respectively.

Table 35

Estimated Revenue Gain/Loss of Intercollegiate Athletics at Public Community Colleges, 2003

State	Number Reporting: State Reimbursement	Number Reporting: Athlete Expenditure	Estimated State Reimbursement AY 2001-'02 ($/FTE)	Average Expenditure per Athlete AY 2002-'03 ($/FTE)	Estimated Revenue Gain/Loss ($/FTE)
AL	19	19	$4,118	$3,790	$328
AR	1	1	$5,583	$2,541	$3,041
AZ	14	14	$1,319	$3,296	-$1,977
CA	102	99	$3,040	$1,981	$1,059
CO	6	6	$3,610	$4,225	-$615
CT	3	3	$7,426	$972	$6,454
DE	2	2	$7,085	$3,035	$4,049
FL	25	25	$4,733	$7,977	-$3,244
GA	9	9	$5,757	$4,840	$917
IA	11	11	$3,095	$3,002	$93
ID	2	2	$4,420	$6,903	-$2,483
IL	40	40	$1,764	$2,685	-$920
KS	18	18	$2,508	$3,910	-$1,403
LA	2	2	$3,292	$3,524	-$232
MA	8	8	$5,682	$1,223	$4,458
MD	13	13	$3,153	$1,687	$1,466
ME	4	4	$6,382	$797	$5,585
MI	17	17	$2,484	$3,127	-$643
MN	16	16	$5,111	$1,646	$3,465
MO	15	15	$1,684	$4,585	-$2,900
MS	14	14	$3,220	$4,010	-$789
MT	3	3	$2,917	$2,466	$452
NC	13	13	$4,930	$1,137	$3,793
ND	4	4	$4,262	$3,070	$1,193
NE	5	5	$3,275	$5,846	-$2,570
NH	1	1	$3,262	$1,016	$2,247
NJ	16	16	$1,871	$2,046	-$175
NM	2	2	$4,441	$4,640	-$199
NV	2	2	$4,117	$10,965	-$6,847
NY	33	32	$2,453	$1,604	$848
OH	9	9	$3,794	$3,106	$688
OK	10	10	$4,391	$3,771	$620
OR	10	10	$4,631	$3,319	$1,312
PA	11	11	$3,120	$1,019	$2,101
RI	1	1	$4,489	$1,138	$3,351
SC	1	1	$4,172	$2,677	$1,495
TN	10	10	$4,076	$4,166	-$89
TX	33	33	$3,497	$4,929	-$1,432
UT	5	5	$3,535	$4,790	-$1,255
WA	24	24	$4,114	$2,434	$1,681
WI	5	5	$2,660	$2,493	$168
WY	7	7	$5,420	$5,078	$343
Average	546	542	$3,231	$2,855	$376

Note: FTE is the acronym for full-time equivalent. One part time community college student is considered equivalent to approximately one-third (.35737) of a full-time student (FTE).
Source: Institutional Postsecondary Educational Data System (IPEDS) 2001 Finance and IPEDS 2001 Enrollment surveys.

Recruitment Expenses

For women, suburban single campus colleges had the lowest new athlete recruitment expenditures with an average of $680 for all women's teams. Urban multicampus colleges had the lowest college recruitment expenditures for men at $752. All three categories of rural community colleges outspent their suburban and urban counterparts. The lowest recruitment average amount for rural colleges was $7,356 by medium institutions. The highest average amount spent among suburban and urban colleges was $3,707. These findings may be related to the higher percentage of Division I and II teams that can be found at rural community colleges.

Public community colleges spent more money recruiting male athletes than female athletes. A total of $1.6 million was spent recruiting male athletes compared to $1.2 million for women. The average amount spent on new athlete recruitment per college was $2,955 and $2,197 for all men's teams and women's teams, respectively.

Table 36

Average and Total Athlete Recruitment Expenditures for all Teams at Public Community Colleges, 2002-2003

College Classification	Number Reporting			Average Recruitment Expenses			Total Recruitment Expenses		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Rural									
Small	49	47	49	$4,426	$3,432	$7,719	$216,895	$161,318	$378,213
Medium	165	162	165	$4,478	$2,932	$7,356	$738,788	$475,028	$1,213,814
Large	88	88	89	$4,401	$3,410	$7,723	$387,306	$300,046	$687,352
Suburban									
Single Campus	78	78	78	$813	$680	$1,494	$63,446	$53,057	$116,503
Multicampus	64	64	64	$2,110	$1,597	$3,707	$135,039	$102,220	$237,258
Urban									
Single Campus	23	23	23	$1,024	$1,097	$2,122	$23,561	$25,241	$48,802
Multicampus	84	83	84	$752	$838	$1,580	$63,143	$69,545	$132,688
Total	551	545	552	$2,955	$2,197	$5,098	$1,628,178	$1,186,455	$2,814,630

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

Staffing Requirements

Fielding a team requires both student participants and appropriate coaching staff. The number of full- and part-time coaches that were employed by community colleges had low levels of variability. Most teams had a head coach that worked at least half time. For men, the teams with the highest average number of full-time coaches were football and cross country. Each of those two sports averaged one full-time coach.

For women, only all track (indoor, outdoor, and cross country) combined rated one full-time coach. Women's golf had the lowest average for full-time coaches at 0.3 full-time equivalents (FTEs) lacrosse was a close second at 0.4 head coach FTEs. At 0.6 FTE, men's swimming and ice hockey had the lowest head coach averages among men's teams. Basketball, bowling, outdoor track and field, water polo and softball/baseball had an equal average for men and women.

Table 37

Average Number of Head Coaches per Men's and Women's Sport at Public Community Colleges, 2002-2003

	Number Reporting		Average Number of Full-Time Coaching Positions	
Sport	Men's Teams	Women's Teams	Men's Teams	Women's Teams
Badminton		14		0.8
Baseball/Softball	446	392	0.9	0.9
Basketball	499	497	0.9	0.8
Bowling	13	13	0.8	0.8
Football	131		1.0	
Golf	232	230	0.8	0.3
Ice Hockey	10		0.6	
Lacrosse	20	20	0.9	0.4
Rodeo	38	38	0.8	0.7
Soccer	249	249	0.8	0.7
Swimming and Diving	41	41	0.9	0.8
Swimming	8	8	0.6	0.9
Tennis	166	166	0.7	0.8
All Track Combined	13	13	0.8	1.0
Track and Field, Indoor	10	10	0.7	0.6
Track and Field, Outdoor	55	55	0.8	0.8
Track and Field, Cross Country	38	38	1.0	0.9
Volleyball		367		0.9
Water Polo	44	44	0.8	0.8
Wrestling	59		0.9	

Notes: Colleges may opt to report track as a combined sport or as three individual sports.
Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

Six of the 15 sports played by both men and women had equal average staffing at the position of assistant coach. Golf, rodeo, and all track combined each had 0.2 assistant coach FTEs or less for both the men's and women's teams. In contrast football had 4.8 assistant coaches FTEs.

Table 38

Average Number of Assistant Coaches per Men's and Women's Sport at Public Community Colleges, 2002-2003

	Number Reporting		Average Number Full-Time Positions	
Sport	Men's Teams	Women's Teams	Men's Teams	Women's Teams
Badminton		14		0.4
Baseball/Softball	446	392	1.3	1.0
Basketball	498	499	1.1	0.9
Bowling	13	13	0.3	0.3
Football	131		4.8	
Golf	232	231	0.2	0.1
Ice Hockey	10		0.4	
Lacrosse	20	20	1.0	0.5
Rodeo	38	38	0.2	0.2
Soccer	249	249	0.8	0.8
Swimming and Diving	41	41	0.8	0.8
Swimming	8	8	0.5	0.9
Tennis	166	166	0.3	0.3
All Track Combined	13	13	0.2	0.2
Track and Field, Indoor	10	10	0.5	0.4
Track and Field, Outdoor	55	55	1.6	1.7
Track and Field, Cross Country	38	38	1.1	1.1
Volleyball		367		0.8
Water Polo	44	44	0.6	0.8
Wrestling	59		0.9	

Notes: Colleges may opt to report track as a combined sport or as three individual sports.

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

Head coaches for men's teams had a higher average FTE salary than did coaches for women's teams (Table 39). The average difference in head coaching salaries for men's and women's teams was nearly $1,800. For assistant coaches, there was a higher differential in men's and women's wages at $2,600, once again with coaches for men's teams receiving the higher salaries. The standard deviations on the

average FTE salaries indicate a wider salary range for head coaches of both men's and women's teams, compared to the variability in assistant coach salaries.

Table 39

Average Annual Full-Time Salaries for Head and Assistant Coaches at Public Community Colleges, 2002-2003

	Head Coaches		Assistant Coaches	
	Men's Teams	Women's Teams	Men's Teams	Women's Teams
Average Salary	$24,308	$22,587	$12,169	$9,569
Number Reporting	437	428	408	394

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey.

Average coaches salaries were automatically calculated in the EADA survey by taking the total amount spent in each coach category and dividing by the total number of full-time equivalents (FTE) accounted for in that same category. For example, if 1.5 head coaches earned a total salary of $45,000 then the average head coach FTE annual salary was calculated to be $30,000. Salary data are not reported for each individual sport. Only aggregate numbers and averages are available for each college.

Urban single campuses had the lowest paid coaches for both men's and women's teams, at $16,399 and $14,023 annually, respectively (Table 40). There was a notable difference between coaches at urban single campuses and the next lowest paid men's and women's head coaches. For women, the second lowest average head coach FTE salary was $19,888 at small rural colleges. This was an increase of over $5,800 over their counterparts at urban single campuses. At $20,761 suburban single campuses had the second lowest head coach FTE salary; however, that amount was more than $4,300 the FTE head coach average at urban single campuses.

The highest average FTE salaries for coaches for both men and women were found at large rural colleges where men's head coaches earned $29,425 and women's head coaches earned nearly as much at $29,034. Large rural colleges showed the smallest difference in average FTE salaries between head coaches for men's and women's teams at a difference of less than $400 in the men's team coaches favor. The largest differential between coaches for men's and women's team was at small rural colleges with the women's team coaches earning an average of $2,513 less than the men's team coaches.

The lowest assistant coach FTE salaries for men's teams were at urban single colleges at less than $9,000 (Table 41). For women's teams, the lowest salaries were at small rural colleges with an FTE average salary of $5,502. Rural medium colleges were found to have the highest assistant coach FTE for men's teams at $13,233, while the highest for women's team coaches was at large rural colleges with $11,086.

Table 40

Average Full-Time Equivalent Annual Salaries for Head Coaches at Public Community Colleges by Classification, 2002-2003

College Classification	Number Reporting		Average Full-Time Equivalent Salary	
	Men's Teams	Women's Teams	Men's Teams	Women's Teams
Rural				
Small	46	44	$22,401	$19,888
Medium	130	126	$24,430	$22,153
Large	70	71	$29,425	$29,034
Suburban				
Single Campus	61	61	$20,761	$19,985
Multicampus	51	51	$23,172	$21,121
Urban				
Single Campus	13	13	$16,399	$14,023
Multicampus	66	62	$25,684	$23,565
Total	437	428	$24,308	$22,587

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

Table 41

Average Full-Time Equivalent Annual Salaries for Assistant Coaches at Public Community Colleges by Classification, 2002-2003

College Classification	Number Reporting		Average Full-Time Equivalent Salary	
	Men's Teams	Women's Teams	Men's Teams	Women's Teams
Rural				
Small	36	33	$9,278	$5,502
Medium	124	117	$13,233	$9,435
Large	69	68	$12,436	$11,086
Suburban				
Single Campus	56	56	$11,066	$9,632
Multicampus	47	47	$12,523	$10,854
Urban				
Single Campus	13	13	$8,795	$6,012
Multicampus	63	60	$12,846	$10,053
Total	408	394	$12,169	$9,569

Source: Equity in Athletics Disclosure Act (EADA) 2002 Survey. Classification from Katsinas & Hardy, 2004.

CHAPTER 5

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter interprets the major findings from the results, outlines recommendations for research, provides implications for practice, and synthesizes the findings of the study by providing relevant conclusions.

Findings

Finding 1: Public community college participation in intercollegiate athletics is significant and ongoing, but is not evenly distributed across the 50 states. Further, as population density decreases the importance of intercollegiate athletics increases and the larger the college the greater the number of teams sponsored.

The distribution of public community colleges with athletics is not random. California has the highest participation level in intercollegiate athletics of any state at 94%. While only 99 California community colleges were included in this study due to missing data, of the 107 community colleges in California, only six do not sponsor intercollegiate athletics (COA, 2004a). The reasons for this are historical, cultural, and demographic.

California has long been on the forefront of community college education. The California Master Plan for Higher Education mapped out community college roles and districts in 1960. The Master Plan ensured that each college would have a sufficiently sized service area and a large enough population base to support a comprehensive community college (University of California Office of the President, 2004). Furthermore, California's population density results in the classification of most of its community colleges in either the urban or suburban rubrics. This more highly dense student base,

coupled with a strong tradition of high school athletics, creates a student population that is very interested in intercollegiate athletics. Furthermore, California's centralized athletic association, the Commission on Athletics (COA), which organizes and regulates athletic competition, provides a structured avenue for colleges to add new teams.

This study supports Rooney's (1972) findings about the importance of athletics at California community colleges. Although his findings were limited to football and basketball, Rooney notes, "California is the citadel of junior college football." (p. 95). In 1972, Rooney found 176 football teams at community colleges, with 72 or 41% of the teams in California. In this study, 30 years later, the author found 137 community college football teams with 71 or 52% in California. This means that any decline in community colleges fielding football teams has occurred mostly outside of California, in states such as Washington, Oregon, and Massachusetts.

On the other end of the spectrum, there are some states that do not offer intercollegiate athletics at any of their public community colleges. In states such as Alaska and Hawaii, the cost of intercollegiate athletics would likely be too prohibitive, requiring air travel for virtually every contest. Other states without intercollegiate athletics may have a more limited notion of the role, scope, and function of community colleges. The states with a historically greater technical focus for their two-year colleges, such as Louisiana, Kentucky, and Delaware, may not view athletics as a vital student activity that adds to campus life. It is also possible that states with a stronger general education focus also may have more traditionally aged students, a group that is the most likely to pursue intercollegiate athletics.

Intercollegiate athletics are a vital part of over 57% of all public American community colleges campuses. When one looks at the 860 community college districts and single campus institutions, the rate of sponsorship of athletics increases to 59%. In 2002-2003, 567 colleges sponsored competition in over 30 sports, resulting in 4,277 teams and 73,926 athletes involved in intercollegiate athletics at public community colleges in the United States. In 1987, McAninch found that 67% of the community colleges responding to his survey sponsored intercollegiate athletics. It is not clear if the decline may indicate that fewer colleges are in fact sponsoring intercollegiate athletics in 2002 than in 1987, or may be the result of response bias in McAninch's sample.

The highest percentage of sponsorship of intercollegiate athletics was at large rural colleges. The fact that a higher percentage chose to sponsor intercollegiate athletics than did urban or suburban campuses--despite these later two groups' higher average unduplicated enrollment--indicates the key role athletics play at rural community college campuses.

The lower participation rates in intercollegiate athletics at small rural colleges can likely be explained by their size. In the Katsinas et al. classification typology, small rural colleges were defined as those with an unduplicated annual enrollment of less than 3,500 students. When actual average enrollment was calculated the average was a mere 1,155 students. This unduplicated student total is a count of the physical number of students registered both part- and full-time, and would shrink significantly if only full-time, degree/certificate-seeking students were enumerated. These findings directly contradict those of McAninch (1987) who found sponsorship of intercollegiate athletic at 70%, 22%, and 8% of small, medium, and large colleges respectively. A flaw of

McAninch's study is that community colleges that did not report headcount were automatically classified as small colleges, which may have skewed the findings. Brown (1988) also found that small community colleges were more likely to offer intercollegiate athletics. However, Brown used four college size categories that are not comparable to those in the Katsinas et al. classification.

The argument that athletics requires a critical mass of full time students can be extended to the medium rural college. While the classification typology includes colleges with enrollment of 2,500-7,500 students, the average unduplicated enrollment for this type of college was only 2,819. Further, for rural colleges, the number of sports offered mapped directly onto average size of college type. The larger rural colleges offered nearly one more sport for men and women than did the small rural colleges. Suburban campuses offered the highest average number of sports averaging 4.9 and 4.6 sports for men and women, respectively.

Size did not explain the number of teams offered at urban campuses. Urban single campuses had the highest average enrollment of all classifications, yet had the third lowest average number of sports for men and women at 4.0 and 3.7, respectively. This reverse in the trend for urban campuses may indicate that sports have not had the same importance on urban campuses as they did for rural and suburban colleges. The lack of importance may be due to the competing athletic opportunities for students in an urban area with potentially strong city-leagues available, coupled with a lower emphasis on recruitment of athletes. Conversely, urban community colleges may cater to an older student demographic. Simply put, it may be that urban community colleges are not as concerned with using athletics for enrollment growth, because they are larger and the

marginal benefit to urban colleges in terms of an increase in student full-time equivalent (FTE) growth is lower than for their rural community college counterparts.

