

A SPATIAL ANALYSIS OF INTERSCHOLASTIC
SOCCER IN THE UNITED STATES

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PREFACE

This thesis was concerned with the diffusion and spatial variations of interscholastic soccer in the United States. The primary objective is to analyze the recent growth and areal differentiation of soccer and to determine the significance of the sport in American high schools.

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CHAPTER I

INTRODUCTION

The International Sport

At the present time throughout the world, soccer prevails as the leading and most popular sport. On an international level, soccer far surpasses all other sports in attracting the largest number of participants and spectators. It is one of the few sports which transcends geographical, cultural, and political barriers.

In an age where sports competition has evolved into ceremonious and extravagant public exhibitions, soccer stands at the forefront in instigating mass bedlam on a global scale. Crowds two to three times those which attend football and baseball contests in the United States are frequent occurrences in places where soccer is played.

The pageantry and media-induced drama that accompanies America's Super Bowl and World Series more closely resemble a dirge when compared to the universal interest and excitement generated by the World Cup matches in soccer. In some countries, everyday social, economic and governmental processes are altered or halted by games of national importance. Numerous reports of spectator hysteria, which have resulted in rioting, violence and fatalities, are attributed to the fervor and extreme fan behavior associated with critical matches among rival teams and political states.

Today, soccer is played in more than 140 nations on six continents, and in Europe and South America, it is the predominate sport. In 1972, the Federation Internationale de Football Association, the major governing body of organized soccer, estimated that there were between 16 and 20 million participants of the sport, nearly three quarters of whom resided in European countries.¹ The Soviet Union and West Germany claim approximately one-half million registered players, respectively.² England lists more than one million club participants and 10,000 professional players, and, in the Netherlands, one citizen out of every twenty-one is active in the sport.³

If one word were to be suitable in describing soccer's widespread popularity, "simplicity" may be the most appropriate. The fundamentals are very basic: the kicking of a ball in an open field of play by a group of persons. The rudiments of the game have aided in the adoption of soccer by a diversity of nations, from the highly industrialized countries of Western Europe to the developing states of Africa and Asia.

Historically, soccer began back during the ancient civilizations of man. There are sundry references of the past which describe a ball being kicked in games or ceremonies. In 3000 B.C. in China, such an activity was called Tsu chu; the Greeks called it episkiyros; Harpaston in Roman times; Kemari or Kernat by the Japanese in 600 A.D.; Calcio in medieval Florence; Gomacari in Mexico; and poltapok in Yucatan, to name several.⁴ During the last 5,000 years, the game assumed many alterations, and it has not been until this century that soccer became an "internationally organized" sport.

The anomaly concerning the worldwide popularity and favored status of soccer among nations is the people in the United States' reluctance to regard it as a principal and significant sport. Only in recent years has soccer achieved any major recognition as a sport played in America, and that is greatly attributed to the formation of the professional North American Soccer League (NASL). The professional teams have drawn large attendance in cities scattered across the country, but their presence goes virtually unnoticed by a society totally enmeshed in football, baseball, and an array of sports.

On the collegiate level, soccer is generally considered a minor sport among the colleges and universities that participate. At many of those institutions, there are high percentages of foreign students from countries which are "soccer hotbeds", comprising the rosters of varsity teams. The situation is unchanged in the secondary and elementary school systems. Soccer is promoted and emphasized on a national basis much less than the more traditional sports. On other levels, such as youth programs, private and parochial leagues, and amateur clubs, soccer still is not as prevalent as within their counterparts in some Western European nations.

The apparent paucity of soccer opportunities in the United States has precipitated this country's lack of success in developing players and national teams capable of competing against other nations. This has been quite true in the past three decades. The United States has won only a single World Cup title (1950 versus England), and since that momentous feat, Americans have experienced hard times and have failed to qualify for the finals.⁵

Some observers of the American sports scene have suggested a variety of reasons in explaining why the United States has not developed its national soccer potential on a level comparable to the more successful soccer nations. One writer concluded:

Only in the United States have spectators failed to become impassioned by the sport. In U.S. high schools, soccer is played in less than half of the fifty states, mostly in New England and the northeastern seaboard. TV may hasten soccer's acceptance in the U.S., but to really succeed here, it first needs to be adopted at the grass roots level in American high schools and grade schools. Once the revolution starts there, national acceptance will be assured.⁶

H. V. Porter, former secretary of the National Federation of State High School Athletic Associations, said, "It's hard to interest American kids in a sport in which they can't use their hands."⁷

Most advocates of American soccer forecast a dramatic increase in public interest and participation in the sport within the near future. In the 1970 Collier's Yearbook, the remark appeared that: "there is a vast underground expansion in secondary and collegiate soccer," which may ultimately produce excellent national teams in the years ahead.⁸

A 1972 survey conducted by the National Collegiate Athletic Association (NCAA) disclosed that soccer was the most rapidly growing sport throughout the country's colleges and universities.⁹ The study also revealed that soccer was on the increase on other amateur levels.

These and similar accounts predict that soccer is emerging from years of dormancy and neglect in the United States and is destined to become an integral facet of the American sports culture. Accordingly, if soccer does cultivate a substantial contingent of followers and participants, the possibility exists that it will one day attain equal

standing with, or even exceed America's revered football and baseball. Regardless, the position of soccer in American society warrants study.

The Scope of the Investigation

The purpose of this study is to investigate the spatial variation and difference in participation of interscholastic soccer in the United States. Specific emphasis is on the analysis of soccer growth and diffusion in the high schools from 1967 through 1978. A secondary purpose of the research is the analysis of soccer development and expansion in colleges and universities from 1902 through 1978. In conjunction with the aforementioned objectives, the study was also designed to analyze and explain:

1. The origins and diffusion of soccer in the United States, its subsequent growth and adoption as an American sport, and its development on the professional and intercollegiate levels.

2. The extent to which participation opportunities differ among states, cities and rural areas.

3. Various trends and patterns which illustrate geographical differences in participation, and those processes which determine the presence or absence of soccer in interscholastic athletic programs.

4. The relevance of analyzing the academic years of 1967-68, 1971-72, 1975-76 and 1977-78 to determine the number of high schools participating in soccer and assessing state and regional trends.

5. The identification of areas which indicate a potential growth in interscholastic participation in contrast to sections of the United States where development of the sport does not appear to be in much evidence.

Objectives and Procedures

The objective of this research is to analyze the current spatial arrangement and areal differentiation of interscholastic soccer participation throughout the United States. Chief considerations of this thesis will be: (1) to briefly relate the historical origins and role of soccer in society, with special attention given to the growth of the sport in American culture; (2) to analyze the diffusion of soccer nationally, by individual states, and in 105 selected cities from 1967 through 1978, so to identify patterns and spatial variations and those processes which are associated; and (3) to discuss the implications and trends of soccer on the interscholastic level in the United States.

Review of the Literature

A search of the literature revealed that geographers have paid little attention to sports in American culture. In respect to soccer, there have been no efforts to study the sport in secondary schools on a national or regional basis.

Rooney surveyed the geographic organization of high school athletics and analyzed the state-to-state variations in per capita participation and the degree to which high schools participate in various sports.¹⁰ Based on a 1971 sports participation survey compiled by the National Federation of State High School Associations, 2,290 schools and more than 78,000 boys were active in interscholastic soccer. One male out of every 101, between the ages of 14-17, was engaged in high school soccer.¹¹ However, Rooney points out that access to reliable

data involving participation statistics are sometimes inflated and to be judged with a degree of skepticism. He also suggests sundry variables, such as population density, settlement patterns, occupational structures, climate and tradition, serving as carriers and barriers that help to explain spatial variations in sports participation.

Adrian's spatial analysis of participation in high school sports reaffirmed Rooney's conclusion that soccer is almost totally a regional sport in the United States, concentrated in the Northeast.¹²

Origin and diffusion studies by geographers such as Gould¹³ and Brown¹⁴ have examined the processes by which a cultural trait or innovation spreads over space and time. Types of spatial diffusion, such as expansion, hierarchical and relocation diffusion, are processes which transmit a phenomenon from one culture to another or within an individual culture. Barriers, which may be political, religious, physical, psychological, economical or social in nature, prevent or slow down the diffusion process of a particular cultural characteristics.

The bulk of sports research, both in the United States and abroad, has been performed by persons outside the discipline of geography, primarily those in sociology and history. Studies addressed to soccer are a pittance in number compared to works concerning other American sports. Much more investigation of soccer has occurred in countries where the sport is held in higher esteem.

Reisman and Denney observed that American culture and its individual universities have shown a propensity for changing, and, in some instances, refusing to adopt, several of the sports brought to the United States by colonists who emigrated from Europe.¹⁵ They cited the modification of rugby into American football as a chief example.

Munrow carried this concept a step further by stating that the educational system in America has developed its athletic and physical education programs to meet the particular needs and desires of the American populace. He wrote:

During its growth, American physical education has drawn mainly from four sources, from the gymnastics systems of Germany and Sweden, from the games-playing 'system' of the English public schools and universities, and from the particular contributions and development of its own people. Wherever it has borrowed, it has also characteristically shaped and modified.¹⁶

Vidich and Bensman believe the American public is basically more attentive to sports participation in urban centers, specifically on the professional and interscholastic level. They show less interest in sports activities and their effects in small towns and rural communities.¹⁷

Parents and educational institutions also have acted as dualistic forces in shaping the participation opportunities of American youth in sport. Coleman maintains that this social occurrence is indicative of all societies, but he sees more alternatives available to adolescents of industrialized societies.¹⁸

Fichter's study of the roles parents and educational institutions assume in determining sports participation opportunities suggests that religion often influences the decision-making process. He claims that parochial schools do not always view athletics as having any "educational value," but among some Catholic families, parents in the urban community place pressures on the church-affiliated schools to initiate and organize an athletic program consisting of those sports preferred by the adults for their children.¹⁹

Economics have become an integral factor in the organization and administration of sports in America's school systems. Neale remarks that sport and recreation activities have steadily become "increasingly important" in formulating athletic programs in schools faced with the problem of weighing the costs and revenues associated with those sports they offer to their students.²⁰ Rooney has also examined spatial variations in participation opportunities among states, and notes that states with high per capita incomes tend to provide more sports in their high school athletic programs than do states with low per capita incomes.²¹

Studies by Elias and Dunning,²² Lang,²³ and Taylor²⁴ have analyzed the impact of soccer on crowd behavior and fan interest throughout the world. Lever studied the structure of soccer in Brazil and comments that "soccer in Latin America is more than a game . . . it is an all-consuming commitment bordering on fanaticism."²⁵ Lever also draws a comparison between the soccer athlete in Brazil and many of America's college athletes in respect to using sport as a means to an end.

The possibility for stable social advancement through soccer exists, but it is elusive. For the majority, soccer provides only fleeting social mobility, leaving their educational levels and values unchanged. Around the age of 30, they find themselves with no work skills, no money and only memories of their brief careers.²⁶

In explaining why soccer has not yet caught the interest of most Americans, Koppett adheres to the philosophy that "American tastes are conditioned to more explosive action, including some violence, and they are used to more frequent scoring."²⁷

Cozens and Stumpf say that the sports children participate in today will ultimately shape a society's sports culture in the future, and, subsequently instigate changes in a school's athletic program.²⁸

In reference to those processes which dictate the inclusion or exclusion of a specific sport in American high schools and colleges, Scott recognizes the public as being the persuasive factor. He says:

In all areas of school and college athletics, the public has been relied upon to such an extent for support; therefore, the program of competitive sports must represent the viewpoint of the public rather than that of education. It is naive to expect that school or college athletics can reflect ideals that are loftier than those of the public from which it receives its nurture.²⁹

Because sport, and especially soccer, is an international activity, it is possible to analyze and compare those factors which are instrumental in formulating the sports cultures of nations. According to Ball, the existence of world championships, the Olympics, and the playing of similar sports in many countries, provokes the question: "can we account for variations in the nonsport characteristics of these nations?"³⁰ In essence, Ball is attempting to understand the importance of sport in relationship to more general patterns which can be found in a nation's culture.³¹

Another study of the cultural effects on sport is Vanderzwaag's analysis of why a culture places a demand on the individual to participate in sports.³² This "cultural demand" theory is applicable to Americans in that they are continually "forcing their boys" into participating in particular sports, such as football and baseball, which have become status measurements in United States society.³³

This theme also has been pursued by persons outside the academic field. Noted popular writer, James A. Michener, in his book Sports in America, recognized the early demands brought to bear on children by a society inflexible in its dedication to organized athletics for persons of all ages, which is often to the detriment of youths seeking

to choose their own experiences in sport.³⁴

In examining the growth of soccer in the United States per se, two comprehensive studies have analyzed the sport on a macro and micro-scale using an historical approach. Baptiste traced the origin and development of intercollegiate soccer for the purpose of analyzing its rate of growth and present status as a sport among colleges and universities.³⁵ Robinson wrote an historical account of soccer in the city of St. Louis studying the causes and effects of the sport's popularity upon the community over the decades.³⁶

Baptiste concluded that soccer could not compete with football in the autumn, and that the latter was a "big business" on most campuses whose ". . . attendant pageantry, glamour and publicity have so captivated the American sport public that any other fall activity experiences great difficulty in staking claim on the athletic scene."³⁷

However, Baptiste predicted a growth of soccer as an intercollegiate sport, and said it was on the verge of experiencing a new era of "unparalleled prosperity."³⁸

In the case of St. Louis, Robinson attributed soccer's strong foothold to two private enterprises, the Catholic Youth Council and the Khoury Soccer Association.³⁹ The city's fascination with soccer has also been the result of support from the local inhabitants, sports-minded businessmen and the media.⁴⁰

The relative obscurity of soccer to other sports in high schools coupled with the scarcity of current information on the diffusion and spatial variation of the sport justifies the need to study and analyze the impact soccer is making on the interscholastic system in the United States.

FOOTNOTES

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CHAPTER II

THE HISTORY OF SOCCER AND ITS DEVELOPMENT AS A SPORT IN THE UNITED STATES

Origins and Diffusions

Centuries ago, at Chester, England, a group of townspeople were assembled in an open field on Shrove Tuesday happily kicking the severed head of a captured and slain Dane. About the same time, in the town of Derby, also on Shrove Tuesday, several of the local citizenry defeated an assemblage of Roman soldiers in a game of football. Based upon those two events, both of the respective towns voice their claim to having played the first soccer football game.¹

Many accounts have been written on the historical origins and world growth of soccer, or football as it is known in various nations. However, historians can only speculate as to where the sport originated. It is highly probable that researchers will never unravel the enigma encompassing soccer's beginning.

Some historians claim the game was conceived in China, and over the succeeding generations, other civilizations developed their own particular style of play.² Ancient records disclose that the Chinese used a leather sphere stuffed with hair, sand or air, while the Babylonians and Egyptians played with a round object filled with bamboo fibers.³

Other historians have disputed this accreditation given to the Chinese. Menke maintains there is no evidence in early Chinese culture to attribute the game's origin to them. He further supports his opinion by noting that contemporary China has shown only slight interest in the kicking game, and is not considered a soccer-loving nation by the rest of the world.⁴

No evidence exists to sustain the Greeks or Romans as being the innovators of soccer either. In fact, no investigation has been able to trace the spread of the game from China in the Third Century B.C., down to the era of the Romans.

Regardless of whether China, Greece or Rome was the site of the first soccer contest, authorities tend to agree that it was the Romans who were responsible for introducing the game throughout their expanding empire, and it was in England, where soccer was received with the most enthusiasm.⁵

The English Influence

Contemporary soccer can be traced in its development and organization to nearly two centuries of growth of the sport in England. The dominance of England as a major world and colonial power for approximately four centuries contributed greatly to the diffusion of soccer to most areas of the world. Even in many countries where the Union Jack did not represent direct governance over the lives of people, the British culture and politics were quite influential. England's leadership in European diplomatic affairs prompted many states to adopt English social customs, and soccer was one of the British imports that was readily accepted.

The first reliable accounts of football being played in England were written in the Fourteenth Century. Constant with the times, the game was characterized by brutal play on the part of the performers and frequently ignited violent actions by spectators.⁶ Local authorities viewed the game itself as the cause of rioting, killing, and disorder in their districts. Their consternation shortly came to the attention of King Edward II, who in 1314,⁷ issued a decree naming those who participated in the game for precipitating a breach in the peace

. . . forasmuch as there is a great noise in the city caused by hustling over large balls from which many evils might arise which God forbid; we command and forbid, on behalf of the king, on pain of imprisonment, such game to be used in the future.⁸

Despite the severe penalties, Englishmen ignored the ban and continued to inflict injuries upon one another, and the sport began to increase in popularity.

Every monarch from Edward II to Elizabeth I continued to issue bans against football. Henry VIII and Elizabeth passed legislation aimed at dissuading participation, and went so far as to jail soccer players. Ironically, this treatment of soccer contestants was quite a change from the more recent Queen Elizabeth, who in 1966, knighted the English team manager, Alf Ramsay, for winning the world soccer title for England.⁹

Soccer continued to prosper throughout England and soon became a favorite sport of the Scots.¹⁰ By the end of the Fifteenth Century, fields with boundaries were set aside for soccer, and local rules regulating play slowly were being formulated.¹¹

By the early Sixteenth Century, soccer was being incorporated into English schools of higher education. The game was allowed to be played

at English colleges and universities so long as one school did not compete against another. This provision did not concur with the student spirit of competition, and in 1620, Cambridge began to promote intercollegiate soccer game.¹²

The violence associated with the sport started to dissipate near the end of the Seventeenth Century. In 1861, an English nobleman introduced the Italian "brand" of soccer to England, which was not as "savage as the style of game inherited from the Romans."¹³ The sport still retained its violent nature to some degree, but less criticism and repressive legislation from officials resulted.

The only serious impediment to soccer being nationally accepted by the people of England was that no formal, regulatory body existed. Rules and conduct of soccer fluctuated from Cornwall to Sussex to Yorkshire to Suffolk. It was not until the middle of the Nineteenth Century that soccer became a structured, regulated sport, which was on the verge of being included in the English public school system as a viable component of physical education programs.

Birth of Modern Soccer

Through the 1840's, English football followed two styles of play: one, allowing the use of the hands and carrying the ball, and; the other, allowing only the kicking of the ball. The two methods of playing the sport caused conflicts and barriers to intercollegiate competition among the schools in Great Britain.¹⁴

To bring uniformity to the sport, English universities established a set of rules to govern soccer. In 1848, the "Cambridge rules for association football" were adopted to achieve conformity.¹⁵

This uniform code of rules did not meet with immediate general acceptance, but signaled the beginning of an attempt "to devise a universal set of laws which would unite football players everywhere in a common game."¹⁶ With the exception of a few minor changes, the Cambridge rules have remained to this time in worldwide use. The football game which permitted use of the hands emerged as rugby.

Fifty years after the inception of the Football Association in England (1863), soccer had diffused to European nations, primarily through the expertise of English and Scottish coaches who traveled around the world.¹⁷ The first international soccer game took place between Scotland and England in 1872 at Glasgow.¹⁸ This landmark in soccer history was largely due to the emphasis the sport was given by the British public schools. The form of soccer practiced in schools diffused into society as a whole, and amateur and professional leagues began to form and organize throughout Wales, Scotland, Ireland, as well as in England.¹⁹

In the 1870's, soccer (and rugby) became a popular sport to all social classes of Britons. Dunning wrote that:

. . . the new models of football forged in the public schools ceased to be monopolized by the middle and upper classes. With the gradual shortening of working hours members of the urban working classes, at first mainly in the North and Midlands, began to form clubs, too. "Muscular Christian" and "Christian Socialist" priests, many of them educated at public schools, played a central role in the diffusion of Rugby and Association Football to the working classes.²⁰

From the beginning of this century up to World War II, England was master of international soccer competition. In the course of half a century, soccer extended to all habitable continents. Nations in Eastern Europe began to develop their soccer programs. In South

America, soccer was particularly successful in being absorbed into the culture of numerous nations. Several countries in Asia and Africa, many of which had been under British imperial rule, became seriously involved with the sport.

The diffusion of soccer throughout the world is largely credited to England. In the case of the sport's introduction and diffusion into the United States, the British are no less responsible.

Growth of Soccer in the United States

Historians have agreed that football appeared in the United States in the Seventeenth and Eighteenth Centuries, and that the first form of the sport was played in the colony of Virginia in 1609.²¹ There is no record as to where soccer in America originated, but reliable information is available concerning the growth of the sport in this country.

Soccer developed in the United States similarly to the way it did in England. Rules differed from one locality to another, chaos and violence prevailed, and authorities were constantly attempting to restrict participation.

The Rise and Fall of Soccer

Following the pattern of growth in England, American soccer received its biggest impetus in colleges. Some accounts dating back to 1800, describe students playing the sport on several campuses in the East.²² However, the sport was without rules and formal organization.

The first organized and "true" soccer contest, according to some researchers, was held in Boston in 1865.²³ The "Boston Game", as it came to be known, was a favorite activity among secondary school boys and shortly led to the formation of the Oneida Football Club, the first organized soccer club in the United States.²⁴

Because of the high popularity of the sport throughout the Boston area, it was only natural for soccer to shortly be adopted by colleges in the vicinity. Harvard was one of the first American colleges to allow "The Boston Game", along with Princeton, Rutgers, Columbia, Yale and Stevens.²⁵

The first intercollegiate game did not resemble either football or soccer as Americans know them today. A game between Princeton and Rutgers was held on November 6, 1869, in New Brunswick, New Jersey, which is of historic significance to both modern-day football and soccer enthusiasts. The contest, though it resembled soccer more than football, is considered to be the origin of intercollegiate football in the United States.²⁶

At the beginning of the 1870's, the future of soccer in America appeared promising. Intercollegiate and secondary school participation slowly increased in isolated pockets of New England, New York and New Jersey. However, by 1877, the first period of growth of soccer had ceased in the United States.

The pivotal event which steered this nation from soccer to the American style of football occurred in the fall of 1875. Yale and Harvard chose to adhere to the rugby rules of play, and their decision ultimately influenced other colleges.²⁷ The American Intercollegiate Football Association was formed which permitted the ball to be carried,

awarded touchdowns instead of goals in scoring, and caused the early demise of soccer.

From 1877 to 1905, soccer experienced hard times in the United States. The rise of baseball and the introduction of basketball into American culture served to further decrease soccer's ability to attract participants. The sport may have disappeared if not for the great numbers of immigrants who streamed into the United States during the latter decades of the Nineteenth Century and the beginning of the 1900's.

