WOMEN'S SPORTS FOUNDATION

PROGRESS WITHOUT EQUITY:

The Provision of High School Athletic Opportunity in the United States, by Gender 1993-94 through 2005-06

November 2011

Center for Research on Physical Activity, Sport & Health, D'Youville College
Women's Sports Foundation
SHARP Center, University of Michigan

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Authorship and Acknowledgments

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This report flows from an analysis of high school athletic programs that is unprecedented in its national and historical scope. We are grateful for the Office of Civil Rights and the Department of Education for gathering and dispersing the data that made the analysis feasible. Special thanks are owed to The Margaret Fund for its continued support of this project and the advancement of gender equity in sport. We especially recognize Deborah Slaner Larkin's enduring dedication to research on Title IX. The scholarly and empirical rigor invested in the creation of this report was substantially augmented by the consultative expertise of Nancy Hogshead-Makar, LLP, Donna A. Lopiano, Ph.D., Marjorie A. Snyder, Ph.D., and Susan Ware, Ph.D. Heartfelt thanks to Sr. Denise Roche, Ph.D., President of D'Youville College, for her continuing support of the Center for Research on Physical Activity, Sport & Health. We appreciate the spirit and support of SHARP leaders Carol Boyd, Ph.D., and Kathy Babiak, Ph.D. Special thanks to Deana Monahan for her editorial and graphic design expertise.

About CRPASH

The mission of the Center for Research on Physical Activity, Sport and Health (CRPASH) at D'Youville College is to design, conduct, and disseminate cutting-edge research on the links among physical activity, sport and health. We are an organizational catalyst for interdisciplinary research projects that foster education, policy development, and public health initiatives. We also specialize in getting knowledge and policy "off the shelf" and into communities, schools, and media, where it can impact people's lives.

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The Women's Sports Foundation, founded in 1974, is the leader in promoting sports, health and education for girls and women. With Billie Jean King as its founder and ongoing visionary, the Women's Sports Foundation continues to have a profound impact on female athletics, from its vigorous advocacy of Title IX legislation to providing grants and scholarships, grassroots programs for underserved girls, and groundbreaking research. An agent for change, the foundation has relationships with more than 1,000 of the world's elite female athletes and is recognized globally for its leadership, vision, strength, expertise and influence. For more information, visit www.WomensSportsFoundation.org.

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Established in 2010, the new, first-of-its-kind, Sport, Health and Activity Research and Policy Center for Women and Girls (SHARP Center), is the result of a strategic partnership between the Women's Sports Foundation and the University of Michigan's Institute for Research on Women and Gender (IRWG) and School of Kinesiology. The SHARP Center generates interdisciplinary research on issues related to women's sports, gender issues and kinesiology to enhance existing and establish new relationships with policymakers, academia and women's sports organizations. Our vision is to build on extant understandings in order to create new knowledge that will inform policy and benefit women and girls.

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INTRODUCTION

Interscholastic sport is a U.S. social institution that directly engages and impacts millions of adolescents, as well as their families and communities. The National Center for Education Statistics (2009) reports that among various extracurricular activities provided by high schools, interscholastic sports had the highest percentage of seniors (38.8%) who participated in this school-based activity in 2004, followed by academic clubs (21.3%), vocational clubs (21.3%), band (21%), vocational clubs (15.6%) and hobby clubs (11.7%)[1]. Since the passage of Title IX in 1972, more girls have tapped the social capital attached to sport along with boys. Yet athletic opportunity in U.S. high schools is not shared equally between the sexes. Protracted legal struggles for gender equity continue, and many parents are frustrated because their daughters are being shortchanged.[2]

There are three compelling reasons to study gender differences in the provision of high school athletic opportunities in the United States. First, a great deal of research now points to the significant links between high school athletic participation and the health and well-being of both girls and boys. At a time when health reform has become a national priority, policymakers increasingly realize that interscholastic sports can be tapped as a public health resource for American youth and families. Second, a variety of research studies show that high school athletic participation is favorably associated with academic achievement, test scores, performance on standardized tests, GPA and reduced dropout rates. And finally, despite growing evidence that interscholastic sports are a health and educational asset for American youth, there is surprisingly little research on national trends in the provision of athletic opportunities to girls and boys.

Because sport is such a dominant institutional practice and modal life course experience for millions of youth, the lack of systematic analysis and evaluation is striking. The scarcity of reliable information has meant that policy discussions and social planning efforts that pertain to gender equity in U.S. high school sports were frequently based on political contention rather than evidence. On the policy front, the lack of facts and analysis also allowed those who benefit from the political status quo of gender inequality to run "business as usual," while those who seek equality and educational reform were stymied by insufficient evidence to support their goals. In contrast, for those who seek gender equity in interscholastic sports, evidence-based research can underpin both advocacy and policy reform.

This study merged and analyzed survey data from two government-sponsored nationwide databases (discussed below), which allowed us to examine a nationally

representative sample of 24,370 public four-year high schools between 1993-94, 1999-2000 and 2005-06. Three measures of the extent of athletic opportunity in each high school were used in the analysis: (1) the number of participation opportunities, (2) the number of athletic teams and (3) the number of sports. The main purpose of the study was to describe and compare the provision of interscholastic athletic opportunities of U.S. boys and girls across the timeframe. We also show how the provision of athletic opportunities varied by geographic region (i.e., Northeast, Midwest, South and West) and by the type of community in which the school was located (i.e., urban, suburban, town and rural). Finally, we used the percentage of a school population eligible for free lunch as a proxy measure to examine whether a school's general economic resources are tied to gender differences in the provision of athletic opportunities.

RETHINKING AND MEASURING ATHLETIC OPPORTUNITY

We define an "athletic opportunity" as a situation or condition within a school that allows or enables a young person to participate in some type of athletic activity. School boards, administrators and athletic directors make decisions about the number and kinds of athletic programs that are offered in the school during the academic year. School officials also designate how many students participate on each team and whether rosters are open, capped or subject to tryouts.

The definition of an "athletic opportunity" used in this research study is not considered something that an individual young person does, creates or initiates by virtue of her or his participation. But rather, athletic opportunities are viewed as resources that high schools provide to the members of the student body. The policies and practices in one school may generate many athletic opportunities for its students, and another school may offer few. With regard to gender equity, therefore, one overarching question is whether boys and girls within a school or school district receive fair shares of the athletic opportunities provided by school leaders. Consistent with Title IX, the policies and practices that guide the provision of athletic opportunities by school officials should follow the statute:

"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..."

School leaders create and allocate athletic opportunities to their students in basically three ways.

(1) Schools provide a varying number of athletic participation opportunities for their female and male students. A softball team, for example, may have 20 members that translate to 20 athletic participation opportunities. Note that the number of athletic participation opportunities within a particular school probably never equals the number of students involved with sports because many boys and girls play multiple sports. This means that some students take advantage of more than one of the total athletic participation opportunities provided by the school.[3] When measuring the provision of athletic participation opportunities in a school, therefore, it makes sense to count each athletic participation opportunity provided by the school rather than the number of athletes in a school.

(2) A school leadership creates policy goals, allocates funds and administers a number of sports for its students to select from and participate in. For example, one school may sponsor basketball, football, track and field, and lacrosse for boys, and basketball, volleyball, track and field, and lacrosse for girls.

(3) A school provides a number of teams for its students. For example, girls might be offered both junior-varsity and varsity basketball teams, as well as volleyball and swimming, while boys are offered both junior-varsity and varsity football, basketball and track and field.

The following comparison can help sharpen understanding of how to accurately measure the provision of educational opportunities in a school in order to assess gender equity. The school administrators and PTA leaders at "Middleton High School" received substantial funds from a local donor to create a health promotion program aimed at increasing the extent of physical activity in the student body. The donor specified that the program leaders must recruit and involve both boys and girls in an equitable manner. During the first year of the program, school leaders provided three new after-school exercise activities. While most of the enrollees participated in one exercise program during the year, many students enrolled in two programs, and smaller numbers participated in all three of the exercise classes. At the end of the year, in accordance with the donor's directives, the program leaders needed to assess whether they had actually provided equitable opportunities to both boys and girls. To accomplish this task, they counted the individual registrations across all three exercise classes. Next, they calculated the number of participants among girls in relation to the size of the female student body, and, finally, they performed the same calculation among the male students. Ideally, the respective participation rates within the female and male student bodies would be similar. Similar percentages would indicate gender equity.

The same basic rationale and measurement procedure holds for counting and recording the extent that high schools provide athletic participation opportunities across the female and male student bodies. The Office of Civil Rights Data Collection guidelines for the school officials who recorded the athletic participation rates enacted this logic and procedure with this instruction:

"Number of participants. Enter the number of students who participate in (1) male-only teams and (2) female-only teams. Count a student once for each team he/she is on. For example, a student should be counted twice if he is on two teams."[4]

Finally, the most accurate and reliable measure of athletic opportunity for purposes of assessing gender equity is athletic participation opportunities. To solely rely on or highlight the number of teams or sports can be misleading and beckon false inferences; e.g., one women's volleyball team may have 14 members, whereas one men's football team may have 60 members.

Assessing the Provision of Athletic Opportunities in U.S. High Schools

Data for this analysis draw from two sources. The first source of data comes from the Civil Rights Data Collection (CRDC)[5]. Three cross-sections of elementary and secondary public school data collected during 1994 (n = 44,151), 2000 (n = 88,650)[6] and 2006 (n = 62,484) were merged to create a larger data set to analyze changes in the number of different sports, athletic teams and percentage of athletic opportunities that U.S. public high schools provided to girls and boys. Only administrators at high schools were asked to respond to questions that dealt with the number of different sports offered to girls and boys, the number of athletic teams offered to girls and boys, and the number of girls and boys who participate on teams throughout the school year. This analysis is restricted to high schools that offered grades 9-12 to both girls and boys during the three time periods, resulting in a sample of 24,370 high schools (1994, n = 4,566; 2000, n = 12,030; 2006, n = 7,774).

The second source of data comes from the Common Core of Data (CCD), which is collected annually by the National Center for Education Statistics (NCES). The CCD gathers basic demographics on all public U.S. elementary and secondary schools. To help supplement the CRDC data, CCD data were merged to determine each school's geographic location (i.e., Northeast, Midwest, South and West), gender composition (the number of students who are female and male), the type of community the school is located in (i.e., urban, suburban, town or rural area), the state in which the school is located and the percentage of students who are eligible for free lunch (a proxy measure for the economic resources of a school).

Consistent with the definitions discussed in the previous section, we measured the extent that each school provided three types of athletic opportunity to its female and male students: (1) the percentage of athletic participation opportunities within and between the female student body and male student body, (2) the number of sports provided to boys and girls and (3) the number of female-only and male-only sport teams. The first measure was constructed by taking the total number of participation opportunities among girls in all the different sports that each high school provided during the school year and dividing by the total number of girls who were enrolled for the academic school year. The same procedure was followed among the boys.[7] (Details appear in Appendix B.)

Gender equity ratios were calculated for each of the three measures above. A ratio provides information about the proportion of one set of numbers to another. During an election year, for example, pollsters set out to measure the ratio of registered Democrats to Republicans in a particular voting district. For example, if there are 3,000 Democrats and 4,000 Republicans in "Cambria County," then 3,000 is divided by 4,000 to produce a ratio of 0.75, which translates to "for every three Democrats, there were four Republicans." If there were 4,000 Democrats and 4,000

Republicans, then the ratio would equal 1.00. The gender equity ratio allowed us to measure the proportion of athletic opportunity among girls in relation to boys. When the gender equity ratio falls below 1.00, it means that girls were allocated fewer opportunities than boys. Conversely, if the gender equity ratio exceeds 1.00, it means that girls were given more opportunities than boys.