Another possible explanation involves the representation of only one California community college in the urban single campus category. California's strong sports culture fosters a high degree of intercollegiate athletics. Coupled with the high density of the state's population, the result is an overrepresentation of California colleges in the suburban multicampus classification and a relatively low representation in the urban multicampus category. Owiesny (2000) found that the average number of athletic teams for the 107 California community colleges campuses was 6.73 sports for women and 6.97 sports for men. With only one California college in the urban single campus category, the result may have been a relatively lower average number of teams in the urban single campus category and the correspondingly higher number of team averages in the single suburban campus category.

Finding 2: Intercollegiate athletics is a critically important student activity for public community colleges in the United States, but more so for rural colleges. Achieving gender equity in student participation is a challenge for all college types involved in intercollegiate athletics and in particular for those that sponsor football.

Athletes represent an important student demographic for colleges that offer intercollegiate athletics. There were nearly 74,000 student athletes in 2002-2003 at America's public community colleges. This means that an average of 5.3% and 10.9% of full-time degree/certificate seeking women and men at public community colleges, respectively, were athletes. Athletics may well have been the most popular student activity on community college campuses in 2002-2003. With US demographics

indicating an increase in the population of 17-24 year olds students (Palmer, 2000), community colleges will need to be responsive to this younger group in the area of student activities including intercollegiate athletics.

The pattern in student participation in athletics was very clear. At rural colleges, athletes accounted for a higher percentage of full-time students than at suburban or urban campuses. At the high end, athletes accounted for 16% of full-time degree seeking students at small rural colleges and a low of only 4% of students at urban single campus colleges. Here the effect of college size accentuated the key role that athletes have played in rural colleges' student body composition. The smaller the college, the higher the percentage of athletes among full-time students. These findings corroborate the report by Feather River College, a small rural community college in northern California, where 26% of full-time students are athletes (Thein, 2001). The nonessential nature of athletics at urban campuses was manifested in the much lower percentages of athletes among full-time students.

Nationally, women accounted for 55% of full-time enrollment in public community colleges in the US during Fall 2000 (NCES, 2002). Yet, only 37% of all athletes were women. Whether the disparity in athletic participation was reflective of student interest, age distribution, or opportunity to participate in intercollegiate teams is unclear. Yet, it is important to know the reasons for the difference between full-time enrollment and participation in intercollegiate athletics in order to assess a college's standing in meeting Title IX requirements.

Athletics increased the enrollment of full-time male students on public community college campuses. This is especially true if a college sponsored football, a sport that

commonly has rosters of 80 - 100 players. However, football exacerbated gender inequity in sports participation due to the size of the roster. Community colleges without football already have gender imbalances in athletics are advised to carefully consider the impact of the addition of football on gender participation ratios.

While participation among men and women was highly skewed, the total number of opportunities for men and women to compete was much more balanced. Men's teams accounted for 51.3% of all teams. Women's teams accounted for the remaining 48.7% of intercollegiate athletic teams at public community colleges in the United States in 2002-2003. Note that this represents a simplification of the complexity of intercollegiate athletics. Some sports, such as golf, were played via coed teams. In such a case, that sport was counted as both a men's and women's team. Over time, the emphasis on balance in men's and women's teams reflects American community colleges' attempts to promote equity in athletics.

Finding 3: Most community colleges participating in intercollegiate athletics offer athletically-related aid, with the exception of those in California. The sports with the greatest student participation were baseball, football, and basketball for men and softball, basketball, and volleyball for women. Rural community colleges offer greater amounts of financial aid than suburban or urban colleges and use it to effectively increase the percent of full-time male students.

More than half of all intercollegiate athletic teams at public community colleges chose to compete at the Division I or II level meaning that they could choose to award athletically-related aid. This may signal a desire for what may be perceived as a tougher level of competition, or a lack of availability of Division III competition (as is the case for

bowling, lacrosse, and ice hockey). However, the greater percentage of women's sports at the Division I and II levels signals an attempt to attract more women athletes through offers of athletically-related aid.

The exception to the finding about the availability of athletic aid was the State of California in which COA, on behalf of member public community colleges, decided not to permit awarding any athletically-related student aid. In California, athletic competition may have been widely supported because it is regionally valued, and there has historically been strong athletic competition at the high school level (Rooney,1972).

The athletic association in which a sport is recognized can determine the extent of scholarship availability. Sports such as lacrosse, bowling, and ice hockey had low participation levels but high levels of potential scholarship availability because they were Division I sports in the NJCAA. In a similar vein, women's bowling and lacrosse both competed exclusively as Division I NJCAA teams and had a nearly 100% rate of potential scholarship availability. Conversely, if a sport was only played in California, such as men's volleyball or water polo, then the rate of scholarship availability was nonexistent. Scholarships were completely unavailable for the women's sports of badminton and water polo for the same reason. These findings corroborate Brown's study (1988).

There were seven sports that were not governed by the National Junior College Athletic Association (NJCAA), Northwest Athletic Association of Community Colleges (NWAACC) or the Commission on Athletics (COA.) The most popular among these was rodeo with 39 community colleges sponsoring men's teams and 28 colleges sponsoring women's teams. Rodeo has its own governing body for both two- and four-year

colleges, the National Intercollegiate Rodeo Association (NIRA). Community colleges account for 44% of NIRA's members. No determination on the availability of athletically related aid could be made for rodeo, archery, skiing, field hockey, and the other sports not played under the aegis of the three major community college athletic associations.

Basketball, softball, and volleyball had the most teams at Division I and II for women. For men, basketball, baseball, and, surprisingly, golf offered more teams in Divisions I and II than any other sports. Sports able to take advantage of shared facilities were most popular. Volleyball and basketball, for example, can both be played in a gym. Baseball and softball each require fields. Meanwhile, golf does not require much space since matches and most practice may occur off campus at golf courses. Brown (1988) also found that basketball had the most Division I and II teams.

Within level of competition, rural colleges were found to sponsor Division I and II teams at a higher rate, 77%, than suburban, 43%, or urban colleges, 50%. Since those two divisions are the ones that award financial aid, it is evident that rural colleges use athletics as a strategy for enrollment growth. California's high representation in the suburban multicampus category and low representation in the urban single campus category obscured this trend for suburban and urban community colleges.

The unavailability of IPEDS Graduation Rate survey data for 2002 made it impossible to definitively state the percentage of athletes receiving athletically-related aid in 2002-2003. However, by combining IPEDS 2001 and EADA 2002-2003 data, it was estimated that over 30% of athletes at public community colleges received athletically-related aid in 2002-2003.

In the area of athletically-related aid, female athletes appeared to have the upper hand. This provided strong evidence of attempts to comply with Title IX on the part of public community colleges. In athletically-related aid, women accounted for 42% of all athletes receiving athletically-related aid, and had a higher average scholarship amount by nearly $300. The proportion of women receiving athletic aid was higher than their representation of 37% in the population all athletes.

Rural colleges, particularly small ones, demonstrated a high level of commitment to athletics in the form of the highest average amounts of athletically-related aid for men and women. The average athletically-related aid awards at small rural colleges were $5,471 and $6,500 for men and women, respectively, thousands of dollars higher than in any other institutional type. The emphasis on trying to recruit women athletes explains why in five of the seven classifications, aid for was greater for female than for male athletes. California's high representation in the suburban multicampus category and low representation in the urban single campus category obscured this general trend for suburban and urban community colleges.

Recruitment expenses for men and women indicate that while the colleges spend a higher gross amount on getting male athletes to campus, they spend a higher amount per female athlete. This is likely indicative of the public community college's efforts to comply with Title IX. Since "female student-athletes are more likely than their male counterparts to meet overall NCAA core course, GPA and test requirements" (National Center for Fair and Open Testing, 2004), opportunities for athletic scholarships at four-year colleges may be greater for female than male athletes. Thein (2001) reports that higher eligibility standards enacted by the NCAA in "Proposition 16 has left 25% of

college bound seniors ineligible for varsity athletics at an NCAA institutions." Consequently, community colleges must offer greater incentives, in the form of athletically-related student aid, to female athletes than male athletes.

Higher average recruitment expenses demonstrated the importance of athletics at public rural community colleges. Rural colleges spent a greater average amount on recruiting student athletes for all teams, $7,599, than did suburban or urban colleges at $2,601 and $1,851, respectively. Urban multicampus institutions had the lowest recruitment expenses, perhaps because the need to recruit may not be as imperative in highly populated areas. Urban colleges spent more on female athlete recruitment than on male athlete recruitment but had no better recruitment results for women. Even so, urban colleges were in the last and second from last place when it came to average amount spent on recruiting men and women, respectively.

Finding 4: Athletics revenues and expenses are higher for men's teams than for women's teams with expenses always higher than revenues. However, athletics are likely to be profitable when state reimbursement for full-time student enrollments is considered.

The American preference for watching men's sports is also found at the community college level. This factor likely accounts for the consistently lower revenues earned by women's than men's teams. An additional factor may be the definition of revenue in the EADA survey. In reporting revenues, the EADA asks colleges to include athletically-related aid that is part of the athletic budget as revenue. The result is lower revenues for women who are awarded a lower gross amount of aid than men.

The higher average athletic expenses for women may be understood by considering the economic aspect of sports. A key issue is economies of scale. There may be built in efficiencies with larger team sizes. The smaller average size of women's teams may also result in a marginal cost that is higher for each additional woman than for each additional man. This is true for transportation, coaching, maintenance, and athletically-related aid.

No other sport requires the extensive fiscal commitment that football does. Football is the most expensive sport because of the size of the squad, the number of assistant coaches employed, the need for more specialty equipment for the athletes, and the single use field that is required to accommodate the sport. However, no other sport can enlist and enroll as many full-time male students as football. The expense of sponsoring a football team may be rationalized by the increase in the number of full-time male students, which is on campus an underrepresented group among community college students. Having a football team may also attract students who are interested in student activities that go hand-in-hand with football, such as cheerleading, band, dance, and drill teams.

In the EADA survey, revenues and expenses are closely tied to athletically-related aid. In theory, athletic revenues and expenses should always be greater than athletically-related student aid, because athletic aid must be counted as revenue for the department when it is in the budget and as an expense when it is awarded to students. The glossary of EADA terms warns that, "many schools in the past have neglected to include their institutional support, i.e. their budget as revenue" (US Department of Education, 2004a). However, a comparison of these figures indicated that rural colleges

consistently reported higher total amounts of athletic aid than they reported in total expenses. This result demonstrated that public community colleges, and likely others as well, have not clearly understood what should be recorded as revenues.

Within the rural college subcategory, the larger rural colleges had higher average revenues than did the smaller colleges. This may have been directly related to the higher average number of teams reported by medium and large rural colleges. In suburban and urban colleges, other factors may be at play. Urban single campuses reported the lowest team revenues for men and women. This may be related to that group having the highest sponsorship of non-scholarship (Division III) athletic teams. Since athletically-related aid is counted as revenue for the EADA, this would explain the low revenues for urban single campuses. Suburban community colleges had expenses that fell between their urban and rural counterparts, but their revenues were comparable to their urban counterparts.

There was no clear pattern to whether public community colleges experience a net benefit gain or loss from intercollegiate athletics. Eighteen colleges were estimated to have had a net revenue loss and 24 a net revenue gain related to intercollegiate athletics. The lack of a clear pattern suggests that the measure used to approximate state reimbursement per FTE may have been too simplistic. For example, community colleges in Texas are reimbursed for some types of non-credit student enrollment but FTE counts gathered by IPEDS only account for credit students. The state reimbursement for California in 2001, as calculated by Thein, was approximately $3,735 (2001). Some state higher education reimbursement formulas also provide

supplemental funding for colleges with intercollegiate athletics. However, those nuances were not captured in the estimation formula used.

Finding 5: Nearly all community colleges that sponsor intercollegiate athletics belong to the National Junior College Athletic Association, Commission on Athletics or the Northwest Athletic Association of Community Colleges, yet there is no truly national intercollegiate athletic association for community colleges.

Almost all competition in community college athletics is regulated by one of the three community college athletic associations. Whether they belong to a regional (COA, NWAACC) or national (NJCAA) association, the structure provided by the association's rules, eligibility guidelines, competitions, and recognition is enough to entice most colleges to belong. While the NJCAA is the only association that claims to be national, it does not have members in every state, unlike its counterpart for four-year colleges, the National Collegiate Athletic Association (NCAA).

The community colleges in New England are less likely to belong to an athletics association than community colleges in other parts of the country. Inclement weather, the desire to keep costs low, and the high concentration of four-year colleges in New England may contribute to this phenomenon. Other contributing factors may include the historically high tuition and lower state appropriations per student.

Membership in athletic associations varied by community college type as well. The COA's restriction to California and that state's high population density affects the distribution of community colleges, with over 80% of colleges with athletics predominately located in urban and suburban areas. Oregon and Washington are more rural, with only 37% of all colleges with athletics located in suburban or urban areas. As

expected, the distribution of NJCAA members, most closely matched the distribution of public community colleges in the US. However, the NJCAA's claims to be national fall short when one considers that only slightly more than 60% of community college athletes played sports at colleges whose primary athletic association membership was the NJCAA in 2002-2003.

Finding 6: Coaches of intercollegiate athletics at public community colleges are not well paid. Generally, the smaller the college the lower the salary, with the exception of coaches at urban single campus colleges.

The average number of head and assistant coaches and their respective average full-time equivalent (FTE) salaries indicate that coaching at the community college level has not been a lucrative undertaking. A public community college average FTE salary was $24,308 for a head coach and $12,169 for an assistant coach of men's teams. The coaching salaries were far below the average public community college faculty salary for 2002-2003 of $51,824 (AAUP, 2003). Even instructors, the lowest faculty group, earned an average of $38,215. A head coach's average salary was just 64% of the average for public community college instructors. Few of the sports averaged even one full-time head or assistant coach.

The low coaching salaries for head and assistant coaches for both men's and women's teams at urban single campuses may be linked to the low representation of COA colleges in this category. California has a much higher cost of living, a unionized community college faculty, and higher average salaries than the rest of the country. With only one California college in the urban single campus category, the wages were the lowest of any category at $16,399 and $14,023 for one FTE head coach for men's

ad women's teams, respectively. At the same time, COA is heavily represented in the suburban multicampus category, which could have raised the average salary within that category. Perhaps outside of California athletics are just not as important to urban colleges.

Rural colleges had a clear positive trend in coaching salary to college size. The smaller colleges had lower salaries for both head and assistant coaches. The larger the rural college, the greater the average head and assistant coaches salary for both men's and women's teams.

Conclusions

Conclusion 1: Public community college involvement in intercollegiate athletics is significant and supports Rooney's finding that colleges in rural communities are more likely to sponsor athletics.

Community colleges, by definition, are responsive to the needs of their surrounding service areas. The tailoring that community colleges do to meet their local needs are reflected in the range and scope of their academic curriculum, vocational instruction, developmental education, workforce training, and continuing education (Cohen and Brawer, 2003). The current results provide compelling evidence that community based strategies also guide the sponsorship of intercollegiate athletics at community colleges.

Rural colleges were found to make the greatest commitments to intercollegiate athletics as seen in student participation, their relatively higher coaching salaries, larger awards of athletically-related student aid, and the level of competition sponsored. There are several reasons for the public rural community college's strong emphasis on

intercollegiate athletics. First, athletics can be used to drive enrollment growth which provides several benefits: increased efficiency and economies of scale in housing, food service and student activities.

Athletics also results in the enrollment of more full-time students and males in particular. These additional full-time students bring in more revenue in the form of state reimbursement to the colleges. These reimbursements have been shown to bring in more income than the college expends on athletics (Thein, 2001). According to Thein, "The approximate annual (fall/spring) financial value of an athlete is $7470 per academic year," for a community college in California. This amount would likely be lower outside of California among colleges that offer athletically -related student aid.

Other reasons for the prominence of intercollegiate athletics at rural community are supported by past research. Rooney's findings in particular were supported in this study: "The spatial organization of intercollegiate sport also favors the sparsely populated areas" (1972, p. 287). Evidence for this was found in the higher sponsorship of intercollegiate athletics among rural colleges. Lastly, Rooney's conclusion that "sport seems to be given highest priority in small towns and cities, characterized by average income and a lack of intervening opportunities" (p. 284) was addressed by the higher percentage of athletes found in small rural colleges than in colleges of any other type.

Urban community colleges, despite having the highest average number of intercollegiate athletic teams, demonstrated the lowest commitment to intercollegiate athletics. Urban colleges had the lowest proportion of student athletes, the lowest recruitment expenses, and generally the lowest average coaching salaries at the head and assistant coach levels for both men's and women's sports. It appears that athletics

are simply not a priority at urban community colleges outside of California. Urban colleges are situated in densely populated settings, and while athletics may bring more students to campus, the marginal benefit would be low.