During the late 1800's, modern soccer was brought to America by immigrants from the British Isles; namely, the Scots, Irish and English.²⁸ At first, they settled in and around urban centers in the East. But, as time passed, they began to diffuse to other parts of the country. Reports of soccer being played in areas of the Midwest and in California by these newly arrived settlers can be traced to the 1880's and '90's.²⁹

Resurgence

While soccer lay dormant on college campuses and within the public schools, a renaissance of the sport was underway in many cities across the nation in the late Nineteenth Century. Soccer clubs were being organized in cities such as New York, Philadelphia, Trenton, and Paterson, N.J., Fall River, Mass., and other centers in the East, Detroit, Chicago, Cincinnati, Cleveland and St. Louis in the Midwest, and Denver and San Francisco in the West.³⁰

The strongest region of soccer was found centered around the New York metropolitan area and Fall River, where the Bristol County Soccer League was established in 1886.³¹ That same year marked the first

international competition of a U.S. team, when members of several clubs banded together to play a team from Canada. Soon afterwards, organized soccer club leagues began to appear in St. Louis (1884), Denver (1892), Cleveland (1905) and other cities.³²

The City Sport

Having been shunned by the overwhelming number of colleges and universities, soccer's sole opportunity to develop in the United States was in the urban centers. Cities such as Philadelphia, New York and St. Louis emphasized soccer club league competition more than most other urban centers. This high degree of participation was attributed to their large numbers of European immigrants.³³ In the early years of the Twentieth Century, British soccer teams made occasional trips to the United States to compete against some of the better clubs in U.S. cities.³⁴

Soccer in St. Louis. St. Louis is one city where soccer has flourished as an important sport for nearly a century. Two organizations have been chiefly responsible for the perpetuation of the sport: the Catholic Youth Council, founded in 1941, and the Khoury Soccer Association, organized 10 years later.³⁵ The Catholic Youth Council has influenced the development of soccer in St. Louis by providing the opportunity for youth of all ages to participate in the sport, and has been a leading organization in the establishment of instructional programs and clinics throughout the metropolitan area.³⁶

The Catholic Youth Council, however, was restricted to boys from the city's Catholic parishes. To provide an opportunity for other

religious and ethnic groups in St. Louis to participate, the Khoury Soccer Association was formed.³⁷

St. Louis is a prime example of how cities in the United States kept soccer alive after its disappearance from the collegiate level in the 1870's. Currently, soccer is one of the "fastest growing" sports in the St. Louis area, and it has emerged as a key sport in local secondary schools, colleges and amateur organizations.³⁸

The impact of soccer in St. Louis has affected the social development of the community. It was observed that soccer:

. . . was one of the ways which served to ease many of the immigrants and their children into the flow of urban life of Saint Louis. The gradual intermingling of immigrants and second generation Americans can be observed. As in other American cities of the late nineteenth and early twentieth centuries, immigrants tended to gravitate to particular neighborhoods that soon became nationality ghettos. The immigrants - the hyphenated Americans - accepted American culture, as they saw it in St. Louis. But they also contributed to it.³⁹

The revival of soccer in cities, such as St. Louis and those in the East, was noticed by colleges in the Northeast which had rejected the sport several decades earlier. In the vicinity of Philadelphia, soccer's popularity had steadily increased over the years to the point that many social and fraternal organizations were active in the sport. This strong interest prompted a small institution in 1902 to incorporate soccer into its collegiate varsity sports program. Subsequently, Haverford College has been credited as the first American school to participate in modern-day intercollegiate soccer.⁴⁰

The Diffusion of Intercollegiate Soccer

As mentioned earlier in this chapter, soccer football was an intercollegiate sport in several eastern American institutions prior

to 1900, but no official regulatory structure existed until several colleges and universities formed the Intercollegiate Association Football League in 1905.⁴¹ The following year, Haverford, Columbia, Cornell, Harvard and Pennsylvania began to compete with one another. By 1910, there were only 11 institutions participating on the inter-scholastic level (Figure 1). Initially, soccer was scheduled in both the fall and spring, but by 1914, the spring session was eliminated, with the exception of schools on the Pacific Coast.⁴²

Despite having some of the more prestigious colleges and universities in the young soccer league, not many other schools adopted the sport.

The spatial organization of intercollegiate soccer participation in 1910 was concentrated in the Northeast with the exception of two universities (University of California and Stanford) near San Francisco.

World War I produced a negative impact on intercollegiate growth of soccer. Columbia withdrew from the game in 1916, and a year later, Harvard, Princeton and Yale resigned from league competition.⁴³ A year before the war, the U.S. Football Association was founded and obtained membership with the Federation Internationale de Football Association, the Amateur Athletic Union of the United States and the American Olympic Association.⁴⁴

By 1920, 14 eastern colleges either reinstated their soccer programs or started new ones. Soccer appeared on the verge of sweeping every campus in the United States, which prompted some to forecast "the time is almost with us when soccer will be, next to baseball, the most popularly played game in this country."⁴⁵

The prematurity of this prophecy is seen in Figures 2 through 8, which illustrate the diffusion and spatial variation of soccer by decade from 1910 to 1970, and as of 1977. What many soccer supporters did not foresee was the sudden explosion in the national popularity of college football in the 1920's and '30's, which continues to the present time throughout all segments of the sports hierarchy.⁴⁶

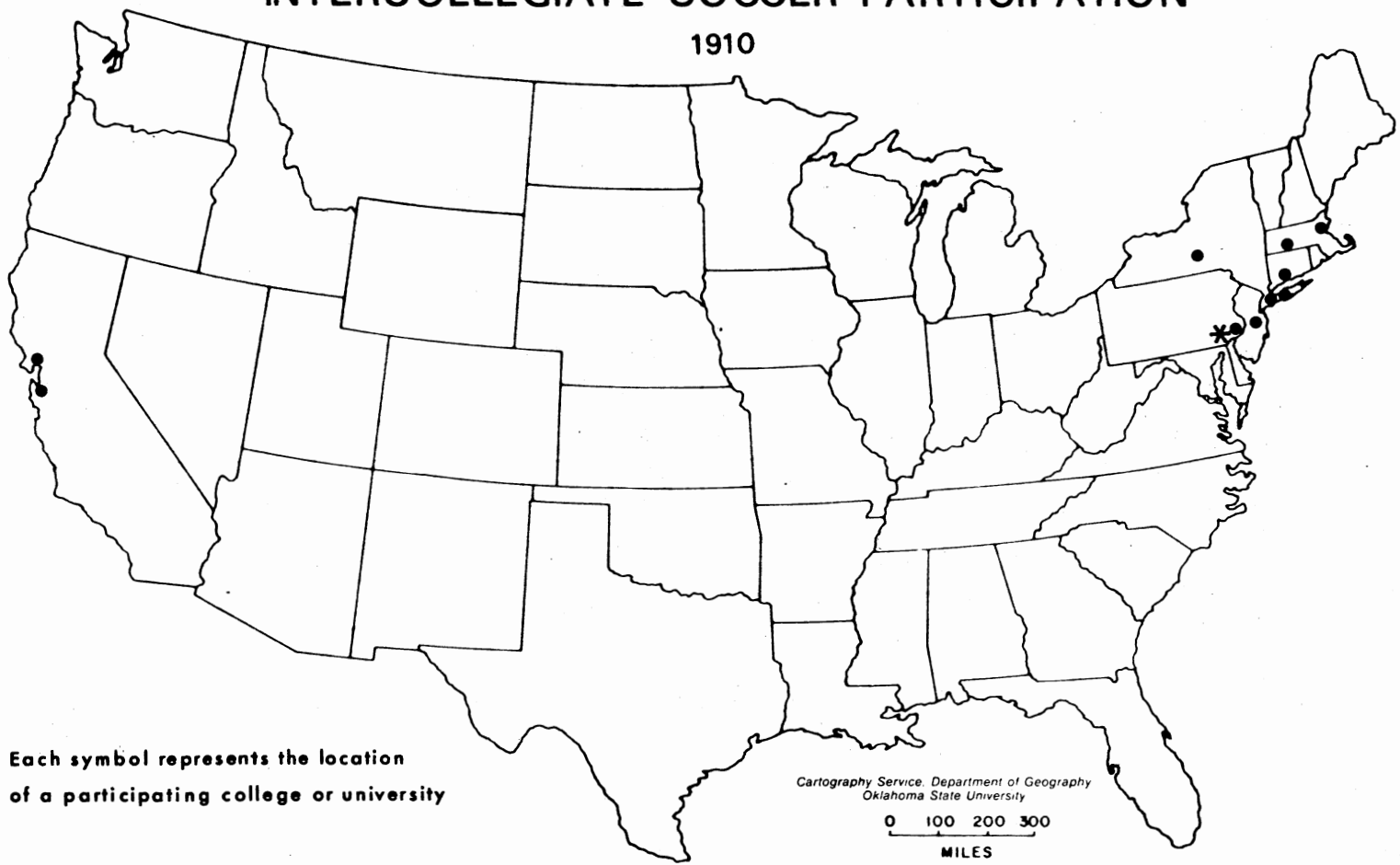
Intercollegiate soccer participation from 1920 through 1950 (Figures 2-5) was congregated essentially in the Northeast. From 1920 to 1930, the number of colleges and universities playing soccer increased from 20 to 55. The area around San Francisco showed signs of becoming the soccer node of the West. The presence of soccer at the University of California and at Stanford may have influenced the adoption of the sport by two of their neighboring schools, the University of San Francisco and the University of California at Davis by 1930.

The second center of intercollegiate soccer in the West is Los Angeles, but that city took to the sport after San Francisco. In 1940, one institution played soccer, and by 1950, two more surfaced in the Los Angeles urban area (Figures 4-5). During this time span, the diffusion of soccer in the San Francisco vicinity had essentially halted. Thus, Los Angeles began to rapidly catch the Bay area in the number of colleges and universities participating in soccer.

The geographic arrangement of intercollegiate soccer participation through 1950 indicates that the sport was most prevalent in the New England states, New York, Pennsylvania, New Jersey and Maryland. A comparison of Figures 4 and 5 reveals that soccer was beginning to spread into the Ohio Valley region and into the urban and industrial centers of Ohio, Indiana and Illinois. Soccer was starting to move

INTERCOLLEGIATE SOCCER PARTICIPATION

1910



Each symbol represents the location of a participating college or university

Cartography Service, Department of Geography
Oklahoma State University

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MILES

* Haverford College - 1st intercollegiate soccer program, 1902.

Figure 1.

INTERCOLLEGIATE SOCCER PARTICIPATION

1920

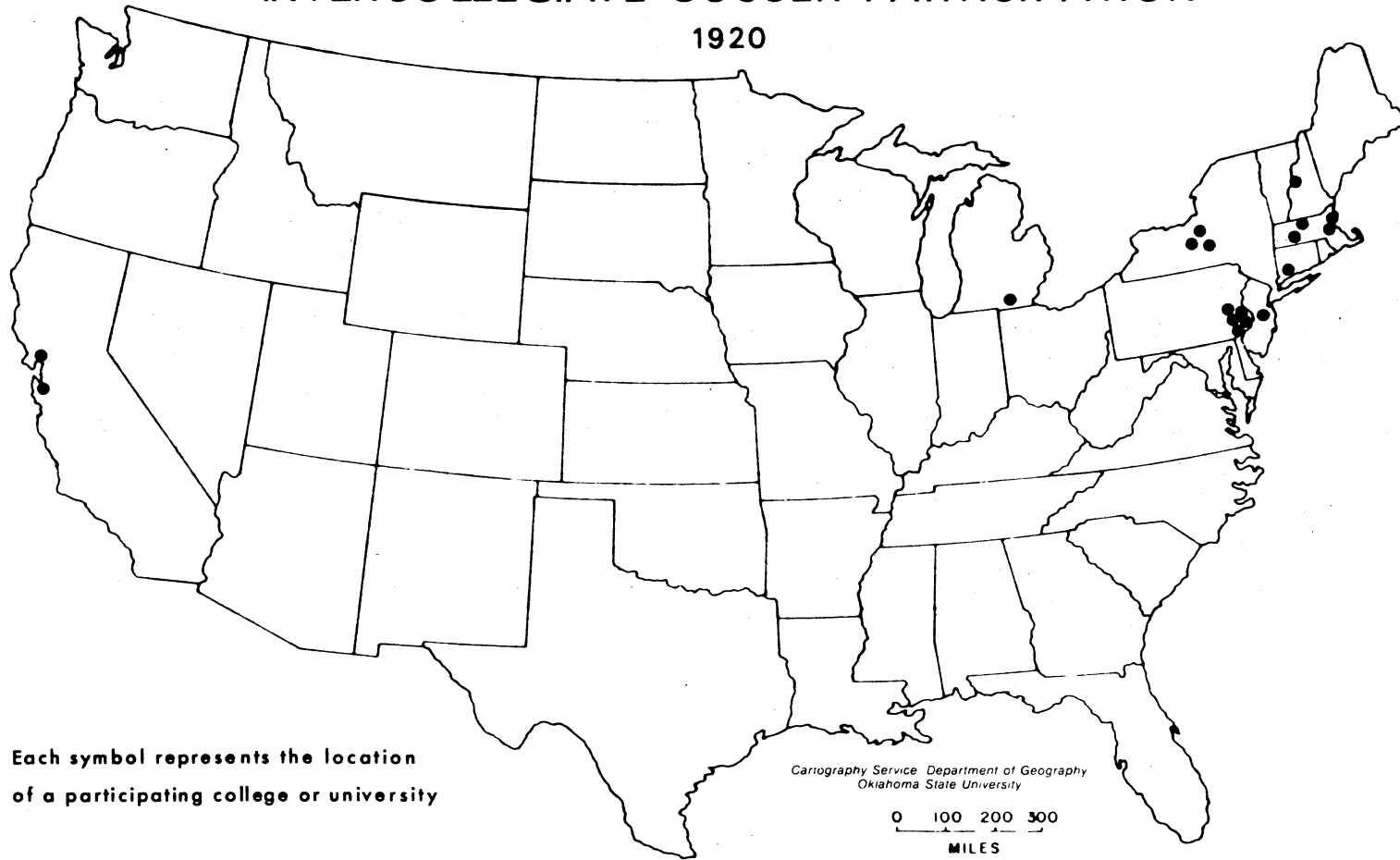


Figure 2.

INTERCOLLEGIATE SOCCER PARTICIPATION 1930

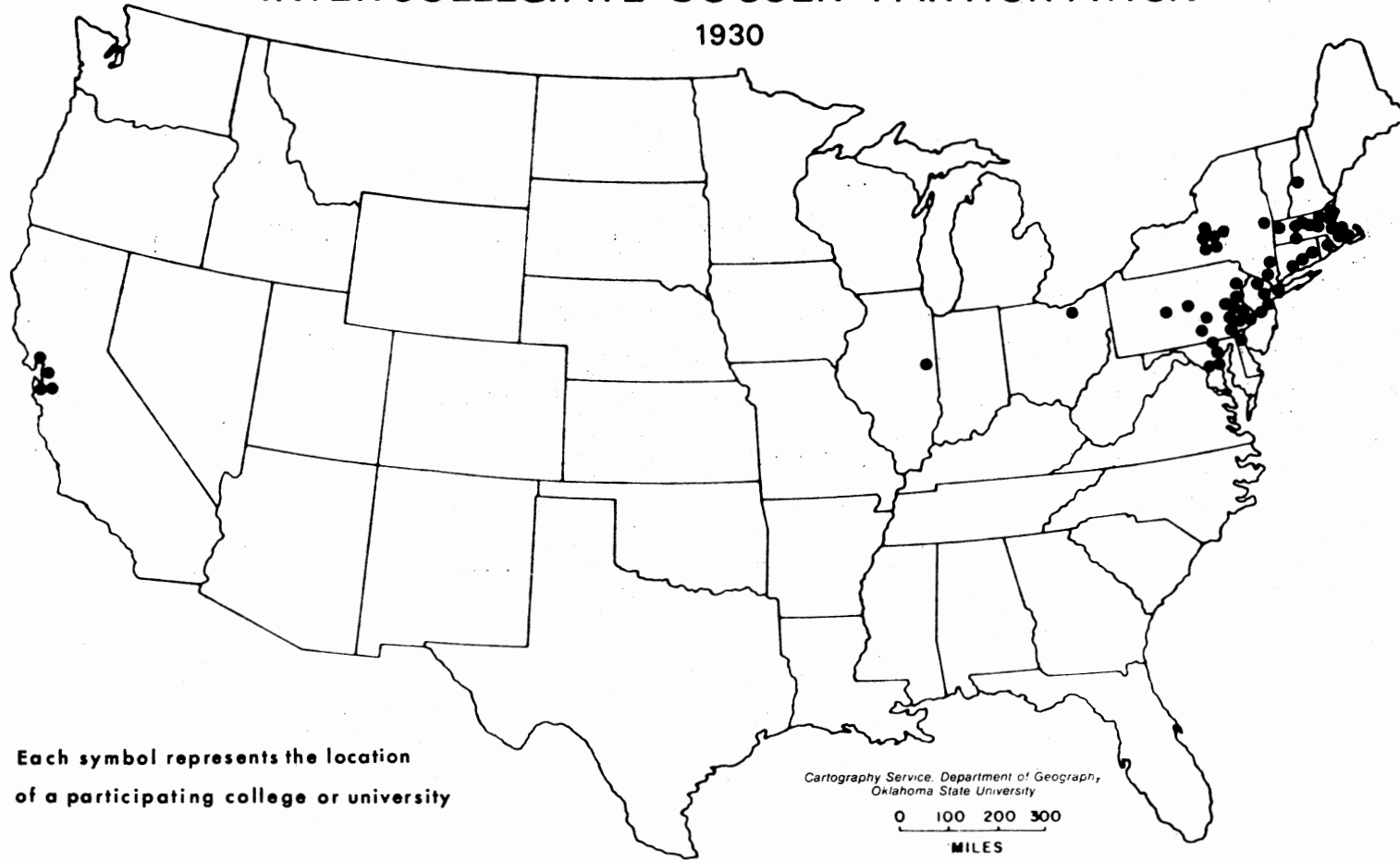
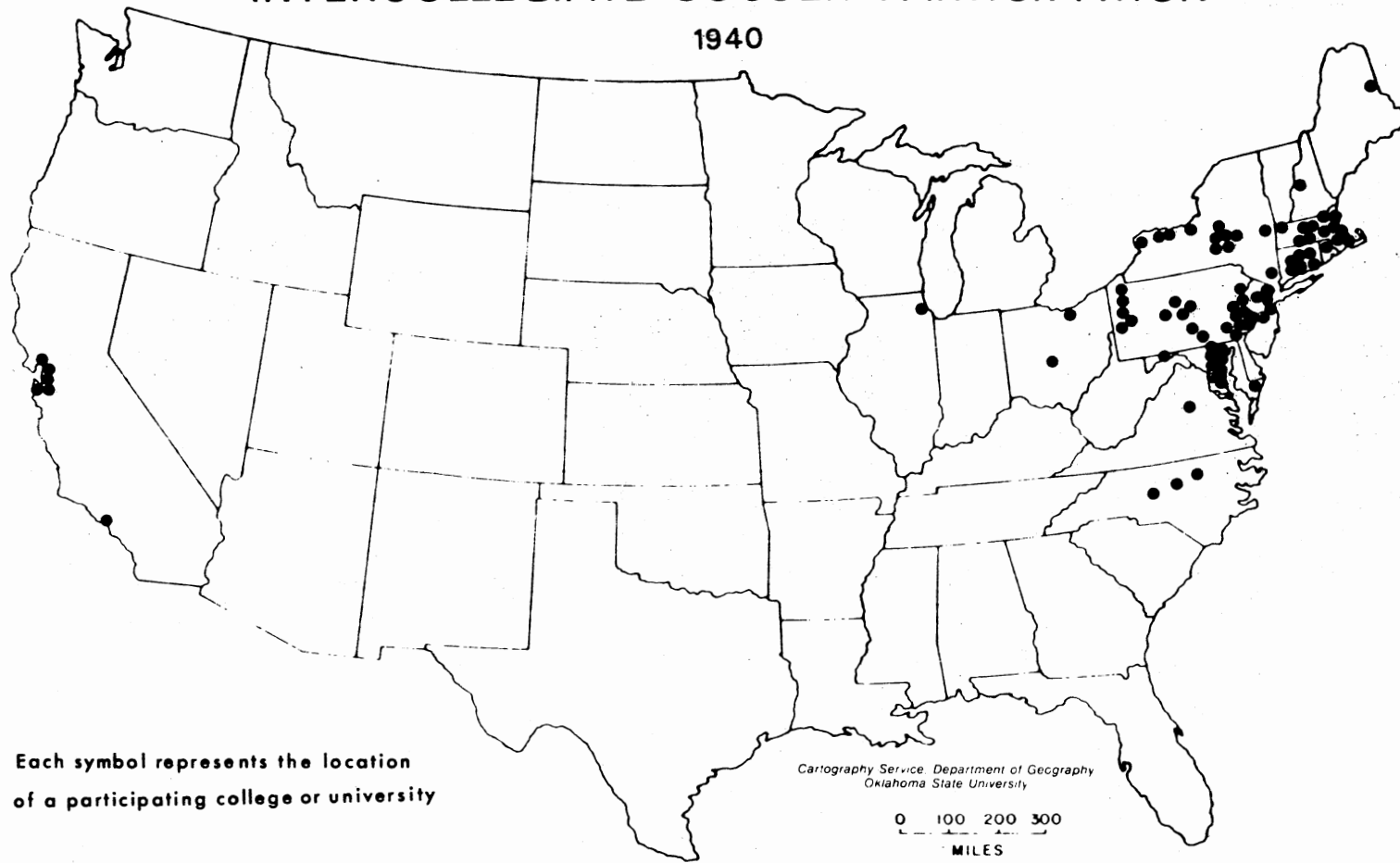


Figure 3.

INTERCOLLEGIATE SOCCER PARTICIPATION

1940



Each symbol represents the location
of a participating college or university

Figure 4.