Finally, we gathered information about high schools themselves including: (1) gender composition (i.e., the number of students who are female and males within schools), (2) federal lunch enrollment (i.e., percent of students eligible for free lunches), (3) geographic region[8] (i.e., location in the Midwest, Northeast, South or West), and type of community[9] (i.e., rural, suburban, town or urban), and (4) school size (i.e., the number of students per high school).

Some Strengths of the Office of Civil Rights Data Collection

The findings presented in this report are based on the Office of Civil Rights Data Collection, which offers educators and policymakers access to reliable information using a meaningful unit of analysis; i.e., our analysis is built on information gathered from individual schools in each state throughout the United States. In contrast, the National Federation of State High School Associations (NFSHSA) reports statistics that represent state totals rather than information that pertains directly to individual schools.

An additional strength of the OCR Data Collection is that all U.S. public high schools are required by federal law to participate. The resulting sample, therefore, has a high degree of representativeness. In contrast, the NFSHSA relies on the voluntary participation of school officials to report information.

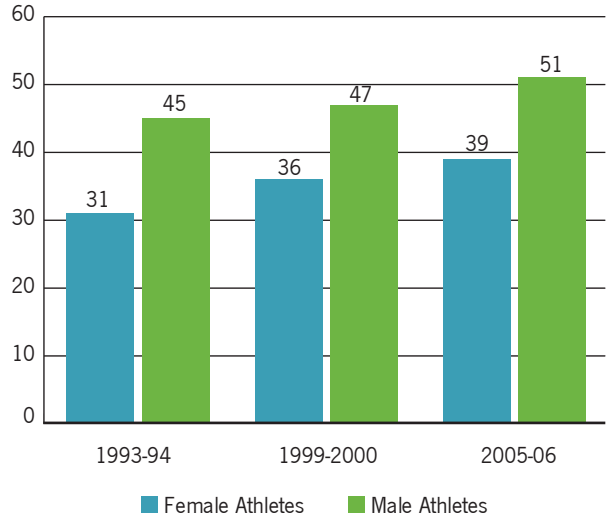
THE RESULTS

The main findings from our analysis are depicted and discussed below. The provision of athletic opportunities in the U.S. is examined from a variety of vantage points. The measurement procedures employed for each of the Tables in this report are detailed in Appendix B.

The Provision of Athletic Participation Opportunities by Gender

A "good news and bad news" scenario emerged from the data. While U.S. high schools increased the number of athletic participation opportunities provided to girls and boys between 1993-94 and 2005-06, they fell short of gender equity. While scrutiny of Table 1 shows steady increases in the percentages of athletic participation opportunities across the time frame, the gender gap actually widened between 1999-2000 and 2005-06. Between 1993-94 and 1999-2000, the percentage difference between girls and boys declined from 14% to 11%. By 2005-06, girls' percentage of athletic participation opportunities in proportion to their numbers in the female student body reached 39%, while among the boys the figure was 51% (a difference of 12%). Generally, while high schools gradually increased their allocations of athletic participation opportunities between 1993-94 and 2005-06, progress toward closing the gender gap slowed.

Table 1: The Percentage of Athletic Participation Opportunities that U.S. High Schools Provided to Girls and Boys, 1993-94 through 2005-06



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12:
1993-1994: n = 4,253
1999-2000: n = 10,837
2005-2006: n = 6,676

The Provision of Athletic Participation Opportunities by Gender and Type of Community

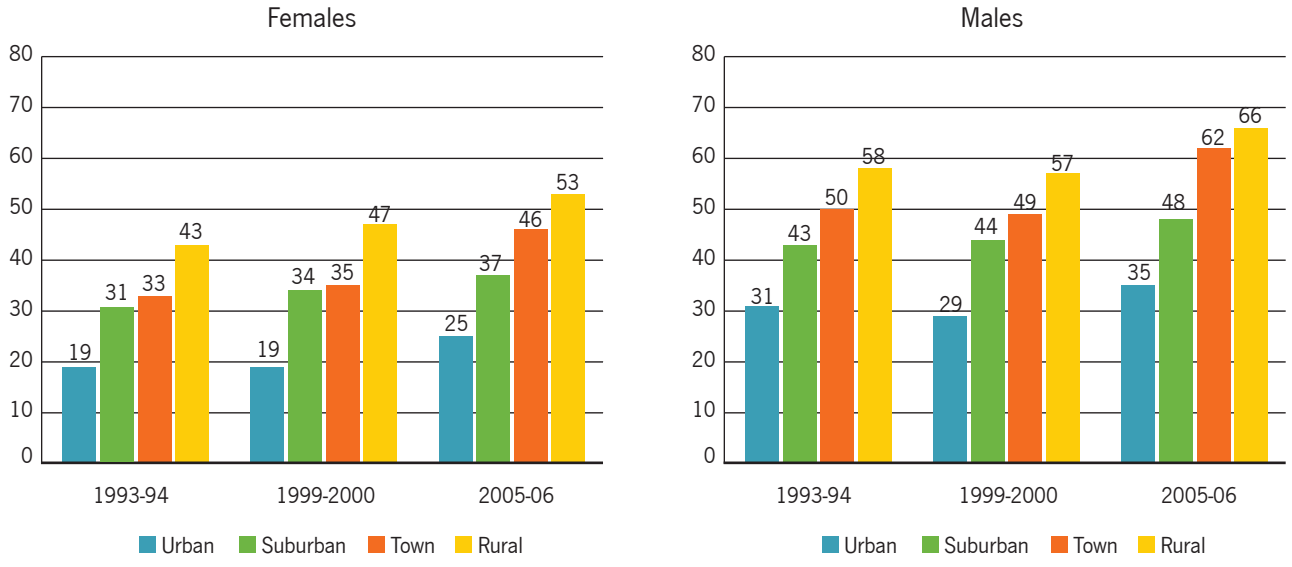
Two consistent patterns are visible in how the provision of athletic participation opportunities differed by gender across urban, suburban, town and rural communities.[10] First, boys received a larger proportion of athletic

participation opportunities than girls did for each school year in all communities. At the same time, while schools in all communities increased the number of athletic opportunities for both sexes, the gender gap closed only minimally between 1993-94 and 2005-06. In urban schools during 1993-94, for example, the percentage of athletic opportunities allotted among the boys was 31%, whereas among the girls this figure was 19%–a percentage difference of 13%. The same difference during 2005-06 was 12%.

Second, across the entire timeframe, for both boys and girls, the lowest percentages of athletic participation opportunities occurred in urban schools, whereas the highest percentages were issued in rural schools (see Table 2). Historically, it was rural high schools that did the best job providing participation opportunities to boys, whereas it was urban schools that showed the poorest results issuing athletic opportunities to girls.

School size may also play a role. In rural schools, enrollments may be smaller than in larger urban and suburban schools, and there may be a smaller array of extracurricular activities for young people to choose from than in urban or suburban schools. Perhaps this

Table 2: The Percentage of Athletic Participation Opportunities that U.S. High Schools Provided to Girls and Boys, by the Type of Community Where the School is Located



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by type of community:

Urban	Suburban	Town	Rural
1993-1994: n = 1,048	1993-1994: n = 1,068	1993-1994: n = 1,168	1993-1994: n = 969
1999-2000: n = 2,020	1999-2000: n = 3,347	1999-2000: n = 1,779	1999-2000: n = 3,691
2005-2006: n = 1,775	2005-2006: n = 2,266	2005-2006: n = 667	2005-2006: n = 1,968

combination means that a larger proportion of students are likely to take advantage of sport due to the smaller number of options. Paradoxically, as the results discussed later in this report depict, our analysis also showed that schools located in rural and town communities offered fewer teams and sports than did their suburban and urban counterparts. It may be, therefore, that rural and town school leaders managed larger squad sizes, thereby maximizing participation rates throughout the school.

And finally, the cultural significance of high school sports may be more salient and influential in rural areas and towns, reflecting and reinforcing the commitment of the community and school to invest resources in athletic program development, recruitment and staffing. Rural and town newspapers pepper their pages with results of area athletic contests, all-star teams, team photos, scholar-athletes, etc.—local coverage that often focuses on both boys and girls. Upon entering many small towns across the United States, drivers are apt to see signage announcing, "Cordelia, Home of the Blue Falcons."

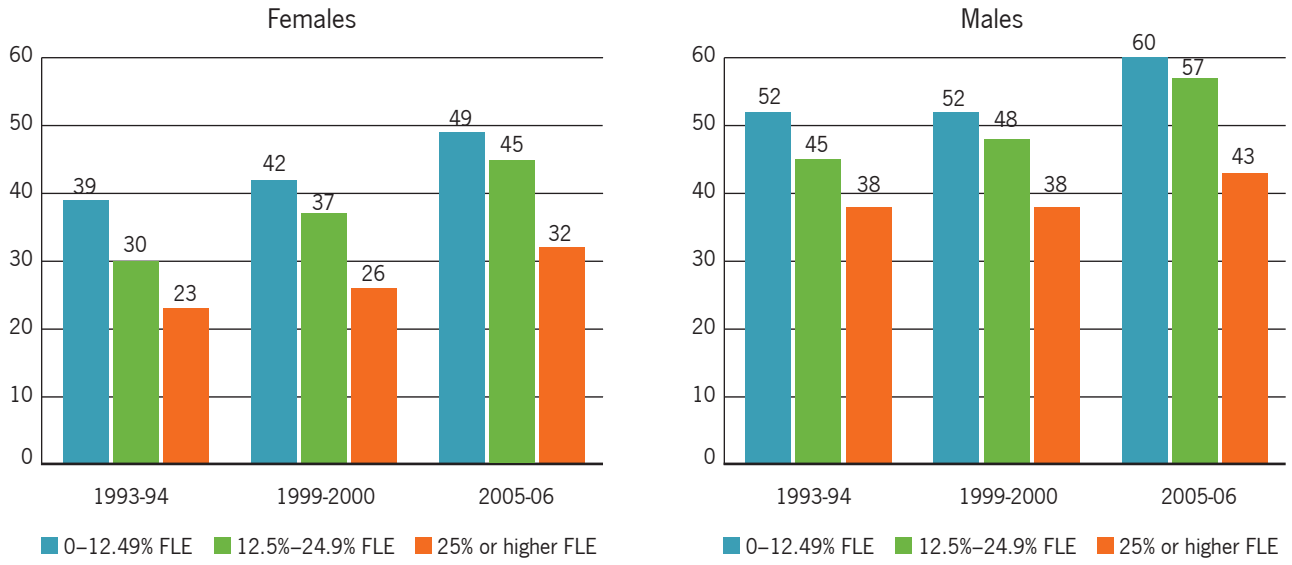
The Provision of Athletic Participation Opportunities by Gender and School Economic Resources

Some of the variation in the provision of athletic participation across communities is owed to differences in the amount of economic resources available to the school. Schools with more ample fiscal resources, we hypothesized, may be more willing and able to provide students with greater athletic opportunity than schools with budgetary constraints. However, less is known about how a school's economic well-being is related to a fair division of athletic opportunity between the girls and boys. For this analysis we used the percentage of students eligible for free lunch as a proxy measure of a school's economic status. Two clear patterns emerged from the analysis (see Table 3 on following page).

First, schools with greater economic resources provided more athletic participation opportunities for their students—both girls and boys—than their less fiscally sound counterparts. This association is evident for each of the school years under analysis. Second, boys were afforded more athletic participation opportunities than girls regardless of the economic viability of the school. During the 2005-06 school year, for example, the male share of athletic participation opportunities was 11-12% greater than their female counterparts'.