Due to the lack of previous research into athletics in community colleges, it is not possible to conclusively state that the kinds and number of sports that community colleges sponsor have changed significantly. Rooney (1972) identified baseball, basketball, and football as the three national sports of the United States. These sports were also those found to have the most male participants 30 years later in 2002-2003.

A partial insight into sport sponsorship trends can be gained by looking at the trends reported by the NJCAA in their annual *Handbook and Casebook* (2003). Women's slow pitch softball was phased out of competition in 1999-2000, and women's golf was introduced in 1997-1998. Fast pitch softball added over 100 teams between 1991-1992 and 2002-2003, increasing from 199 to 321 teams. The number of women's soccer teams more than doubled from 54 to 130 teams. For women, the sports with the greatest declines in number of teams between 1991-1992 and 2002-2003 were tennis, 120 to 66 teams, and outdoor track and field, 78 to 59 teams. Marathon had a short-lived appearance in NJCAA competition for women in the five years between 1997-1998 and 2002-2003. Overall, 7 women's sports gained teams and 6 sports lost teams, including marathon.

For men, the greatest decline was in the number of NJCAA teams in tennis (NJCAA, 2003). The number of men's tennis teams fell from 146 teams in 1991-1992 to 88 teams in 2002-2003. Basketball fell from 469 to 428 teams in the same period. Soccer showed the biggest increase growing from 141 to 174 teams during this period.

Overall, 11 men's sports had fewer teams in 2002-2003 than in 1991-1992. One of those sports, marathon, was phased out entirely in 2001-2002. Three sports showed gains of 6 to 15 teams (NJCAA, 2003). Rooney's mapping and report of football and basketball at community colleges, which dates to 1972, also indicated a decline in sponsorship of football outside of the state of California.

Conclusion 2: Intercollegiate athletics at public community colleges are popular, yet gender equity in participation remains a challenge. Nonetheless, public community colleges have demonstrated a commitment to achieving gender equity in their funding of athletically-related aid, number of teams sponsored, proportion of funds allocated to women's athletics and average recruitment expenditures for women athletes.

There is mixed evidence on community colleges' efforts to comply with gender equity in athletics that is governed by Title IX. Evidence supporting the colleges' efforts at gender equity were seen in the raw number of teams that are offered for women, the higher financial aid awards for women, and the higher average recruitment expenses for women. Forty-eight percent of all intercollegiate athletic teams at public community colleges were women's teams, even though women accounted for only 37% of all athletes.

The NJCAA reported an increase of over 3,300 female athletes in the 10 years between 1990 and 2000. During this same time period there was a decline of over 2,300 male participants in NJCAA competitions (NJCAA, 2002). This study found that women made up only 37% of intercollegiate athletes at community colleges in 2002-2003, only slightly better than the 35.7% rate reported by Brown (1988). However, caution must be applied in drawing conclusions, since Brown excluded colleges that

offered football from his studies, which results in a significant artificial inflation of the percent of female athletes.

When it comes to coaches' salaries for women's teams versus men's teams, the evidence against gender equity was unambiguously damaging. In each of the seven college classifications, coaches for men's teams were paid more at both the assistant and head coach levels than those for women's teams. Whether this differential is due to a difference in experience, qualifications, or other reasons is unclear.

Conclusion 3. Athletics may be a net income producer for public community colleges.

Intercollegiate athletics appears to result in a net financial loss for public community colleges because expenses exceed revenues. Nationally, when state reimbursement per full-time student is considered, the total income per student athlete exceeded the cost by $376 per student. This net benefit does not include the revenue to the college from enrolling other students who may come to participate in drill team, band, or cheerleading. Colleges also benefit from having athletes live in the residence halls and take part in the food service plan, lowering the marginal cost for all students on campus. However, a state level analysis provides mixed evidence with only 25 of 42 states showing a greater reimbursement per athlete than cost per athlete.

Furthermore, there is some evidence (Castañeda, 2002; Davis as cited in Thein, 2001) that many athletes come from out of the community college's district or service area. The higher tuition charged to out-of-district, out-of-state, and out-of-country students can result in a great economic benefit for the college. While COA restricts the public community colleges to recruiting student in their own districts, students still come

from out-of-district and out-of-state (Anderson, 2003; Lewis, 2002). At Feather River College in California, Thein reports that “95% of the student athletes are from out of the district” (p.10). Public community colleges in California may not award athletically-related aid so any additional tuition paid above the in-district rate adds to the college’s bottom line.

Even colleges that award athletically-related aid may experience a revenue boost from out-of-district students who are scholarship athletes. Colleges may choose to divide a full-scholarship among two or more students to maximize their scholarship budget (Castañeda, 2002). Even if districts award an out-of-district student a half-tuition scholarship that student may still be paying more tuition for the same number of credit hours than a non-athlete from within the college’s district.

Greater precision in using state reimbursement formulas may provide a clearer picture on whether intercollegiate athletics at public community colleges results in a net revenue gain or loss on a state-by-state basis. Thein estimated that “the reimbursement that the community colleges collect in California is approximately $3,735” per full-time (FTE) student equivalent an amount far greater than the $1,059 estimated in this study (p. 11).

Conclusion 4: Coaches at public community colleges are not well paid but the data is inconclusive.

The low staffing and salary ratios may indicate something about the way coaches have been compensated and their status as community college employees. In some colleges, if not many, athletic coaches may be employed as faculty or staff members in addition to coaching. For those individuals, coaching and teaching and/or administrative

duties are a part of their regular workload. Other colleges may pay part-time coaches on an extra service contract, paying them a coaching stipend on top of their full-time positions. Coaches may have primary professions outside of the community college and have a coaching contract that mirrors the way that of adjunct instructors.

Recommendations for Research

Recommendation 1: A comprehensive, periodic census of community college athletics should be conducted using the research design presented here as a starting point. The proposed study could provide a baseline for future research into which sports are increasing and decreasing in popularity and participation and would enable future researchers to discover trends in community college intercollegiate athletics. The NCAA in collaboration with the NJCAA, COA, and NWAACC could undertake this study. The NCAA already produces annual reports for its membership on topics such as gender-equity, graduation rates, participation rates, and revenues and expenses, that could be replicated for community colleges (NCAA, 2004). The three community college athletic associations could fund this study on a prorated basis based on membership.

Recommendation 2: Further study should be conducted to investigate the link between full-time enrollment and intercollegiate athletic sponsorship at community colleges. While total unduplicated enrollment is a good measure for the Katsinas et al. classification, full-time enrollment is the key qualifier for student athletes. Only 32.3% of small rural colleges sponsored intercollegiate athletics. There may be a certain critical mass of full-time students that are required to field an intercollegiate athletic program, build a residence, provide food service, fill classes, and create efficiencies in staffing student services. The Association of College and University Housing Officers

International (ACUHO-I), which sponsors the *Journal of College and University Student Housing*, could commission a study to investigate the link between intercollegiate athletics and housing at public community colleges. Research by Moeck (2004), indicates that a survey will be needed since the reliability of community college responses to the IPEDS survey on Institutional Characteristics, which collects information on housing, is low and likely inaccurate.

Recommendation 3: Further research is needed into the relative popularity of all student activities, including athletics. Particular attention should be given to relationship among involvement in extracurricular activities, student engagement, and the resulting effects on student retention. Only one study (Chang, 2002) was found that gauged student interest in athletics compared to other student activities. A national study that uses a stratified random sample of public community colleges in the Katsinas et al. classification, is required and could be funded by National Association of Student Personnel Administrators (NASPA). The design of such a study would include a survey of student affairs officers at public community colleges regarding the types of student activities that are available on campus and student participation in those activities, by race/ethnicity, age, and gender.

Recommendation 4: This study excluded tribal colleges, special use institutions, 2-year under 4-year, and private community colleges. Further work describing the role of intercollegiate athletics at those institutions is needed to complete the national picture. The research design for this study could be replicated focusing on these different community college types.

Recommendation 5: California is a community college athletics powerhouse. The COA members in this study had a significant impact on the overall averages in nearly all categories particularly in classifications where they were heavily over- or under-represented. An analysis that considers athletic association as the primary lens in studying intercollegiate athletics may be useful. Partial approaches have included Brown (1988) who studies only the NJCAA and Owiesny (2000) who looked at gender equity in athletics in California community colleges. Comparative research is needed to examine differences among the NJCAA, COA, and NWAACC member colleges. An additional component of this research would be to investigate public community colleges that are not members of any of these three associations.

Recommendation 6: This study found a discrepancy in the representation of women as athletes versus full-time students. Research into the reasons behind this discrepancy must be undertaken. This is important to all colleges for helping to determine Title IX compliance. Understanding the reasons that women pursue intercollegiate athletics at community colleges may help to inform and improve recruitment practices. A mixed methods study of female student athletes could provide useful information for athletics directors, coaches, and enrollment managers. The qualitative piece could focus on what motivates female athletes to pursue athletics at the community college level, while the quantitative research could investigate factors that help predict participation in athletics. The National Association for Girls and Women in Sport (NAGWS), which conducts an annual survey on women in intercollegiate sports (Carpenter and Acosta, 2004), would be well positioned to undertake this research.

Recommendation 7: There is strong evidence that community college students who transfer to four-year colleges, after suffering initial transfer shock, rebound and graduate with a higher average GPAs than native students. A study is needed to determine if the same pattern exists within the more narrow population of community college transfer athletes in comparison to native athletes for completion rates. Differences by gender should also be explored. Some of these data is available from the IPEDS Graduation Rate Survey, but only for athletes that received athletically-related aid. Past transfer shock studies could be replicated with a more narrow focus on student-athletes.

Recommendation 8: The definition of who is a degree/certificate seeking student is elusive at best. Students' self-concepts can vary as they gain competence, confidence, and experience success in developmental or non-credit classes. Yet it is full-time degree seeking students, typically defined as those enrolled in 12 credit hours or more, that are considered eligible for athletics. The lack of a clear identified number of eligible students remains an unresolved issue in the further study of intercollegiate athletics at public community colleges. The American Association of College Registrars and Admissions Officers (AACRAO) could commission a study that focuses on the validity of concepts of full-time students versus full-time degree seeking students at public community colleges. The study could investigate fluctuations in student status between full-time and part-time enrollment as well as the frequency with which students are reclassified from non-degree seeking to degree/certificate seeking.

Recommendation 9: In March 2004, a report was released which assessed gender equity in athletics at high schools, community colleges, and 4-year colleges in

California. This report was commissioned by the California State Legislature, and in so far as it was limited to California only included the members of COA (RMC Research Corporation, 2004). A replication of this study is needed that also includes NJCAA, NWAACC, and community colleges that sponsor intercollegiate athletics but are not members of athletic association. The suggested national study can replicate the RMC California athletics study at the national level to evaluate national progress toward Title IX goals in community colleges across the country.

Recommendation 10: Compliance with Title IX is a goal for all college campuses and can impact a college's athletic budget allocation. Non-compliance with Title IX holds the potential threat of loss of federal funds. Title IX allows for three prongs to determine compliance. If one only examines whether the percentage of student athletes is reflective of the overall student body, community colleges are far from compliance. However, a study is needed to compare the demographic of student athletes to the overall college population. Overall, women account for over 55% of full-time community college students (NCES, 2002). It may be that older women are not interested in pursuing intercollegiate athletics. A new algorithm to determine Title IX compliance which accounts for students' ages could be developed by having the US Department of Education add a few more fields to the EADA survey. Colleges already report on the number of male and female athletes that participate by sport adding field to college age by gender and sport would be all that would be needed.

Recommendation 11: Within the NJCAA membership the correspondence in sponsoring Division I and II teams and proving athletically-related aid was not one-to-one. What motivates colleges to compete in a division where they could offer aid and

then choose not to provide that aid? Future researchers in community college athletics should explore colleges' motivations for offering Division I and II teams. This research could be undertaken in partnership with the NJCAA since it is the only one of the three major community college athletic associations that offers competition in more than one division. The NJCAA has access to archival data that could reveal trends regarding colleges that choose to provide or eliminate athletically-related aid.

Recommendation 12: Now that we know how much is spent on recruitment, a study is needed to determine how those funds are actually spent. Do coaches visit campuses, make phone calls, or attend camps? Are the majority of funds spent recruiting out-of-state or out-of-district students? What types of colleges are most successful in getting students to sign letters of intent? This topic would require a survey of a sample of public community college athletic directors and could be undertaken as a master's thesis or doctoral dissertation project.

Recommendation 13: A better study of community college athletic finance is needed. Incorporating state reimbursement formulas, rather than the state allocation used here, would provide a clearer picture into whether intercollegiate athletics results in a net revenue boost or drain to a community college's budget. The NJCAA could commission a report similar to *The Empirical Effects of Collegiate Athletics: An Interim Report* (Littan, Orszag, and Orszag, 2003), a NCAA commissioned report or such an endeavor might be undertaken by the Knight Commission, which up to now has not focussed on community college intercollegiate athletics.

Recommendation 14: A more sophisticated analysis of coaching salaries and roles is needed. The current EADA survey does not collect coaches' salaries for each

sport, but rather relies on aggregate figures and averages across each college. Football tends to have the highest paid coaches at four-year colleges and likely does at the community college level as well. Unfortunately, the data are not currently available to make this determination. The EADA survey could be expanded to require reporting of coaches' salaries for each sport, as opposed to the aggregate figures now required. A closer analysis would also need to incorporate a variable for cost of living differences across the country. This analysis could be undertaken by the Commission on Athletics but with a national, rather than California, focus. California's community college coaches have a statewide association and sport level associations whose members may be amenable to participating in a research study.

Recommendation 15: Now that the scope and extent of intercollegiate athletics has been charted, it is important to know more about the role that intercollegiate athletics play on college campuses. Do the quantitative differences in colleges with athletics translate into atmospheric differences on their campuses in areas such as school spirit? Do colleges with athletics have more student activities that rely on sports such as cheerleading, pep band, and drill or dance teams? Qualitative research that uses case studies of public community colleges with intercollegiate athletics is needed to know why colleges sponsor athletics and how it affects their campuses.

Community colleges are not a single homogeneous group, yet many research designs treat all community colleges as being fundamentally interchangeable. The Katsinas, et al. Classification Scheme provides a useful lens for uncovering possible differences among different community college types. Each of the research

recommendations would benefit from the use of the Katsinas et al. typology in their investigations and reporting.

Recommendations for Practice

Recommendation 1: All colleges should regularly survey their students to ensure that the students' needs and interests in intercollegiate athletics are being met. With the demographics indicating an increase in the enrollment of younger students, Palmer (2000) concludes that colleges will need to provide more student activities that appeal to this age group. Athletics are certainly one area that fits into this plan. The National Association of College Directors of Athletics (NACDA) and their affiliate group the National Alliance of Two Year College Athletic Administrators (NATYCAA) could prove instrumental in developing workshops for public community colleges on how to formulate and implement a student interest survey to ensure compliance with Title IX.

Recommendation 2: Colleges that wish to improve their gender ratio of male and female college athletes may wish to consider adding track and field events for women, provided that the facilities are already available. Track had low average expenses at less than $2,300 per women's team. Bowling is also an economical sport to add, but is far less common as a public community college sport and finding competition would be difficult outside of the Northeast.

Recommendation 3: Anecdotal evidence suggests that athletics can add diversity to community college campuses. A rigorous empirical study is needed to determine if this is true for any community college types. However, this research would require greater detail in the collection of IPEDS Graduation Rate survey information.

Information on student athletes receiving athletic aid is only reported for baseball, football, basketball, and track. All other sports are combined for reporting purposes.

Recommendation 4: The lack of congruence in the data when comparing athletic aid to athletic revenue indicates a need for the EADA survey to be more explicit in defining revenue and expense categories. While this may seem to be inconsequential, such discrepancies in systematic reporting can undermine the accuracy of the research conducted in this area. The EADA survey software could be edited to flag cases where athletic aid exceeds either athletic revenue and/or athletic expenses.

Recommendation 5: Adding or expanding intercollegiate athletics offerings at rural community colleges, particularly small ones, can produce enrollment growth. Public community colleges that desire to increase full-time student enrollment to capitalize on economies of scale in instruction, student services, housing, or food service, or that seek to increase financial stability by collecting greater state reimbursement for instruction may wish to explore this option. Colleges must conduct careful planning to initiate a viable athletics program that has sufficient staffing, funding, access to facilities, and competition to ensure a net increase in full-time enrollment.

Recommendation 6: Most sports at the intercollegiate level report employing less than one full-time coach. However, the status of these coaches in relation to the community college is unclear. A closer examination into coaching salaries at community colleges is needed to determine what types of employment contracts are used for coaches and how coaches fit into the employee categories. It may be that coaches at rural colleges are more likely to have teaching duties and be employed full time. Or there may be a relationship in how coaches' contracts are structured and the integration

and importance of athletics to a community college campus. It is important to understand the differing contract structures because some schemes may permit colleges to hide the true cost of athletics by shifting significant portions of coaches' salaries to instructional or administrative line items.