INTERCOLLEGIATE SOCCER PARTICIPATION

1950

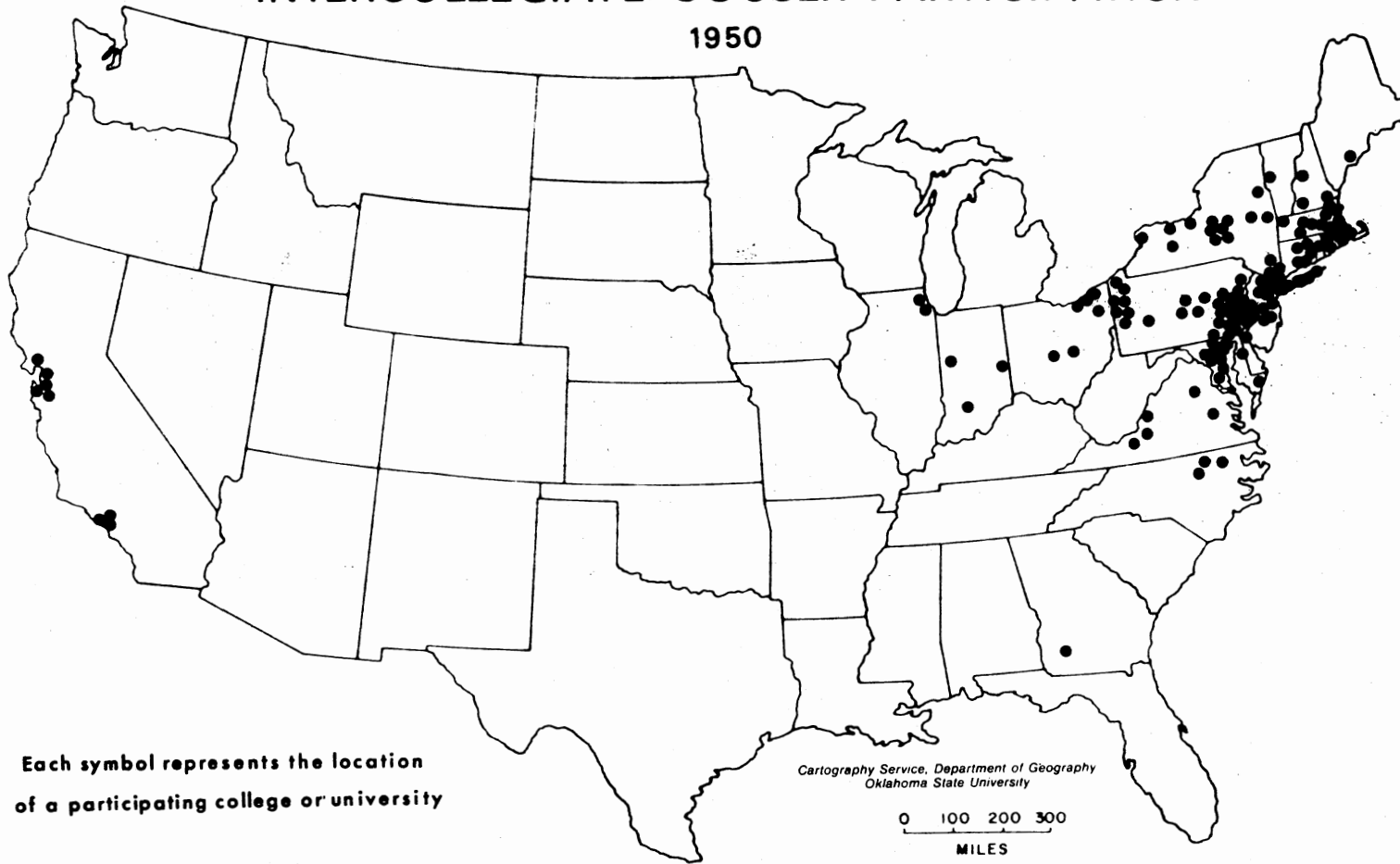


Figure 5.

INTERCOLLEGIATE SOCCER PARTICIPATION

1960

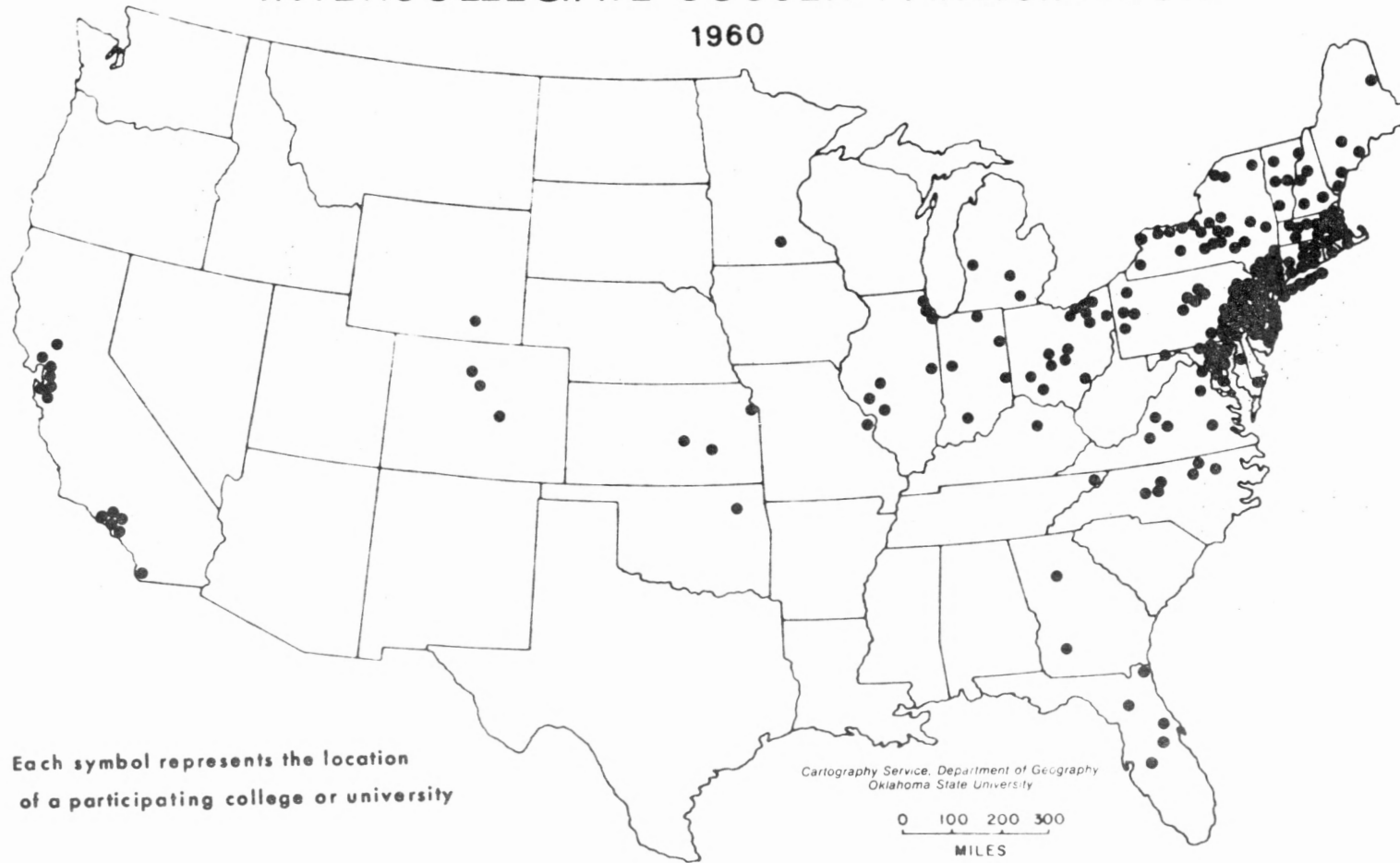


Figure 6.

INTERCOLLEGIATE SOCCER PARTICIPATION

1970

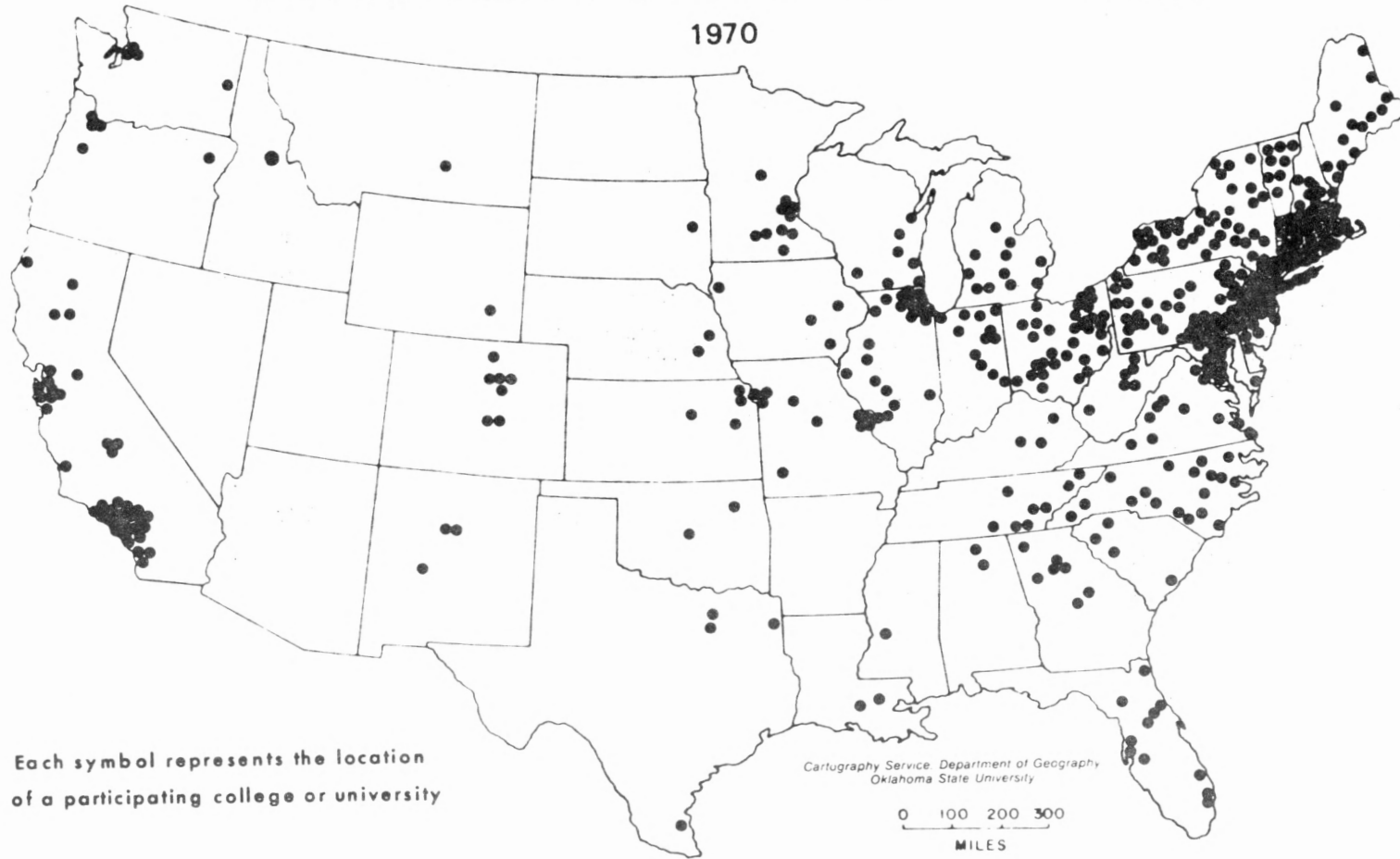


Figure 7.

INTERCOLLEGIATE SOCCER PARTICIPATION

1977

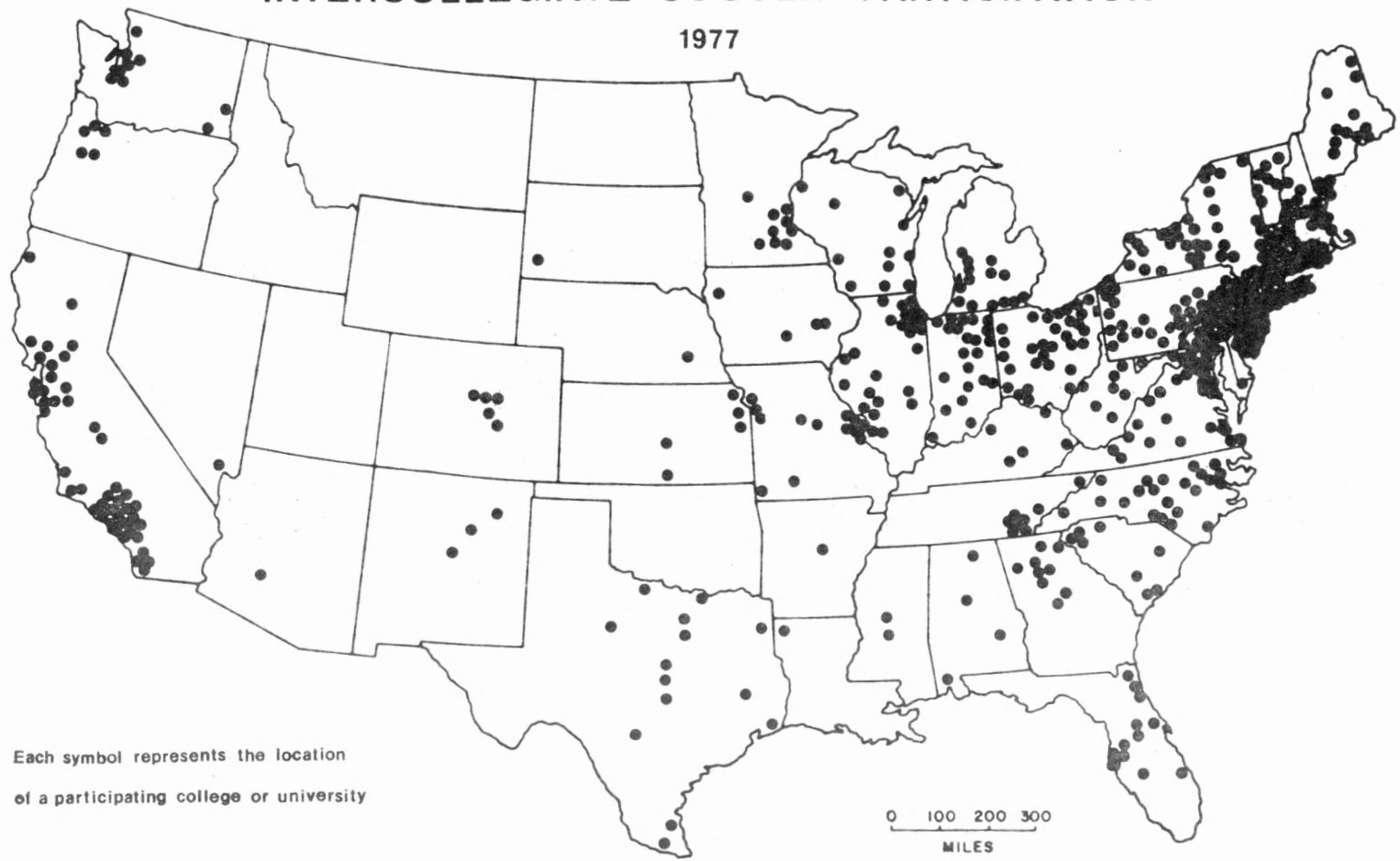


Figure 8.

into the South by 1950, with five colleges and universities present in Virginia, three in North Carolina, and a single school in Georgia. However, the sport had not yet penetrated the Deep South.

At the midway point of the century, all but eight of the 128 colleges and universities engaged in soccer were located east of Chicago. Soccer had grown primarily through the process of expansion diffusion. The pioneering schools in the Ivy League and in the metropolitan regions of New York and Philadelphia caused a domino effect to occur in respect to their influence on other schools in their respective proximities.

Early intercollegiate soccer participation was composed of a high percentage of private and church-affiliated institutions.⁴⁷ Colleges and universities such as St. Stephens, Amherst, Clark, Howard, Johns Hopkins, Trinity and others implemented soccer programs years before the sport was found at state supported institutions, such as North Carolina State, Indiana, Rhode Island and several of the larger state universities in New York.⁴⁸

A closer analysis of the spatial arrangement of intercollegiate soccer participants in 1950 discloses the absence of any collegiate soccer in the St. Louis area. Though the sport had been an integral part of the city's development, none of the local colleges and universities participated in soccer until St. Louis University organized a team in 1958, which was comprised largely of former Catholic Youth Council soccer players and graduates from various parochial schools in the city.⁴⁹ Surprisingly, St. Louis University won the first National Collegiate Soccer Tournament a year later, and has been a

dominant soccer power since, attesting to the caliber of soccer in the high schools and amateur organizations of the city.⁵⁰

Two factors which may have contributed to the slow diffusion of soccer from the 1930's to the early 1950's were the Great Depression and World War II. Economic conditions of the era, coupled with a scarcity of male students due to the war, no doubt had a significant impact on all collegiate athletics. Though soccer participation on the intercollegiate level continued to grow, the rate of growth in the United States decreased from 1942 until several years after the war.

Toward Attaining Respectability

From 1954 to 1959, an average of 13 new schools a year began to participate in intercollegiate soccer.⁵¹ During this time period, Columbia resumed its soccer program after more than four decades of not participating in varsity competition. Other schools which had dropped soccer from their athletic programs in the past began to re-establish the sport during the 1950's.⁵²

The most dramatic period of intercollegiate soccer growth occurred between 1960 and 1970 (Figures 6-7). The number of colleges and universities participating jumped from 216 to 487 in that span of time - an increase of 125 per cent. Fourteen states which did not have any collegiate soccer in 1960 had at least one school offering the sport in 1970.

But, the basic pattern which had existed in characterizing the distribution of intercollegiate soccer had not changed. The emphasis remained in the Northeast. The sport, however, had been more intensely

developed in the Upper Midwest, the Ohio Valley, the Atlantic coastal states, and along the Pacific Coast. Secondary patterns also began to appear by 1970. Major urban areas, such as Denver, Kansas City, Seattle, Minneapolis, Atlanta, and Dallas joined the bandwagon.

Some soccer historians have attributed the post-war boom of soccer in U.S. colleges and universities to two factors. Members of the military who had been to Europe during the war had participated in the game which was the national sport in many of the occupied nations. And secondly, the relaxing of immigration restrictions spurred an increase of foreigners, "who, because of their basic interest in the sport, have either initiated or increased interest in the game wherever they have settled."⁵³

The rapid growth of soccer in the 1960's has affected the spatial organization of intercollegiate soccer leagues. In 1905, the Intercollegiate Association Football League was founded to accommodate the handful of teams playing soccer at the time. The Intercollegiate Soccer Football Association (ISFA) succeeded that body in 1926 when soccer was no longer being played in one centralized area. Since that time, the ISFA has governed intercollegiate soccer in this country, and there are now more than 15 leagues and conferences.⁵⁴

Currently, the distribution of intercollegiate soccer participation is similar to the general patterns found in 1970 (Figure 8). The only differences are that as of 1977, soccer was still continuing to diffuse throughout Texas and Washington, and in some of the southern states, most notably Alabama. Soccer disappeared from Wyoming, Idaho, Montana and Oklahoma between 1970 and 1977, but surfaced for the first time in Arkansas, Nevada, Arizona and Hawaii. North Dakota, Utah

and Alaska are the only states that have never had intercollegiate soccer.

Spatial variation of intercollegiate soccer is more visible when compared on a state-to-state basis in 1960 and 1977 (Table I). In 1960, the New England states, New York, Pennsylvania, and New Jersey combined to account for 59.2 per cent of the national total of universities and colleges participating in the sport. This same group represented 37.8 per cent in 1977. By contrast, states in the western half of the United States comprised only 7.9 per cent of intercollegiate soccer in 1960, and 18.6 per cent in 1977.

Men clearly dominate the sport. In 1976, the Association for Intercollegiate Athletics for Women (AIAW) listed only three schools out of a membership of 646 that offered soccer for women. Two of the colleges were in the East (Brown and Boston State College), and the other was Eastern Washington State College.⁵⁵ The future development of women's soccer in this country may be expanded due to the recent passage of Title IX which calls for equal emphasis for both men's and women's athletic opportunities.

Interscholastic Soccer

High school soccer has not yet been developed on a national scale. Neither has the history of interscholastic soccer been traced and analyzed throughout the country as it has with American colleges and universities. Some sources have stated that soccer was present in high school athletic programs in eastern cities and several other urban centers as early as the 1920's, but most were parochial or private schools.⁵⁶

TABLE I
 NUMBER OF COLLEGES AND UNIVERSITIES
 PLAYING INTERCOLLEGIATE SOCCER
 IN 1960 COMPARED TO 1977
 ACCORDING TO STATE

| State | 1960 | 1977 | Pct. with Soccer in 1977 | State | 1960 | 1977 | Pct. with Soccer in 1977 |
|---------------|------------|------|--|----------------|------|------|--------------------------------|
| Alabama | 0 | 4 | 19 | Nebraska | 0 | 1 | 7 |
| Alaska | 0 | 0 | 0 | Nevada | 0 | 1 | 50 |
| Arizona | 0 | 1 | 20 | New Hampshire | 4 | 9 | 100 |
| Arkansas | 0 | 1 | 7 | New Jersey | 15 | 22 | 60 |
| California | 12 | 45 | 80 | New Mexico | 0 | 3 | 37 |
| Colorado | 3 | 5 | 39 | New York | 43 | 60 | 74 |
| Connecticut | 8 | 16 | 100 | North Carolina | 6 | 22 | 59 |
| Delaware | 1 | 1 | 33 | North Dakota | 0 | 0 | 0 |
| Florida | 5 | 13 | 54 | Ohio | 13 | 33 | 67 |
| Georgia | 1 | 9 | 35 | Oklahoma | 1 | 0 | 0 |
| Hawaii | 0 | 1 | 33 | Oregon | 0 | 5 | 29 |
| Idaho | 0 | 0 | 0 | Pennsylvania | 29 | 55 | 73 |
| Illinois | 7 | 25 | 50 | Rhode Island | 2 | 5 | 71 |
| Indiana | 5 | 21 | 57 | South Carolina | 0 | 8 | 44 |
| Iowa | 0 | 4 | 17 | South Dakota | 0 | 1 | 7 |
| Kansas | 2 | 5 | 23 | Tennessee | 1 | 7 | 18 |
| Kentucky | 1 | 5 | 25 | Texas | 0 | 14 | 29 |
| Louisiana | 0 | 1 | 6 | Utah | 0 | 1 | 16 |
| Maine | 5 | 14 | 88 | Vermont | 5 | 8 | 80 |
| Maryland | 11 | 13 | 81 | Virginia | 6 | 15 | 50 |
| Massachusetts | 18 | 35 | 88 | Washington | 0 | 9 | 64 |
| Michigan | 3 | 15 | 42 | West Virginia | 0 | 8 | 50 |
| Minnesota | 1 | 11 | 46 | Wisconsin | 0 | 10 | 35 |
| Mississippi | 0 | 2 | 14 | Wyoming | 1 | 0 | 0 |
| Missouri | 2 | 13 | 39 | Dist. Columbia | 5 | 6 | 60 |
| Montana | 0 | 0 | 0 | | | | |
| Total: | 1960 - 216 | | | | | | |
| | 1977 - 584 | | (52 per cent of 1,131 colleges and universities) | | | | |

There are some inherent differences in the athletic organizations of colleges and high schools. Secondary schools are greatly influenced by their local communities in the selection of sport participation. Universities have more autonomy in choosing those sports they wish to emphasize or include in their program. Most high schools belong to conferences comprised of schools in their home state. It is common for American colleges, on the other hand, to be associated with colleges from as many as half a dozen states.⁵⁷

As a general rule, high schools are more provincial in their participation in sports. A common interest in a few, selected sports aid in forming a bond among schools in a state or small region. Sports appear to be more easily diffused within the intercollegiate ranks. This is rather apparent by the multitude of national tournaments that are held for both major and minor sports in collegiate athletics.