There is some evidence of some initial progress with regard to gender equity, but then a basic slowdown seems to have emerged. The gap between female and male athletic participation opportunities narrowed between 1993-94 and 1999-2000. The percentage differences between the sexes were 13%, 15% and 15% across the fiscal categories during the former period and 10%, 11%, and 12% during 1999-2000. Despite these trends, however, the gender differences

Table 3: The Percentage of Athletic Participation Opportunities Provided by U.S. High Schools to Girls and Boys, by Percentage of School Population Eligible for Free Lunch



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by percent of schools' student bodies eligible for free lunch:

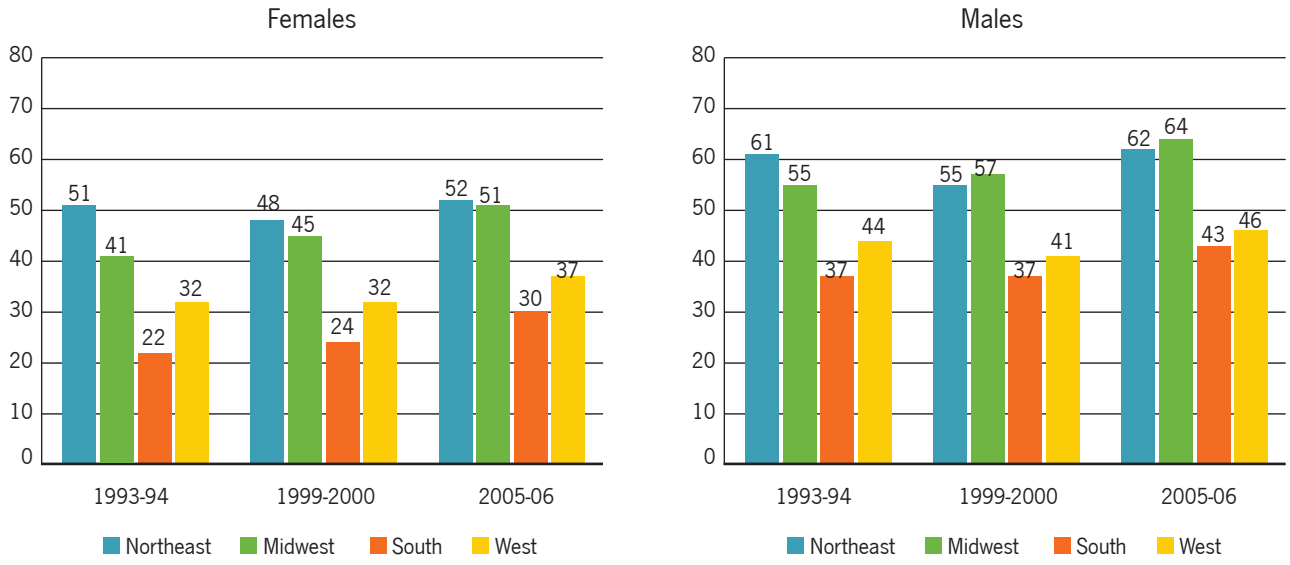
0 - 12.49% FLE	12.5% - 24.9% FLE	25% or higher FLE
1993-1994: n = 1,297	1993-1994: n = 873	1993-1994: n = 1,096
1999-2000: n = 3,800	1999-2000: n = 2,562	1999-2000: n = 2,748
2005-2006: n = 1,667	2005-2006: n = 1,595	2005-2006: n = 2,937

across school socioeconomic categories remained basically stable between 1999-2000 and 2005-06; i.e., 11%, 12% and 11%, respectively. The movement toward gender equity during this period appears to have flatlined.

Gender and Athletic Participation Opportunities across Geographic Regions

The analysis revealed several patterns in how athletic participation opportunities were distributed between girls and boys across geographic regions. Once again, girls were provided proportionately fewer athletic participation opportunities than boys during each school year and in all geographic regions. The percentage of athletic participation opportunities was highest for both girls and boys in the Northeast, followed closely by those in the Midwest. Both girls and boys in the South exhibited the lowest percentage of athletic participation opportunities across the timeframe, but girls were left even more outside the athletic opportunity stream. Schools in the American Northeast and Midwest generated the most athletic participation opportunities for their students, yet in the midst of regional plenty, leaders

Table 4: The Percentage of Athletic Participation Opportunities Provided to U.S. High School Girls and Boys, by Geographical Region



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by region:

Northeast	Midwest	South	West
1993-1994: n = 517	1993-1994: n = 973	1993-1994: n = 2,025	1993-1994: n = 738
1999-2000: n = 1,637	1999-2000: n = 3,294	1999-2000: n = 3,746	1999-2000: n = 2,160
2005-2006: n = 827	2005-2006: n = 1,655	2005-2006: n = 2,700	2005-2006: n = 1,494

failed to generate equitable access to athletic resources in the schools (see Table 4).

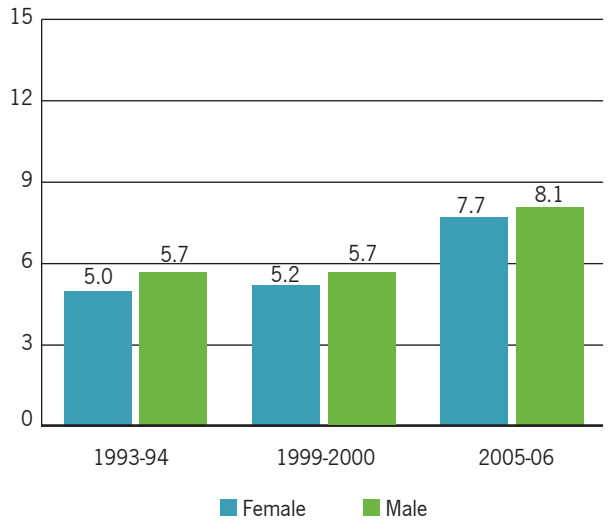
From the vantage point of parents who wanted their daughters to have ample opportunity to develop a physically active and athletic lifestyle, at least during the timeframe of this study, best not to live in the South and West. A bit more positively, the percentage of southern girls who had athletic participation opportunities increased 8% between the 1993-94 and 2005-06 school years (from 22% to 30%), while the respective increase among Southern boys was 6% (from 37% and 43%). The children of parents in the Northeast and Midwest, in contrast, had more available athletic opportunities than their southern and western counterparts, although their daughters' opportunities fell short of their sons' opportunities.

The Number of Sports and Teams by Gender

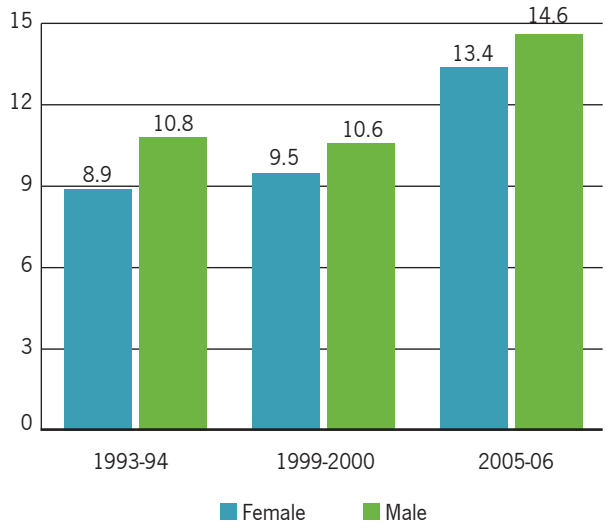
The years between 1999-2000 and 2005-06 saw an increase in the average number different sports and teams provided to girls and boys across the timeframe. Generally,

Table 5: The Average Number of Female-Only and Male-Only Sports and Athletic Teams Provided by U.S. High Schools, 1993-94 through 2005-06

Number of Different Sports Offered to Females and Males



Number of Different Teams Offered to Females and Males



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12:
1993-1994: n = 4,253
1999-2000: n = 10,837
2005-2006: n = 6,676

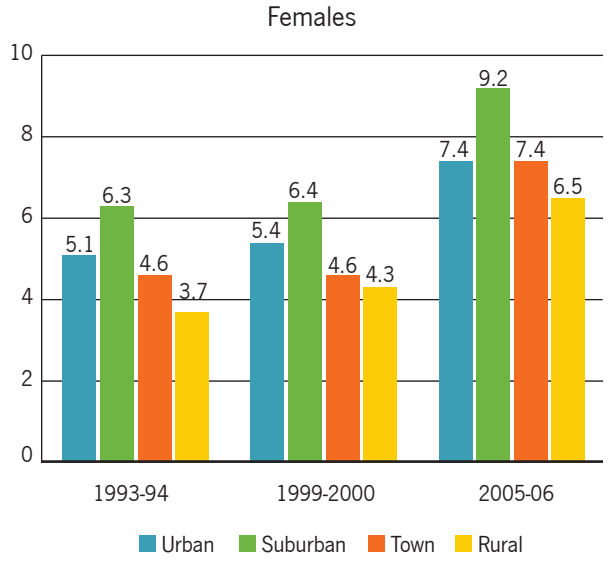
boys and girls average about the same number of different sports in 1999-2000 and 2005-06. During this same time period, however, boys were allocated one more team on average than girls (see Table 5).

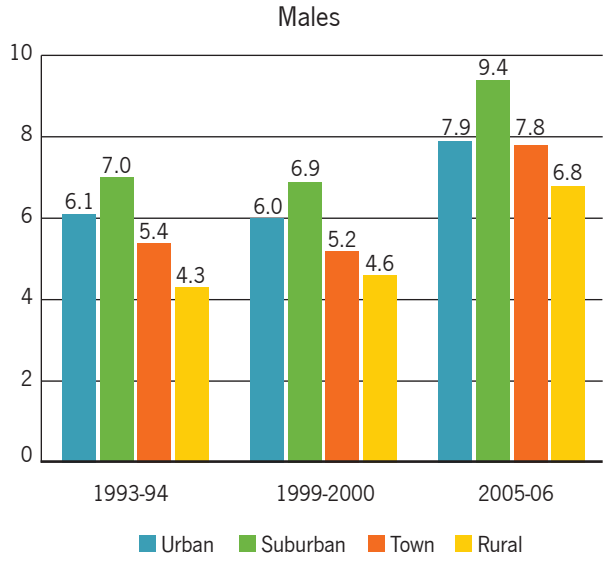
The Number of Sports and Teams by Gender and Type of Community

During the period between 1993-94 and 1999-2000, the number of sports in U.S. high schools remained somewhat constant across communities. It was between 1999-2000 and 2005-06 that witnessed jumps in both the number of female-only and male-only sports provided by schools. By 2005-06, an average gender gap of about one sport was reported (see Table 6 on following page).