Recommendation 7: The three major community college athletic associations, the National Junior College Athletic Association, the Commission on Athletics, and the Northwest Athletic Association of Community Colleges, should work together to provide greater benefits for their member colleges and their respective student athletes. In the six men's and seven women's sports that all three associations play, a national championship competitions should be held. The Junior Rose Bowl, a football championship game between the COA and NJCAA champions that was played 23 times between 1946 and 1977, should be reinstated (College Football Data Warehouse, 2004).

From a policy perspective, the three athletic associations would benefit from working together to lobby Congress and the appropriate staff in the US Department of Education's Office of Civil Rights (OCR) for gender equity tests that take into account the differences in enrollment patterns and student demographics between four-year and two-year colleges. The Secretary of Education's Commission on Opportunities in Athletics has recommended that

> In demonstrating compliance with [Title IX}….the male/female ratio of athletic participation should be measured against the male/female ratio of an institution's undergraduate population minus nontraditional students. (USED 2003b, p. 39)

An alternative test designed by OCR that recognizes the negative impact of nontraditional student enrollment on athletic participation rates would give more positive results than the finding that only 8% of COA members met the proportionality test in 2004 (RMC, 2004).

Recommendation 8: Community college chief executive officers and student affairs officers that are considering employment in a rural community college would be well advised to inform themselves about the role of intercollegiate athletics at those campuses. College websites, data from the Equity in Athletics Disclosure Act (EADA) Survey and from the Integrated Postsecondary Educational Data System (IPEDS) Surveys are all publicly available information resources that can provide insight into a specific public community college's commitment to intercollegiate athletics. It would also be beneficial for candidates for employment at public community colleges to research the athletic association to which the college of interest belongs.

Commentary

It is clear that athletics are alive and well at public community colleges in the United States and that intercollegiate athletics provides benefits to individual students and colleges. This study has explored the benefits of athletics that accrue to the colleges in particular in the areas of enrollment and revenue but the benefits to individual students remain unexplored. The diversity of sports offered and number of teams available for men and women indicates that athletics may be a leading student activity in public community college campuses. If Palmer's analysis of demographic data is correct then intercollegiate athletics may see growth as a greater number of traditionally aged students enter the community colleges in the next two decades.

Community colleges provide more opportunities for female athletes than ever before. Title IX has compelled all colleges to move beyond Thornton's recommendation that, "For women, too, the lessons of sportsmanship are important and should be encouraged by appropriate *intramural* competition in suitable sports" [emphasis added] (1972, p. 274). Still, participation ratios indicate that the colleges have far to go to meeting the proportionality test that can be used to prove compliance with Title IX.

Intercollegiate athletics at community colleges is a field that is vastly uncharted. There is great potential for meaningful and instructive research that will be helpful to community college scholars and practitioners such as presidents, student affairs professionals, athletic directors, and coaches. Professionals at rural community colleges in particular should be aware of the integral role intercollegiate athletics likely plays at their campuses. However, no community college president should treat athletics as a panacea for declining enrollments, rather they should heed the following advice from Raepple, Peery and Hohman:

> Unless athletics sponsored by the college are truly a part of the college education process and support and promote the goals of the institution, then the entire mission of the institution is in jeopardy and the athletic program has no basis for existence (1982, p. 162).

APPENDIX A

EQUITY IN ATHLETIC DISCLOSURE ACT (EADA) SURVEY

Equity In Athletics - Both Mens and Womens Teams

Screening Questions

1. How are you going to report your Operating Expenses (i.e Game Day expenses)?

- ○ By Team
- ○ Per participant

2. Select the type of Sports Teams at your institution

- ○ Men's Teams Only
- ○ Women's Teams Only
- ○ Both Men's and Women's Teams

3. Select Sports teams at your institution (must select at least one)

- ☐ Archery
- ☐ Badminton
- ☐ Baseball
- ☐ Basketball
- ☐ Beach Volleyball
- ☐ Bowling
- ☐ All Track Combined **
- ☐ Diving
- ☐ Equestrian
- ☐ Fencing
- ☐ Field Hockey
- ☐ Football
- ☐ Golf
- ☐ Gymnastics
- ☐ Ice Hockey
- ☐ Lacrosse
- ☐ Rifle
- ☐ Rodeo
- ☐ Rowing
- ☐ Sailing
- ☐ Skiing
- ☐ Soccer
- ☐ Softball
- ☐ Squash
- ☐ Swimming
- ☐ Swimming and Diving**
- ☐ Synchronized Swimming
- ☐ Table Tennis
- ☐ Team Handball
- ☐ Tennis
- ☐ Track and Field, Indoor
- ☐ Track and Field, Outdoor
- ☐ Cross-Country
- ☐ Volleyball
- ☐ Water Polo
- ☐ Weight Lifting
- ☐ Wrestling
- ☐ Other Sports

Note: If you remove sportscode(s) from the current selection, associated data will also be deleted.
**Please note: You may report all Track and Field as one sport under All Track Combined, or as individual sports. The same is true of Swimming and Diving.

Athletics Participation

Athletics Participation

Varsity Team	Coed Teams checkmark	Number of Participants as of the day of the first scheduled contest: Men's Teams	Number of Participants as of the day of the first scheduled contest: Women's Teams	Number of Participants Participating on a Second Team: Men's Teams	Number of Participants Participating on a Second Team: Women's Teams	Number of Participants Participating on a Third Team: Men's Teams	Number of Participants Participating on a Third Team: Women's Teams	Number of Participants Participating on a Fourth Team: Men's Teams	Number of Participants Participating on a Fourth Team: Women's Teams
Archery	☐								
Badminton	☐								
Baseball	☐								
Basketball	☐								

Beach Volleyball								
Bowling								
All Track Combined								
Diving								
Equestrian								
Fencing								
Field Hockey								
Football								
Golf								
Gymnastics								
Ice Hockey								
Lacrosse								
Rifle								
Rodeo								
Rowing								
Sailing								
Skiing								
Soccer								
Softball								
Squash								
Swimming and Diving								
Swimming								
Synchronized Swimming								
Table Tennis								
Team Handball								
Tennis								
Track and Field, Indoor								
Track and Field, Outdoor								
Track and Field, X-Country								
Volleyball								
Water Polo								
Weight Lifting								
Wrestling								
Other Sports								

Total Participants Unduplicated Count of Participants

	Operating Expenses per Participant					
	Operating Expenses per Participant					
	Men's Teams			Women's Teams		
Varsity Teams	Participants	Operating Expenses per Participant	By Team	Participants	Operating Expenses per Participant	By Team	Total Operating Expenses
Archery						
Badminton						
Baseball						
Basketball						
Beach Volleyball						
Bowling						
All Track Combined						
Diving						
Equestrian						
Fencing						
Field Hockey						
Football						
Golf						
Gymnastics						
Ice Hockey						
Lacrosse						
Rifle						
Rodeo						
Rowing						
Sailing						
Skiing						
Soccer						
Softball						
Squash						
Swimming and Diving						
Swimming						
Synchronized Swimming						
Table Tennis						
Team Handball						
Tennis						

Track and Field, Indoor		
Track and Field, Outdoor		
Track and Field, X-Country		
Volleyball		
Water Polo		
Weight Lifting		
Wrestling		
Other Sports		
Total Operating Expenses		

Operating Expenses Per Team

Operating Expenses, i.e Game Day Expenses per Team

	Men's Teams			Women's Teams			
Varsity Teams	Participants	Operating Expenses per Participant	By Team	Participants	Operating Expenses per Participant	By Team	Total Operating Expenses
Archery							
Badminton							
Baseball							
Basketball							
Beach Volleyball							
Bowling							
All Track Combined							
Diving							
Equestrian							
Fencing							
Field Hockey							
Football							
Golf							
Gymnastics							
Ice Hockey							
Lacrosse							
Rifle							
Rodeo							
Rowing							
Sailing							
Skiing							
Soccer							
Softball							

Football									
Golf									
Gymnastics									
Ice Hockey									
Lacrosse									
Rifle									
Rodeo									
Rowing									
Sailing									
Skiing									
Soccer									
Squash									
Swimming and Diving									
Swimming									
Table Tennis									
Team Handball									
Tennis									
Track and Field, Indoor									
Track and Field, Outdoor									
Track and Field, X-Country									
Volleyball									
Water Polo									
Weight Lifting									
Wrestling									
Other Sports									
Coaching Position Totals									

Head Coaches Women's Team

Varsity Teams	Head Coaches - Women's Teams								
	Male Head Coaches				Female Head Coaches				
	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Total Head Coaches
	FT	PT	FT Emp	PT Emp	FT	PT	FT Emp	PT Emp	

Football								
Golf								
Gymnastics								
Ice Hockey								
Lacrosse								
Rifle								
Rodeo								
Rowing								
Sailing								
Skiing								
Soccer								
Squash								
Swimming and Diving								
Swimming								
Table Tennis								
Team Handball								
Tennis								
Track and Field, Indoor								
Track and Field, Outdoor								
Track and Field, X-Country								
Volleyball								
Water Polo								
Weight Lifting								
Wrestling								
Other Sports								
Coaching Position Totals								

Head Coaches Women's Team

Varsity Teams	Head Coaches - Women's Teams								
	Male Head Coaches				Female Head Coaches				
	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Total Head Coaches
	FT	PT	FT Emp	PT Emp	FT	PT	FT Emp	PT Emp	

Archery								
Badminton								
Basketball								
Beach Volleyball								
Bowling								
All Track Combined								
Diving								
Equestrian								
Fencing								
Field Hockey								
Golf								
Gymnastics								
Ice Hockey								
Lacrosse								
Rifle								
Rodeo								
Rowing								
Sailing								
Skiing								
Soccer								
Softball								
Squash								
Swimming and Diving								
Swimming								
Synchronized Swimming								
Table Tennis								
Team Handball								
Tennis								
Track and Field, Indoor								
Track and Field, Outdoor								
Track and Field, X-Country								
Volleyball								
Water Polo								
Weight Lifting								
Wrestling								

Equity In Athletics - Both Mens and Womens Teams

Screening Questions

1. How are you going to report your Operating Expenses (i.e Game Day expenses)?

- ○ By Team
- ○ Per participant

2. Select the type of Sports Teams at your institution

- ○ Men's Teams Only
- ○ Women's Teams Only
- ○ Both Men's and Women's Teams

3. Select Sports teams at your institution (must select at least one)

- ☐ Archery
- ☐ Badminton
- ☐ Baseball
- ☐ Basketball
- ☐ Beach Volleyball
- ☐ Bowling
- ☐ All Track Combined **
- ☐ Diving
- ☐ Equestrian
- ☐ Fencing
- ☐ Field Hockey
- ☐ Football
- ☐ Golf
- ☐ Gymnastics
- ☐ Ice Hockey
- ☐ Lacrosse
- ☐ Rifle
- ☐ Rodeo
- ☐ Rowing
- ☐ Sailing
- ☐ Skiing
- ☐ Soccer
- ☐ Softball
- ☐ Squash
- ☐ Swimming
- ☐ Swimming and Diving**
- ☐ Synchronized Swimming
- ☐ Table Tennis
- ☐ Team Handball
- ☐ Tennis
- ☐ Track and Field, Indoor
- ☐ Track and Field, Outdoor
- ☐ Cross-Country
- ☐ Volleyball
- ☐ Water Polo
- ☐ Weight Lifting
- ☐ Wrestling
- ☐ Other Sports

Note: If you remove sportscode(s) from the current selection, associated data will also be deleted.
**Please note: You may report all Track and Field as one sport under All Track Combined, or as individual sports. The same is true of Swimming and Diving.

Athletics Participation

Athletics Participation

Varsity Team	Coed Teams checkmark	Number of Participants as of the day of the first scheduled contest: Men's Teams	Number of Participants as of the day of the first scheduled contest: Women's Teams	Number of Participants Participating on a Second Team: Men's Teams	Number of Participants Participating on a Second Team: Women's Teams	Number of Participants Participating on a Third Team: Men's Teams	Number of Participants Participating on a Third Team: Women's Teams	Number of Participants Participating on a Fourth Team: Men's Teams	Number of Participants Participating on a Fourth Team: Women's Teams
Archery	☐								
Badminton	☐								
Baseball	☐								
Basketball	☐								

Track and Field, Outdoor								
Track and Field,X-Country								
Volleyball								
Water Polo								
Weight Lifting								
Wrestling								
Other Sports								
Coaching Position Totals								

Assistant Coaches Women's Team

	Assistant Coaches - Women's Teams								
	Male Assistant Coaches				Female Assistant Coaches				
Varsity Teams	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Full Time Coaching Duties	Part Time Coaching Duties	Full Time University Employee	Part Time University Employee or Volunteer	Total Assistant Coaches
	FT	PT	FT Emp	PT Emp	FT	PT	FT Emp	PT Emp	
Archery									
Badminton									
Basketball									
Beach Volleyball									
Bowling									
All Track Combined									
Diving									
Equestrian									
Fencing									
Field Hockey									
Golf									
Gymnastics									
Ice Hockey									
Lacrosse									
Rifle									
Rodeo									
Rowing									
Sailing									
Skiing									
Soccer									
Softball									
Squash									

Swimming and Diving								
Swimming								
Synchronized Swimming								
Table Tennis								
Team Handball								
Tennis								
Track and field, Indoor								
Track and field, Outdoor								
Track and Field, X-Country								
Volleyball								
Water Polo								
Weight Lifting								
Wrestling								
Other Sports								
Coaching Position Totals								

Revenues

Varsity Teams	Revenues per Team		
	Men's Teams	Women's Teams	Total
Basketball			
Football			
Archery			
Badminton			
Baseball			
Beach Volleyball			
Bowling			
All Track Combined			
Diving			
Equestrian			
Fencing			
Field Hockey			
Golf			
Gymnastics			
Ice Hockey			
Lacrosse			

Rifle		
Rodeo		
Rowing		
Sailing		
Skiing		
Soccer		
Softball		
Squash		
Swimming and Diving		
Swimming		
Synchronized Swimming		
Table Tennis		
Team Handball		
Tennis		
Track and Field, Indoor		
Track and Field, Outdoor		
Track and Field, X-Country		
Volleyball		
Water Polo		
Weight Lifting		
Wrestling		
Other Sports		
Total Revenues of all Sports, except football and basketball, combined		
Total Revenues		
Not allocated by sport		
Grand Total		

Expenses

Varsity Teams	Expenses per Team		
	Men's Teams	Women's Teams	Total
Basketball			
Football			
Archery			
Badminton			
Baseball			
Beach Volleyball			
Bowling			
All Track Combined			
Diving			
Equestrian			
Fencing			
Field Hockey			
Golf			

Gymnastics		
Ice Hockey		
Lacrosse		
Rifle		
Rodeo		
Rowing		
Sailing		
Skiing		
Soccer		
Softball		
Squash		
Swimming and Diving		
Swimming		
Synchronized Swimming		
Table Tennis		
Team Handball		
Tennis		
Track and Field, Indoor		
Track and Field, Outdoor		
Track and Field, X-Country		
Volleyball		
Water Polo		
Weight Lifting		
Wrestling		
Other Sports		
Total Expenses of all Sports, except football and basketball, combined		
Total Expenses		
Not allocated by sport		
Grand Total		

Athletically-Related Student Aid

Varsity Teams	Athletically-Related Student Aid		
	Men's Teams	Women's Teams	Total
Total			
Ratio(percent)			100%

Recruiting Expenses

Varsity Teams	Recruiting Expenses		
	Men's Teams	Women's Teams	Total
Total			

Head Coaches Salaries

Varsity Teams	Head Coaches Salaries	
	Men's Teams	Women's Teams
Annual Institutional Salary per Coach		

Number of Head Coaches Included in Average		
Average Annual Institutional Salary per FTE		
Number of FTEs included in Average		

Assistant Coaches Salaries

Varsity Teams	Assistant Coaches Salaries	
	Men's Teams	Women's Teams
Annual Institutional Salary per Coach		
Number of Assistant Coaches Included in Average		
Average Annual Institutional Salary per FTE		
Number of FTEs included in Average		

Supplemental Information

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APPENDIX B

SPORT FACT SHEETS AND MAPS

Community College Athletics Fact Sheet, 2002-2003

Sport: Badminton

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: N/A	Number of Teams: 15
Participants: N/A	Participants: 119
Average Team Size: N/A	Average Team Size: 8
Associations which Recognize Sport	
N/A	COA
Staffing	
Average Head Coaches FTE: N/A	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: N/A	Total Number of Head Coaches: 11
Average Assistant Coaches FTE: N/A	Average Assistant Coaches FTE: 0.4
Total Number of Assistant Coaches: N/A	Total Number of Assistant Coaches: 6
Finances, 2003-2004	
Average Revenues: N/A	Average Revenues: $2,542
Average Expenses: N/A	Average Expenses: $6,368