The majority of high schools are presently aligned with the National Federation of State High School Athletic Associations (NFSHAA), which was founded in 1920 for the "purpose of protecting and regulating interstate athletic interests and promoting pure amateur sports."⁵⁸ Further discussion of interscholastic soccer is found in Chapter IV, where the spatial organization and diffusion of the sport is analyzed in greater detail.

International and Professional Competition

American teams have participated in the international soccer theater for nearly 50 years. With the exception of the banner year of 1950, the United States has been a weak competitor against the world's

top soccer nations. The primary reason for America's dismal record in world competition has been a lack of funding, publicity, quality soccer educational programs, experienced coaching and support from the public.⁵⁹ Several attempts by individuals and groups to elevate soccer in the United States met with little success until the early 1960's, when large audiences were attracted to watch some of the best foreign teams play exhibition matches in cities scattered across the country.⁶⁰

On the amateur level, interest in the sport has widened during the past two decades. The United States Soccer Football Association (USSFA), which consists of members from high schools, colleges and universities and Amateur Athletic Union soccer clubs, listed a membership of more than 25,000 schoolboys (with the greatest concentration found in the East, especially in New York state), more than 5,000 participants on 200 college teams and clubs, and about 15,000 players on independent clubs.⁶¹

Renewed interest in soccer within the collegiate and amateur ranks has led to the creation of professional teams in the larger metropolitan areas of the United States in the last 12 years. The first few seasons of play were marked by various shifts in the location of franchises, failure of some leagues to remain financially solvent, and genuine concern for professional soccer's survival.⁶²

The United States Soccer Association and the National Professional Soccer League began operations in 1966. Within two disastrous years, a massive reorganization came about resulting in the formation of the North American Soccer League, which survives today.⁶³

Expansion of professional soccer from its first year to the present, illustrates the diffusion of franchises to major cities in every geographical section of the nation (Figures 9-10). In 1968, there were 10 American cities competing in the 12-team league (the National Professional Soccer League consisted of nine American teams in 1966, but folded the following season). In 1978, 22 cities in the United States were represented among the 24 teams of the NASL (Table II).

A comparison of the distribution of intercollegiate soccer in 1977 (Figure 8) and the location of current professional soccer franchises (Figure 10) indicates a strong relationship between areas where there is a pronounced emphasis on intercollegiate participation.

Another change in professional soccer that has materialized over the last ten years has been an increase in the number of American athletes drafted from colleges and universities. Initially, players from Europe and South America constituted the greatest share of rosters. More recently, a larger number of Americans are entering the professional arena, signifying a rise in the caliber of native players.

Summary

In the past quarter century, the stature of soccer has improved, leastways on the intercollegiate, amateur club and professional levels. On a national spectrum, soccer has yet to be recognized as a significant and major sport in the class of football, baseball and basketball. The momentous decision of more than 100 years ago, when the leading colleges of the era opted for football in lieu of soccer, has clearly affected its position in the present American sports culture.

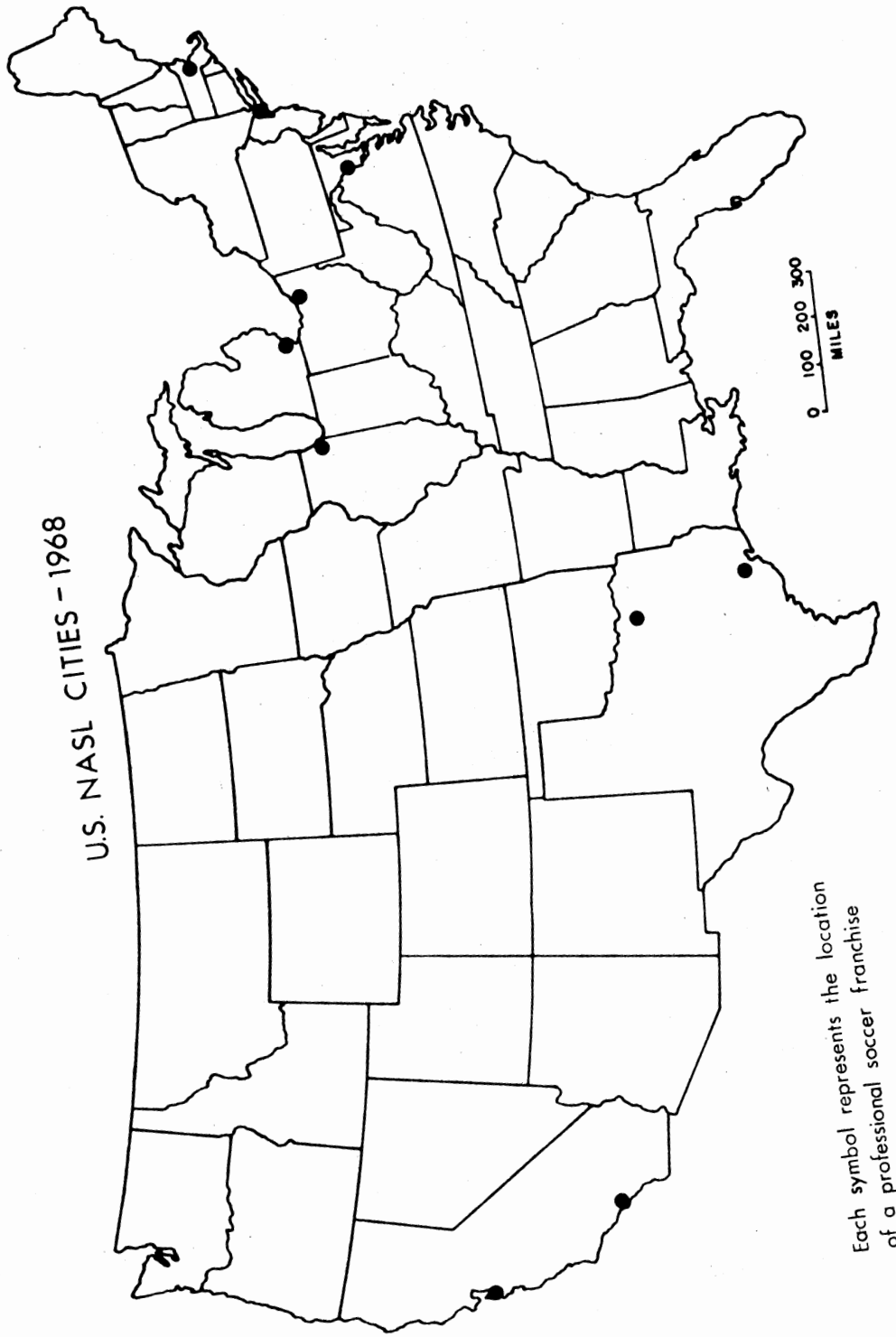


Figure 9.

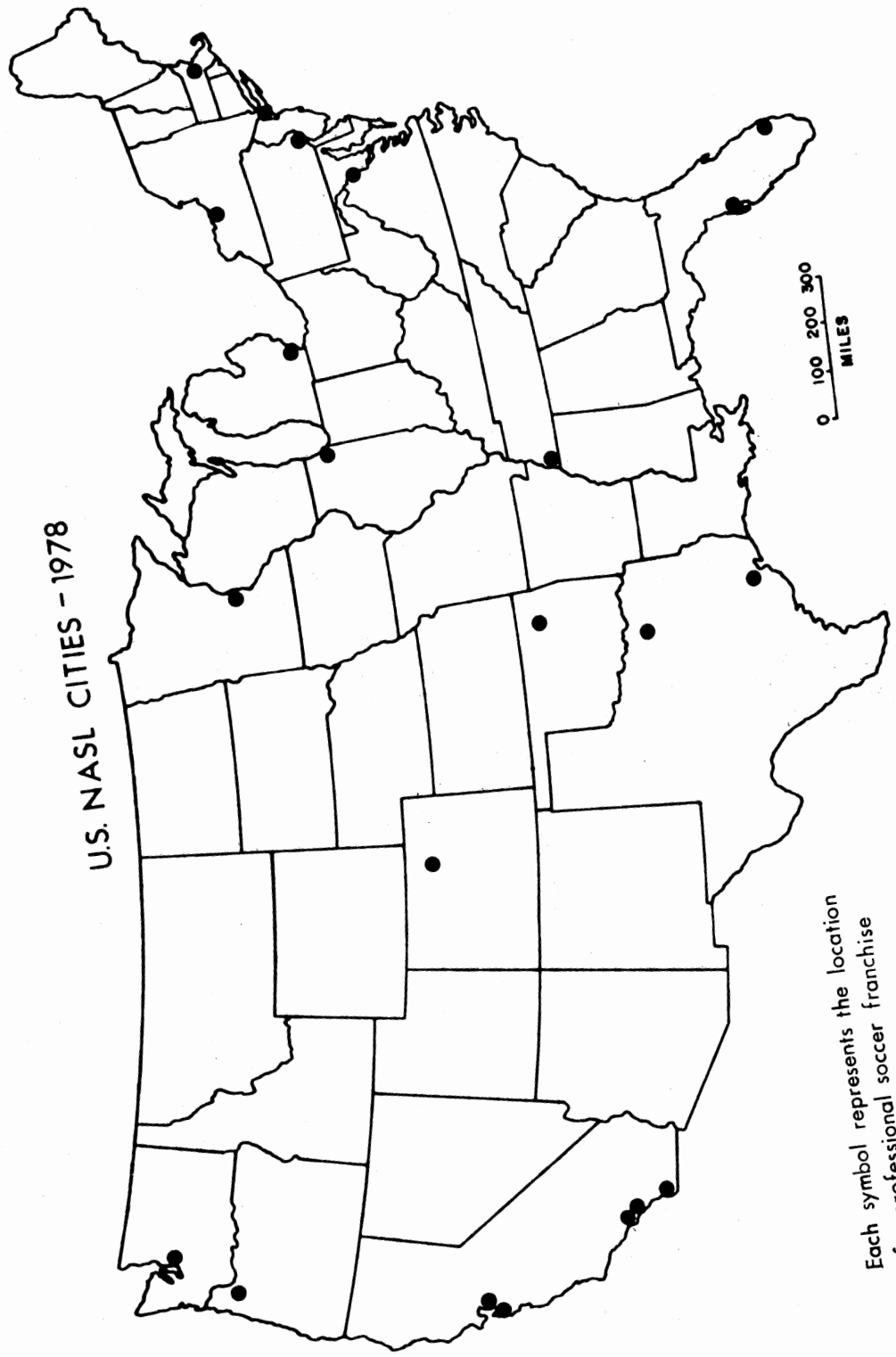


Figure 10.

TABLE II
 LOCATION OF PROFESSIONAL SOCCER
 TEAMS IN THE UNITED STATES
 IN 1968 AND 1978

| 1968 | 1978 |
|---|--|
| Boston Chicago Cleveland Dallas Detroit Golden State (San Francisco) Houston Los Angeles New York Washington, D.C. | California (Los Angeles) Chicago Colorado (Denver) Dallas Detroit Ft. Lauderdale Houston Los Angeles Memphis Minnesota (Minneapolis-St. Paul) New England (Boston) New York Oakland Philadelphia Portland Rochester San Diego San Jose Seattle Tampa Tulsa Washington, D.C. |

Soccer was the victim of a society renovating an already established sport to satisfy its own particular needs. The architects of soccer - immigrants from the British Isles and other European ethnic groups - brought to this country a sport which had taken centuries to sustain, modify, organize and nurture. Consequently, it is barely beyond the embryonic stage of its development.

Tradition-bound ethnic groups who settled in the cities of the Northeast and others, like St. Louis, gave soccer sustenance during the years it nearly disappeared from public eye. Intercollegiate participation has been the guiding force in disseminating the sport to virtually all reaches of the nation. The professional aspect of the sport also has served as an agent of the diffusion of soccer.

It is this relatively recent surge in the growth of soccer that evokes a need for further investigation of the sport, in respect to its relationship with another visage of the American sports hierarchy: secondary school athletic participation. The remaining three chapters of this thesis are designed to analyze and interpret the diffusion and geographic arrangement of interscholastic soccer in the United States.

FOOTNOTES

- ¹Menke, p. 885.
- ²Herbert A. Giles, "Football and Polo in China," Nineteenth Century and After, 59 (March, 1906), p. 508.
- ³Vogelsinger, p. 3.
- ⁴Menke, p. 408.
- ⁵Baptiste, p. 37.
- ⁶Norbert Elias and Eric Dunning, "Folk Football in Medieval and Early Modern Britain," The Sociology of Sport, ed. Eric Dunning (London, 1971), pp. 116-117.
- ⁷Menke, p. 885.
- ⁸Ibid.
- ⁹Vogelsinger, p. 4.
- ¹⁰Menke, p. 885.
- ¹¹Francis P. Magoun, History of Football from the Beginning to 1871 (Bochum-Langendreer, 1938), p. 14.
- ¹²Ibid., p. 73.
- ¹³Vogelsinger, p. 4.
- ¹⁴Menke, p. 490.
- ¹⁵Vogelsinger, p. 4.
- ¹⁶Baptiste, p. 47.
- ¹⁷Collier's Encyclopedic Yearbook 1970, p. 33.
- ¹⁸Vogelsinger, p. 4.
- ¹⁹Eric Dunning, "The Development of Modern Football," The Sociology of Sport, ed. Eric Dunning (London, 1971), pp. 133-134.
- ²⁰Ibid., p. 147.

- ²¹Baptiste, p. 47.
- ²²George F. Anderson, "Soccer," Selected Team Sports for Man, ed. John H. Shaw (New York, 1969), p. 145.
- ²³Vogelsinger, p. 4.
- ²⁴Baptiste, p. 52.
- ²⁵Ibid., pp. 53-58.
- ²⁶Ibid., p. 56.
- ²⁷Vogelsinger, p. 6.
- ²⁸John Lowell Pratt and Jim Benaugh, The Official Encyclopedia of Sports (New York, 1964), p. 248.
- ²⁹Ibid.
- ³⁰Menke, p. 886.
- ³¹Ibid.
- ³²Ibid., pp. 886-887.
- ³³Ibid., p. 886.
- ³⁴Ibid., p. 887.
- ³⁵Robinson, p. 235.
- ³⁶Ibid., pp. 237-241.
- ³⁷Ibid., p. 248.
- ³⁸Ibid., p. 252.
- ³⁹Ibid., pp. 254-255.
- ⁴⁰Baptiste, p. 68.
- ⁴¹Menke, p. 891.
- ⁴²Ibid.
- ⁴³Ibid.
- ⁴⁴Soccer (Annapolis, 1943), p. 5.
- ⁴⁵National Collegiate Athletic Association, Proceedings of the Fifteenth Annual Convention (Chicago, Dec. 29, 1920), p. 28.
- ⁴⁶Rooney, p. 47.

- ⁴⁷Baptiste, pp. 233-236.
- ⁴⁸Ibid.
- ⁴⁹Ibid., p. 134.
- ⁵⁰Vogelsinger, p. 6.
- ⁵¹Baptiste, p. 125.
- ⁵²The Official National Collegiate Athletic Association Soccer Guide (New York, 1959), p. 16.
- ⁵³Menke, p. 888.
- ⁵⁴Baptiste, p. 146.
- ⁵⁵AIAW Handbook-Directory 1975-1976 (Washington, D.C., 1975), pp. 126-176.
- ⁵⁶Vogelsinger, p. 6.
- ⁵⁷Charles E. Forsythe, The Administration of High School Athletics (New York, 1948), pp. 3-4.
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- ⁵⁹Vogelsinger, p. 7.
- ⁶⁰Pratt and Benaugh, p. 249.
- ⁶¹Ibid.
- ⁶²Menke, p. 889.
- ⁶³Vogelsinger, p. 7.

CHAPTER III

METHODOLOGY OF THE ANALYSIS OF THE DIFFUSION AND THE SPATIAL VARIATION OF HIGH SCHOOL SOCCER

Compiling the Sample

Size of the Sample

A selected sampling of four different school years was used to analyze the diffusion and spatial variation of interscholastic soccer in the United States. The years chosen for determining and comparing the location, distribution, dispersion and current patterns of high school soccer were the academic years of 1967-68, 1971-72, 1975-76 and 1977-78.

The primary sources utilized in establishing the sampling were The National Directory of High School Coaches (NDHSC) and The Official Handbook of the National Federation of State High School Athletic Associations (NFSHSAA).

The NFSHSAA handbook was used in accounting for the number of high schools offering soccer and the number of participants, per state, in 1968, 1972 and 1976. The coaches' directory was used to compile a 20 per cent sampling of U.S. high schools in 1975-76, and a 100 per cent sampling in 1977-78, and to distinguish areas where soccer is found from areas where the sport is absent or less emphasized.

The research is focused primarily on the sampling period of 1977-78. The procedure followed was to survey every high school in the 50 states and the District of Columbia. Only those schools which offered at least one interscholastic sport were considered in the sampling. The omission of high schools not engaged in competitive athletics was based on the assumption that they do not truly represent the vast majority of U.S. high schools, and, therefore, would not accurately reflect the percentage of schools participating in soccer. Subsequently 18,574 high schools were incorporated into the 1977-78 sample.

Levels of the Sample

The sample was measured on four levels: national, state, city and three-digit zip code area. The number of schools participating in soccer compared to the total number of schools found within each of the four levels to determine the spatial variation and intensity of interscholastic soccer.

Another measurement of interscholastic soccer participation was the tabulation of the number of coaches assigned to the sport by each of the high schools. The purpose of this procedure was to distinguish geographical differences in the emphasis placed on soccer by comparing areas above and below the national mean. A total of 3,480 soccer schools and 4,104 coaches were counted in the 1977-78 sample. This produced a national mean of 1.18 coaches per high school.

Cities with 10 or more high schools, where soccer was provided in at least one school, were included in the study. A complete sampling of 104 cities was taken for both 1975-76 and 1977-78. Increase

and decrease in the number of schools participating in soccer were derived by computing the number of schools offering soccer in 1975-76 to the number of schools in 1977-78. Percentages were figured to determine the degree soccer rose or declined within the schools of these cities.

Three-digit zip code areas were used to analyze the spatial variations in soccer participation on a larger scale. Data incorporated at this particular level were designed to exhibit a more vivid areal differentiation on a national, state and regional scale. A series of maps were produced from zip code area information served to enhance the identification and analysis of regions where soccer is most dominant.

Another objective of the analysis was to determine a per capita index of soccer participants. Population of 14-17 year-olds was based on July 1, 1974 estimates by the Bureau of the Census. State figures on the number of high school participants were obtained from a 1976 sports participation survey conducted by the NFSHSAA. A per capita index for each state was computed by dividing its respective percentage of the total number of soccer participants. A per capita index of 1.00 represents the national norm.

Determining Patterns and Trends

Spatial patterns of participation in interscholastic soccer were depicted by the use of maps, tables and graphs to illustrate variations from state-to-state, city-to-city and on a regional level. The per capita indices were used in analyzing geographical differences in participation. A series of maps and tables were constructed to

indicate changes in soccer participation on the state level for each of the four time periods in the sample.

Per capita participation in interscholastic soccer for 1971-72 and 1975-76 were compared to establish the extent to which soccer has diffused within each state. An estimate of the number of participants was made for those states with interscholastic soccer in 1977-78 based on the average number of participants per high school in 1975-76. The average number of participants for 1975-76 was multiplied by the number of schools offering soccer in 1977-78. A table was designed to give some indication of the probable status of soccer in respect to the number of persons participating at the present time.

An integral part of the analysis focuses upon trends in soccer participation at all four levels. National trends were studied from 1962 to 1978 for the number of schools participating in soccer. On the three-digit zip code area level, changes in the spatial variation of soccer participation were derived by comparing data collected for 1975-76 to data for 1977-78.

An additional aspect of the research is to analyze the growth and role of soccer in relation to other interscholastic sports offered at those schools participating in soccer. Due to the large number of schools found to offer soccer in 1977-78, it was not feasible to survey every one to determine what other sports were provided. Therefore a table of 87 cities having 10 or more high schools with a minimum of one high school participating in soccer, was compiled to compare the number of soccer coaches to the number of coaches for 12 other selected sports: namely, baseball, basketball, football, cross country, golf, gymnastics, skiing, hockey, swimming, track, wrestling and tennis.

One soccer coach per high school was considered to be the norm. Schools which had more than one coach were regarded as those which emphasized soccer in the athletic programs. In addition, by dividing the number of soccer coaches by the number of participating high schools, a mean number of coaches for each city was tabulated.

CHAPTER IV

RESULTS OF THE ANALYSIS

Diffusion of Interscholastic Soccer

As a nationally competitive sport in American high schools, soccer remains a neophyte in comparison to the more established and traditional sports, such as football and baseball. Currently, fewer than one of every five high schools offer soccer in its athletic programs, although all but seven states provide the sport to some degree.

Though soccer has not received recognition as a major sport in this country, the number of participating schools has more than doubled from 1968 to 1978. During this period, soccer has begun to emerge from regional sports status, historically found and emphasized in the Northeast, to one of national importance.