The results show that the number of teams provided by U.S. high schools differed by both gender and type of community across the timeframe. The general picture in 1993-94 indicates that boys were allocated two more teams than girls in urban, suburban and town communities, but one additional team in rural communities. There was a small increase in the average number of teams by 1999-2000;

Table 6: The Average Number of Female-Only and Male-Only Sports Provided by U.S. High Schools, by the Type of Community Where High School is Located

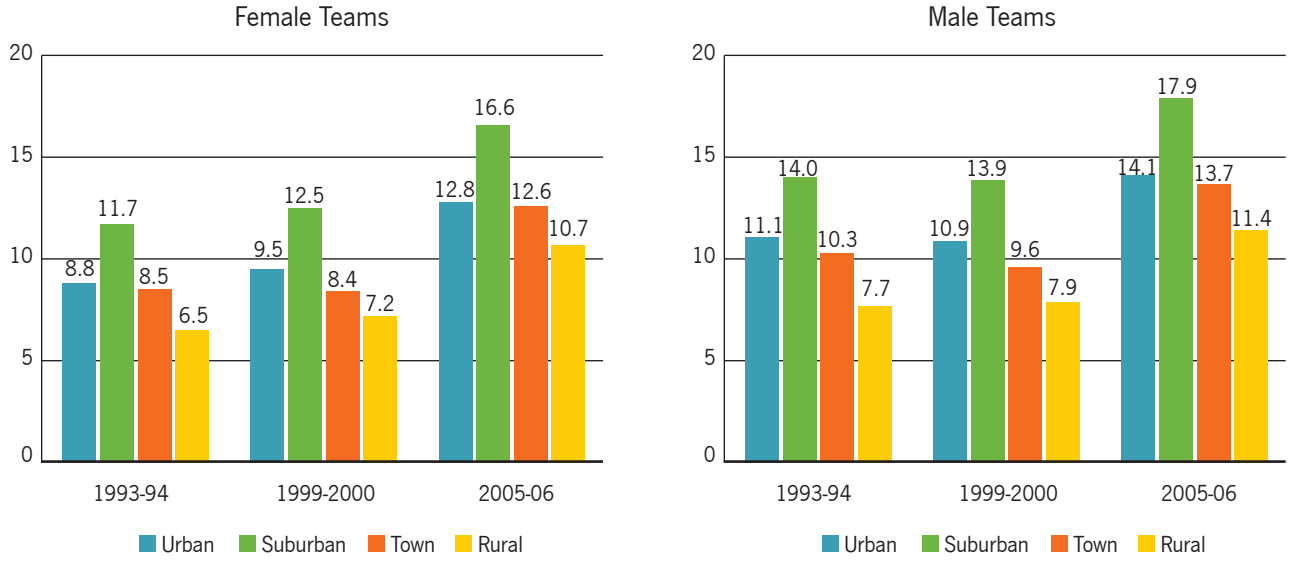




Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by type of community:

Urban	Suburban	Town	Rural
1993-1994: n = 1,048	1993-1994: n = 1,068	1993-1994: n = 1,168	1993-1994: n = 969
1999-2000: n = 2,020	1999-2000: n = 3,347	1999-2000: n = 1,779	1999-2000: n = 3,691
2005-2006: n = 1,775	2005-2006: n = 2,266	2005-2006: n = 667	2005-2006: n = 1,968

Table 7: The Average Number of Female-Only and Male-Only Sports Teams Provided by U.S. High Schools, by the Type of Community Where High School is Located



Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by type of community:

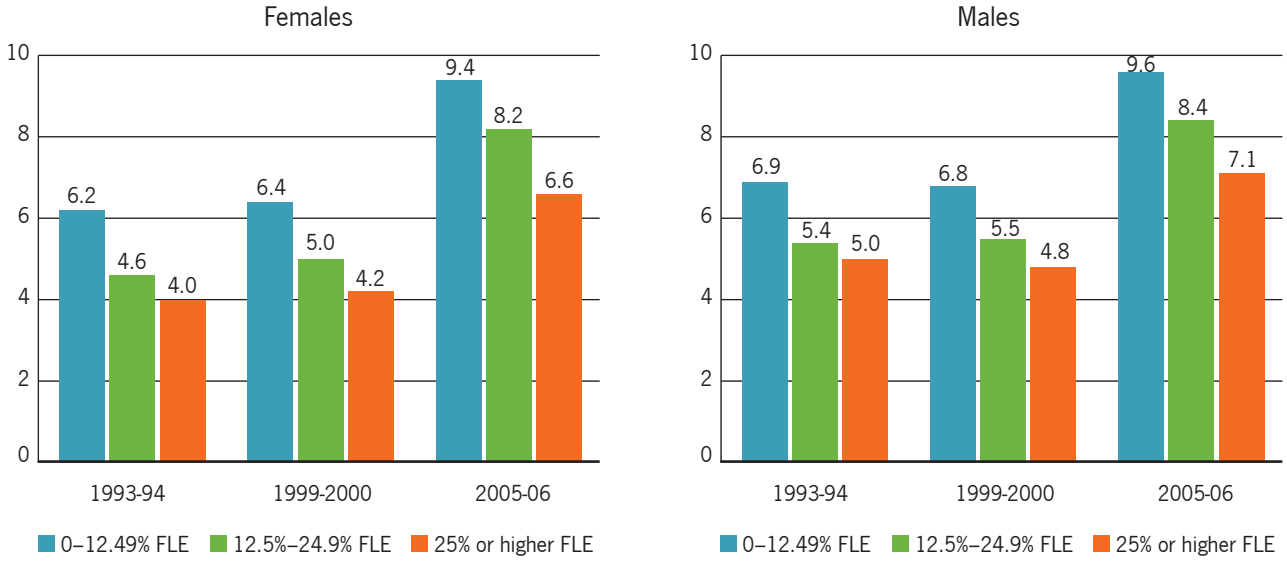
Urban	Suburban	Town	Rural
1993-1994: n = 1,048	1993-1994: n = 1,068	1993-1994: n = 1,168	1993-1994: n = 969
1999-2000: n = 2,020	1999-2000: n = 3,347	1999-2000: n = 1,779	1999-2000: n = 3,691
2005-2006: n = 1,775	2005-2006: n = 2,266	2005-2006: n = 667	2005-2006: n = 1,968

i.e., an increase of two teams in urban, suburban and rural schools, and one team in town communities. However, schools in all communities reported a substantial increase in the number of teams provided between 1999-2000 and 2005-06. During 2005-06, rural schools offered girls and boys the same number of sports teams (n = 11), while in the other communities, boys were provided with one more team than girls (see Table 7).

The Number of Sports and Teams by Gender and School Economic Resources

The findings depicted in Tables 8 and 9 (on following pages) show that schools with greater economic resources offered more sports and teams to their students than schools with less resources. This pattern persisted across all three school years studied. Furthermore, U.S. schools increased the number of sports and teams they offered between 1999-2000 and 2005-06.

Table 8: The Average Number of Female-Only and Male-Only Sports Provided by U.S. High Schools to Girls and Boys, by Percent of School Population Eligible for Free Lunch

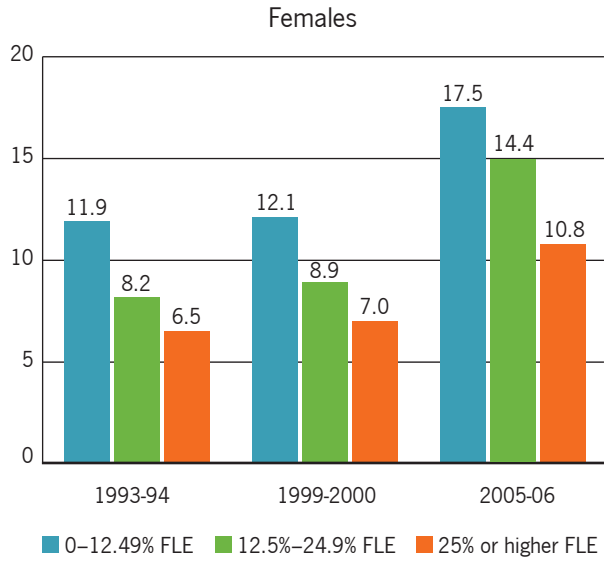


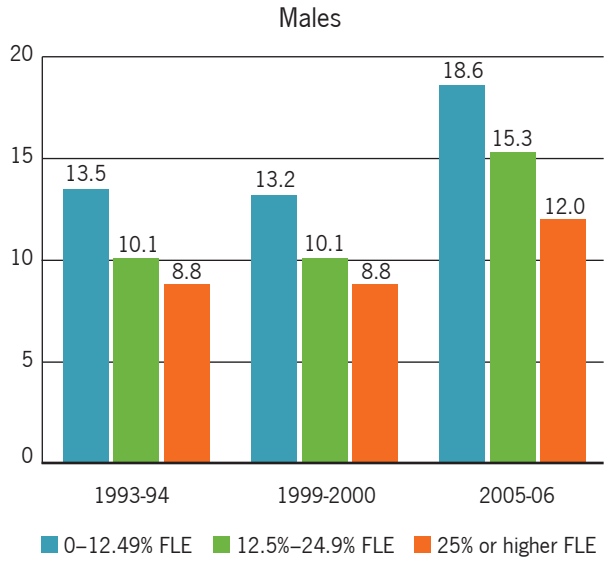
Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by percent of schools' student bodies eligible for free lunch:

0 - 12.49% FLE	12.5% - 24.9% FLE	25% or higher FLE
1993-1994: n = 1,297	1993-1994: n = 873	1993-1994: n = 1,096
1999-2000: n = 3,800	1999-2000: n = 2,562	1999-2000: n = 2,748
2005-2006: n = 1,667	2005-2006: n = 1,595	2005-2006: n = 2,937

By the 2005-06 school year, U.S. schools offered comparable numbers of sports to boys as girls. With regard to the number of teams, however, schools in each economic category sustained one more team for boys than for girls.

Table 9: The Average Number of Female-Only and Male-Only Sports Teams Provided by U.S. High Schools to Girls and Boys, by the Percentage of School Population Eligible for Free Lunch





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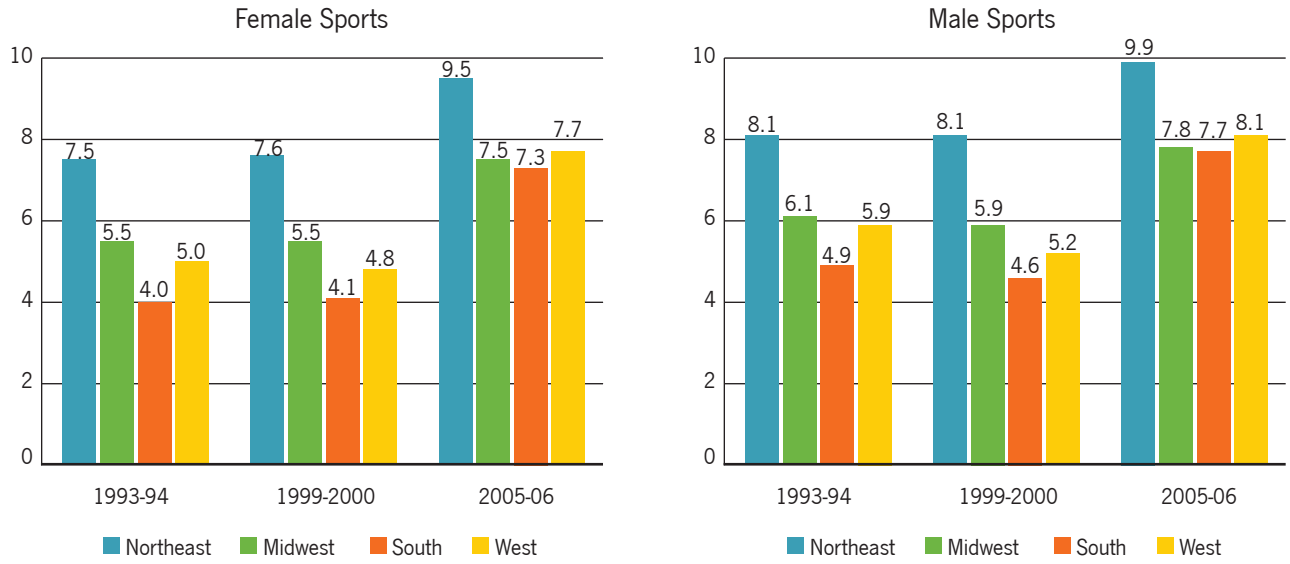
2005-2006: n = 1,667	2005-2006: n = 1,595	2005-2006: n = 2,937

The Number of Sports and Teams by Gender and Geographic Region

The number of sports that U.S. high schools offered their students varied by geographic region and across the time period. Northeastern schools provided the highest average number of sports. Between 1993-94 and 1999-2000, the number of sports provided to both sexes across regions increased somewhat, but the largest increase occurred between 1999-2000 and 2005-06 (See Table 10 on following page). During the 2005-06 school year, schools in the Northeast, Midwest and South offered somewhat similar numbers of sports to both sexes, although boys edged out girls slightly in each region (10, 8 and 8, respectively). Western schools provided boys with an average of 8.1 sports, compared to 7.7 sports for girls.