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Badminton Teams at Public Community Colleges, 2002-2003

Legend

- Badminton

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

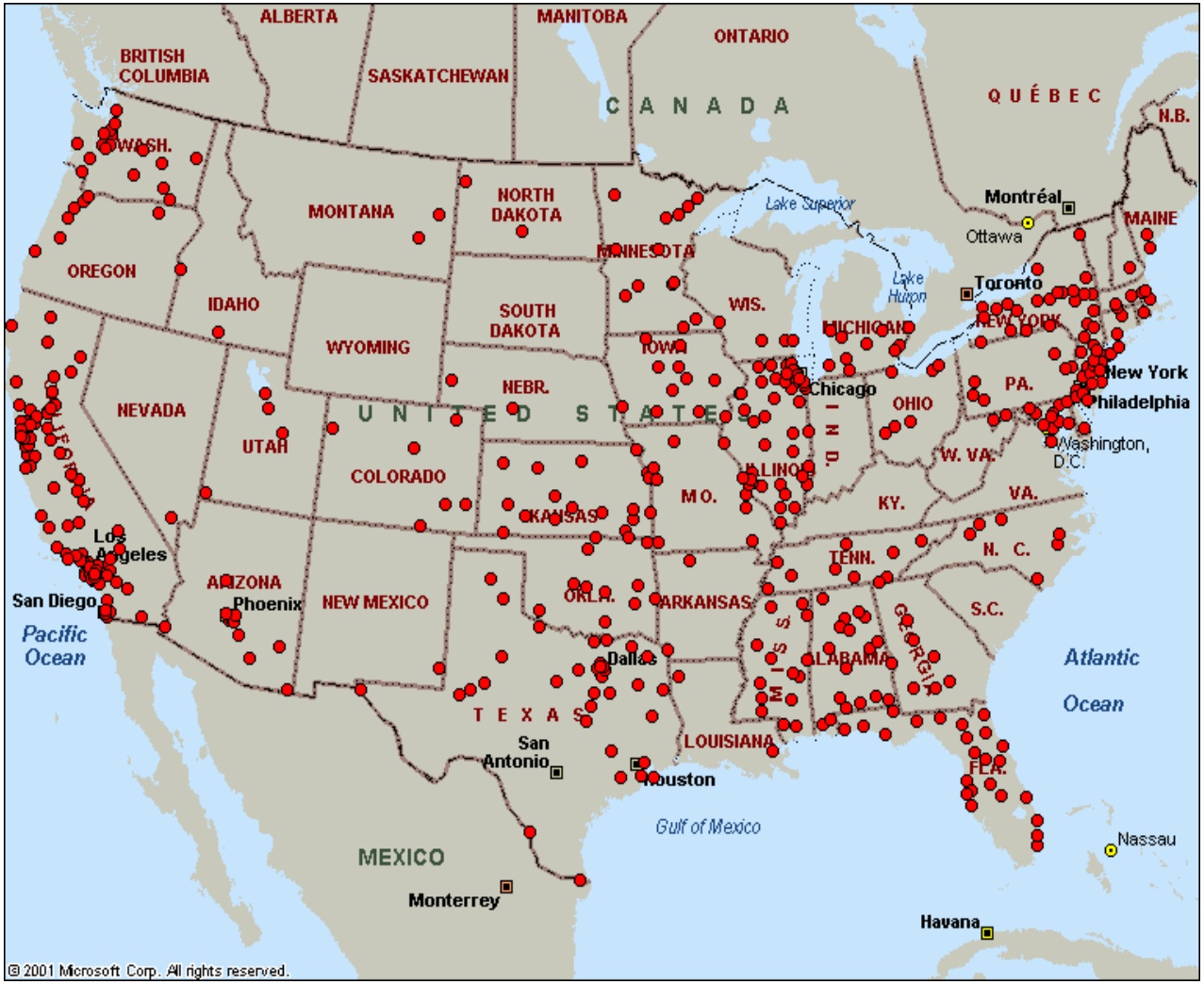
Sport: Baseball

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 463	Number of Teams: N/A
Participants: 12,360	Participants: N/A
Average Team Size: 27	Average Team Size: N/A
Associations which Recognize Sport	
NJCAA, COA, NWAACC	N/A
Staffing	
Average Head Coaches FTE: 0.9	Average Head Coaches FTE: N/A
Total Number of Head Coaches: 406	Total Number of Head Coaches:
Average Assistant Coaches FTE: 1.3	Average Assistant Coaches FTE: N/A
Total Number of Assistant Coaches: 577	Total Number of Assistant Coaches: N/A
Finances, 2003-2004	
Average Revenues: $24,907	Average Revenues: N/A
Average Expenses: $48,511	Average Expenses: N/A

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Baseball at Public Community Colleges, 2002-2003



Legend

- Men's Baseball

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

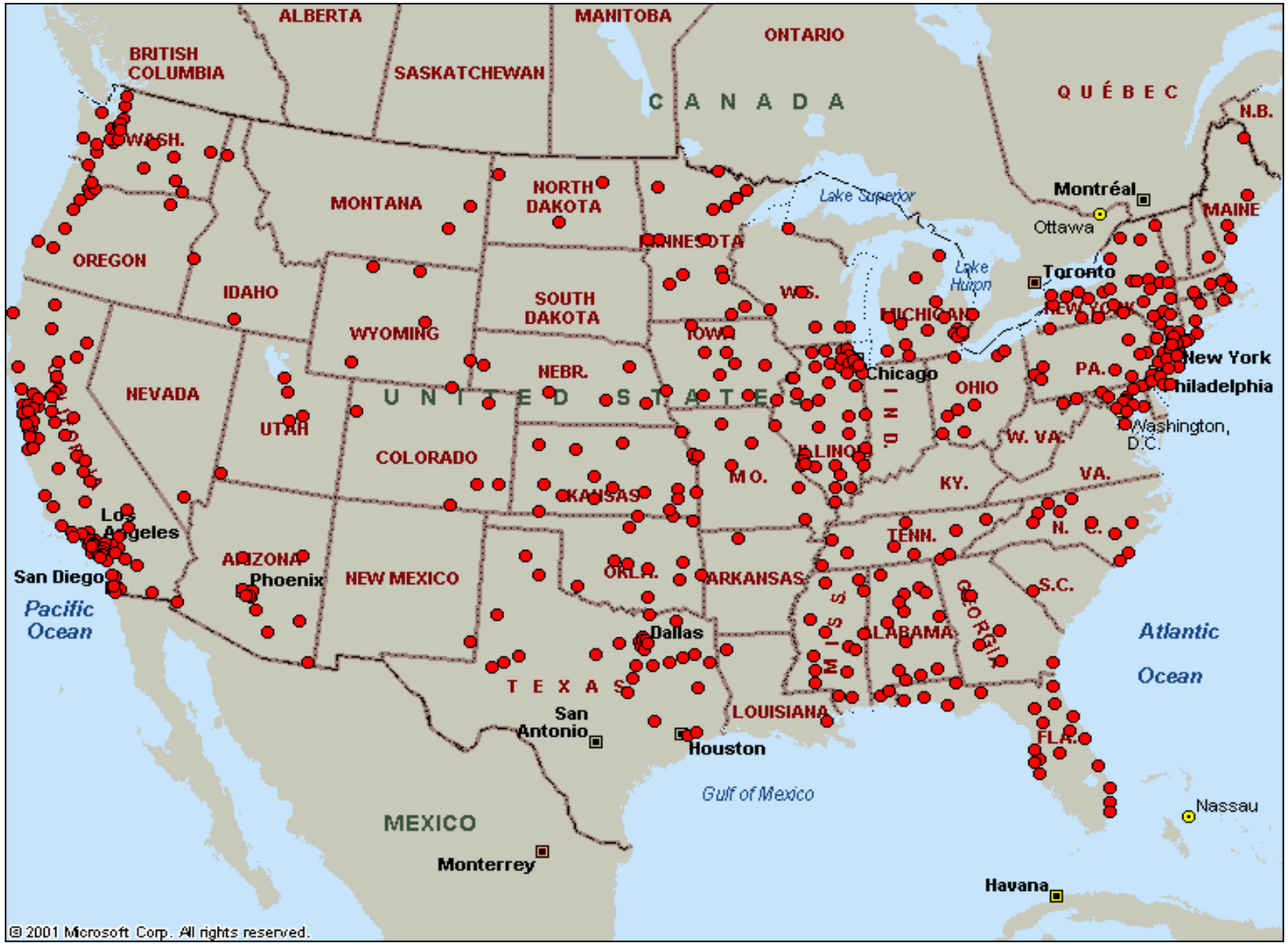
Sport: Basketball

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 509	Number of Teams: 462
Participants: 7,349	Participants: 5,904
Average Team Size: 14	Average Team Size: 13
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.9	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 449	Total Number of Head Coaches: 400
Average Assistant Coaches FTE: 1.1	Average Assistant Coaches FTE: 0.9
Total Number of Assistant Coaches: 558	Total Number of Assistant Coaches: 444
Finances, 2003-2004	
Average Revenues: $18,085	Average Revenues: $16,118
Average Expenses: $43,354	Average Expenses: $39,703

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Basketball Teams at Public Community Colleges, 2002-2003

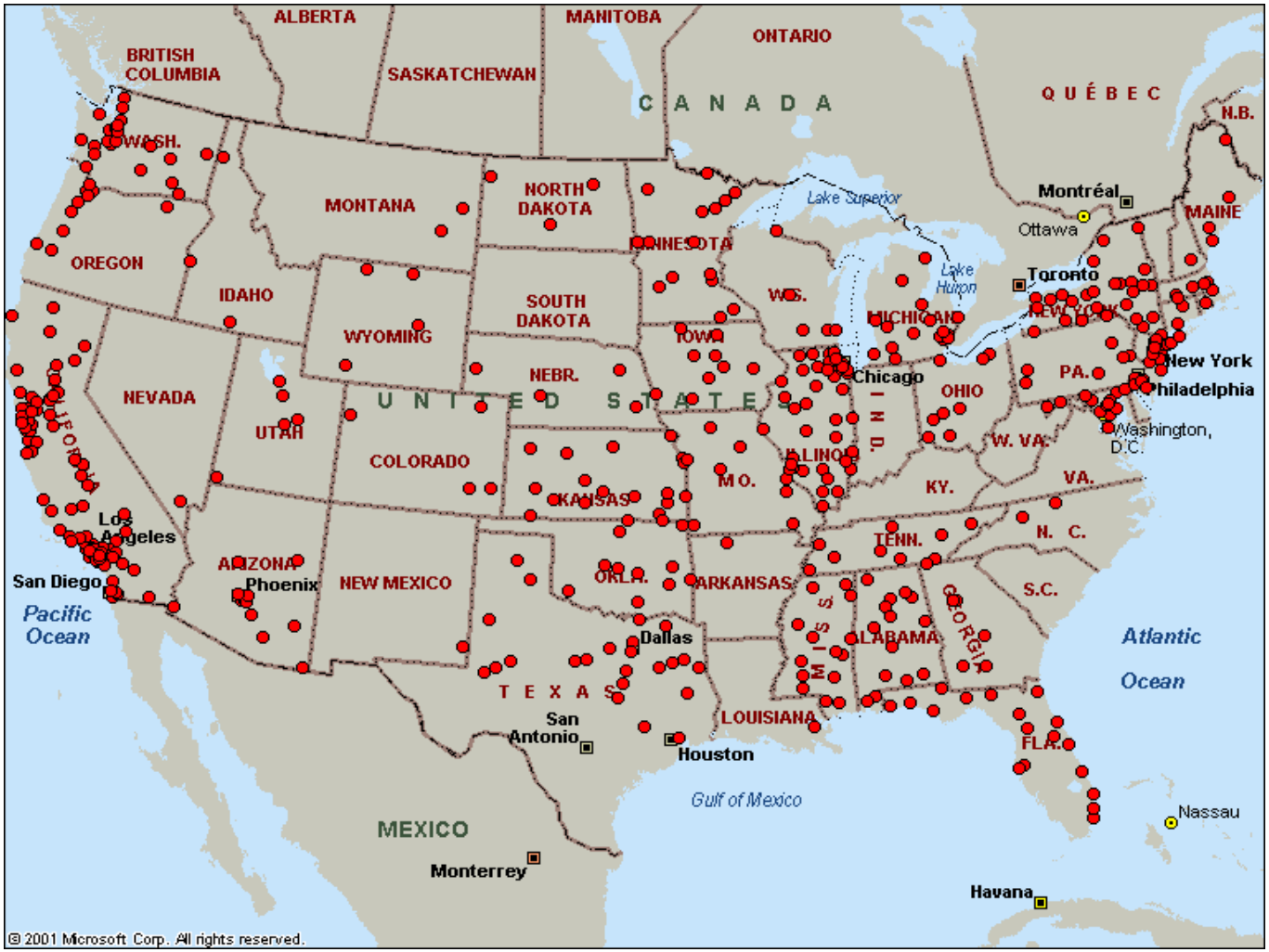


Legend

- Men's Basketball

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Women's Basketball Teams at Public Community Colleges, 2002-2003



Legend

- Women's Basketball

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Bowling

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 15	Number of Teams: 13
Participants: 123	Participants: 76
Average Team Size: 8	Average Team Size: 6
Associations which Recognize Sport	
NJCAA	NJCAA
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 11	Total Number of Head Coaches: 10
Average Assistant Coaches FTE: 0.3	Average Assistant Coaches FTE: 0.3
Total Number of Assistant Coaches: 4	Total Number of Assistant Coaches: 4
Finances, 2003-2004	
Average Revenues: $1,795	Average Revenues: $1,616
Average Expenses: $2,305	Average Expenses: $2,123

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Bowling Teams at Public Community Colleges, 2002-2003

Legend

- Men's Bowling

Source: 2002 Equity in Athletics Disclosure Act Survey (EADA) Survey.

Women's Bowling Teams at Public Community Colleges, 2002-2003

Legend

- Women's Bowling

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Football

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 137	Number of Teams: N/A
Participants: 9,761	Participants: N/A
Average Team Size: 71	Average Team Size: N/A
Associations which Recognize Sport	
NJCAA, COA, NWAACC	N/A
Staffing	
Average Head Coaches FTE: 1.0	Average Head Coaches FTE: N/A
Total Number of Head Coaches: 129	Total Number of Head Coaches: N/A
Average Assistant Coaches FTE: 4.8	Average Assistant Coaches FTE: N/A
Total Number of Assistant Coaches: 634	Total Number of Assistant Coaches: N/A
Finances, 2003-2004	
Average Revenues: $30,756	Average Revenues: N/A
Average Expenses: $99,705	Average Expenses: N/A

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Football Teams at Public Community Colleges, 2002-2003