In 1968, only four states with a combined total of 105 schools providing soccer, were located west of the Mississippi River. Ten years later, 786 schools in the western half of the country were active in soccer. In 1968, 7.9 per cent of all high school soccer was evident in western states, compared to 22.6 per cent in 1978. This represented an increase of more than 200 per cent.

Five states dominate interscholastic soccer: New York, New Jersey, Pennsylvania, Massachusetts and California. In 1968, this cluster comprised 71.6 per cent of secondary school soccer, according

to statistics gathered by the NFSHSAA.¹ By 1978, when an additional 2,000 schools embraced soccer as a competitive sport, the same five states still accounted for 52.1 per cent of the national total.

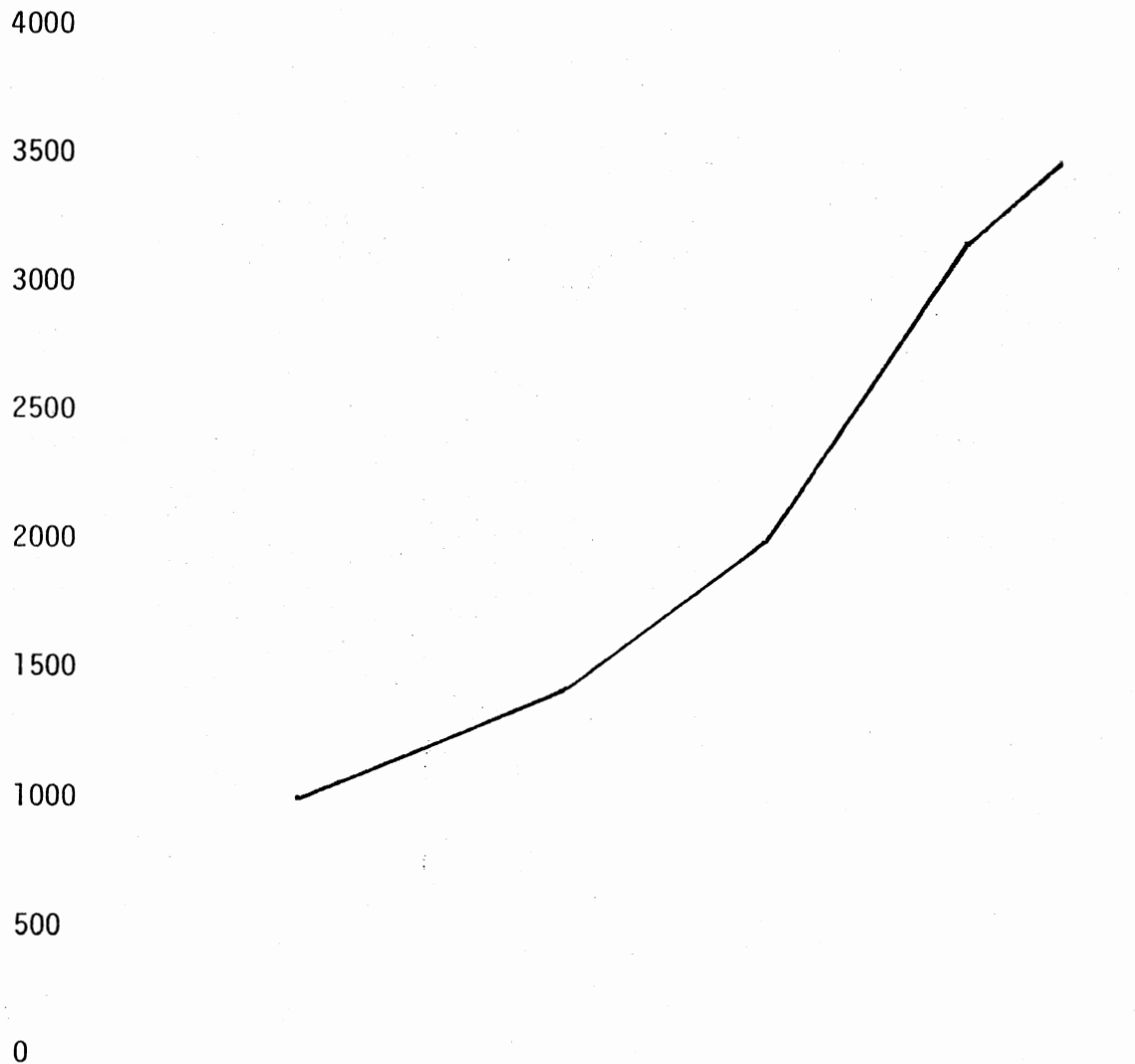
Soccer's relative insignificance as a primary interscholastic sport is further illustrated when compared to basketball and football participation. In 1968, more than 19,000 schools competed in basketball and more than 15,000 played football. At the present time, there are approximately 18,000 and 15,500 schools participating in basketball and football, respectively. The slight decline in the number of schools playing basketball may be attributed to consolidation of U.S. high schools in the past several years.

There has been a lack of intensive and reliable research aimed at collecting highly accurate statistics on the number of schools and participants involved with soccer. For example, a 1976 sports participation survey by the NFSHSAA omits Massachusetts as a soccer participating state, thereby producing erroneous national figures.² Conversely, the 1971 NFSHSAA sports participation survey listed 60 schools playing soccer in Arkansas, a state which was shown as having not one school engaged in the sport in 1968, and, at the present, is one of seven states bereft of interscholastic soccer.

Since the early 1960's, interscholastic soccer participation has been growing (Table III). The sport underwent its most prodigious period of diffusion from 1972 to 1976. In that time, soccer attracted approximately 1,500 new schools and 40,000 participants. In 1968, 1,335 schools were providing soccer for 37,000 youths; today, there are 3,480 schools and an estimated 115,000 participants.

TABLE III
 NUMBER OF HIGH SCHOOLS OFFERING SOCCER
 1962, 1968, 1972, 1976, AND 1978

| | | | | | |
|------------------------------------|-------------|-------------|-------------|-------------|---|
| Number of High Schools with Soccer | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 9 |
| | 6 | 6 | 7 | 7 | 7 |
| | 2 | 8 | 2 | 6 | 8 |



Source: National Federation of State High School Athletic Associations, Official Handbook, 1961-1962, 1967-1968, 1971-1972, and The National Directory of High School Coaches, 1975-76 and 1977-78 eds.

Interscholastic Participation in 1967-68

Only 19 states participated in interscholastic soccer in the academic year of 1967-68. Of the nation's 19,468 high schools, 6.85 per cent were playing soccer.³ New York was unchallenged as the leading state with 435 schools engaged in soccer in 1967-68, claiming 15,000 participants. The state's dominance of high school soccer is further reflected by the fact that it comprised about one-third of all interscholastic soccer in the United States, and accounted for more than 40 per cent of the participants (Table IV).

The northeastern U.S. was preeminent. The New England states, plus New Jersey, New York and Pennsylvania, embodied 83.1 per cent of the soccer schools and 80.5 per cent of the participants. Of the 10 remaining states which offered soccer to some degree, seven had fewer than 20 schools involved in the sport. Three of these states (California, Maryland and Missouri) accounted for more than three-fourths of the schools situated outside the Northeast, and 15.4 per cent of the total U.S. participation.

Essentially, the distribution of high school soccer was confined to one region, with token participation elsewhere. The South, Great Plains, Midwest, Rocky Mountains and much of the Far West had yet to adopt the sport into their athletic programs.

Interscholastic Participation in 1971-72

According to the NFSHSAA sports participation survey, soccer expanded to four additional states and Washington, D.C., between the academic years 1967-68 and 1971-72.⁴ The total number of secondary schools participating in the United States rose from 1,335 to 1,860,

TABLE IV
STATES WITH HIGH SCHOOLS OFFERING SOCCER
ON THE INTERSCHOLASTIC LEVEL
1967-68 (BOYS)

| State | No. Schools with Soccer | Per Cent U.S. Total | Number of Participants | Per Cent U.S. Total |
|----------------|----------------------------|------------------------|---------------------------|------------------------|
| California | 50 | 3.8 | 1,800 | 4.8 |
| Connecticut | 100 | 7.5 | 1,200 | 3.2 |
| Delaware | 19 | 1.4 | 475 | 1.3 |
| Georgia | 15 | 1.1 | 450 | 1.2 |
| Hawaii | 7 | 0.5 | 168 | 0.5 |
| Maine | 30 | 2.2 | 600 | 1.6 |
| Maryland | 70 | 5.2 | 2,500 | 6.7 |
| Massachusetts | 88 | 6.6 | 3,204 | 8.6 |
| Minnesota | 3 | 0.2 | 78 | 0.2 |
| Missouri | 45 | 3.4 | 1,454 | 3.9 |
| New Hampshire | 55 | 4.1 | 1,500 | 4.0 |
| New Jersey | 145 | 10.9 | 2,900 | 7.8 |
| New York | 435 | 32.6 | 15,000 | 40.2 |
| Ohio | 11 | 0.8 | 220 | 0.6 |
| Pennsylvania | 191 | 14.4 | 3,800 | 10.2 |
| Rhode Island | 8 | 0.6 | 175 | 0.5 |
| South Carolina | 2 | 0.1 | 30 | 0.1 |
| Vermont | 56 | 4.2 | 1,647 | 4.4 |
| Virginia | 5 | 0.4 | 90 | 0.2 |
| Total | 1,335 | 100.0 | 37,291 | 100.0 |

Source: National Federation of State High School Athletic Associations, Sports Participation Survey, 1967-1968.

and there were approximately 27,000 more athletes participating.

Closer scrutiny of these state figures raise an element of skepticism regarding the rate of diffusion of soccer within the secondary school system of several states (Table V). It is extremely doubtful that Georgia experienced a growth in excess of 600 per cent in the brief span of four years, soaring from 15 to 100 schools and increasing the number of participants tenfold.

Perhaps more realistic, though no less suspicious, are the statistics concerning New Jersey. Due to factors such as population size, intensity of urbanization, and the emphasis placed on intercollegiate soccer within the area, New Jersey may possibly have shown a sizeable increase in schools (145 to 203), but it is highly improbable that the growth in the number of participants jumped from 2,900 to 12,180 in the course of only a few years.

Information transmitted from the individual state interscholastic associations to the NFSHSAA is not double checked for accuracy. The significance of the sports participation data lies in its use as a means to measure general patterns and national trends of interscholastic soccer at a given time period.

Consequently, in 1971-72, soccer displayed little sign of diffusion into geographical regions of the United States which sets it apart from the 1967-68 pattern. Limited growth was observed in Kansas, Illinois, Alabama and Michigan. The northeastern section of the United States continued to dominate American high school soccer. On the West coast, California remained the lone representative.

An overview of interscholastic soccer in 1971-72 indicated that changes in spatial variations from 1967-68 were insignificant. The

TABLE V
STATES WITH HIGH SCHOOLS OFFERING SOCCER
ON THE INTERSCHOLASTIC LEVEL
1971-72 (BOYS)

| State | No. Schools with Soccer | Per Cent U.S. Total | Number of Participants | Per Cent U.S. Total |
|----------------|----------------------------|------------------------|---------------------------|------------------------|
| Alabama | 10 | .6 | 200 | 0.3 |
| California | 70 | 3.7 | 2,900 | 4.5 |
| Connecticut | 101 | 5.4 | 3,950 | 6.1 |
| Delaware | 21 | 1.1 | 525 | 0.8 |
| Dist. Columbia | 10 | .6 | 350 | 0.5 |
| Georgia | 100 | 5.4 | 4,000 | 6.2 |
| Hawaii | 10 | .6 | 355 | 0.6 |
| Illinois | 27 | 1.4 | 540 | 0.9 |
| Kansas | 1 | .06 | 20 | 0.03 |
| Maine | 51 | 2.8 | 1,438 | 2.2 |
| Maryland | 97 | 5.4 | 3,100 | 4.8 |
| Massachusetts | 152* | 8.2* | 4,529* | 7.0* |
| Michigan | 25 | 1.3 | 600 | 0.9 |
| Minnesota | 12 | .6 | 959 | 1.5 |
| Missouri | 67 | 3.6 | 2,295 | 3.6 |
| New Hampshire | 55 | 2.9 | 1,552 | 2.4 |
| New Jersey | 203 | 10.9 | 12,180 | 18.9 |
| New York | 495 | 26.7 | 15,000 | 23.3 |
| Ohio | 35 | 1.8 | 525 | 0.8 |
| Pennsylvania | 235 | 12.6 | 7,050 | 11.0 |
| Rhode Island | 15 | .8 | 208 | 0.3 |
| South Carolina | 15 | .8 | 300 | 0.5 |
| Vermont | 47 | 2.5 | 1,637 | 2.6 |
| Virginia | 6 | .3 | 150 | 0.2 |
| Total | 1,860 | 100.0 | 64,363 | 100.0 |

* signifies figures based on estimates and not given by source

Source: National Federation of State High School Athletic Associations, Sports Participation Survey, 1971-1972.

sport had diffused slowly among the nation's schools, but not to the degree it had spread by 1970 through the collegiate ranks.

The Northeast comprised about 80 per cent of the total high school participation. States in the western half of the country still accounted for less than 10 per cent of school soccer. Participation in the southern states was confined to Virginia, South Carolina, Alabama and Georgia.

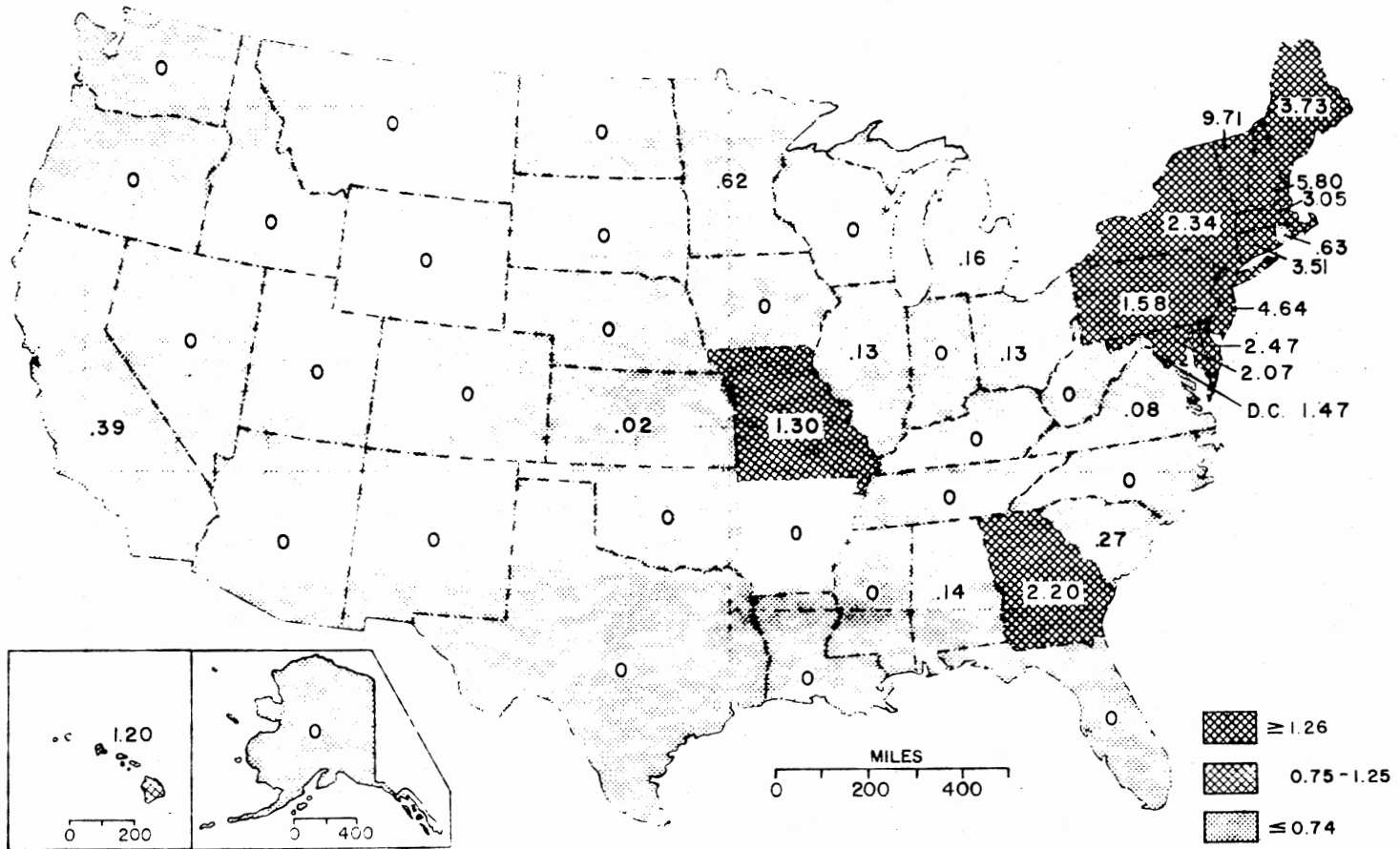
In 1971-72, one high school in every 100 participated in the sport. The largest concentration of soccer players was found in the Northeast (Figure 11). The leading states and their respective per capita participation indices were: Vermont (9.71), New Hampshire (5.80), New Jersey (4.60), Maine (3.73), and Connecticut (3.51).⁵ New York and Maryland had more than twice the national average participation, and in the South, Georgia had an index of 2.20.

More than half of the states had not incorporated soccer into any of their high school athletic programs. Several states in the Midwest had begun to participate, but the diffusion was limited to schools located in large urban centers. The Great Plains, Southwest and Rocky Mountain states did not offer soccer.

Interscholastic Participation in 1975-76

By the middle of the 1970's, high school soccer was present in 30 states and the District of Columbia. New additions were: Washington and Oregon on the Pacific coast; Nevada, Utah and Colorado in the western and Rocky Mountain regions; and Louisiana, Florida and North Carolina in the South.

PER CAPITA PARTICIPATION IN HIGH SCHOOL SOCCER - 1971 - 72



AVERAGE PARTICIPATION = 1 PER 202 PEOPLE IN THE 14-17 AGE GROUP

Figure 11.

While interscholastic participation was once again concentrated in New England and the heavily populated Northeast, a marked increase in the number of schools found in other geographic areas of the United States became more evident than in previous years.

Figures accumulated by the NFSHAA's 1976 sports participation survey revealed that soccer had grown rather spectacularly in a brief, two-year period (Table VI). Compared to 1971-72 statistics, the number of schools playing soccer increased by almost 70 per cent, and the number of participants rose from 64,363 to 107,806.⁶

According to the survey, California reports an increase of 394 schools and 15,000 participants from 1971-72. Diffusion of soccer had been so rampant in four years, that California ranked second behind New York in number of schools (556) and New Jersey in participants (18,840).

Florida, which listed no soccer participation in 1971-72, suddenly claimed 126 schools and more than 4,000 participants. Other states that made their debut in interscholastic soccer were: Colorado (41 reported schools); Oregon (80); Washington (72); Utah (17); Nevada (11); Louisiana (14); and North Carolina (38).

States which reputedly experienced an intensive adoption of soccer within their schools from 1971-72 to 1975-76 were: Illinois (27 to 120); Virginia (six to 50); South Carolina (15 to 40); Minnesota (12 to 43); and Ohio (35 to 110). Alabama and Kansas, which had accounted for 10 and one schools, respectively, in the 1971-72 survey, were absent from the 1975-76 tabulation. All remaining states recorded an increase in participation from 1971-72.

TABLE VI
STATES WITH HIGH SCHOOLS OFFERING SOCCER
ON THE INTERSCHOLASTIC LEVEL
1975-76 (BOYS)

| State | No. Schools with Soccer | Per Cent U.S. Total | Number of Participants | Per Cent U.S. Total |
|----------------|----------------------------|------------------------|---------------------------|------------------------|
| California | 466 | 13.6 | 18,420 | 16.1 |
| Colorado | 41 | 1.2 | 1,025 | 0.9 |
| Connecticut | 136 | 3.9 | 3,988 | 3.5 |
| Delaware | 39 | 1.1 | 1,261 | 1.1 |
| Dist. Columbia | 10 | 0.2 | 220 | 0.2 |
| Florida | 126 | 3.7 | 4,295 | 3.8 |
| Georgia | 132 | 3.8 | 4,000 | 3.5 |
| Hawaii | 20 | 0.5 | 729 | 0.6 |
| Illinois | 120 | 3.5 | 4,220 | 3.7 |
| Louisiana | 14 | 0.4 | 350 | 0.3 |
| Maine | 72 | 2.1 | 2,203 | 1.9 |
| Maryland | 121 | 3.5 | 3,896 | 3.4 |
| Massachusetts | 216* | 6.3* | 6,912* | 6.0* |
| Michigan | 35 | 1.0 | 1,085 | 0.9 |
| Minnesota | 43 | 1.2 | 3,107 | 2.7 |
| Missouri | 106 | 3.1 | 3,167 | 2.8 |
| Nevada | 11 | 0.3 | 250 | 0.2 |
| New Hampshire | 62 | 1.8 | 2,000 | 1.7 |
| New Jersey | 314 | 9.2 | 18,840 | 16.4 |
| New York | 556 | 16.3 | 16,140 | 14.0 |
| North Carolina | 38 | 1.1 | 760 | 0.7 |
| Ohio | 110 | 3.2 | 3,515 | 3.1 |
| Oregon | 80 | 2.3 | 1,600 | 1.4 |
| Pennsylvania | 272 | 7.9 | 5,440 | 4.7 |
| Rhode Island | 29 | 0.8 | 869 | 0.8 |
| South Carolina | 40 | 1.1 | 750 | 0.6 |
| Utah | 17 | 0.5 | 555 | 0.5 |
| Vermont | 56 | 1.6 | 1,382 | 1.2 |
| Virginia | 50 | 1.4 | 1,250 | 1.1 |
| Washington | 72 | 2.1 | 2,479 | 2.2 |
| Total | 3,404 | 100.0 | 114,708 | 100.0 |

*Massachusetts was not a member of the NFSHSAA in 1975-76; therefore, its statistics are based on growth estimates from 1971-72.

Source: National Federation of State High School Athletic Associations, Sports Participation Survey, 1975-76.

A 20 per cent sampling of U.S. high schools listed in The National Directory of High School Coaches, 1975-76, exposed several discrepancies in the NFSHSAA data.⁷ Though limited, soccer was provided in several schools in Alabama, Kansas and Iowa, states that were shown to have no interscholastic soccer by the 1976 sports participation survey.