A somewhat different picture emerged regarding the number of teams. Regional differences existed that were similar to the number of sports discussed above (See Table 11 on page 19). The Northeast and West once again provided more teams by 2005-06 than their regional counterparts. In addition, the gender gap narrowed a bit

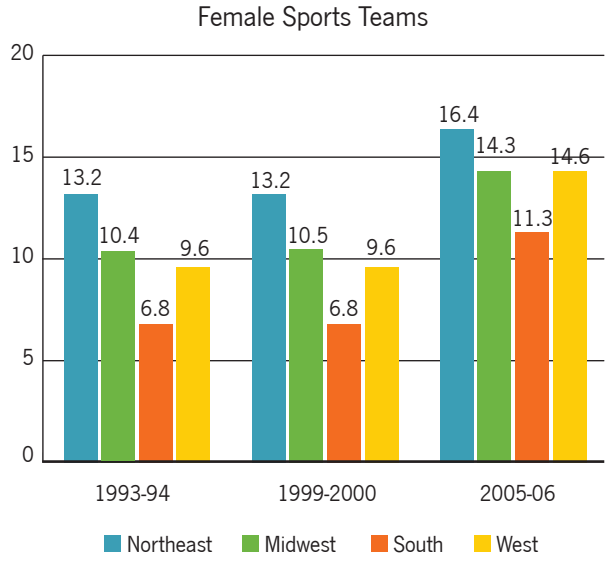
Table 10: The Average Number of Female-Only and Male-Only Sports Provided by U.S. High Schools to Girls and Boys, by Geographic Region

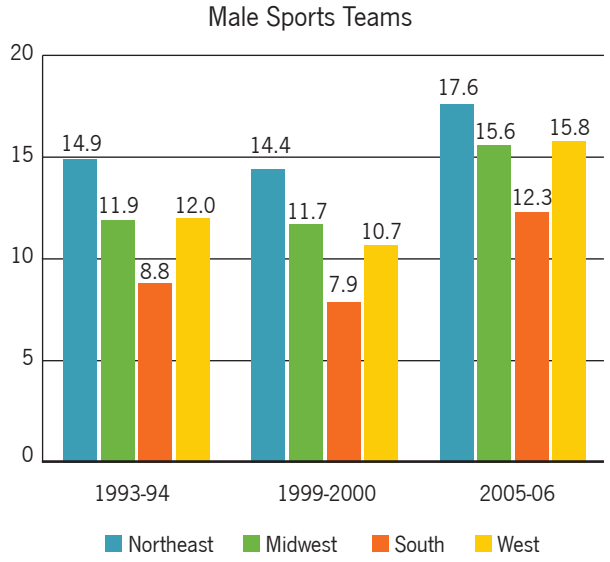


Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by region:

Northeast	Midwest	South	West
1993-1994: n = 517	1993-1994: n = 973	1993-1994: n = 2,025	1993-1994: n = 738
1999-2000: n = 1,637	1999-2000: n = 3,294	1999-2000: n = 3,746	1999-2000: n = 2,160
2005-2006: n = 827	2005-2006: n = 1,655	2005-2006: n = 2,700	2005-2006: n = 1,494

Table 11: The Average Number of Female-Only and Male-Only Sport Teams Provided by U.S. High Schools, by Geographic Region





Valid (listwise) sample sizes for the number of high schools offering grades 9 through 12, by region:

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2005-2006: n = 827	2005-2006: n = 1,655	2005-2006: n = 2,700	2005-2006: n = 1,494

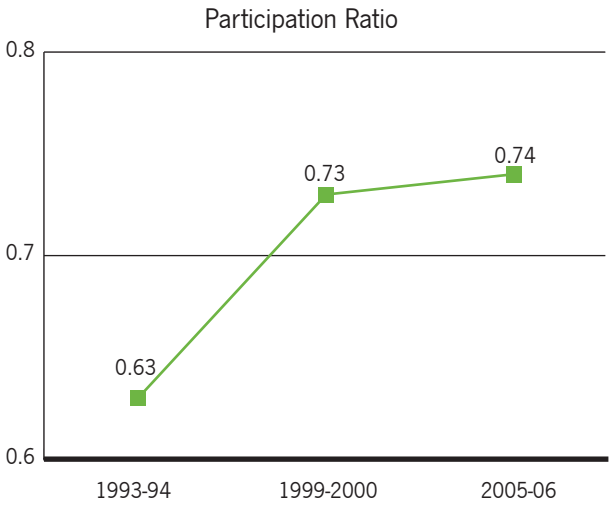
across the timeframe. Whereas boys in each region were provided with between one and three more teams during the 1993-94 school year, by 2005-06 there was only a one-team difference between girls' and boys' team numbers across all four geographic regions.

Changes in the Gender Equity Ratio between 1993-94 and 2005-06

Figures 1 and 2 (on following page) portray changes in the ratio of athletic participation opportunities between girls and boys across the 1993-94 through 2005-06 time frame. The "gender equity ratio" was calculated by taking the total number of athletic opportunities provided to girls and dividing by the total number provided to boys. Ratios below 1.00 indicate fewer opportunities were provided to girls than boys. A ratio of 1.00 means girls and boys received equal athletic opportunities.

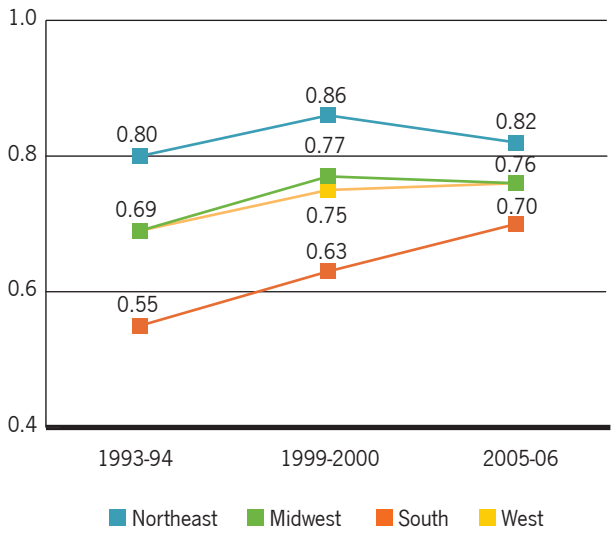
Figure 1 (on following page) reveals an observable trend toward increasing gender equity across the entire U.S. between 1993-94 and 1999-2000, but there was only a .01 increase toward gender equity occurring between 1999-

Figure 1: The Gender Equity Ratios for Athletic Participation Opportunity, 1993-94 through 2005-06*



*Note: The gender equity ratio is calculated by taking the total number of athletic participation opportunities provided to girls and dividing by the total number of athletic participation opportunities provided to boys. Ratios below 1.00 indicates fewer athletic participation opportunities provided to girls than boys.

Figure 2: The Gender Equity Ratio between the Number of Athletic Participation Opportunities Provided to U.S. Girls and Boys, by Geographic Region, 1993-94 through 2005-06*



*Note: The gender equity ratio is calculated by taking the total number of athletic participation opportunities provided to girls and dividing by the total number of athletic participation opportunities provided to boys. Ratios below 1.00 indicates fewer participation opportunities were provided to girls than boys.

2000 and 2005-06. This means that most of girls' gains in athletic participation opportunities came between 1993-94 and 1999-2000.

Figure 2 reveals some historical shifts in the provision of athletic participation opportunities within geographic regions. First, the Northeast made the most progress toward achieving gender equity, followed by the West, Midwest and South. However, all four regions fell short of achieving an equitable allocation of athletic participation opportunities. Boys got more, girls got less. The largest gender gap appeared in the South, but progress did occur throughout the time frame. Schools in the Northeast surpassed their Southern counterparts with regard to providing athletic participation opportunities to their coeds, but there was also backsliding between 1999-2000 and 2005-06 (i.e., 0.86 to 0.82).

Overall, the greatest amount of progress toward gender equity occurred between the 1993-94 and 1999-2000 school years, where there was a visible narrowing of the gender gap. Between 1999-2000 and 2005-06, however, the momentum of reform appears to have slowed. Gender inequity in athletic participation opportunities not only

persisted throughout the time frame, but progress toward building equity bogged down.

State-by-State Comparisons, Change in the Provision of Athletic Opportunity

The final section of this report provides regional and state-by-state breakdowns of the extent that the provision of three types of athletic opportunities changed for each gender between the 1993-94 and 2005-06 school years. These data were designed to help readers compare and assess the degree of gender equity within their regions and states. Some readers may speculate about how these results for the 2005-06 school year compare to the current athletic realities in their schools, district or state.

The gender equity ratios presented in the first two columns of Table 12 (on pages 22-23) show that boys were provided with substantially more athletic participation opportunities than girls in every state except Alaska. The gains in athletic participation that girls made between 1993-94 and 2005-06, therefore, fell far short of achieving equity. In contrast, the results in columns two through six show that many states provided girls and boys equal or somewhat comparable numbers of teams and sports during 2005-06. In a few states, girls were allocated more teams and sports than boys. In states like Maine, New Hampshire, Michigan, Minnesota, Delaware, Virginia, Montana, Alaska and Hawaii, the gender equity ratios exceeded 1.00—which means that girls had proportionately more teams than boys did.

Finally, we measured the extent of the change in the provision of athletic opportunities between the 1993-94 and 2005-06 school years. Table 13 (on pages 24-25) presents the results by geographic region and for each state (including the District of Columbia). The first and second columns report the differences between the proportions of athletic participation opportunities allotted to each gender respectively.[11] Here a plus sign (+) indicates a percentage point gain in athletic participation opportunities, while a minus sign (-) means a percentage point decline across the timeframe, and an equal sign (=) means no change occurred. The findings in columns three and four show the average increase in the number of sports across the 12-year time period for boys and girls. Finally, the next two columns present the average increase in the number of teams for boys and girls.