Legend

- Football

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

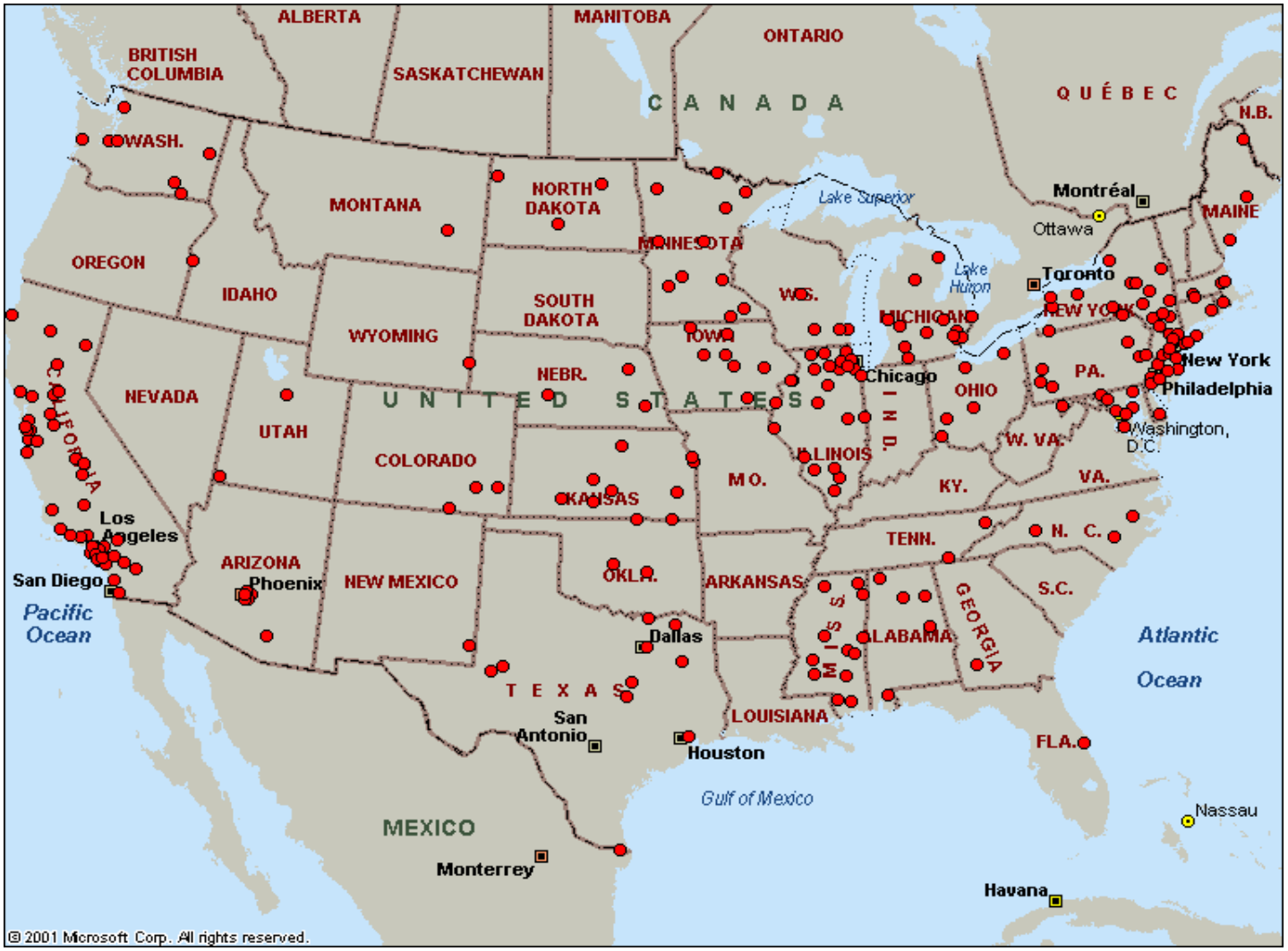
Sport: Golf

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 241	Number of Teams: 75
Participants: 1,953	Participants: 362
Average Team Size: 8	Average Team Size: 5
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.3
Total Number of Head Coaches: 190	Total Number of Head Coaches: 79
Average Assistant Coaches FTE: 0.2	Average Assistant Coaches FTE: 0.1
Total Number of Assistant Coaches: 50	Total Number of Assistant Coaches: 19
Finances, 2003-2004	
Average Revenues: $6,072	Average Revenues: $4,137
Average Expenses: $12,831	Average Expenses: $9,333

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Golf Teams at Public Community Colleges, 2002-2003



Legend

- Men's Golf

Source: 2002 Equity in Athletics Disclosure Act Survey (EADA).

Women's Golf Teams at Public Community Colleges, 2002-2003

Legend

- Women's Golf

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Ice Hockey

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 12	Number of Teams: 2
Participants: 277	Participants: 33
Average Team Size: 23	Average Team Size: 17
Associations which Recognize Sport	
NJCAA	N/A
Staffing	
Average Head Coaches FTE: 0.6	Average Head Coaches FTE: N/A
Total Number of Head Coaches: 6	Total Number of Head Coaches: N/A
Average Assistant Coaches FTE: 0.4	Average Assistant Coaches FTE: N/A
Total Number of Assistant Coaches: 4	Total Number of Assistant Coaches: N/A
Finances, 2003-2004	
Average Revenues: $29,711	Average Revenues: N/A
Average Expenses: $36,798	Average Expenses: N/A

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Ice Hockey Teams at Public Community Colleges, 2002-2003

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Lacrosse

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 20	Number of Teams: 9
Participants: 502	Participants: 167
Average Team Size: 25	Average Team Size: 19
Associations which Recognize Sport	
NJCAA	NJCAA
Staffing	
Average Head Coaches FTE: 0.9	Average Head Coaches FTE: 0.4
Total Number of Head Coaches: 17	Total Number of Head Coaches: 7
Average Assistant Coaches FTE: 1.0	Average Assistant Coaches FTE: 0.5
Total Number of Assistant Coaches: 19	Total Number of Assistant Coaches: 10
Finances, 2003-2004	
Average Revenues: $7,870	Average Revenues: $2,974
Average Expenses: $15,264	Average Expenses: $7,076

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Lacrosse Teams at Public Community Colleges, 2002-2003

Legend

- Men's Lacrosse

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Women's Lacrosse Teams at Public Community Colleges, 2002-2003

Legend

- Women's Lacrosse

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

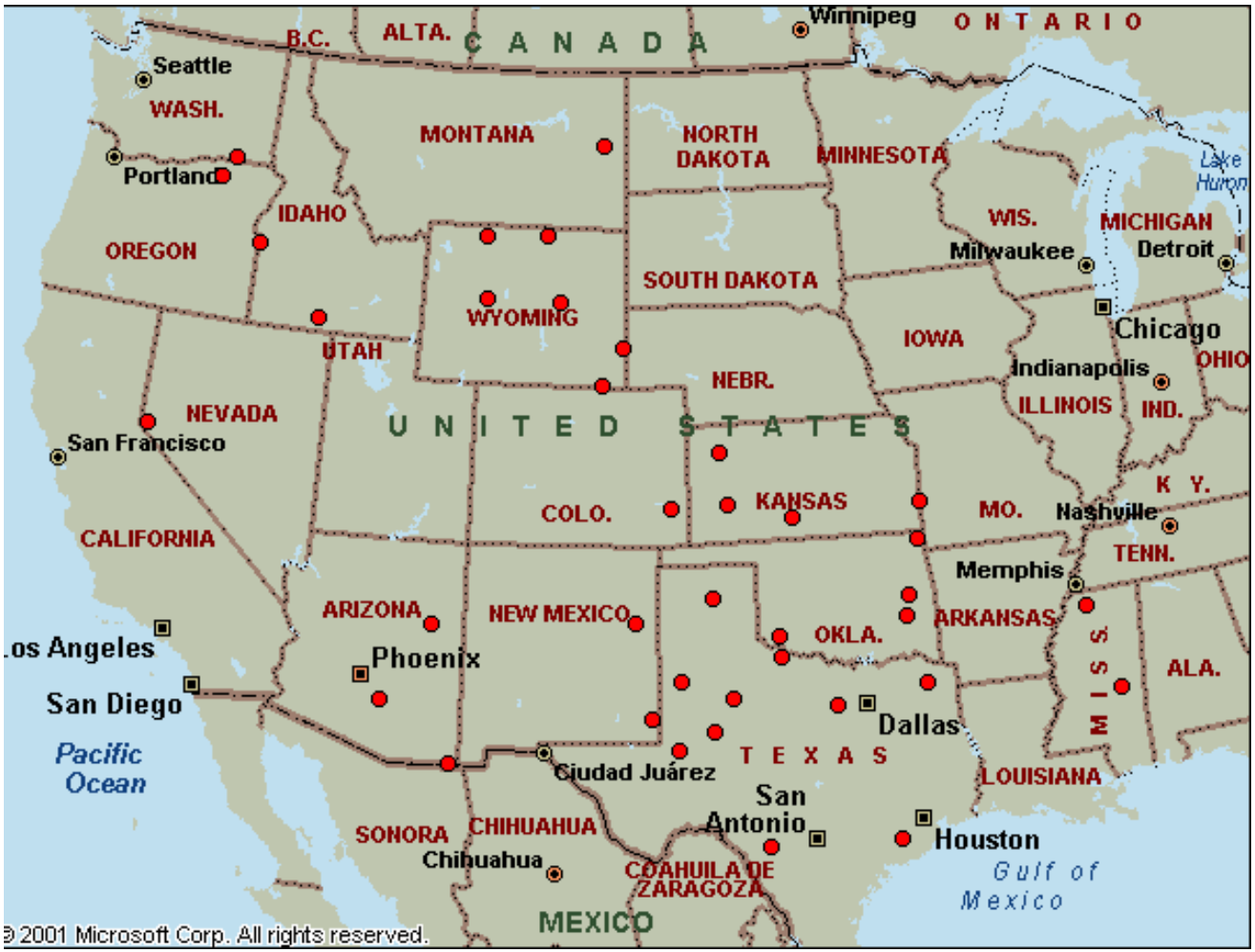
Sport: Rodeo

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 39	Number of Teams: 28
Participants: 817	Participants: 208
Average Team Size: 21	Average Team Size: 7
Associations which Recognize Sport	
NIRA	NIRA
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.7
Total Number of Head Coaches: 30	Total Number of Head Coaches: 26
Average Assistant Coaches FTE: 0.2	Average Assistant Coaches FTE: 0.2
Total Number of Assistant Coaches: 9	Total Number of Assistant Coaches: 7
Finances, 2003-2004	
Average Revenues: $20,809	Average Revenues: $8,329
Average Expenses: $38,516	Average Expenses: $19,689

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Rodeo Teams at Public Community Colleges, 2002-2003

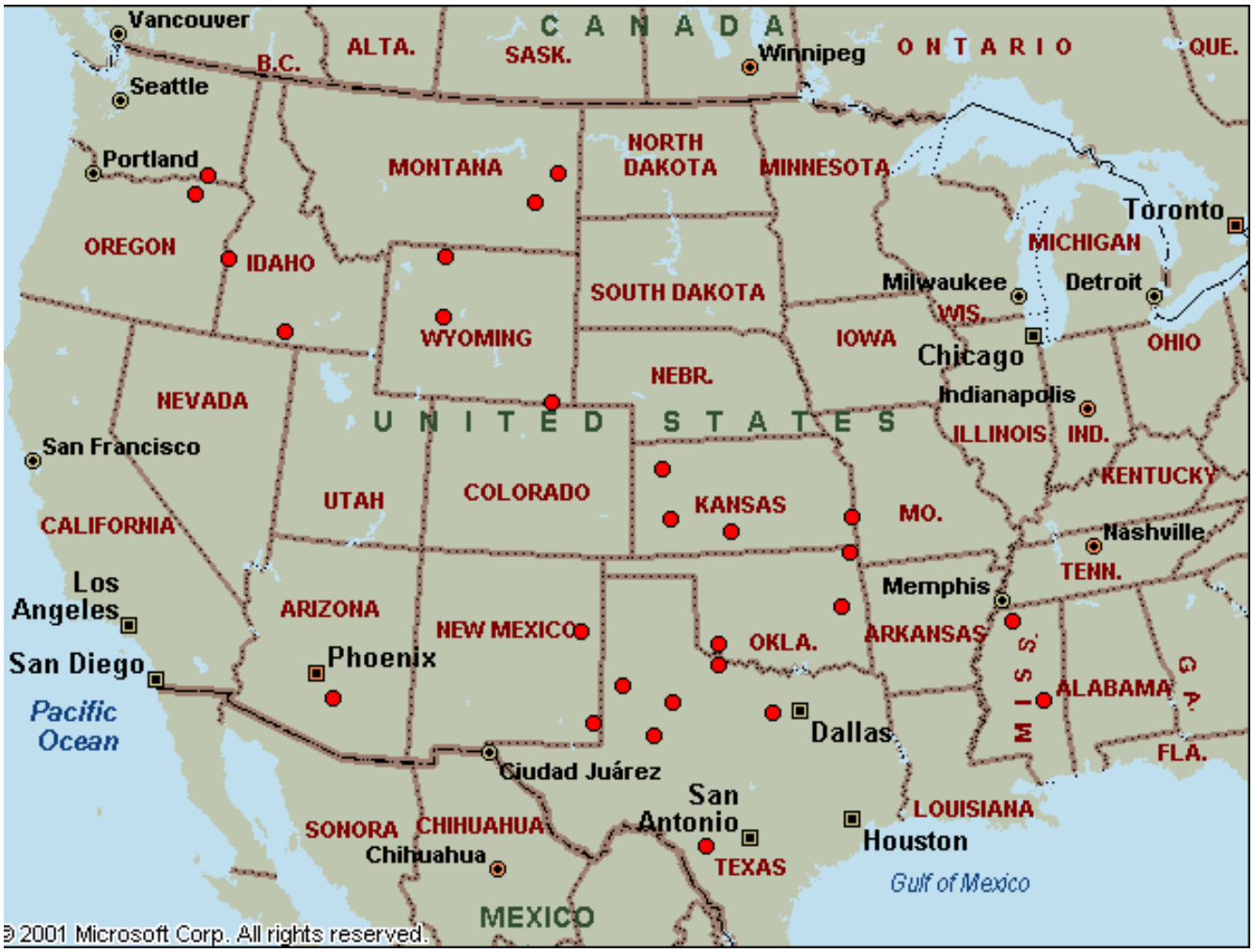


Legend

- Men's Rodeo

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Women's Rodeo Teams at Public Community Colleges, 2002-2003



Legend

- Women's Rodeo

Source: 2002 Equity in Athletics Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

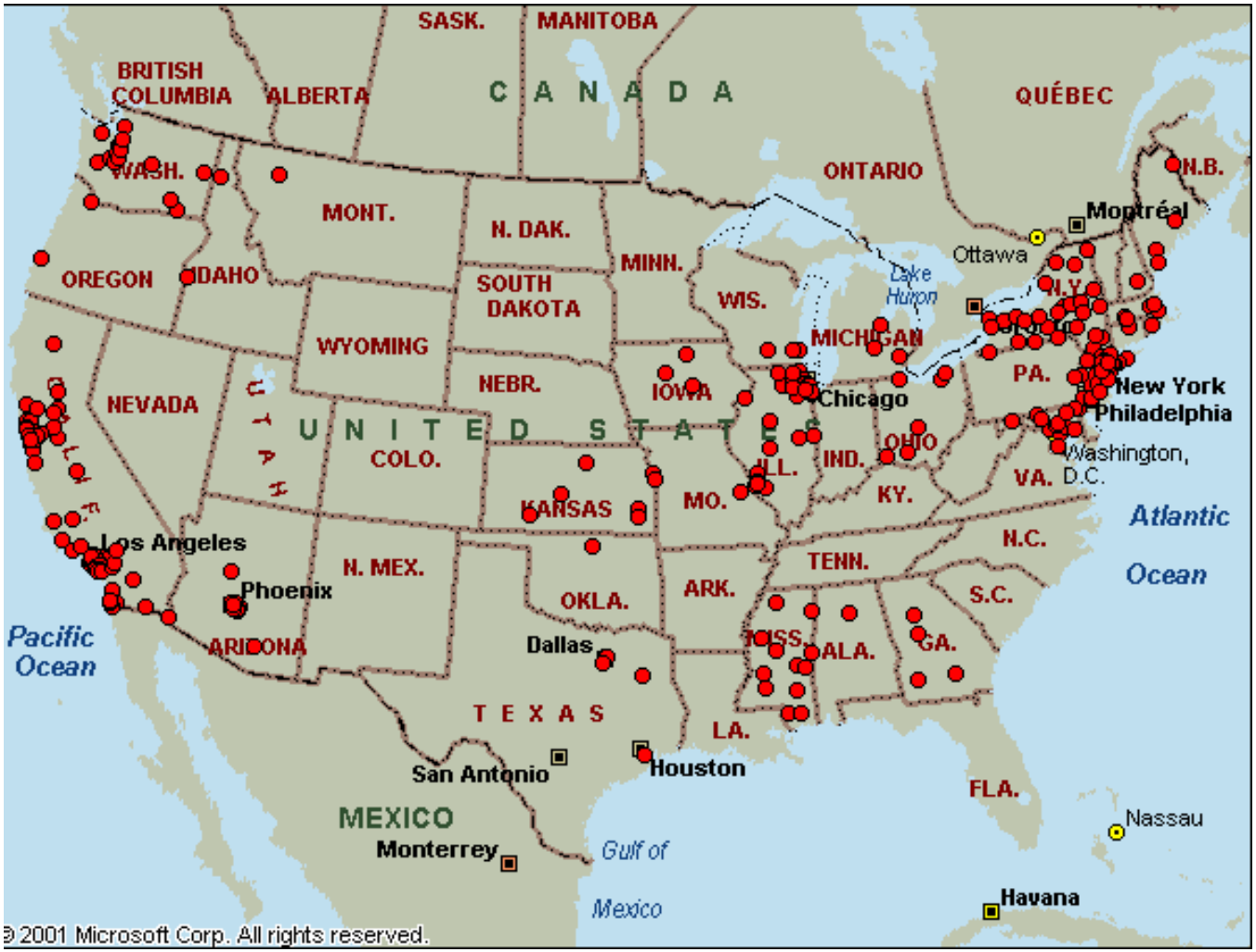
Sport: Soccer

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 237	Number of Teams: 210
Participants: 5,056	Participants: 3,694
Average Team Size: 21	Average Team Size: 18
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.7
Total Number of Head Coaches: 198	Total Number of Head Coaches: 166
Average Assistant Coaches FTE: 0.8	Average Assistant Coaches FTE: 0.8
Total Number of Assistant Coaches: 208	Total Number of Assistant Coaches: 196
Finances, 2003-2004	
Average Revenues: $8,577	Average Revenues: $8,398
Average Expenses: $18,738	Average Expenses: $16,647