Oregon, along with Arkansas, was the most grossly misrepresented state in terms of number of schools and participants. Portland, the largest urbanized center of the state, accounted for only seven high schools participating in soccer. The sample suggested that it was highly improbable that there were 73 more schools competing in the sport, based on the relative number of schools and population found within Portland to the remainder of the state.

The sampling further supports the possibility of incomplete and erroneous data collection on the part of the individual state athletic associations. In most instances, the presence of interscholastic soccer in a state is not challenged. What is most susceptible to critical analysis is the seemingly inflationary statistics on the level of participation in some of the states which had little or no soccer prior to 1975-76.

To determine the accuracy of the diffusion and spatial variation of interscholastic soccer, as stated by the 1975-76 data, the next step of this research analyzed the growth patterns of the sport through 1977-78. A 100 per cent survey of all U.S. high schools participating in athletics as listed in the National Directory of High School Coaches, 1977-78, was conducted to establish current areal differences

in participation, and to hopefully present a more accurate assessment of the spatial organization of interscholastic soccer.

Interscholastic Participation in 1977-78

The balance of this chapter will deal with the current status of interscholastic soccer based upon the most recent available data for the academic year 1977-78. As stated in Chapter I, the purpose of this study is to attempt to produce a more elaborate and accurate analysis of the spatial variation of soccer.

Of the 18,574 schools which competed in at least one interscholastic sport in 1977-78, 3,480 competed in soccer (Table VII). Forty-three states and the District of Columbia participated to various degrees in soccer, ranging from one school in Iowa to 652 schools in New York. States that did not participate included Alaska, Arkansas, Montana, North Dakota, South Dakota, West Virginia and Wyoming.

Primarily, soccer was still most visible and concentrated in the Northeast. However, the New England states along with New York, New Jersey and Pennsylvania accounted for a significantly lower percentage of the national total than 10 years earlier. In 1977-78, these states amassed for approximately 50 per cent of high school soccer participation compared to more than 80 per cent in 1967-68.

Of the top 10 participating states, five were in the geographical regions other than the northeastern United States. California followed New York with 429 schools, and Maryland, Illinois, Florida and Georgia stood sixth through tenth, respectively. Investigation of the 1977-78 data appears to support the level of soccer found in Georgia and Florida in the 1976 NFSHSAA sports participation survey.

TABLE VII
 STATES WITH HIGH SCHOOLS OFFERING SOCCER
 ON THE INTERSCHOLASTIC LEVEL
 1977-78 (BOYS)

| State | No. Schools with Soccer | Per Cent U.S. Total | Estimated No. Participants | Estimated Pct. U.S. Total |
|----------------|----------------------------|------------------------|-------------------------------|------------------------------|
| Alabama | 9 | .03 | 288 | .30 |
| Arizona | 4 | .02 | 128 | .10 |
| California | 429 | 12.30 | 16,731 | 14.60 |
| Colorado | 34 | 1.00 | 850 | .70 |
| Connecticut | 166 | 4.70 | 4,814 | 4.20 |
| Delaware | 28 | .08 | 896 | .80 |
| Dist. Columbia | 19 | .06 | 418 | .40 |
| Florida | 115 | 3.30 | 3,910 | 3.40 |
| Georgia | 105 | 3.00 | 3,150 | 3.20 |
| Hawaii | 17 | .05 | 612 | .50 |
| Idaho | 2 | .01 | 64 | .06 |
| Illinois | 117 | 3.40 | 4,095 | 3.60 |
| Indiana | 13 | .04 | 416 | .40 |
| Iowa | 1 | .01 | 32 | .03 |
| Kansas | 3 | .01 | 96 | .08 |
| Kentucky | 26 | .07 | 832 | .70 |
| Louisiana | 8 | .03 | 200 | .20 |
| Maine | 85 | 2.40 | 2,550 | 2.20 |
| Maryland | 135 | 3.90 | 4,320 | 3.80 |
| Massachusetts | 249 | 7.20 | 7,968 | 7.00 |
| Michigan | 28 | .08 | 868 | .70 |
| Minnesota | 45 | 1.30 | 3,240 | 2.80 |
| Mississippi | 3 | .01 | 96 | .08 |
| Missouri | 63 | 1.80 | 1,890 | 1.60 |
| Nebraska | 4 | .01 | 128 | .10 |
| Nevada | 6 | .02 | 138 | .10 |
| New Hampshire | 73 | 2.10 | 2,336 | 2.00 |
| New Jersey | 260 | 7.50 | 14,820 | 12.90 |
| New Mexico | 6 | .02 | 192 | .20 |
| New York | 652 | 18.70 | 18,908 | 16.50 |
| North Carolina | 40 | 1.20 | 800 | .70 |
| Ohio | 102 | 2.90 | 3,264 | 2.80 |
| Oklahoma | 6 | .02 | 192 | .20 |
| Oregon | 28 | .08 | 560 | .50 |
| Pennsylvania | 224 | 6.40 | 4,480 | 3.90 |
| Rhode Island | 31 | .09 | 930 | .80 |
| South Carolina | 16 | .05 | 304 | .30 |
| Tennessee | 11 | .04 | 352 | .30 |
| Texas | 58 | 1.70 | 1,856 | 1.60 |

TABLE VII (Continued)

| State | No. Schools with Soccer | Per Cent U.S. Total | Estimated No. Participants | Estimated Pct. U.S. Total |
|------------|----------------------------|------------------------|-------------------------------|------------------------------|
| Utah | 6 | .02 | 198 | .20 |
| Vermont | 60 | 1.70 | 1,920 | 1.70 |
| Virginia | 97 | 2.80 | 1,843 | 1.60 |
| Washington | 74 | 2.10 | 2,146 | 1.80 |
| Wisconsin | 22 | .06 | 704 | .60 |
| Total | 3,480 | 100.00 | 114,585 | 100.00 |

Source: The National Directory of High School Coaches, 1977-78.

States which were discovered as participating in the sport to a much lesser extent than stipulated in the 1975-76 survey were Oregon, South Carolina, Utah and New Jersey. Oregon, which had been credited with 80 schools offering soccer two years earlier, plummeted to 28 in 1977-78, a decline of 65 per cent. South Carolina dropped from 40 to 16, Utah decreased from 17 to six, and New Jersey, one of the major soccer citadels, regressed from 314 to 260 schools.

Table VII denotes a high level of participation along the Atlantic seaboard, Pacific Coast and the industrialized areas of the Midwest. Exceptions to this general pattern are Michigan and Texas, the latter which has just recently begun to participate.

With no information available on numbers of participants, an estimate of the number of boys participating in 1977-78 was tabulated for each state based on the figures for 1975-76, and explained in Chapter III. It was projected that about 115,000 high school athletes were competing in soccer throughout the United States.

An examination of Table VI suggests that more athletes were participating in 1975-76 than in 1977-78, but it must be taken into account that several states were shown to be suspect in respect to the number of schools and participants credited them in the sports participation survey. With an additional 13 states involved in the sport in the 1977-78 study, it is probable that there was an increase in both schools and participants.

Another measurement of the spatial variation of high school soccer is the intensity and diffusion of the sport within the secondary school framework of each state. Table VIII provides some clue as to the relative importance of soccer within specific regions of the country. Nine

TABLE VIII
 HIGH SCHOOL PARTICIPANTS IN SOCCER
 AND NUMBER OF COACHES PER STATE
 1977-78

| State | No. of Schools | Offering Soccer | Pct. with Soccer | No. of Coaches | Mean No. of Coaches |
|----------------|-------------------|--------------------|---------------------|-------------------|------------------------|
| Alabama | 425 | 9 | 2 | 13 | 1.44 |
| Alaska | 53 | 0 | | | |
| Arizona | 140 | 4 | 3 | 5 | 1.67 |
| Arkansas | 395 | 0 | | | |
| California | 994 | 429 | 43 | 464 | 1.08 |
| Colorado | 254 | 34 | 13 | 38 | 1.12 |
| Connecticut | 224 | 166 | 74 | 201 | 1.21 |
| Delaware | 52 | 28 | 54 | 33 | 1.18 |
| Dist. Columbia | 31 | 19 | 61 | 21 | 1.11 |
| Florida | 442 | 115 | 26 | 121 | 1.05 |
| Georgia | 413 | 105 | 25 | 173 | 1.65 |
| Hawaii | 61 | 17 | 28 | 23 | 1.35 |
| Idaho | 131 | 2 | 2 | 2 | 1.00 |
| Illinois | 790 | 117 | 15 | 135 | 1.15 |
| Indiana | 438 | 13 | 3 | 13 | 1.00 |
| Iowa | 507 | 1 | 0 | 1 | 1.00 |
| Kansas | 405 | 3 | 1 | 3 | 1.00 |
| Kentucky | 365 | 26 | 7 | 27 | 1.00 |
| Louisiana | 481 | 8 | 2 | 8 | 1.00 |
| Maine | 146 | 85 | 58 | 94 | 1.11 |
| Maryland | 200 | 135 | 68 | 160 | 1.19 |
| Massachusetts | 400 | 249 | 62 | 301 | 1.21 |
| Michigan | 771 | 28 | 4 | 28 | 1.00 |
| Minnesota | 439 | 45 | 10 | 50 | 1.11 |
| Mississippi | 312 | 3 | 1 | 3 | 1.00 |
| Missouri | 577 | 63 | 11 | 75 | 1.19 |
| Montana | 191 | 0 | | | |
| Nebraska | 380 | 4 | 1 | 4 | 1.00 |
| Nevada | 47 | 6 | 13 | 7 | 1.17 |
| New Hampshire | 97 | 73 | 75 | 88 | 1.21 |
| New Jersey | 404 | 260 | 64 | 285 | 1.10 |
| New Mexico | 127 | 6 | 5 | 6 | 1.00 |
| New York | 1,022 | 652 | 64 | 837 | 1.28 |
| North Carolina | 556 | 40 | 7 | 44 | 1.10 |
| North Dakota | 272 | 0 | | | |
| Ohio | 835 | 102 | 12 | 110 | 1.08 |
| Oklahoma | 495 | 6 | 1 | 9 | 1.50 |
| Oregon | 235 | 28 | 12 | 41 | 1.46 |

TABLE VIII (Continued)

| State | No. of Schools | Offering Soccer | Pct. with Soccer | No. of Coaches | Mean No. of Coaches |
|----------------|-------------------|--------------------|---------------------|-------------------|------------------------|
| Pennsylvania | 809 | 224 | 28 | 243 | 1.08 |
| Rhode Island | 64 | 31 | 48 | 32 | 1.03 |
| South Carolina | 232 | 16 | 7 | 16 | 1.00 |
| South Dakota | 210 | 0 | | | |
| Tennessee | 305 | 11 | 4 | 11 | 1.00 |
| Texas | 1,216 | 58 | 5 | 68 | 1.17 |
| Utah | 95 | 6 | 6 | 7 | 1.17 |
| Vermont | 77 | 60 | 78 | 69 | 1.15 |
| Virginia | 345 | 97 | 28 | 106 | 1.09 |
| Washington | 340 | 74 | 22 | 105 | 1.42 |
| West Virginia | 211 | 0 | | | |
| Wisconsin | 492 | 22 | 4 | 24 | 1.09 |
| Wyoming | 71 | 0 | | | |
| Total | 18,574 | 3,480 | 19 | 4,104 | 1.18 |

Source: The National Directory of High School Coaches, 1977-78.

states and the District of Columbia have better than one-half of their schools providing participation opportunities. Vermont, with about 78 per cent of its schools active in the sport, ranks first. Others in descending order are: New Hampshire (75); Connecticut (74); Maryland (68); New Jersey and New York (64); Massachusetts (62); District of Columbia (61); Maine (58); and Delaware (54).

The disparity in soccer participation among the states is radical. In 28 states, less than 25 per cent of the high schools have adopted soccer. Twenty states fell below 10 per cent, which accounts for only 19 per cent of the nation's high schools that play soccer in 1977-78. Further analysis of state-to-state variations is examined more fully later in this chapter.

Calculating the mean number of soccer coaches for schools offering the sport delivers another perspective on areal differences, particularly on the degree to which soccer is emphasized. A national mean of 1.18 coaches per school was computed and considered to be the norm. Variances ranged from 1.67 to the minimum 1.00 coaches per school.

Thirteen states were above the norm, but four had less than 30 schools participating. Georgia and Washington were the most impressive emphasizees of interscholastic soccer with respective means of 1.65 and 1.42. One hundred-five schools and 173 designated coaches were counted in Georgia, and 74 schools and 105 coaches were noted for Washington. Connecticut, New Hampshire, Massachusetts and New York were those leading participation states that were also above the national mean.

States which illustrated a minimal degree of emphasis (mean of 1.00) consisted chiefly of those in the South, Great Plains, and

several in the Midwest and West. Despite the high state means for Alabama, Arizona, Hawaii, Oklahoma and Oregon, the paucity of schools participating in soccer in these states lends them to be realistically classified as areas which do not emphasize the sport.

Diffusion and spatial variations of interscholastic soccer from 1967-68 to 1977-78 portray the sport's emergence from the Northeast and California into the interior regions of the United States. Figure 12 depicts the growth of soccer over the last 10 years. Prior to the 1970's, high school soccer existed essentially as a regional sport practiced by a select group of states in the populous northeastern sector of the country. Isolated participation was evident only in a few southern states, in the Midwest and California.

By the early and mid-1970's, the sport was still prevalent, but less confined, to the eastern half of the nation. In numbers, the Northeast held a commanding position. However, the growth of soccer in the South, Midwest and western United States had become more pronounced than in previous years.

Since 1975-76, soccer has diffused to the extent where it is now found in almost all areas of the United States. In the East, West Virginia is the only holdout, while Arkansas remained the sole non-participant in the South. The Great Plains region is the principal laggard. It is also the geographical area with the lowest level of participation.

To better understand these regional variations, it is necessary to take a closer look at the differences in participation among the states and attempt to identify some of the factors which contribute to those dissimilarities.

GENERALIZED DATES OF ADOPTION FOR INTERSCHOLASTIC SOCCER - BY STATE *

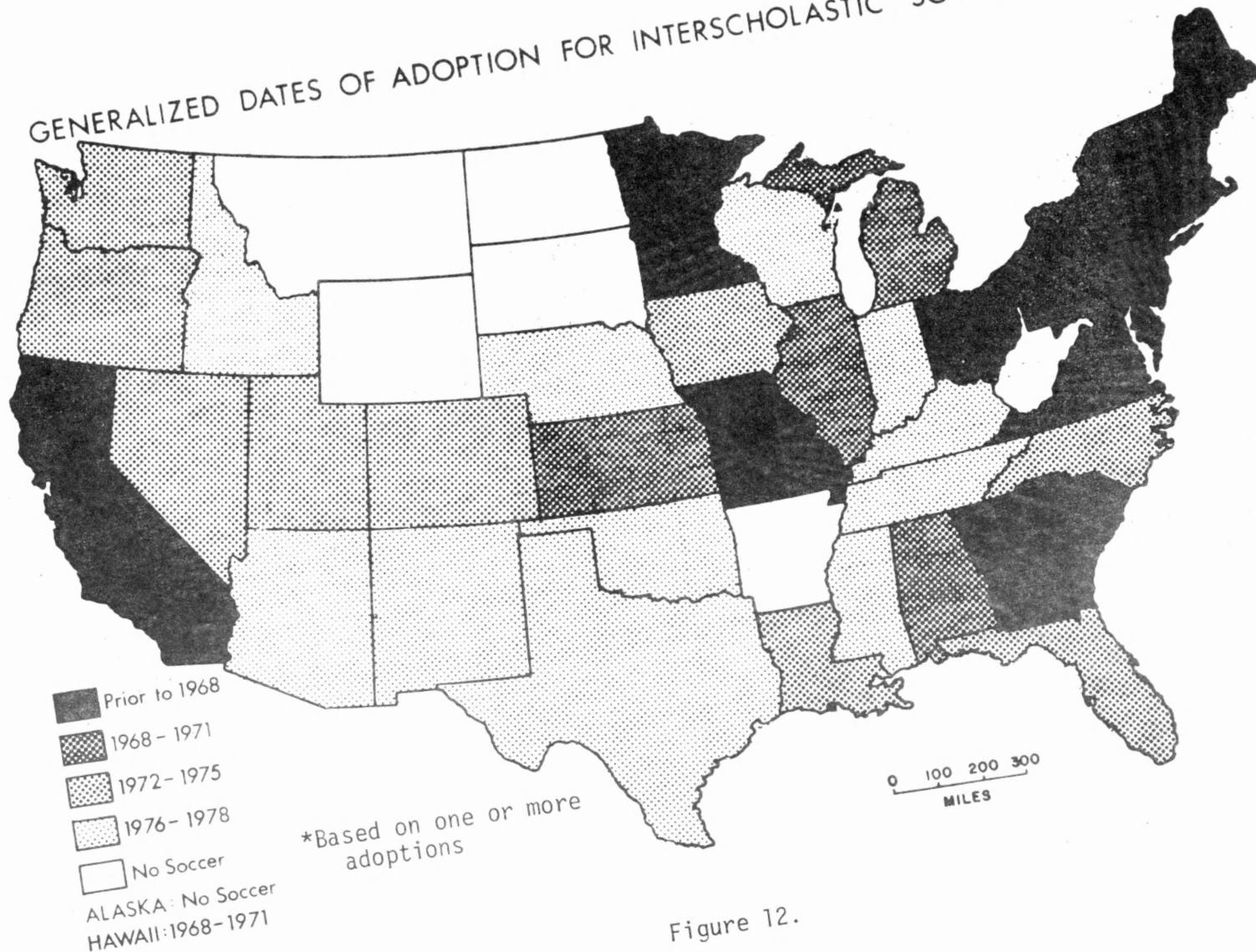


Figure 12.

Diversity in State-to-State Participation

National statistics and patterns fail to adequately identify and account for the spatial variations of interscholastic soccer on a regional basis. A comparative study of contiguous states within a delineated, geographical area was made to distinguish which sections of the United States are more intensely involved in participation than others.

Five geographical regions were arbitrarily designed to include 42 states and the District of Columbia. Hawaii was omitted from any region. The five regions of the United States are the Northeast, Midwest, South, West and the Central Plains-Rocky Mountains.

The Northeast

States included in the Northeast region were Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, Pennsylvania, New Jersey, Maryland, Delaware and the District of Columbia. Approximately 2,000 of the combined 3,564 schools (55 per cent) in the above group were participating in soccer in 1977-78. Vermont had soccer provided in 60 of its 77 schools (78 per cent), while Pennsylvania was the lowest participating state of this region with 224 of its 809 schools (28 per cent) engaged in soccer.

The strength of interscholastic soccer in the Northeast appears to be closely associated with a high number of colleges and universities playing soccer in the area. Traditionally, this has been the hearth of soccer in the United States. Demographically, the region contains several of the nation's largest urban centers, whose

populations are comprised of a mixture of ethnic and nationality groups of European origin. Because the sport was initially introduced and developed in this area, soccer has benefited from a longer period of contact and maturation within the secondary school system.

Judging by the multitude of schools participating in soccer, the sport competes well with other high school activities, most notably football. Another factor which may explain soccer's success in the Northeast is the comparatively low cost required to maintain a soccer program. Financial considerations are minor compared to the expenditures imperative to supporting a football program.

Emphasis placed upon soccer by the states in the Northeast makes it a legitimate regional sport. Tracing its growth from 1967-68 to the present seemingly reinforces that supposition.

The Midwest

Seven states were categorized in this region: Ohio, Illinois, Indiana, Michigan, Minnesota, Wisconsin and Iowa. These states registered the most schools (4,262) and the second lowest level of participation (328 schools), or 7.7 per cent.

Ohio and Illinois combined to account for two-thirds of all the schools participating in soccer. Separately Ohio's participation rate was only 15 per cent, and Illinois' was 12 per cent. Interestingly, the adjacent states of Michigan and Indiana, also quite populous had less than five per cent of their schools participating. The westernmost states, Minnesota, Wisconsin and Iowa (with a single school), were extremely low. In the case of Minnesota, this

contradicts its reputation as one of the leading states in providing participation opportunities in a variety of interscholastic sports.⁸

The lack of interscholastic soccer in the Midwest may be the result of several undercurrents. Ohio, in spite of having 102 of its schools competing in soccer, heavily emphasizes football as the primary autumn sport. The high per capita production of college players emanating from Ohio suggests that male high school athletes traditionally select football over other alternatives, or soccer is not a significant sport, apparently, even where it does exist.

Indiana has a high per capita participation in both football and basketball, the latter being the state's most populous sport. This generalization is undeviating throughout the Midwest. Only a handful of sports are accentuated, while others, like soccer, are deemed to be secondary or minor activities.

Potentially, the Midwest possesses the characteristics (population, number of schools and overall high per capita participation) to eventually become a significant interscholastic soccer region.

The South

Similar to the Midwest, the South's spatial variation of high school soccer is diverse. Ten states make up this region: Alabama, Louisiana, Mississippi, Florida, Georgia, South Carolina, North Carolina, Kentucky, Tennessee and Virginia.

Slightly less than 75 per cent of the schools playing soccer are in three states: Georgia, Florida and Virginia. In each of these states, about one out of every four schools participates in the sport.

This figure compares to a total participation of 11 per cent of the 3,876 schools in the South.

Outside of Virginia, Georgia and Florida, soccer is practically non-existent in the South. Low income states such as Mississippi and Alabama have soccer in less than one out of every 100 and 50 schools, respectively. More populous states, such as Kentucky, Tennessee, Louisiana and North Carolina, have fewer than five per cent of their high schools participating in soccer.

Virginia's relatively high participation can be attributed to its proximity to the northeastern states. Contact with this region may have accelerated the diffusion and growth of soccer into the schools of the state. The oddity of the spatial arrangement of soccer in the South is Florida and Georgia. None of their neighboring states approaches the level of soccer participation found in Georgia and Florida.

The first intercollegiate soccer participation in the South originated in Georgia and may have stimulated growth on the high school level within the state. Also, Georgia and Florida contain several of the more populous cities in the South, namely, Atlanta, Jacksonville and Miami, which may have been early adopters of the sport. In the case of Miami, the city's rather large Cuban population may have been a factor in introducing soccer to several high schools in Miami, which eventually influenced the diffusion of the sport to other areas of the state. The significance of cities in relation to soccer participation will be examined in more detail later in this chapter.