The overall findings reveal an array of differences across the timeframe. Table 13, for example, shows that, on average, high schools in the Northeast added three teams for both boys and girls, but boys ended up with 18 teams in 2005-06 compared to 16 teams for girls. In contrast, schools in Delaware added seven teams for boys and 10 for girls, totaling 21 and 22 teams for boys and girls, respectively, by 2005-06. In one state, Louisiana, girls registered no additional teams across the time frame, while boys averaged a loss of one team. Despite the additions of

Table 12: State-by-State Comparisons: Change in the Gender Equity Ratios Across High Schools between 1993-94 and 2005-06

	Participation		Sports		Teams	
	Gender Equity Ratio: Participation Oportunities 05-06	Change Since 93-94	Gender Equity Ratio: Sports 05-06	Change Since 93-94	Gender Equyity Ratio: Teams 05-06	Change Since 93-94
Northeast	**0.82**	**-0.03**	**0.98**	**+0.06**	**0.93**	**-0.01**
Maine	0.94	+0.03	1.00	-0.07	1.01	-0.01
New Hampshire	0.95	-0.20	1.09	-0.18	1.06	-0.14
Vermont	0.89	-0.03	1.86	+0.80	0.97	-0.13
Massachusetts	0.78	-0.08	0.92	=0.00	0.89	-0.01
Rhode Island	0.76	-0.05	0.97	=0.00	0.90	+0.03
Connecticut	0.81	-0.02	0.96	=0.00	0.94	+0.05
New York	0.86	+0.07	0.98	-0.06	0.97	+0.05
Pennsylvania	0.75	-0.02	0.90	+0.03	0.85	+0.00
New Jersey	0.78	+0.04	0.94	+0.03	0.90	+0.06
Midwest	**0.76**	**+0.07**	**0.95**	**+0.08**	**0.93**	**+0.07**
Wisconsin	0.79	+ 0.05	0.94	+0.10	0.92	+0.04
Michigan	0.82	+ 0.03	0.99	=0.00	1.02	=0.00
Illinois	0.65	-0.06	0.89	-0.03	0.81	-0.03
Indiana	0.75	+0.11	0.98	+0.13	0.95	+0.14
Ohio	0.73	+0.13	0.92	+0.13	0.90	+0.12
Missouri	0.75	+0.11	0.97	+0.10	0.92	+0.07
North Dakota	0.79	+0.12	0.94	-0.01	0.91	+0.04
South Dakota	0.86	-0.01	0.97	+0.09	0.99	+0.10
Nebraska	0.73	+0.10	0.95	+0.13	0.96	+0.16
Kansas	0.72	+0.07	0.91	+0.05	0.90	=0.00
Minnesota	0.85	+0.06	1.19	+0.24	1.02	+0.05
Iowa	0.82	+0.17	0.94	+0.08	0.96	+0.12
South	**0.70**	**+0.15**	**0.97**	**+0.17**	**0.93**	**+0.19**
Delaware	0.88	+0.12	0.83	-0.09	1.05	+0.15
Maryland	0.83	+0.10	1.02	+0.04	1.03	+0.10

	Participation		Sports		Teams	
	Oportunities 05-06 Ratio: Participation Gender Equity	Change Since 93-94	Sports 05-06 Gender Equity Ratio:	Change Since 93-94	Ratio: Teams 05-06 Gender Equyity	Change Since 93-94
South, cont.	**0.70**	**+0.15**	**0.97**	**+0.17**	**0.93**	**+0.19**
DC	0.56	-0.23	1.11	+0.24	0.97	+0.11
Virginia	0.77	+0.08	1.00	+0.12	1.01	+0.12
West Virginia	0.77	+0.18	0.92	+0.13	0.88	+0.11
North Carolina	0.69	+0.02	0.92	+0.07	0.93	+0.09
South Carolina	0.73	+0.20	0.96	+0.12	0.92	+0.17
Georgia	0.66	+0.13	0.94	+0.22	0.89	+0.15
Florida	0.76	+0.37	1.02	+0.40	0.97	+0.39
Kentucky	0.82	+0.26	0.97	+0.18	0.95	+0.25
Tennessee	0.62	+0.13	0.94	+0.17	0389	+0.15
Mississippi	0.62	+0.23	0.91	+0.38	0.88	+0.37
Alabama	0.62	+0.15	0.92	+0.11	0.82	+0.16
Oklahoma	0.77	+0.20	0.96	+0.19	0.94	+0.21
Texas	0.64	+0.12	1.00	+0.17	0.91	+0.15
Arkansas	0.65	+0.16	0.97	+0.30	0.93	+0.32
Louisiana	0.74	+0.28	0.86	+0.13	0.85	+0.15
West	**0.76**	**+0.09**	**0.97**	**+0.12**	**0.96**	**+0.11**
Idaho	0.71	+0.10	0.96	+0.16	0.98	+0.10
Montana	0.81	+0.01	1.03	+0.03	1.04	=0.00
Wyoming	0.92	-0.05	1.01	+0.11	1.02	-0.02
Nevada	0.69	+0.02	0.90	-0.01	0.91	=0.00
Utah	0.77	+0.07	0.98	+0.01	0.96	+0.04
Colorado	0.79	+0.03	0.98	+0.09	0.97	+0.04
Arizona	0.72	=0.00	0.96	+0.01	0.94	+0.00
New Mexico	0.80	+0.22	0.98	+0.23	0.95	+0.16
Alaska	1.30	+0.55	1.39	+0.50	1.57	+0.57
Washington	0.81	-0.21	1.05	+0.08	1.00	+0.07
Oregon	0.75	+0.09	1.00	+0.07	0.98	+0.11
California	0.72	+0.14	0.91	+0.10	0.90	+0.16
Hawaii	0.80	+0.15	1.06	+0.17	1.09	+0.24

Table 13: State-by-State Comparisons: Percentage of Athletic Opportunities, Average Number of Teams and Sports Across High Schools Between 1993-94 and 2005-06

	Boys		Girls		Boys		Girls		Boys		Girls	
	Percentage of Athletic Opportunities 05-06	Change Since 93-94	Percentage of Athletic Opportunities 05-06	Change Since 93-94	Number of Sports 05-06	Change Since 93-94	Number of Sports 05-06	Change Since 93-94	Number of Teams 05-06	Change Since 93-94	Number of Teams 05-06	Change Since 93-94
Northeast	**62%**	**+0%**	**52%**	**+0%**	**10**	**+3**	**9**	**+3**	**18**	**+3**	**16**	**+3**
Maine	63%	+9%	61%	+8%	9	+3	9	+2	14	+4	14	+4
New Hampshire	56%	+3%	55%	-3%	10	+4	10	+4	16	+8	16	+7
Vermont	61%	+15%	57%	+9%	9	+4	9	+5	16	+3	15	+1
Massachusetts	54%	-14%	46%	-12%	10	+1	9	+1	17	+1	16	+1
Rhode Island	56%	+9%	43%	+5%	11	+3	10	+3	15	+2	13	+2
Connecticut	58%	=0%	49%	+1%	11	+3	11	+3	19	+5	18	+6
New York	66%	-10%	62%	-2%	11	+2	11	+2	21	+2	20	+4
Pennsylvania	45%	-3%	37%	-1%	8	+1	7	+1	13	+2	12	+2
New Jersey	56%	-5%	45%	-2%	11	+2	10	+2	20	+3	18	+4
Midwest	**64%**	**-3.3%**	**51%**	**+3%**	**8**	**+2**	**8**	**+2**	**16**	**+3**	**14**	**+3**
Wisconsin	62%	+1%	51%	+3%	8	+3	8	+3	17	+5	16	+5
Michigan	55%	-6%	47%	-3%	9	+2	9	+2	15	+2	15	+2
Illinois	47%	-5%	36%	-1%	7	+1	7	+1	17	+5	14	+4
Indiana	48%	+2%	37%	+5%	10	+2	9	+3	17	+2	16	+3
Ohio	51%	+8%	40%	+12%	8	+2	7	+3	14	+4	12	+4
Missouri	51%	+3%	38%	+5%	7	+2	7	+2	16	+4	14	+4
North Dakota	73%	+6%	63%	+12%	6	=0	6	=0	12	+1	10	+1
South Dakota	64%	-29%	60%	-20%	5	+1	5	+1	9	+2	9	+2
Nebraska	60%	-3%	52%	+9%	7	+2	7	+2	15	+2	14	+3
Kansas	60%	-4%	52%	+5%	7	+4	7	+4	15	+8	13	+7
Minnesota	54%	-9%	50%	-4%	9	=0	10	=0	21	=0	21	=0
Iowa	64%	-3%	60%	+11%	8	+1	7	+2	16	+2	15	+4
South	**43%**	**+5%**	**30%**	**+8%**	**8**	**+2**	**7**	**+3**	**12**	**+3**	**11**	**+4**
Delaware	41%	-8%	36%	-2%	12	4	10	+3	21	+7	22	+10
Maryland	40%	+4%	34%	+6%	8	+2	8	+2	13	+2	13	+3

	Boys		Girls		Boys		Girls		Boys		Girls	
	Percentage of Athletic Opportunities 05-06	Change Since 93-94	Percentage of Athletic Opportunities 05-06	Change Since 93-94	Number of Sports 05-06	Change Since 93-94	Number of Sports 05-06	Change Since 93-94	Number of Teams 05-06	Change Since 93-94	Number of Teams 05-06	Change Since 93-94
South, cont.	**43%**	**+5%**	**30%**	**+8%**	**8**	**+2**	**7**	**+3**	**12**	**+3**	**11**	**+4**
Virginia	46%	+3%	37%	+6%	10	+3	10	+3	14	+3	14	+4
West Virginia	45%	+5%	36%	+11%	7	+3	6	+3	11	+4	10	+4
North Carolina	46%	+4%	32%	+4%	10	+3	9	+4	13	+3	12	+4
South Carolina	50%	+9%	33%	+11%	8	+3	8	+3	12	+3	11	+5
Georgia	37%	+5%	24%	+6%	8	+3	7	+4	12	+3	11	+4
Florida	22%	-3%	16%	+4%	7	+1	7	+3	10	=0	10	+3
Kentucky	47%	+19%	38%	+21%	8	+4	8	+4	14	+7	13	+8
Tennessee	38%	+9%	24%	+9%	8	+3	7	+4	10	+3	9	+4
Mississippi	47%	+11%	29%	+14%	7	+3	6	+4	9	+4	8	+5
Alabama	45%	+7%	28%	+10%	6	+2	5	+2	9	+2	8	+3
Oklahoma	53%	+1%	43%	+11%	6	+2	5	+2	9	+3	8	+4
Texas	47%	+7%	33%	+10%	8	+4	8	+4	17	+8	15	+8
Arkansas	47%	+7%	33%	+12%	6	+2	5	+3	10	+4	8	+5
Louisiana	41%	+9%	25%	+10%	3	-1	3	=0	6	-1	5	=0
West	**46%**	**-1%**	**37%**	**+3%**	**8**	**+3**	**8**	**+3**	**16**	**+4**	**15**	**+5**
Idaho	57%	-15%	45%	-2%	7	+3	7	+3	13	+4	13	+5
Montana	64%	-1%	60%	+4%	5	+3	5	+3	9	+4	9	+5
Wyoming	68%	-1%	63%	-7%	6	+3	6	+3	10	+5	10	+5
Nevada	42%	+6%	31%	+6%	10	+6	9	+6	17	+10	15	+10
Utah	54%	+10%	44%	+10%	8	+2	8	+2	15	+3	14	+4
Colorado	52%	-5%	44%	=0%	8	+2	8	+2	17	+4	16	+4
Arizona	43%	=0%	33%	+1%	8	+3	8	+2	15	+4	14	+4
New Mexico	48%	+10%	40%	+14%	7	+3	7	+4	13	+5	12	+6
Alaska	34%	-16%	32%	-4%	5	+3	6	+4	9	+2	10	+4
Washington	50%	=0%	42%	-1%	8	+2	9	+3	19	+6	18	+5
Oregon	48%	-7%	40%	-1%	7	+2	7	+2	14	+1	14	+3
California	32%	-2%	24%	+3%	8	+2	8	+2	17	+3	15	+5
Hawaii	50%	+13%	42%	+15%	14	+3	14	+5	20	+2	21	+6

teams in most schools across the timeframe, boys ended up with an average of two more teams than girls in the Northeast and Midwest, and one more team than girls in the South and West. These state-by-state findings can also be summarized this way:

(1) The average number of teams added was the same for girls and boys in 18 states.
(2) The average number of teams added for girls was higher than for boys in 27 states.
(3) The average number of teams added for boys was higher than for girls in 5 states.

These results show that even though girls made some gains in the number of teams across the timeframe, boys' gains either remained the same as girls or increased in relation to girls in 23 states. Girls' gains in the number of sports were either higher (N = 27) or the same as the boys (N = 18) in a total of 45 states. While the basic trend was toward gender equity, the evidence does not support the contention that "girls' gains" came at the expense of "boys' losses."

With regard to changes in the number of sports between 1993-94 and 2004-05, closer scrutiny of the results shows that:

(1) The average number of sports added was the same for girls and boys in 32 states.
(2) The average number of sports added for girls was higher than for boys in 14 states.
(3) The average number of sports added for boys was higher than for girls in 3 states.