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Soccer Teams at Public Community Colleges, 2002-2003



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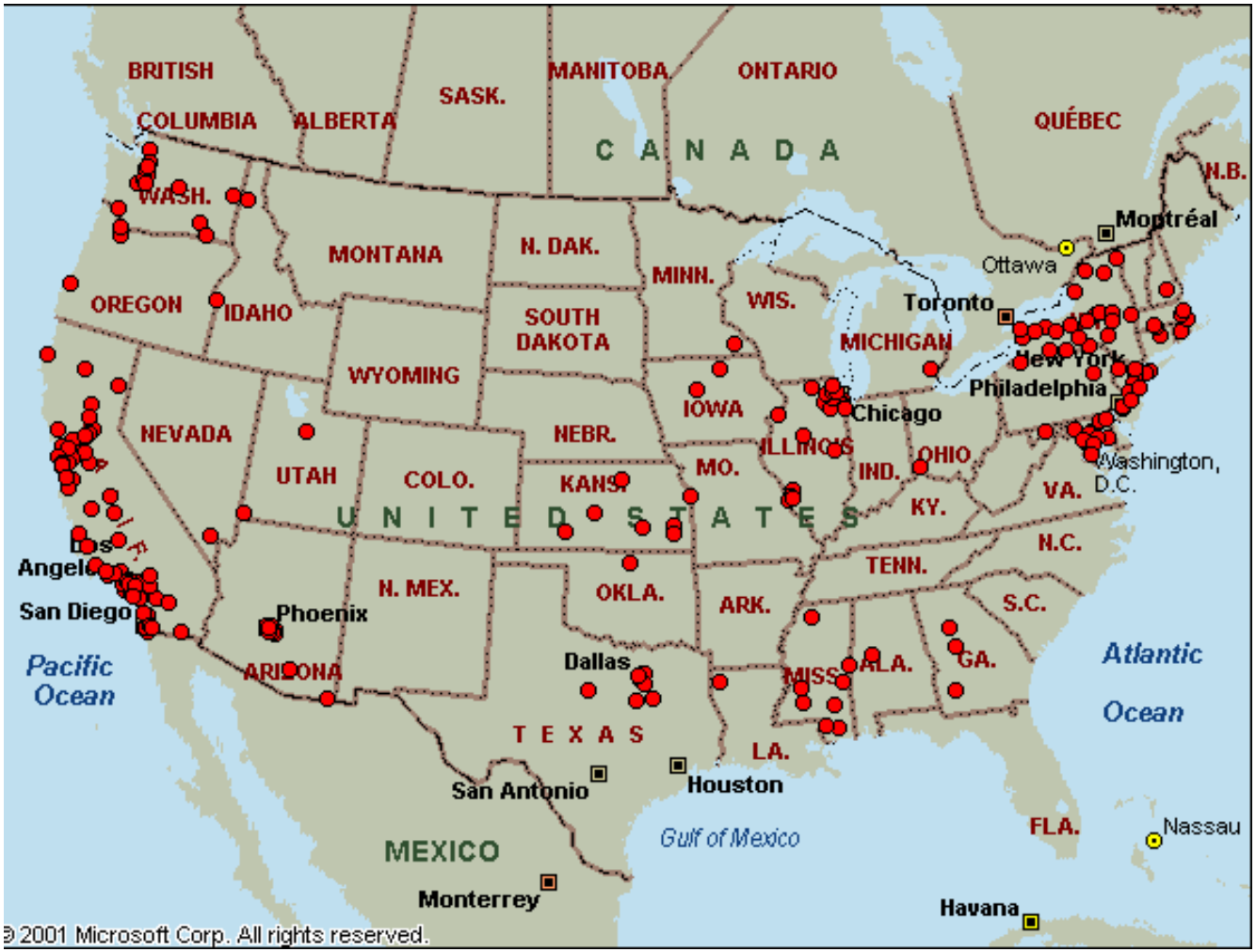
- Men's Soccer

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Soccer Teams at Public Community Colleges, 2002-2003



Legend

- Women's Soccer

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

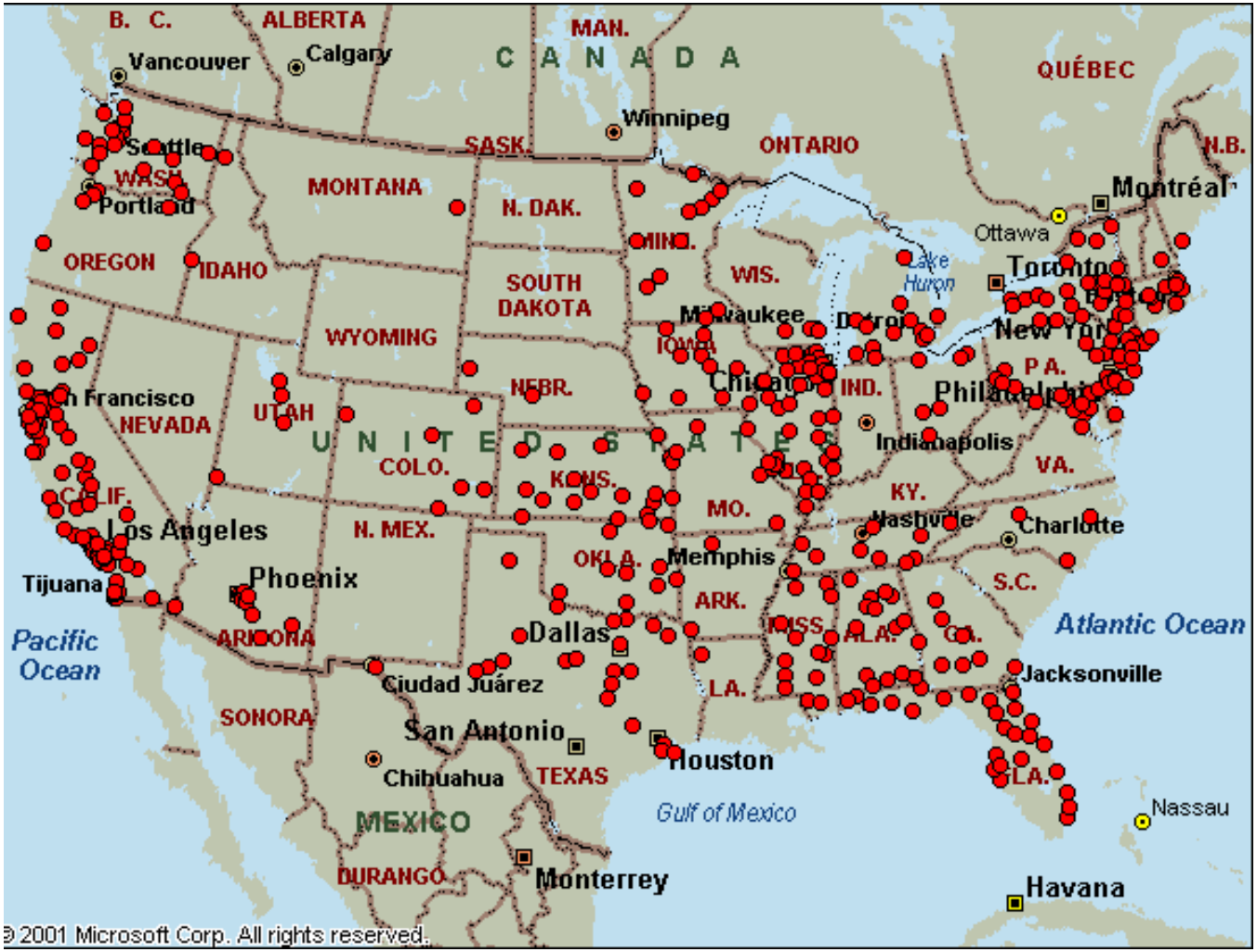
Sport: Softball

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: N/A	Number of Teams: 419
Participants: N/A	Participants: 6,575
Average Team Size: N/A	Average Team Size: 16
Associations which Recognize Sport	
N/A	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: N/A	Average Head Coaches FTE: 0.9
Total Number of Head Coaches:	Total Number of Head Coaches: 343
Average Assistant Coaches FTE: N/A	Average Assistant Coaches FTE: 1.0
Total Number of Assistant Coaches: N/A	Total Number of Assistant Coaches: 380
Finances, 2003-2004	
Average Revenues: N/A	Average Revenues: $16,396
Average Expenses: N/A	Average Expenses: $34,388

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Softball Teams at Public Community Colleges, 2002-2003



Legend

- Softball

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Swimming

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 46	Number of Teams: 44
Participants: 544	Participants: 584
Average Team Size: 12	Average Team Size: 13
Associations which Recognize Sport	
NJCAA, COA	NJCAA, COA
Staffing	
Average Head Coaches FTE: 0.6	Average Head Coaches FTE: 0.9
Total Number of Head Coaches: 5	Total Number of Head Coaches: 7
Average Assistant Coaches FTE: 0.5	Average Assistant Coaches FTE: 0.9
Total Number of Assistant Coaches: 4	Total Number of Assistant Coaches: 7
Finances, 2003-2004	
Average Revenues: $3,783	Average Revenues: $5,325
Average Expenses: $5,686	Average Expenses: $7,299

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Swimming Teams at Public Community Colleges, 2002-2003

Legend

- Men's Swimming

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Swimming Teams at Public Community Colleges, 2002-2003

Legend

Women's Swimming

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Swimming and Diving

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 14	Number of Teams: 16
Participants: 135	Participants: 143
Average Team Size: 10	Average Team Size: 9
Associations which Recognize Sport	
NJCAA, COA	NJCAA, COA
Staffing	
Average Head Coaches FTE: 0.9	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 37	Total Number of Head Coaches: 34
Average Assistant Coaches FTE: 0.8	Average Assistant Coaches FTE: 0.8
Total Number of Assistant Coaches: 32	Total Number of Assistant Coaches: 34
Finances, 2003-2004	
Average Revenues: $8,055	Average Revenues: $8,108
Average Expenses: $10,640	Average Expenses: $10,350

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Swimming and Diving Teams at Public Community Colleges, 2002-2003

Legend

● Men's Swimming and Diving

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Swimming and Diving Teams at Public Community Colleges, 2002-2003

Legend

- Women's Swimming and Diving

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

College Athletics Fact Sheet, 2002-2003

Sport: Tennis

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 137	Number of Teams: 155
Participants: 1,148	Participants: 1,156
Average Team Size: 8	Average Team Size: 7
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.7	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 119	Total Number of Head Coaches: 131
Average Assistant Coaches FTE: 0.3	Average Assistant Coaches FTE: 0.3
Total Number of Assistant Coaches: 43	Total Number of Assistant Coaches: 45
Finances, 2003-2004	
Average Revenues: $4,670	Average Revenues: $4,421
Average Expenses: $10,609	Average Expenses: $11,157

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

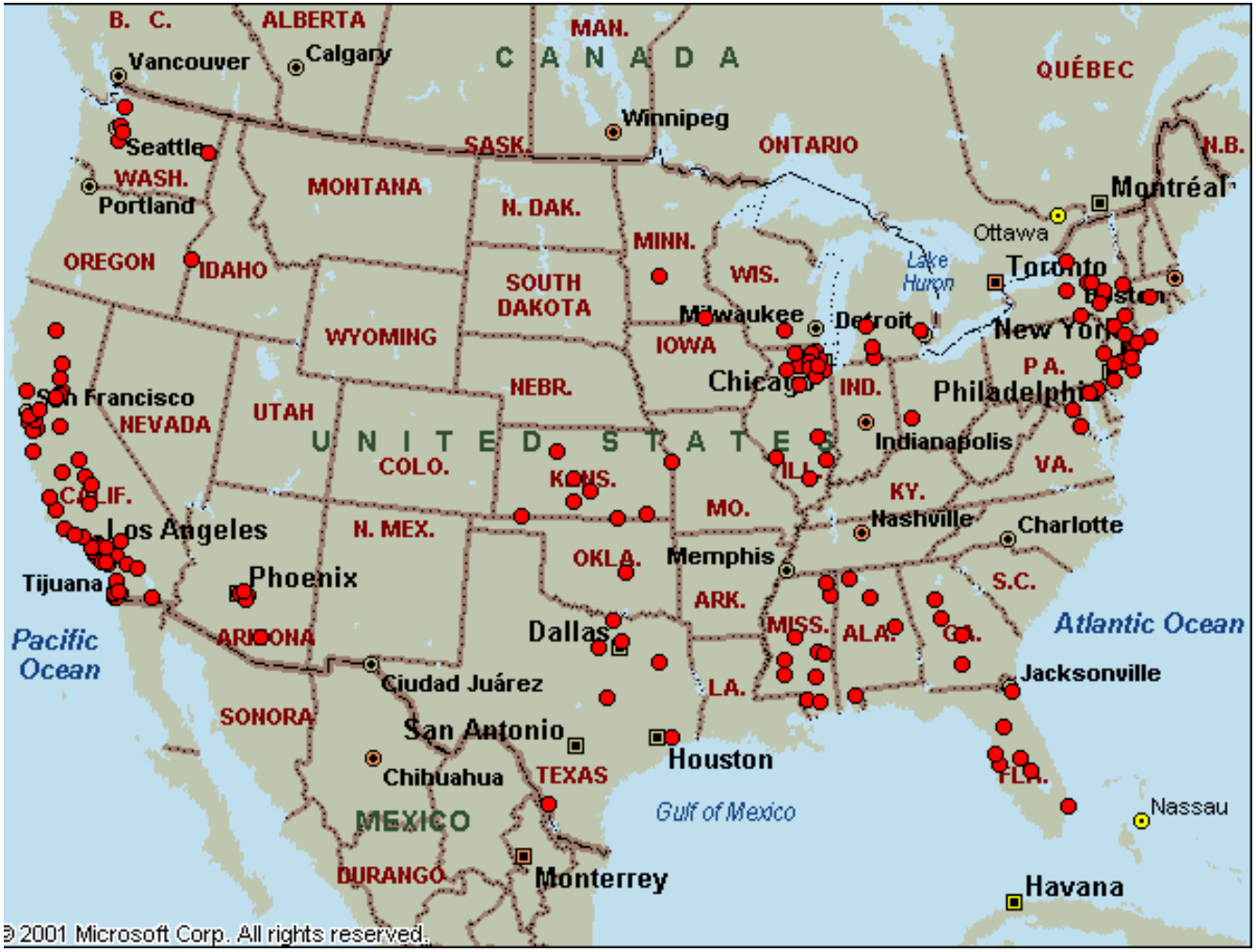
Men's Tennis Teams at Public Community Colleges, 2002-2003

Legend

- Men's Tennis

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Tennis Teams at Public Community Colleges, 2002-2003



Legend

- Women's Tennis

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Track and Field, Cross Country

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 134	Number of Teams: 129
Participants: 2,110	Participants: 1,485
Average Team Size: 16	Average Team Size: 12
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 1.0	Average Head Coaches FTE: 0.9
Total Number of Head Coaches: 39	Total Number of Head Coaches: 34
Average Assistant Coaches FTE: 1.1	Average Assistant Coaches FTE: 1.1
Total Number of Assistant Coaches: 40	Total Number of Assistant Coaches: 43
Finances, 2003-2004	
Average Revenues: $11,834	Average Revenues: $15,261
Average Expenses: $22,135	Average Expenses: $22,211

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data. 4. Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Cross County Teams at Public Community Colleges, 2002-2003