As a collective body, the southern states rank low nationally in per capita participation in most high school sports.⁹ Study of the high schools in several southern states revealed that there were many

small and rural community schools which offered less than half a dozen sports in their athletic programs.

Exposure to the sport is another aspect worth mentioning. In almost all professional sport, the South has very few cities which support a franchise, with the exception of Georgia and Florida. Professional soccer has not made any significant impact on a large portion of this region. Coupled with a scarcity of intercollegiate participation, the public has had little direct contact with the sport.

The West

In simple terms, interscholastic soccer in the West is fundamentally California interscholastic soccer. Six other states have been included in this region. They are: Oregon, Washington, Utah, Nevada, Idaho and Arizona. California is responsible for almost 80 per cent of the soccer within this region. The only other states of note are Oregon and Washington, which account for 17 per cent of the region's participation.

California's huge population and multiplicity of large urban enclaves have enhanced the development of soccer. Several colleges in the San Francisco and Los Angeles areas have participated in soccer for decades. The state's high percentage of Mexican-American and other nationalities has no doubt enhanced the diffusion of the sport into the high schools. This was pointed out in the case of St. Louis when immigrants retained elements of their native culture.

Washington and Oregon are more urbanized and populous than the other states in the region. The total number of schools in the

aggregated states of Arizona, Utah, Idaho and Nevada is 413, which is 16 less than the number of schools providing soccer in California.

The West offers a clear indication that soccer is not prevalent in the rural areas of the United States. Confirming that postulation is another rurally-dominated region - the Central Plains and Rocky Mountains.

The Central Plains and Rocky Mountains

This region is composed of Colorado, New Mexico, Texas, Oklahoma, Kansas, Nebraska and Missouri. Only five per cent of the 3,454 schools in these states participate in soccer. In none of them is soccer considered a significant interscholastic sport.

Missouri has the most participating schools (63), but the majority are in or around St. Louis. Texas has 58 participating schools, but that represents about five per cent of the 1,216 total in the state. Twenty-three of the 58 soccer schools are found in Dallas alone. Colorado has 34 of its 254 schools (13 per cent) playing soccer, New Mexico has six of 127 schools active in the sport, and the remaining three states have one per cent or less of their schools participating.

Analysis of soccer on the state and regional levels has furnished a certain degree of information regarding the spatial variation of high school soccer in the United States. The research will now study the geographical differences in interscholastic participation on a larger scale - three-digit zip code areas - to determine specific regions within states where soccer is present, and to assess its significance as a high school sport.

Spatial Variations of Soccer on the Three-Digit Zip Code Area Level

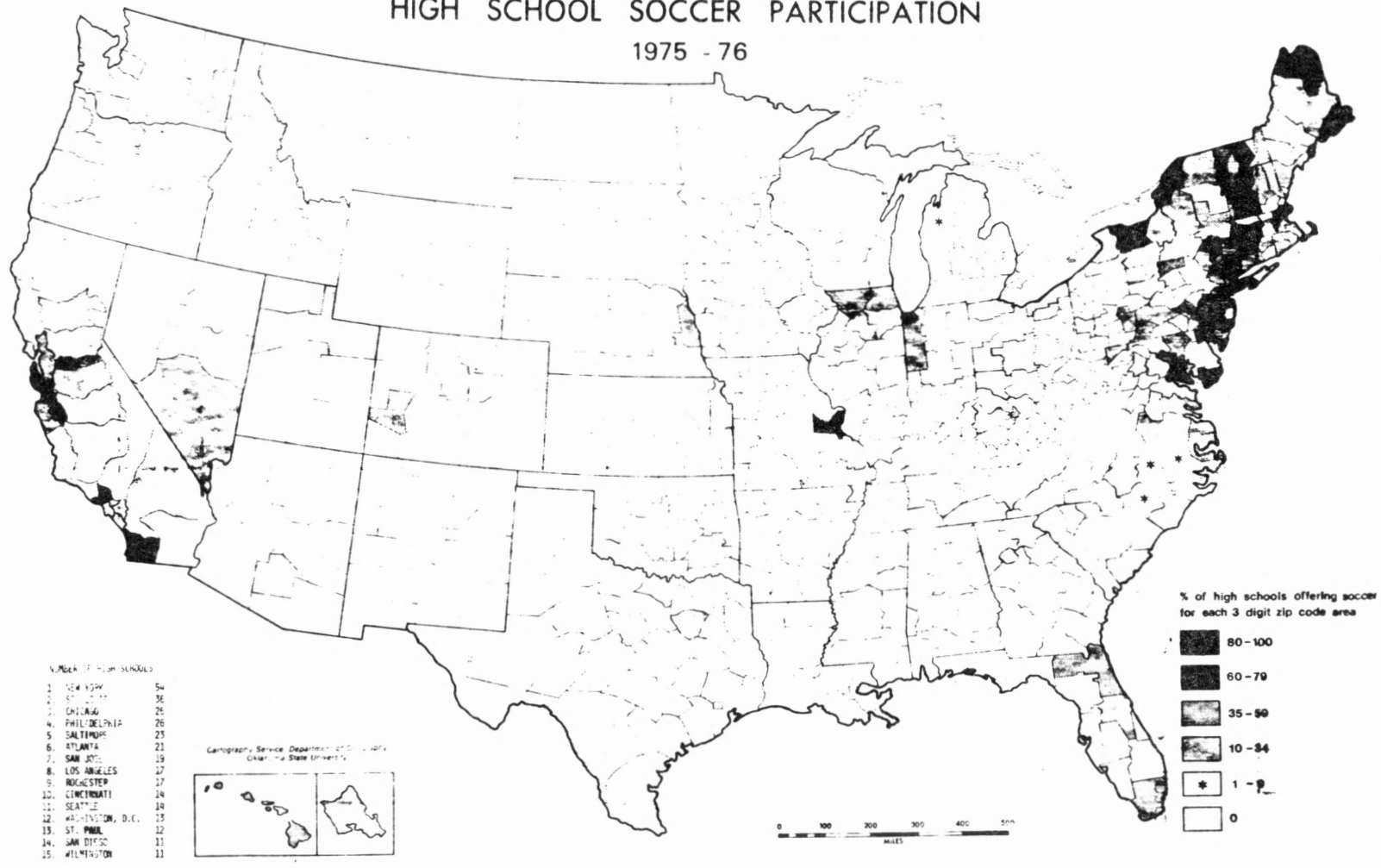
Of the 812 three-digit zip code areas in the United States, 433, or 53.3 per cent, contained schools which participated in soccer in 1977-78. Discounting the seven states that do not have any schools competing in soccer, the national figure climbed to 58.4 per cent.

Analysis of interscholastic participation at this level provided another perspective of the sport's spatial arrangement and patterns. To trace the recent diffusion of soccer at this level, a 20 per cent sampling of high schools found in each of the 812 three-digit zip code areas for 1975-76 was compared to a 100 per cent survey for 1977-78 (Figures 13-14). The source used in both samplings was The National Directory of High School Coaches (1975-76 and 1977-78). Results of the comparative study revealed those areas within a state and region that underwent a growth or decline in participation. Because of the nature of the 1975-76 sampling, the chance for error in misrepresenting the degree of participation for an individual zip code area is of a high probability. Therefore, the 20 per cent sampling was basically used to provide some indication of the spatial organization of interscholastic soccer in 1975-76 for the purpose of comparison to the areal arrangement of soccer in 1977-78.

The South, Southwest and Midwest are the most visible regions where soccer diffusion has occurred. Georgia, North Carolina, Alabama, Mississippi and South Carolina displayed that soccer had spread to various parts of their respective states.

Texas exhibited the most extensive diffusion of any state in 1977-78. In 1975-76, soccer was confined to the Dallas and Houston

HIGH SCHOOL SOCCER PARTICIPATION 1975 - 76



NUMBER OF HIGH SCHOOLS

| | | |
|----|------------------|----|
| 1 | NEW YORK | 54 |
| 2 | ST. LOUIS | 36 |
| 3 | CHICAGO | 26 |
| 4 | PHILADELPHIA | 26 |
| 5 | BALTIMORE | 23 |
| 6 | ATLANTA | 21 |
| 7 | SAN ANTONIO | 19 |
| 8 | LOS ANGELES | 17 |
| 9 | ROCHESTER | 17 |
| 10 | CINCINNATI | 14 |
| 11 | SEATTLE | 14 |
| 12 | WASHINGTON, D.C. | 13 |
| 13 | ST. PAUL | 12 |
| 14 | SAN DIEGO | 11 |
| 15 | WILMINGTON | 11 |

Cartography Service Department of Geography
Oklahoma State University

0 100 200 300 400 500
MILES

Figure 13.

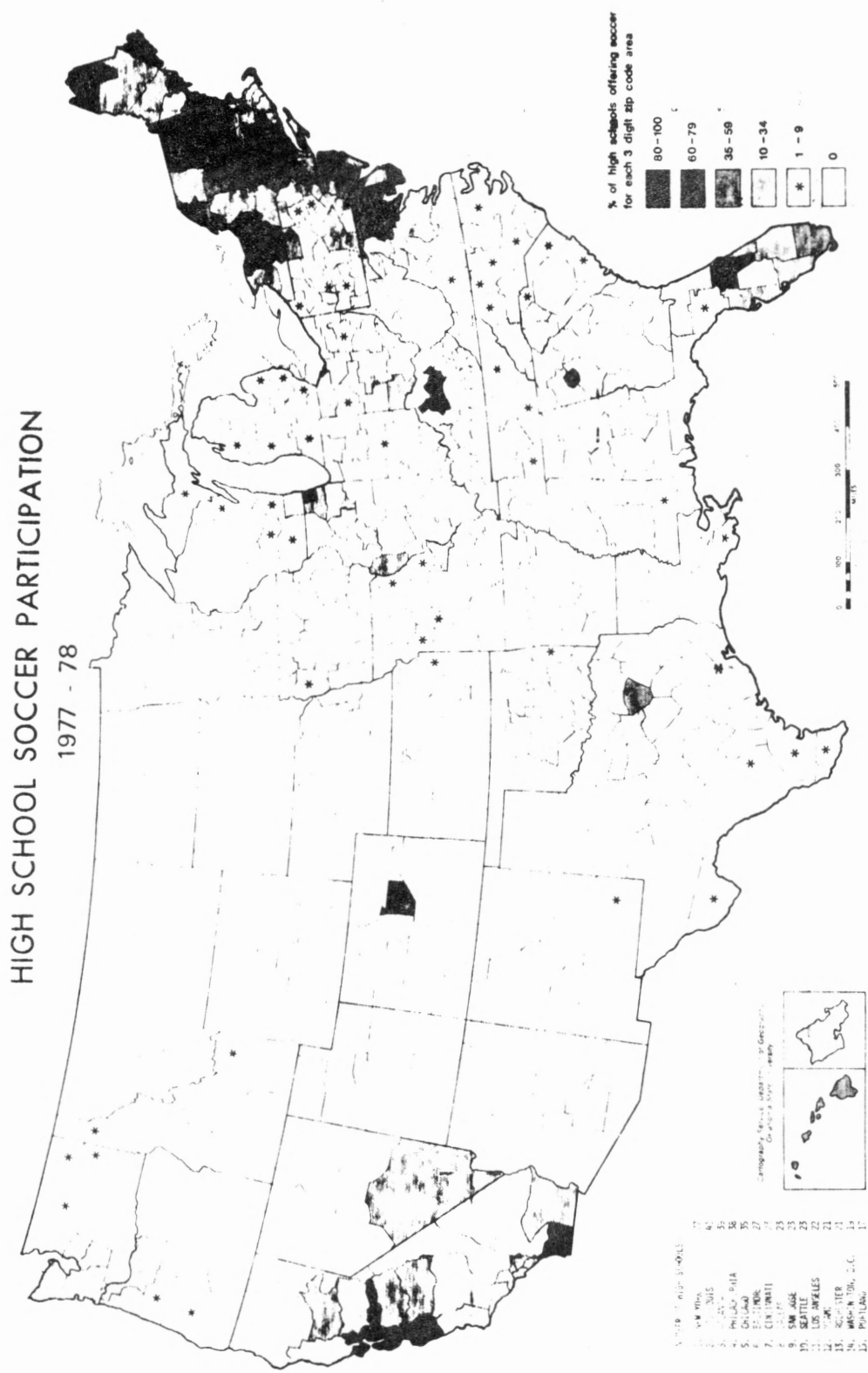


Figure 14.

SMSA's with no participation elsewhere. In the course of two years, nine additional zip code areas scattered throughout the state, had begun to participate.

Previous laggards in adopting soccer, such as Oklahoma and New Mexico, displayed restricted growth, primarily in urbanized areas. Limited diffusion was also characteristic of states in the Midwest. Soccer extended to various parts of Michigan, Wisconsin and Ohio, but not to any significant degree.

Soccer's elite status in the Northeast is further illustrated by the intensity of participation throughout the region. All of the three-digit zip code areas in Maine, New Hampshire, Connecticut, Rhode Island and Delaware participated to a certain extent. The remaining states in the Northeast, with the exception of Pennsylvania, had 90 per cent or more of their zip code areas participating.

Perhaps the most impressive of these states in respect to widespread participation are New York, Massachusetts and New Jersey. All but two of the 50 zip code areas in New York, and only one each in Massachusetts and New Jersey, did not have any schools playing soccer. When the populations and number of schools located in these states are considered, the level of participation achieves an added significance.

Another characteristic of soccer in the Northeast is that it is not a sport solely associated with large cities. Soccer is found in the more pastoral sections of this region as well as in many of the urbanized localities. Maine, New Hampshire and Vermont substantiate this rather effectively, and similar patterns are present in Missouri, Idaho, Washington and Tennessee.

Changes in the spatial variation of participation in the western states from 1975-76 to 1977-78 were slight. Diffusion was most accentuated in California, where 49 of the state's 62 three-digit zip code areas participate in school soccer. The chief pattern of interscholastic participation is along the coast stretching east to the base of the Sierra Nevadas.

Ostensibly, the low population density of Idaho, Utah, Nevada and Arizona influences the relative absence of soccer participation in the majority of zip code areas of these states. Where soccer is present is primarily near the large urban areas, such as Las Vegas, Salt Lake City and Phoenix. However, some soccer is found in the more rural reaches of eastern Washington, northwestern and eastern Idaho and northeastern Arizona.

Twenty-one of the 43 states (along with the District of Columbia), participating in 1977-78, reported 50 per cent or more of their three-digit zip code areas having at least one school involved in the sport. Michigan, with only 28 of 771 schools participating, had 11 of its 20 zip code areas active in soccer. Other states where it was common to find a large proportion of zip codes with relatively few schools participating were North Carolina, South Carolina and Ohio.

Variations in participation on the three-digit zip code level were more apparent by examining those areas which contained 50 per cent or more of the schools offering soccer (Table IX). Not only did these zip code areas reveal areal differences of participation within a state, but they also depicted various degrees of emphasis placed on soccer from one area to the next.

TABLE IX
 LISTING OF THE THREE-DIGIT ZIP CODE AREAS
 WHERE 50 PER CENT OR MORE OF THE
 HIGH SCHOOLS OFFER SOCCER
 1977-78

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| <u>California</u> | | | | | |
| 900 | 46 | 23 | 50 | 23 | 1.00 |
| 902 | 31 | 19 | 61 | 21 | 1.11 |
| 903 | 8 | 5 | 63 | 5 | 1.00 |
| 905 | 6 | 5 | 83 | 6 | 1.20 |
| 907 | 20 | 11 | 55 | 12 | 1.09 |
| 912 | 4 | 2 | 50 | 2 | 1.00 |
| 918 | 2 | 2 | 100 | 2 | 1.00 |
| 920 | 37 | 26 | 70 | 27 | 1.04 |
| 921 | 22 | 15 | 68 | 17 | 1.13 |
| 924 | 2 | 1 | 50 | 1 | 1.00 |
| 926 | 30 | 15 | 50 | 15 | 1.00 |
| 927 | 11 | 7 | 64 | 7 | 1.00 |
| 937 | 10 | 5 | 50 | 5 | 1.00 |
| 939 | 12 | 8 | 67 | 9 | 1.13 |
| 940 | 30 | 26 | 87 | 30 | 1.15 |
| 941 | 16 | 13 | 81 | 14 | 1.08 |
| 944 | 4 | 4 | 100 | 5 | 1.25 |
| 945 | 71 | 38 | 54 | 41 | 1.08 |
| 946 | 13 | 9 | 69 | 11 | 1.22 |
| 948 | 7 | 5 | 71 | 5 | 1.00 |
| 949 | 16 | 13 | 81 | 14 | 1.08 |
| 950 | 24 | 19 | 79 | 21 | 1.11 |
| 951 | 24 | 23 | 96 | 32 | 1.39 |
| 952 | 12 | 6 | 50 | 6 | 1.00 |
| 958 | 17 | 12 | 71 | 12 | 1.00 |
| <u>Colorado</u> | | | | | |
| 800 | 11 | 6 | 55 | 6 | 1.00 |
| 802 | 32 | 17 | 53 | 20 | 1.18 |
| <u>Connecticut</u> | | | | | |
| 060 | 47 | 40 | 85 | 48 | 1.20 |
| 061 | 16 | 13 | 81 | 18 | 1.38 |

TABLE IX (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| 062 | 14 | 9 | 64 | 14 | 1.56 |
| 063 | 14 | 7 | 50 | 9 | 1.29 |
| 064 | 52 | 40 | 77 | 44 | 1.10 |
| 065 | 13 | 9 | 79 | 9 | 1.00 |
| 066 | 10 | 6 | 60 | 6 | 1.00 |
| 067 | 26 | 20 | 77 | 29 | 1.45 |
| 068 | 23 | 16 | 70 | 29 | 1.45 |
| 069 | 9 | 6 | 67 | 6 | 1.00 |
| <u>Delaware</u> | | | | | |
| 197 | 14 | 9 | 64 | 14 | 1.56 |
| 198 | 22 | 13 | 59 | 13 | 1.00 |
| <u>Dist. Columbia</u> | | | | | |
| 200 | 31 | 19 | 61 | 21 | 1.11 |
| <u>Florida</u> | | | | | |
| 328 | 11 | 10 | 91 | 12 | 1.20 |
| 331 | 50 | 28 | 56 | 28 | 1.00 |
| <u>Georgia</u> | | | | | |
| 300 | 27 | 25 | 93 | 35 | 1.40 |
| 303 | 59 | 45 | 76 | 85 | 1.89 |
| <u>Illinois</u> | | | | | |
| 602 | 1 | 1 | 100 | 1 | 1.00 |
| 603 | 2 | 1 | 50 | 1 | 1.00 |
| 605 | 33 | 18 | 55 | 25 | 1.39 |
| <u>Kentucky</u> | | | | | |
| 405 | 6 | 4 | 67 | 4 | 1.00 |
| <u>Maine</u> | | | | | |
| 040 | 23 | 15 | 65 | 17 | 1.13 |
| 041 | 9 | 6 | 67 | 6 | 1.00 |

TABLE XI (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| 043 | 8 | 5 | 63 | 6 | 1.20 |
| 045 | 6 | 4 | 67 | 4 | 1.00 |
| 046 | 15 | 14 | 93 | 14 | 1.00 |
| 047 | 18 | 12 | 67 | 13 | 1.08 |
| 048 | 7 | 4 | 57 | 5 | 1.25 |
| 049 | 21 | 12 | 57 | 14 | 1.17 |
| <u>Maryland</u> | | | | | |
| 206 | 9 | 7 | 78 | 9 | 1.29 |
| 207 | 12 | 8 | 67 | 8 | 1.00 |
| 208 | 23 | 21 | 91 | 25 | 1.19 |
| 209 | 5 | 5 | 100 | 7 | 1.40 |
| 210 | 19 | 13 | 68 | 14 | 1.08 |
| 211 | 10 | 8 | 80 | 9 | 1.13 |
| 212 | 44 | 32 | 73 | 43 | 1.34 |
| 214 | 2 | 1 | 50 | 1 | 1.00 |
| 216 | 9 | 6 | 67 | 6 | 1.00 |
| 217 | 23 | 15 | 65 | 18 | 1.20 |
| 218 | 10 | 8 | 80 | 8 | 1.00 |
| 219 | 8 | 7 | 88 | 8 | 1.14 |
| <u>Massachusetts</u> | | | | | |
| 010 | 34 | 27 | 79 | 36 | 1.33 |
| 011 | 8 | 7 | 88 | 7 | 1.00 |
| 012 | 19 | 17 | 89 | 26 | 1.53 |
| 013 | 10 | 5 | 50 | 6 | 1.20 |
| 015 | 29 | 19 | 66 | 21 | 1.11 |
| 017 | 26 | 18 | 69 | 24 | 1.33 |
| 018 | 35 | 20 | 57 | 23 | 1.15 |
| 019 | 28 | 18 | 64 | 22 | 1.22 |
| 020 | 25 | 16 | 64 | 18 | 1.13 |
| 021 | 96 | 56 | 58 | 64 | 1.14 |
| 023 | 17 | 10 | 59 | 11 | 1.10 |
| 024 | 2 | 1 | 50 | 1 | 1.00 |
| 026 | 8 | 6 | 75 | 6 | 1.00 |
| 027 | 26 | 13 | 50 | 13 | 1.00 |
| <u>Minnesota</u> | | | | | |
| 551 | 32 | 16 | 50 | 19 | 1.19 |

TABLE IX (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| <u>Missouri</u> | | | | | |
| 631 | 66 | 45 | 68 | 54 | 1.20 |
| <u>Nevada</u> | | | | | |
| 891 | 5 | 4 | 80 | 5 | 1.25 |
| <u>New Hampshire</u> | | | | | |
| 030 | 12 | 8 | 67 | 9 | 1.13 |
| 031 | 7 | 6 | 86 | 6 | 1.00 |
| 032 | 22 | 17 | 77 | 21 | 1.24 |
| 033 | 4 | 3 | 75 | 4 | 1.33 |
| 034 | 10 | 8 | 80 | 9 | 1.13 |
| 035 | 12 | 8 | 67 | 11 | 1.38 |
| 036 | 1 | 1 | 100 | 1 | 1.00 |
| 037 | 10 | 7 | 70 | 9 | 1.29 |
| 038 | 19 | 15 | 79 | 18 | 1.20 |
| <u>New Jersey</u> | | | | | |
| 070 | 77 | 44 | 57 | 45 | 1.02 |
| 071 | 15 | 14 | 93 | 14 | 1.00 |
| 072 | 12 | 6 | 50 | 7 | 1.17 |
| 074 | 27 | 19 | 70 | 21 | 1.11 |
| 075 | 9 | 5 | 56 | 5 | 1.00 |
| 076 | 29 | 17 | 59 | 18 | 1.06 |
| 077 | 27 | 19 | 70 | 20 | 1.05 |
| 078 | 17 | 11 | 65 | 11 | 1.00 |
| 079 | 24 | 15 | 63 | 15 | 1.00 |
| 080 | 53 | 42 | 79 | 46 | 1.10 |
| 083 | 10 | 6 | 60 | 6 | 1.00 |
| 085 | 16 | 11 | 69 | 14 | 1.27 |
| 086 | 10 | 9 | 90 | 14 | 1.56 |
| 087 | 8 | 7 | 88 | 12 | 1.71 |
| 088 | 35 | 24 | 69 | 26 | 1.08 |
| 089 | 4 | 3 | 75 | 3 | 1.00 |