The above summary confirms that, across the U.S., boys were allotted a greater number of sports than girls. While the expansion of the number of sports provided across the time frame was comparable for boys and girls in a majority of states (N = 32), it was higher for girls in 14 states, and higher for boys in five states. (In the District of Columbia and Louisiana, there was a greater decline in the average number of sports offered to boys compared to girls.)

An additional tally of the data presented in Table 13 reveals an overall pattern among the individual differences between the states with regard to the provision of athletic participation opportunities. We calculated the number and percentage of states in which the proportion of girls' share of athletic participation opportunities increased, decreased or stayed the same between the 1993-94 and 2005-06 school years. The same tally was done among the boys. Athletic participation opportunities among girls increased in 34 states (66%) and, among boys, in 27 states (53%). The comparable numbers of states with decreases in athletic participation opportunities were 16 (31%) and 21 (41%) for girls and boys, respectively. It must be emphasized these numbers and percentages need to also be understood in relation to the larger finding that, within most states and across the country, the average share of athletic participation opportunities among the female student body remained lower than the proportion of boys' athletic participation opportunities among the male student body.

These findings show that, by 2005-06, girls and boys were often allocated nearly equal numbers of sports and teams. However, boys received substantially more athletic participation opportunities than girls. Despite the jump in the provision of athletic opportunities to girls between 1993-94 and 1999-2000 and slow growth thereafter, the gender equity ratio of 0.74 during 2005-06 fell short of providing girls a number of athletic participation opportunities comparable to boys (review Figure 1). Taken together, these national findings[12] suggest that even though U.S. schools hiked the number of teams and sports for girls across the time period, girls' overall team memberships were lower in number than their male counterparts. Put simply, though girls and boys were often supplied with a similar number of teams and sports by 2005-06, schools provided and managed larger rosters for boys than girls.

Finally, readers can review Table 14 (on following pages) in order to see where their state ranked in the provision of athletic participation opportunities during 2005-06. Please note that the first two columns show the descending athletic participation rates among girls and boys respectively. The first column shows the average rates (converted to percentages) of athletic participation opportunities filled by girls among the female student body in each state. The second column presents the results for boys. And finally, the gender equity ratios between girls and boys in the schools within each state were averaged and presented in descending order by state in the third column. Scrutiny of the findings shows that the provision of higher rates of athletic opportunities to girls within a state is not a direct indicator of gender equity between girls and boys.

Table 14: State-by-State Rankings: Percentage of Athletic Participation Opportunities Across High Schools and Gender Equity Ratio for Athletic Opportunities 2005-06

Percentage of Athletic Opportunities (Girls)		Percentage of Athletic Opportunities (Boys)		Gender Equity Ratio: Athletic Opportunities	
North Dakota	63%	North Dakota	73%	Alaska	1.3
Wyoming	63%	Wyoming	68%	New Hampshire	0.95
New York	62%	New York	66%	Maine	0.94
Maine	61%	Iowa	64%	Wyoming	0.92
South Dakota	60%	Montana	64%	Vermont	0.89
Iowa	60%	South Dakota	64%	Delaware	0.88
Montana	60%	Maine	63%	New York	0.86
Vermont	57%	Wisconsin	62%	South Dakota	0.86
New Hampshire	55%	Vermont	61%	Minnesota	0.85
Kansas	52%	Kansas	60%	Maryland	0.83
Nebraska	52%	Nebraska	60%	Iowa	0.82
Wisconsin	51%	Connecticut	58%	Kentucky	0.82
Minnesota	50%	Idaho	57%	Michigan	0.82
Connecticut	49%	New Hampshire	56%	Connecticut	0.81
Michigan	47%	New Jersey	56%	Montana	0.81
Massachusetts	46%	Rhode Island	56%	Washington	0.81
Idaho	45%	Michigan	55%	Hawaii	0.8
New Jersey	45%	Massachusetts	54%	New Mexico	0.8
Colorado	44%	Minnesota	54%	Colorado	0.79
Utah	44%	Utah	54%	North Dakota	0.79
Oklahoma	43%	Oklahoma	53%	Wisconsin	0.79
Rhode Island	43%	Colorado	52%	New Jersey	0.78
Hawaii	42%	Missouri	51%	Massachusetts	0.78
Washington	42%	Ohio	51%	Oklahoma	0.77
New Mexico	40%	Hawaii	50%	Utah	0.77
Ohio	40%	South Carolina	50%	Virginia	0.77
Oregon	40%	Washington	50%	West Virginia	0.77
Kentucky	38%	Indiana	48%	Florida	0.76
Missouri	38%	New Mexico	48%	Rhode Island	0.76
Indiana	37%	Oregon	48%	Indiana	0.75
Pennsylvania	37%	Illinois	47%	Missouri	0.75

Percentage of Athletic Opportunities (Girls)		Percentage of Athletic Opportunities (Boys)		Gender Equity Ratio: Athletic Opportunities	
Virginia	37%	Arkansas	47%	Oregon	0.75
Delaware	36%	Kentucky	47%	Pennsylvania	0.75
Illinois	36%	Texas	47%	Louisiana	0.74
West Virginia	36%	Mississippi	47%	Nebraska	0.73
Maryland	34%	North Carolina	46%	Ohio	0.73
Arizona	33%	Virginia	46%	South Carolina	0.73
Arkansas	33%	Alabama	45%	Arizona	0.72
South Carolina	33%	Pennsylvania	45%	California	0.72
Texas	33%	West Virginia	45%	Kansas	0.72
Alaska	32%	Arizona	43%	Idaho	0.71
North Carolina	32%	Nevada	42%	Nevada	0.69
Nevada	31%	Delaware	41%	North Carolina	0.69
Mississippi	29%	Louisiana	41%	Georgia	0.66
Alabama	28%	Maryland	40%	Arkansas	0.65
Louisiana	25%	Tennessee	38%	Illinois	0.65
California	24%	Georgia	37%	Texas	0.64
Georgia	24%	Alaska	34%	Alabama	0.62
Tennessee	24%	California	32%	Mississippi	0.62
Florida	16%	Florida	22%	Tennessee	0.62
DC	6%	DC	15%	DC	0.56

CONCLUSION

Policymakers ideally reach out for information in order to inform their efforts to maintain or modify projects and programs. Some of the data they work with are close to the ground, that is, superintendents or building principals typically know "the numbers" in their schools or district. They also know the principle of gender equity and the legal guidance affixed to Title IX.

This report provides educators and policymakers at the national and state levels with new and accurate information. Throughout its 37-year history, the Women's Sports Foundation has sought to base its knowledge of gender and sport on evidence. In order to extend and expand this commitment to evidence-based research, the Foundation has partnered with the University of Michigan to create a joint research and policy center. The center is known as the Women's Sports, Health and Activity Research and Policy Center (SHARP). The center will generate interdisciplinary research on issues related to women's sports, health, gender issues and kinesiology. The mission of CRPASH at D'Youville College is also propelled by the tenet that policy is best based on evidence.

The data presented here reflect the provision of athletic opportunities to U.S. girls and boys during an historical period in which the influence of Title IX was expanding. Some school officials and athletic directors may use this information as a touchstone for conversation and reform. In other schools, a male athletic director's devotion to the "way it was" or persistent gender stereotypes may thwart recognition of the need for greater gender equity. Some administrators might also attempt to fly under the radar of the law.

Despite the social and economic challenges that daunt most educational reform, some progress was made toward expanding the opportunity sector of interscholastic sports to include more girls between 1993-94 and 2005-06. And yet, gender equity was not achieved. Indeed some of the findings revealed a decline (in the Northeast) or leveling off of increases in the provision of athletic participation opportunities among girls between 1999-2000 and 2005-06 (in the Midwest and West). While southern schools reported an upswing during this same period, they provided the lowest regional rate of athletic participation opportunities.

The most striking policy implication unearthed by this analysis is embedded in two seemingly contradictory findings. While many schools generally provided girls and boys with equitable numbers of sports and teams during 2005-06, boys still received a disproportionately more

athletic participation opportunities than girls in most schools, communities and states. Nationally, for example, boys' share of athletic participation opportunities was about 26% higher than girls' (i.e., gender ratio of .74) (See Figure 1 on page 20). One key question for school administrators is, therefore, when is the addition of teams and sports for girls truly intended to mend gender inequities in a school, or in contrast, when is the addition of girls' teams or sports a smokescreen that hides and extends gender inequity in the school?

The findings suggest an alternative strategy for school officials to pursue in order to provide equitable athletic participation opportunities for their female and male students. Schools can create a larger number of teams and sports for girls than boys in order to establish more of a balance in the provision of athletic participation opportunities across genders. Such a policy prescription might strike some observers as unfair. However, in many schools, boys are offered freshman football, junior varsity football and varsity football. The comparatively large squad sizes needed for football are thus magnified by the number of teams provided, resulting in a high overall number of athletic participation opportunities for boys. Similarly, school officials can add more teams and sports for girls than for boys, or they can create additional squads within sports (e.g., volleyball or basketball) in order to increase the total athletic participation opportunities among girls and, in effect, to further approach gender equity across all sports.

The fact that the number of teams and sports increased across 12 years without a comparable acceleration toward gender equity in athletic participation opportunities strengthens legal arguments that participation rates need to be the central focus of program assessment. And methodologically, our results should alert researchers to recognize the limited validity of relying on team numbers and sport numbers as operational measures of gender equity in U.S. high schools.

One timeworn rationale for giving boys more athletic participation opportunities is that girls are not as interested in sports as boys. If this were the case, however, then how does one explain the huge increase in girls' participation in sport that mushroomed during the past 30 to 35 years? Did girls suddenly and spontaneously become interested in sports during the 1980s and, subsequently, rush through the doors of opportunity? It is much more likely that the surge in girls' athletic participation was a response to the creation of programs, teams and recruitment strategies that were undertaken by schools and communities across the country. Children's interest levels vary by grade level, school location and family income levels.[13] And our data show that girls' participation rates vary a great deal between southern states (lowest rates of athletic participation among girls) compared to northeastern states (highest rates of girls' participation). Are southern girls and boys so different from their northeastern counterparts? The historical evidence confirms the adage, "If you build it, they will come."

Finally, the context of current policy debates about high school sport is often confined to sport itself. Put simply, debates focus on what is happening "in the sports programs." But if the research across nearly three decades tells us anything, it is that the influence of youth sports spills over into the classroom, family life, test-taking, and general health and well-being of American youth. Amidst the current economic downturn, sport remains a sound investment in youth development. The investment should be made equitably. With regard to gender equity in sport, there is more at stake than who wears the cleats, throws the balls, runs the fastest, or becomes the best teammate or team leader. Then and now, high school athletic participation was a conduit for physical, social, educational and health gains among U.S. adolescents. Increasingly, parents want the same resources for their daughters as their sons. We hope that the results and analyses presented in this report put empirical wind in the sails of further reform.

APPENDIX A: DESIGN AND DATA ANALYSIS

Data for this analysis draws from two sources. By merging these three national data sets, the researchers were able to detect and analyze how athletic opportunities varied across geographic region and type of community, as well as in relation to various school characteristics. The first source of data comes from the Civil Rights Data Collection (CRDC)[14]. Three cross-sections of elementary and secondary public schools collected during 1994 (n = 44,151), 2000 (n = 88,650)[15] and 2006 (n = 62,484)[16] were merged to create a larger data set to analyze changes in the number of different sports, number of athletic teams and percentage of athletic opportunities that U.S. public high schools provided to girls and boys. Only administrators at high schools were asked to respond to questions that dealt with the number of different sports offered to girls and boys, the number of athletic teams offered to girls and boys, and the number of girls and boys who participate on teams throughout the school year. This analysis is restricted to high schools that offered grades 9-12 to both girls and boys during the three time periods, resulting in a sample of 24,370 high schools (1994, n = 4,566; 2000, n = 12,030; 2006, n = 7,774).