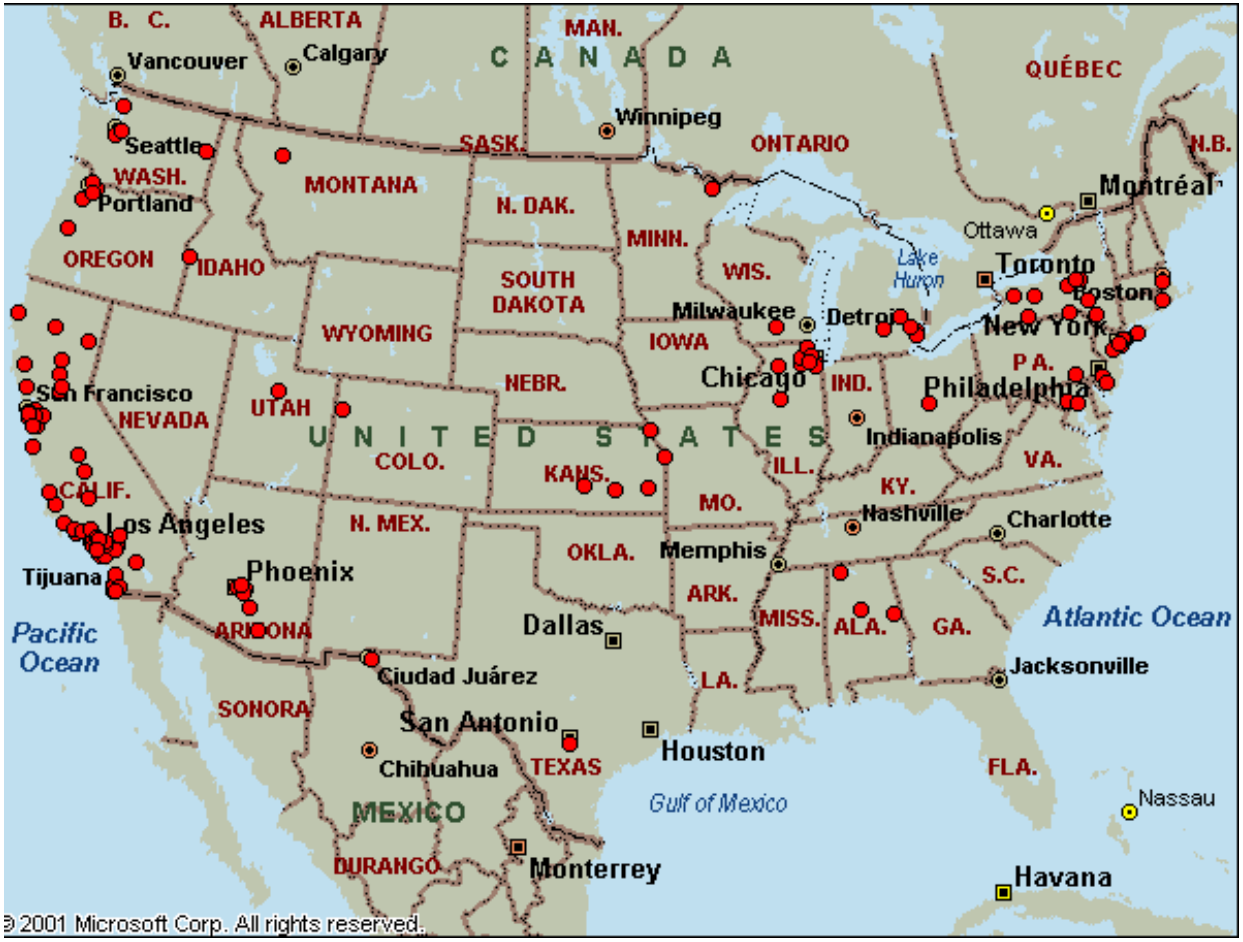
Legend

- Men's Cross Country

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Cross Country Teams at Public Community Colleges, 2002-2003



Legend

- Women's Cross Country

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Track and Field, Indoor

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 15	Number of Teams: 16
Participants: 197	Participants: 122
Average Team Size: 13	Average Team Size: 8
Associations which Recognize Sport	
NJCAA	NJCAA
Staffing	
Average Head Coaches FTE: 0.7	Average Head Coaches FTE: 0.6
Total Number of Head Coaches: 7	Total Number of Head Coaches: 6
Average Assistant Coaches FTE: 0.5	Average Assistant Coaches FTE: 0.4
Total Number of Assistant Coaches: 5	Total Number of Assistant Coaches: 4
Finances, 2003-2004	
Average Revenues: $2,389	Average Revenues: $2,392
Average Expenses: $4,802	Average Expenses: $2,239

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data. 4. Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Indoor Track and Field Teams at Public Community Colleges, 2002-2003

Legend

● Men's Indoor Track and Field

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Indoor Track and Field Teams at Public Community Colleges, 2002-2003

Legend

Women's Indoor Track and Field

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Track and Field, Outdoor

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 68	Number of Teams: 64
Participants: 1,293	Participants: 700
Average Team Size: 19	Average Team Size: 11
Associations which Recognize Sport	
NJCAA, COA, NWAACC	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 46	Total Number of Head Coaches: 44
Average Assistant Coaches FTE: 1.6	Average Assistant Coaches FTE: 1.7
Total Number of Assistant Coaches: 87	Total Number of Assistant Coaches: 92
Finances, 2003-2004	
Average Revenues: $9,846	Average Revenues: $8,897
Average Expenses: $14,706	Average Expenses: $12,063

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data. 4. Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Outdoor Track and Field Teams at Public Community Colleges, 2002-2003

Legend

- Men's Outdoor Track and Field

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Outdoor Track and Field Teams at Public Community Colleges, 2002-2003

Legend

Women's Outdoor Track and Field

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Track, all Combined

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 29	Number of Teams: 28
Participants: 712	Participants: 433
Average Team Size: 25	Average Team Size: 15
Associations which Recognize Sport	
N/A	N/A
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 1.0
Total Number of Head Coaches: 10	Total Number of Head Coaches: 13
Average Assistant Coaches FTE: 0.2	Average Assistant Coaches FTE: 0.2
Total Number of Assistant Coaches: 3	Total Number of Assistant Coaches: 3
Finances, 2003-2004	
Average Revenues: $657	Average Revenues: $418
Average Expenses: $4,445	Average Expenses: $5,154

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data. 4. Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Track, all Teams Combined at Public Community Colleges, 2002-2003

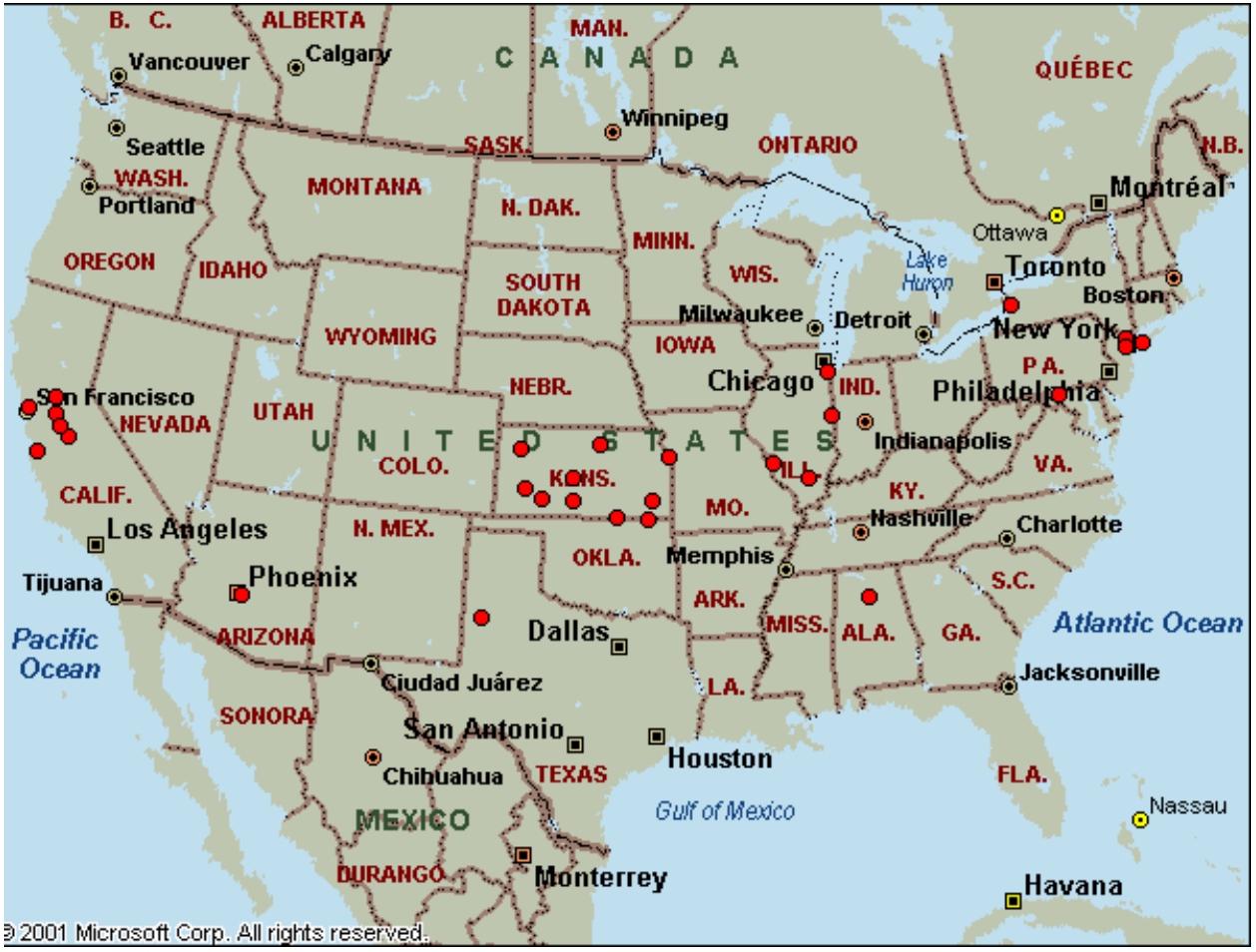
Legend

● Men's Track all Teams Combined

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Track, all Teams Combined at Public Community Colleges, 2002-2003



Legend

● Women's Track all Teams Combined

Note: Colleges can choose to report track and field events either individually (indoor, outdoor, cross country) or as a whole (all combined).

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Volleyball

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 22	Number of Teams: 386
Participants: 264	Participants: 4,500
Average Team Size: 12	Average Team Size: 12
Associations which Recognize Sport	
COA	NJCAA, COA, NWAACC
Staffing	
Average Head Coaches FTE: 0.1	Average Head Coaches FTE: 0.9
Total Number of Head Coaches: 34	Total Number of Head Coaches: 325
Average Assistant Coaches FTE: 0.1	Average Assistant Coaches FTE: 0.8
Total Number of Assistant Coaches: 25	Total Number of Assistant Coaches: 303
Finances, 2003-2004	
Average Revenues: $1,527	Average Revenues: $11,094
Average Expenses: $3,286	Average Expenses: $25,810

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

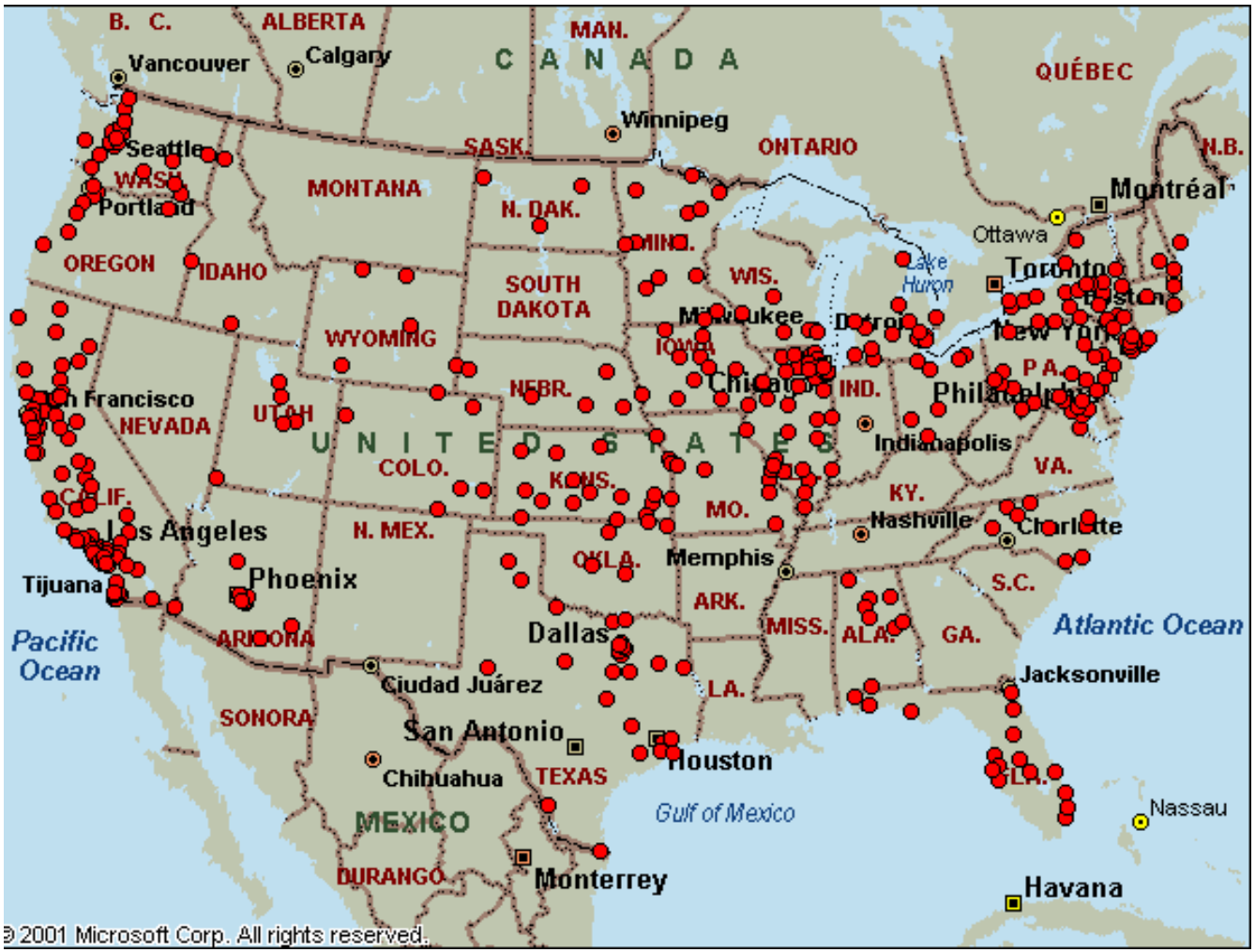
Men's Volleyball Teams at Public Community Colleges, 2002-2003

Legend

- Men's Volleyball

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Volleyball Teams at Public Community Colleges, 2002-2003



Legend

- Women's Volleyball

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Water Polo

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 36	Number of Teams: 40
Participants: 509	Participants: 507
Average Team Size: 14	Average Team Size: 13
Associations which Recognize Sport	
COA	COA
Staffing	
Average Head Coaches FTE: 0.8	Average Head Coaches FTE: 0.8
Total Number of Head Coaches: 34	Total Number of Head Coaches: 37
Average Assistant Coaches FTE: 0.6	Average Assistant Coaches FTE: 0.8
Total Number of Assistant Coaches: 25	Total Number of Assistant Coaches: 37
Finances, 2003-2004	
Average Revenues: $7,604	Average Revenues: $8,825
Average Expenses: $12,456	Average Expenses: $12,027

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Men's Water Polo Teams at Public Community Colleges, 2002-2003

Legend

Men's Water Polo

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Women's Water Polo Teams at Public Community Colleges, 2002-2003

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

Community College Athletics Fact Sheet, 2002-2003

Sport: Wrestling

Men's Teams	Women's Teams
Extent of Participation	
Number of Teams: 61	Number of Teams: N/A
Participants: 1,150	Participants: N/A
Average Team Size: 19	Average Team Size: N/A
Associations which Recognize Sport	
NJCAA, COA, NWAACC	N/A
Staffing	
Average Head Coaches FTE: 0.9	Average Head Coaches FTE: 0.0
Total Number of Head Coaches: 54	Total Number of Head Coaches: 2
Average Assistant Coaches FTE: 0.9	Average Assistant Coaches FTE: 0.0
Total Number of Assistant Coaches: 51	Total Number of Assistant Coaches: 2
Finances, 2003-2004	
Average Revenues: $15,063	Average Revenues: $1,498
Average Expenses: $24,324	Average Expenses: $2,519

Notes: 1. NJCAA is the National Junior College Athletic Association, COA is the Commission Athletics, and NWAACC is the Northwest Athletic Association of Community Colleges. 2. All figures noted above include data from the 18 public community colleges in this study that were not NJCAA, COA or NWAACC members. 3. Finance data are from 2003 EADA Survey due to the poor quality of the 2002 EADA Survey data.

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey, and 2003 EADA Survey.

Wrestling Teams at Public Community Colleges, 2002-2003

Legend

- Wrestling

Source: 2002 Equity in Athletic Disclosure Act (EADA) Survey.

APPENDIX C

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL LETTER

UNIVERSITY of NORTH TEXAS

Office of Research Services

April 21, 2004

Cindy Castaneda
Counseling, Development and Higher Education
University of North Texas

RE: Human Subjects Application No. 04-105

Dear Ms. Castaneda,

Your proposal titled "Intercollegiate Athletics at Public Community Colleges" has been approved by the Institutional Review Board and is exempt from further review under 45 CFR 46.101. **Federal policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only.**

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. Please mark your calendar accordingly. The IRB must also review this project prior to any modifications.

Please contact Shelia Bourns, Compliance Administrator, ext. 3940 or Boyd Herndon, Assistant Director for Compliance, ext. 3941, if you wish to make such changes or need additional information.

Sincerely,

Scott Simpkins, Ph.D.
Chair
Institutional Review Board

SS:sb

P.O. Box 305250 ◆ Denton, Texas 76203-5250 ◆ (940) 565-3940
Fax (940) 565-4277 ◆ TTY (800) RELAY TX ◆ www.unt.edu

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