The second source of data comes from the Common Core of Data (CCD), which is collected annually by the National Center for Education Statistics (NCES). The CCD gathers basic demographics on all public U.S. elementary and secondary schools. To help supplement the CRDC data, CCD data were merged to determine each school's geographic location (i.e., whether the school is located in an urban, suburban, town or rural area), the percent of students who are eligible for free lunch, gender composition (i.e., number of students who are female and male), and the number of students enrolled during the school year. The CCD was collected during the same time periods as the CRDC data. The CCD data[17] that was merged to create the final data set includes the data files from the 1993-94, 1999-2000 and 2005-06 school years.

APPENDIX B: SUMMARY OF MEASUREMENT PROCEDURES FOR THE TABLES IN THIS REPORT

Table 1. Athletic Participation Opportunities by Gender, 1993-94 through 2005-06. In each school, the number of participation opportunities among girls (i.e., the total number of female participants on all teams in the school) was divided by the number of girls in the school. Likewise, among boys, the number of participation opportunities allotted boys (i.e., the total number of male participants on all teams in a school) in each school was divided by the number of boys in the school. The average percentage across all the schools was calculated for each gender.

Table 2. Athletic Participation Opportunities by Gender and Type of Community. The Civil Rights Data Collection (CRDC) data were merged with the Common Core of Data (CCD) in order to determine the type of community in which each school was embedded (i.e., urban, suburban, town, and rural). The number of participation opportunities (female participants on all teams) provided to girls was determined for every school within each community subgroup. For each school, the number of participation opportunities (female participants on all teams) among girls was then divided by the number of girls in the school, yielding a percentage. The average percentages among urban, suburban, town, and rural schools were then calculated. The same procedure was followed among boys.

Table 3. **Athletic Participation Opportunities by Gender and Percentage of Students on Federal Free Lunch Program.** The Civil Rights Data Collection (CRDC) data were merged with the Common Core of Data (CCD) in order to determine the percent of the student body that was eligible for free lunch. The percent of schools' student body eligible for free lunch was calculated by taking the total number of student who are eligible for free lunch within a school and divided by the total number of students who are enrolled in that school. This percentage was then recoded to have three categories that represent different levels of the student body who are eligible for free lunch; i.e., 00-12.49%, 12.5% to 24.9%, and 25% and higher.

Table 4. Athletic Participation Opportunities by Gender and Geographic Region. The Civil Rights Data Collection (CRDC) data were merged with the Common Core of Data (CCD) in order to determine the geographical region in which each school was located and, subsequently, subgrouped schools in their respective geographic region (Northeast, Midwest, South and West). The number of participation opportunities provided to girls was determined for every school in the states (including the District of Columbia) that comprised the geographic region. For each school, the number of participation opportunities among girls was then divided by the number of girls in the school, yielding a percentage. The average percentages among schools in the Northeast, Midwest, South and West were then calculated. The same procedure was followed among boys.

Table 5. Number of Sports and Teams by Gender, 1993-94 through 2005-06. The number of female-only sports in each school was determined and an average among all schools was calculated. The same procedure was followed among boys. The number of female-only athletic teams in each school was determined and an average among all the schools was calculated. The same procedure was followed among boys.

Table 6. Number of Sports by Gender and Type of Community. The number of female-only sports in each school was determined and averages were calculated among all schools within urban, suburban, town and rural communities. The same procedure was followed to calculate the number of male-only sports among boys.

Table 7. Number of Teams by Gender and Type of Community. The number of female-only teams in each school was determined and averages were calculated among all schools within urban, suburban, town and rural communities. The same procedure was followed among boys.

Table 8. Number of Sports by Gender the Percentage of Students on Federal Free Lunch Program. See Table 3 for details on measurement and classification procedures.

Table 9. Number of Teams by Gender and Percentage of Students on Federal Free Lunch Program. See Table 3 for details on measurement and classification procedures.

Table 10. Number of Sports by Gender and Geographic Region. The number of female-only sports in each school was determined and averages were calculated among all schools within the four geographic regions; i.e., Northeast, Midwest, South and West. The same procedure was followed among boys.

Table 11. Number of Teams by Gender and Geographic Region. The number of female-only sports teams in each school was determined and averages were calculated among all schools within the four geographic regions; i.e., Northeast, Midwest, South and West. The same procedure was followed among boys.

Figure 1. The Gender Equity Ratios for Athletic Participation Opportunity, 1993-94 through 2005-06. The gender equity ratio was calculated by taking the total number of athletic opportunities provided to girls (female participants) in each school divided by the total number of athletic opportunities provided to boys (male participants) in each school. The ratios were then averaged across the entire U.S. sample. A similar calculation was performed for the states that comprise the four geographic regions of the nation. If the gender equity ratio equals 1.00, then equal numbers of participation opportunities were provided to girls and boys. When the gender equity ratio falls below 1.00, it means that girls were allocated fewer opportunities than boys. Conversely, if the gender equity ratio is above 1.00, it means that girls were given more opportunities than boys.

Figure 2. The Gender Equity Ratio between the Number of Athletic Participation Opportunities Provided to U.S. Girls and Boys, by Geographic Region, 1993-94 and 2005-06. The gender equity ratios were calculated the same as outlined above but by analyzing data by geographic region and year the school year when the data were collected.

Table 12. Regional and State-by-State Comparisons of the Three Gender Equity Ratios, by Gender and Geographic Region, 2005-06. For each of the 50 states in the United States and the District of Columbia, three gender equity ratios were calculated in order to compare the amount of athletic opportunities provided by high schools to girls and boys across the timeframe. The three gender equity ratios measure the number of athletic participation opportunities (participants), the number of teams and the number of sports. In each instance the number of opportunities allotted to girls was divided by the number provided to boys, producing a ratio. As above, when the gender equity equals 1.00, this indicates an equitable allocation of athletic opportunities between girls and boys. When the ratio falls below 1.00, it means that girls were allocated fewer opportunities than boys. Conversely, if the gender equity ratio is above 1.00, it means that girls were given more opportunities than boys.

Table 13. Changes in the Provision of Athletic Opportunities between 1993-94 and 2005-06, Regional and State-by-State and Comparisons by Gender. The same calculations were done here as presented in Table 12. Here, however, the respective differences were also calculated to measure overall increases and decreases in the gender equity ratio with regard to athletic participation opportunities. The differences in the gender equity ratios, the number of teams and the number of sports between 1993-94 and 2005-06 were calculated in order to compare changes in the number of additional (or reduction of) athletic participation opportunities, teams and sports created for girls and boys across the 12-year time frame.

Table 14. State-by-State Rankings: Percentage of Athletic Participation Opportunities across High Schools and the Gender Equity Ratios for Athletic Participation Opportunities, 2005-06. The same calculation procedure detailed for Table 1 was conducted here as a foundation for comparison and ranking. For each school, the number of participation opportunities among girls (i.e., the total number of female participants on all teams in the school) was divided by the number of girls in the school. Likewise, the number of participation opportunities allotted boys (i.e., the total number of male participants on all teams in the school) was divided by the number of boys in the school. The average percentage across all the schools was calculated for each gender and an average percentage was computed for each state by multiplying the rate by 100. These averages were then ranked in descending order. Finally, the gender equity ratios among schools within each state were averaged and presented in descending order.

ENDNOTES

1 National Center for Education Statistics. 2010. Digest of Education Statistics. Table 164.

2 One nationwide survey of parents found that 39% of mothers and 37% of fathers agreed that "The schools in my community care more about boys' sports programs than girls' sports programs." Sabo, D. & Veliz, P. (2008). Go Out & Play: Youth Sports in America. East Meadow, NY: Women's Sports Foundation, p. 136.

3 For example, Sabo, D. and Veliz, P. (2008) found that among a national U. S. sample of high school students, 53% of girls participated in one or two sports in their school and community, while 14% participated in three or more sports. The respective percentages among high school boys were 48% and 22% (p. 12). See Go Out & Play: Youth Sports in America. East Meadow, NY: Women's Sports Foundation.

4 This question comes from the survey used in the Civil Rights Data Collection. It should also be noted that the OCR instructions specify that respondents "Do not include intramural sports or cheerleading."

5 CRDC data has been collected in 1994, 2000, 2002, 2004 and 2006. The surveys are distributed during the specified years, but ask school administrators to report on the pervious school year (i.e., CRDC data from 1994 has information pertaining to the 1993-94 school year).

6 The Civil Right Data Collection for 2000 collected information on all public schools in the United States during the 1999-2000 school year.

7 The CRDC asked school administrators to report the total number of sport participants for each sport during the school year. This means that some students were counted more than once if they participated in more than one sport (e.g., a student would be counted once if she is on the volleyball team and twice if she also plays basketball).

8 Regional divisions (U.S. census Bureau): Northeast (includes Mid-Atlantic states) - New England, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey; Midwest (includes West North Central states) - Wisconsin, Michigan, Illinois, Indiana, Ohio, Missouri, North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa; South - Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Mississippi, Alabama, Oklahoma, Texas, Arkansas, Louisiana; West - Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, New Mexico, Alaska, Washington, Oregon, California, Hawaii.

9 CCD collection for the 1999-2000 and 2005-06 school years defined eight geographic regions where schools could be located. "Large City" and "Midsize City" were combined to represent high schools located in urban areas. "Urban fringe of a large city" and "Urban fringe of a midsize city" were combined to represent high schools located in suburban areas. "Large Town" (population ≥ to 25,000 located outside a metropolitan Core Based Statistical Area (CBSA) or inside a micropolitan CBSA) and "Small Town" (population 25,000 ≥ to 2,500 and located outside a metropolitan CBSA or inside a micropolitan CBSA) were combined to represent schools located in towns. "Rural, outside CBSA" and "Rural, inside CBSA" were combined to represent schools located in rural area. It should also be noted that the CCD collection for the 1993-94 school year only had one geographic category for rural areas, but did have similar categories for urban, suburban and town areas.

10 CCD collection defined 8 geographic regions where schools could be located. "Large City" and "Midsize city" were combined to represent high schools located in urban areas. "Urban fringe of a large city" and "Urban fringe of a midsize city" were combined to represent high schools located in suburban areas. "Large Town" (population ≥ to 25,000 located outside a metropolitan CBSA or inside a micropolitan CBSA) and "Small Town" (population 25,000 ≥ to 2,500 and located outside a metropolitan CBSA or inside a micropolitan CBSA) were combined to represent schools located in towns. "Rural, outside CBSA" and "Rural, inside CBSA" were combined to represent schools located in rural area.

11 As explained earlier in the text, the percentage of athletic participation opportunities provided to girls was calculated by dividing the total number of reported participation slots filled by girls across all teams by the number of girls in the school. The same procedure was done among the boys.

12 There is emphasis placed on "national" because the extent of gender equity varied across geographic regions and between states. These data are presented in the next section of this report.

13 Sabo, D. & Veliz, P. (2008). Go Out and Play: Youth Sports in America. East Meadow, NY: Women's Sports Foundation. See Part VII.

14 CRDC data has been collected in 1994, 2000, 2002, 2004 and 2006. The surveys are distributed during the specified years, but ask school administrators to report on the pervious school year (i.e. CRDC data from 1994 has information pertaining to the 1993-94 school year).

15 The Civil Right Data Collection for 2000 collected information on all public schools in the United States during the 1999-2000 school year.

16 The Civil Right Data Collection for 2006 collected information on all public schools in the United States during the 2005-06 school year.

17 CCD Data can be found at the following website: http://nces.ed.gov/ccd/ccddata.asp

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