TABLE IX (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| <u>New York</u> | | | | | |
| 100 | 53 | 28 | 53 | 35 | 1.25 |
| 103 | 12 | 7 | 58 | 11 | 1.57 |
| 104 | 29 | 17 | 59 | 20 | 1.18 |
| 105 | 42 | 33 | 79 | 39 | 1.18 |
| 106 | 3 | 2 | 67 | 2 | 1.00 |
| 107 | 7 | 4 | 57 | 4 | 1.00 |
| 109 | 23 | 22 | 96 | 28 | 1.27 |
| 110 | 12 | 10 | 83 | 11 | 1.10 |
| 111 | 4 | 3 | 75 | 3 | 1.00 |
| 112 | 48 | 26 | 54 | 26 | 1.00 |
| 113 | 18 | 14 | 78 | 16 | 1.14 |
| 114 | 16 | 9 | 56 | 9 | 1.00 |
| 115 | 36 | 28 | 78 | 32 | 1.14 |
| 116 | 2 | 1 | 50 | 1 | 1.00 |
| 117 | 66 | 56 | 85 | 59 | 1.05 |
| 118 | 4 | 3 | 75 | 3 | 1.00 |
| 120 | 29 | 21 | 72 | 35 | 1.67 |
| 121 | 31 | 24 | 77 | 31 | 1.29 |
| 123 | 9 | 5 | 56 | 9 | 1.80 |
| 124 | 13 | 12 | 92 | 13 | 1.08 |
| 125 | 30 | 18 | 60 | 26 | 1.44 |
| 126 | 5 | 4 | 80 | 4 | 1.00 |
| 127 | 10 | 10 | 100 | 10 | 1.00 |
| 128 | 28 | 19 | 68 | 22 | 1.16 |
| 129 | 27 | 16 | 59 | 24 | 1.50 |
| 130 | 23 | 17 | 74 | 25 | 1.47 |
| 131 | 22 | 17 | 77 | 19 | 1.12 |
| 132 | 15 | 9 | 60 | 13 | 1.44 |
| 134 | 33 | 18 | 55 | 25 | 1.39 |
| 135 | 6 | 3 | 50 | 3 | 1.00 |
| 136 | 32 | 24 | 75 | 41 | 1.71 |
| 137 | 19 | 10 | 53 | 12 | 1.20 |
| 144 | 24 | 18 | 75 | 30 | 1.67 |
| 145 | 28 | 24 | 86 | 40 | 1.67 |
| 146 | 23 | 21 | 91 | 33 | 1.57 |
| 148 | 31 | 20 | 65 | 31 | 1.55 |

TABLE IX (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| <u>North Carolina</u> | | | | | |
| 276 | 7 | 4 | 57 | 4 | 1.00 |
| 282 | 12 | 6 | 50 | 7 | 1.17 |
| 288 | 10 | 5 | 50 | 6 | 1.20 |
| <u>Ohio</u> | | | | | |
| 443 | 16 | 8 | 50 | 8 | 1.00 |
| 452 | 45 | 25 | 56 | 26 | 1.04 |
| <u>Oregon</u> | | | | | |
| 972 | 30 | 18 | 60 | 27 | 1.50 |
| <u>Pennsylvania</u> | | | | | |
| 172 | 13 | 7 | 54 | 8 | 1.14 |
| 175 | 12 | 7 | 58 | 7 | 1.00 |
| 176 | 4 | 2 | 50 | 2 | 1.00 |
| 181 | 5 | 3 | 60 | 3 | 1.00 |
| 189 | 13 | 11 | 85 | 13 | 1.18 |
| 190 | 58 | 34 | 59 | 35 | 1.03 |
| 191 | 52 | 38 | 71 | 41 | 1.08 |
| 193 | 15 | 13 | 87 | 14 | 1.08 |
| 195 | 11 | 8 | 73 | 8 | 1.00 |
| <u>Rhode Island</u> | | | | | |
| 029 | 23 | 13 | 57 | 13 | 1.00 |
| <u>Texas</u> | | | | | |
| 752 | 32 | 23 | 72 | 26 | 1.13 |
| <u>Vermont</u> | | | | | |
| 050 | 13 | 11 | 85 | 11 | 1.00 |
| 051 | 4 | 3 | 75 | 3 | 1.00 |
| 052 | 3 | 3 | 100 | 3 | 1.00 |
| 053 | 6 | 5 | 83 | 5 | 1.00 |
| 054 | 15 | 11 | 73 | 14 | 1.00 |

TABLE IX (Continued)

| State and 3-Digit Zip Code | Total Number of Schools | Schools Offering Soccer | Per Cent Having Soccer | Number of Coaches | Mean Number of Coaches |
|----------------------------------|-------------------------------|-------------------------------|------------------------------|-------------------------|------------------------------|
| 056 | 13 | 11 | 85 | 15 | 1.36 |
| 057 | 10 | 6 | 60 | 7 | 1.17 |
| 058 | 10 | 9 | 90 | 10 | 1.11 |
| 059 | 1 | 1 | 100 | 1 | 1.00 |
| <u>Virginia</u> | | | | | |
| 220 | 15 | 11 | 73 | 12 | 1.09 |
| 221 | 18 | 10 | 56 | 12 | 1.20 |
| 222 | 4 | 4 | 100 | 4 | 1.00 |
| 223 | 12 | 10 | 83 | 10 | 1.00 |
| 232 | 17 | 12 | 71 | 13 | 1.08 |
| 235 | 10 | 5 | 50 | 5 | 1.00 |
| <u>Washington</u> | | | | | |
| 980 | 36 | 22 | 61 | 31 | 1.41 |
| 981 | 42 | 23 | 55 | 40 | 1.74 |
| 984 | 15 | 10 | 67 | 12 | 1.20 |
| <u>Wisconsin</u> | | | | | |
| 537 | 8 | 4 | 50 | 5 | 1.25 |

Source: The National Directory of High School Coaches, 1977-78.

One hundred eighty-one three-digit zip code areas of the 433 participating in soccer counted one-half or better of their schools competing. This high percentage (41.8) distinguishes the diversity prevalent in interscholastic soccer participation throughout the United States.

Connecticut and New Hampshire have all of their zip code areas participating above 50 per cent. In New York, two of every three zip code areas have one-half or more of their schools playing the sport. California showed 25 zip code areas, and together with New York, accounted for more than two-fifths of the three-digit zip code areas where soccer is played in the majority of schools.

Variations also exist within these zip code areas of high participation. Some schools stress soccer more than others. This is indicated by the mean number of coaches assigned to soccer in the sundry zip code areas. Three-digit zip code area 951, which encompasses the San Jose, California, region, is a conspicuous example. Twenty-three of the 24 schools in 951 have soccer with a mean number of coaches of 1.39. Though several other zip code areas in the state have more schools offering soccer, the degree of participation is less.

In New York, the zip code areas which are strong emphasizees include: the New York City metropolitan region (100 through 119); 120-121 (Albany); 124 (Kingston); 127 (Monticello); 128-129 (north-eastern New York); 130-134 (central New York in the vicinity of Syracuse and Utica); 136 (Watertown and the northwestern section of upstate New York); and 144, 145, 146 and 148 (Rochester and Buffalo). Seven of the zip codes have coaches' means of 1.50 to 1.80.

Like California, a high participation rate is found throughout New York. Soccer is emphasized as equally or more in the less populated sections of New York state as it is in the New York City SMSA.

The spatial variation of soccer in Pennsylvania clearly shows a decreasing emphasis placed on the sport from east to west. No zip code areas with 50 per cent of its schools playing soccer is located in the western half of the state. The highest level of soccer participation is confined to the extreme southeastern area of Pennsylvania (Philadelphia) and, to a lesser extent, in nearby zip code areas.

The remainder of the three-digit zip code areas in the Northeast adhere to the pattern seen in New York. The spatial variation between participation around large urban centers and areas less urbanized is not significant. Diffusion of soccer has been virtually complete in this region of the country.

Spatial variations in the South are easier to discriminate. In Florida, two areas of the state display a higher participation rate than others in school soccer. The central region around Orlando (328) and the southern tip of Florida (331) show higher involvement.

Georgia's concentration of emphasis is in the vicinage of Atlanta (300 and 303). More than 80 per cent of the 96 schools in these two three-digit zip code areas participate in soccer with a combined mean number of coaches of 1.71, which is the highest of any single sector in the United States.

Figures 15 and 16 illustrate the variations in the average number of coaches per three-digit zip code area from 1975-76 to 1977-78. The former (Figure 15) is a 20 per cent sampling of zip code areas, and

HIGH SCHOOL COACHES PER PROGRAM
SOCCER, 1975-76

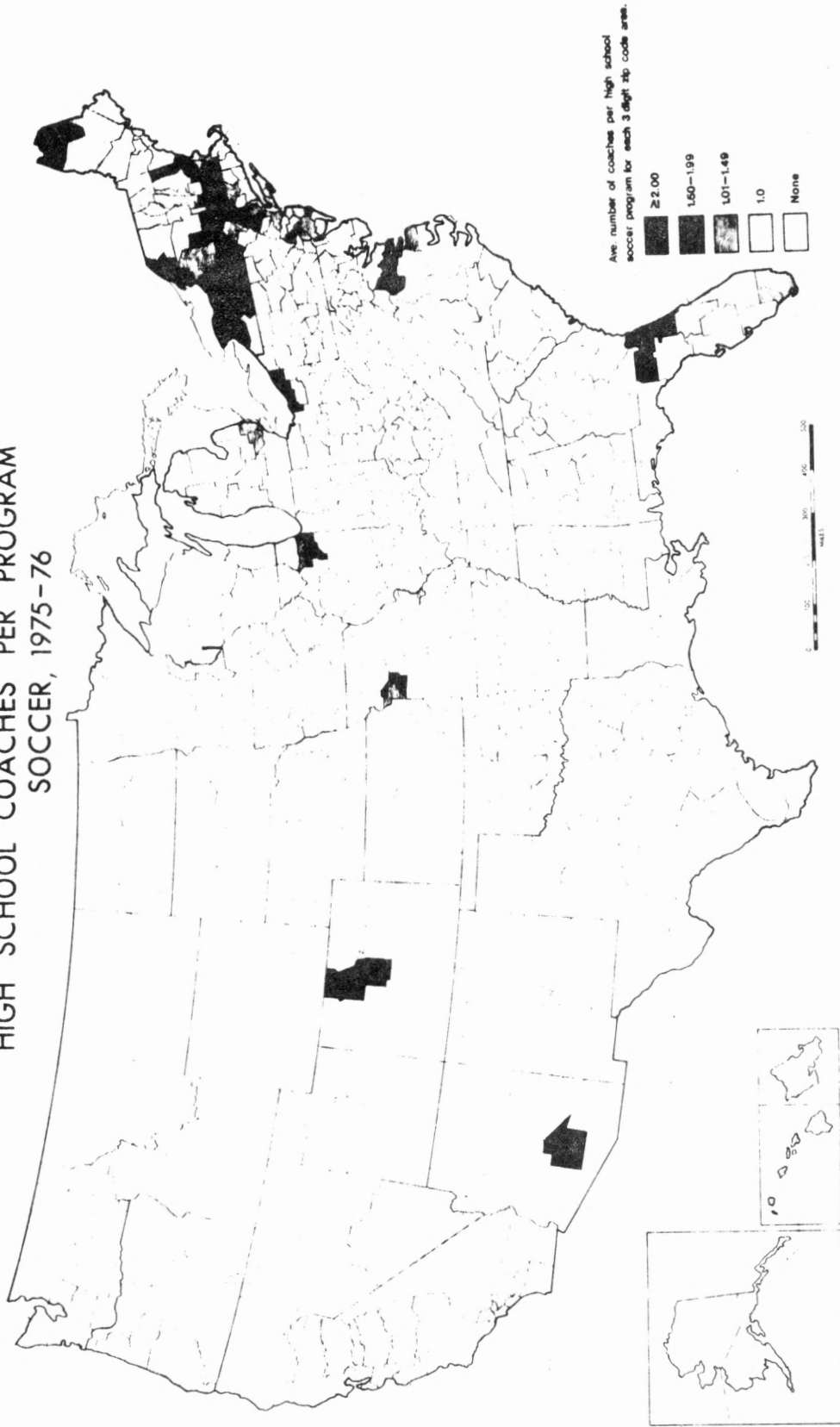


Figure 15.

HIGH SCHOOL COACHES PER PROGRAM
SOCCER, 1977-78

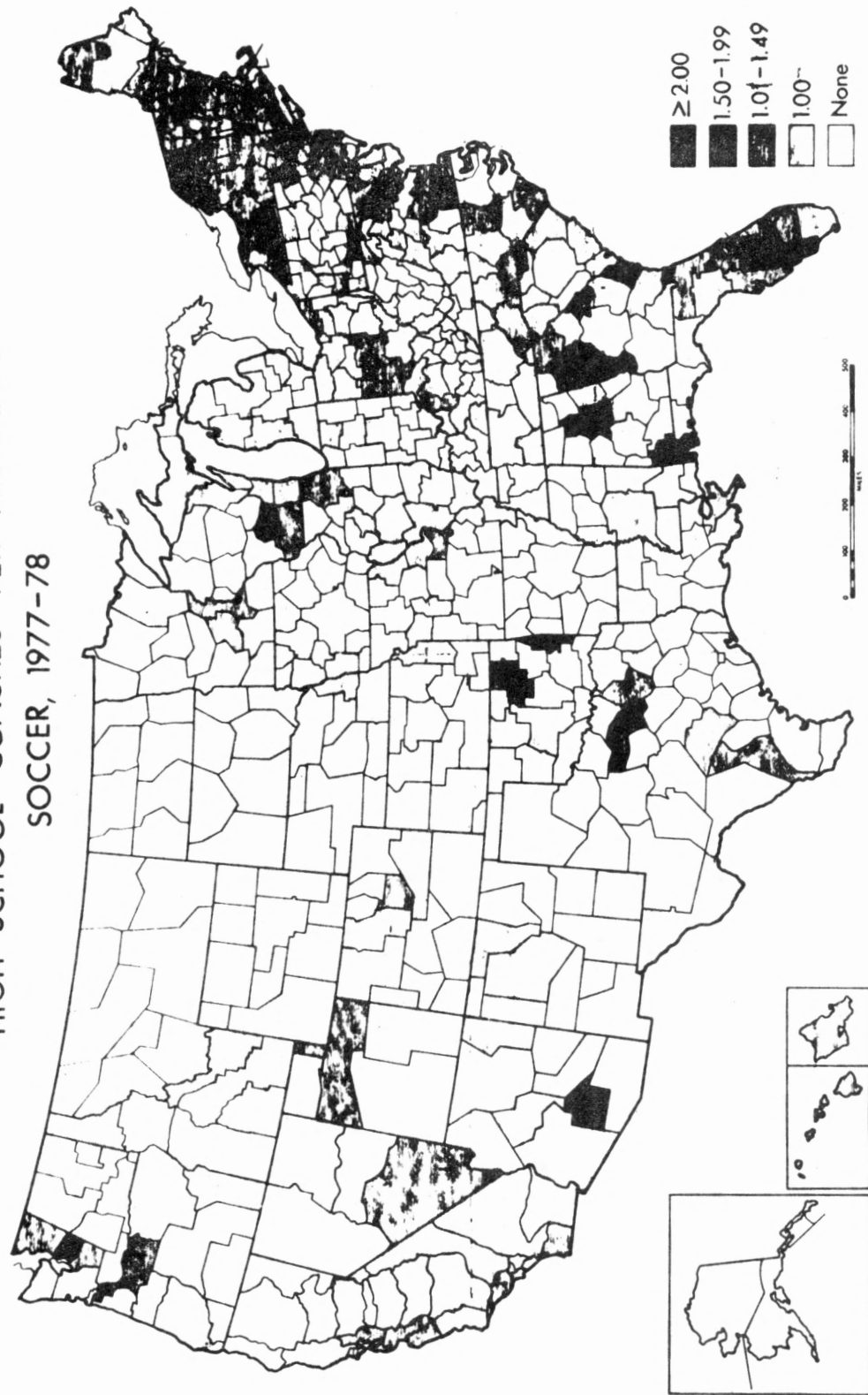


Figure 16.

the latter represents a 100 per cent analysis of high schools in all three-digit zip code areas. Fluctuations which have occurred during this two-year period in the spatial variation of soccer at the three-digit zip code level were more meaningful when Figures 13 and 15 were compared to Figures 14 and 16 respectively.

Zip code areas which showed 60 per cent or more of their high schools participating in soccer and a mean score of 1.01 coaches and higher were considered to be the localities where soccer is most emphasized. Once again, the Northeast contains the greatest number of zip code areas with a combined high participation of schools and average number of coaches. On a more micro level, individual states were shown to have pockets of high participation and means. California claimed 16 of these particularly high three-digit zip code areas. Illinois, Georgia, Florida, Oregon, Virginia and Washington were other states which had a very few zip code areas of high significance.

The general pattern found outside the northeastern United States was that high coaches' means were normally associated with a minority of schools within a given zip code area. An example would be zip code 749 in Oklahoma. Only one high school of the 18 in that area was playing soccer for a six per cent participation rate. However, two coaches were assigned to that school's soccer program, which ultimately made it appear more significant than in reality.

Additional illustrations of this type were found in all regions of the country, where less than 25 per cent of zip code area's schools participated, but the mean number of coaches was more than 1.50.

Significance of Major Cities in Relation
to Interscholastic Participation

Mapping of high school soccer participation and mean number of coaches on the three-digit zip code level revealed that higher classifications of participation appeared to be in the vicinity of metropolitan cities. To evaluate the significance of metropolitan cities to the level of soccer participation, 104 cities with a minimum of 10 schools were analyzed.

Eighty-seven of these selected cities had at least one high school playing soccer in either 1975-76 or 1977-78 (Table X). These 104 cities accounted for 23.2 per cent of the total interscholastic soccer participation in the United States in 1977-78 (824 schools of the nation's total 3,480). Omission of the 17 metropolitan cities which did not participate in the sport increased the figure to 25.7 per cent.

Collectively, the population of the 87 cities totaled 44 million, approximately one-fifth of the national population.¹⁰ Table X also depicted the net increase and decrease of high school participation from 1975-76 to 1977-78. Six cities showed a decline in the number of schools participating during this two-year period. Fourteen cities showed no change in the number of participating schools.

Metropolitan cities in which were recorded the greatest increase in participation were: Dallas (9 to 23); Miami (8 to 21); Denver (2 to 11); Portland (7 to 17); and Boston and Jacksonville (5 to 13). The New York metropolitan area contained the largest number of school participants with 77, representing 55 per cent of the city's 140 schools. Excluding New York, population size and number of soccer schools had no

TABLE X
 CITIES IN THE UNITED STATES HAVING A
 MINIMUM OF 10 HIGH SCHOOLS WHERE
 SOCCER IS OFFERED IN ONE
 OR MORE SCHOOLS

| City | No. Schools with Soccer 1975-76 | No. Schools with Soccer 1977-78 | Net Increase or Decrease | Pct. Increase or Decrease |
|------------------|---------------------------------------|---------------------------------------|-----------------------------|------------------------------|
| New York | 54 | 77 | 23 | 42.6 |
| St. Louis | 36 | 41 | 5 | 13.9 |
| Atlanta | 21 | 39 | 18 | 85.7 |
| Philadelphia | 26 | 38 | 12 | 46.1 |
| Chicago | 26 | 35 | 9 | 34.6 |
| Baltimore | 23 | 27 | 4 | 17.4 |
| Cincinnati | 14 | 23 | 9 | 64.3 |
| Dallas | 9 | 23 | 14 | 155.6 |
| San Jose | 19 | 23 | 4 | 21.1 |
| Seattle | 14 | 23 | 9 | 64.3 |
| Los Angeles | 17 | 22 | 5 | 29.4 |
| Miami | 8 | 21 | 13 | 162.5 |
| Rochester | 17 | 21 | 4 | 23.5 |
| Washington, D.C. | 13 | 19 | 6 | 46.2 |
| Portland | 7 | 17 | 10 | 142.9 |
| San Diego | 11 | 15 | 4 | 36.4 |
| Boston | 5 | 13 | 8 | 160.0 |
| Jacksonville | 5 | 13 | 8 | 160.0 |
| San Francisco | 7 | 13 | 6 | 85.7 |
| Louisville | 10 | 12 | 2 | 20.0 |
| Richmond | 6 | 12 | 6 | 100.0 |
| Denver | 2 | 11 | 9 | 450.0 |
| Hartford | 9 | 11 | 2 | 22.2 |
| Honolulu | 9 | 11 | 2 | 22.2 |
| Sacramento | 9 | 11 | 2 | 22.2 |
| Wilmington | 11 | 11 | 0 | 0 |
| Alexandria | 7 | 10 | 3 | 42.9 |
| Newark | 8 | 10 | 2 | 25.0 |
| Orlando | 5 | 10 | 5 | 100.0 |
| St. Paul | 12 | 10 | -2 | 16.7 |
| Tacoma | 6 | 10 | 4 | 66.7 |
| Cleveland | 7 | 9 | 2 | 28.6 |
| Oakland | 8 | 9 | 1 | 12.5 |
| Pittsburgh | 8 | 8 | 0 | 0 |
| Akron | 6 | 7 | 1 | 16.7 |
| Buffalo | 6 | 7 | 1 | 16.7 |
| Milwaukee | 9 | 7 | -2 | -22.2 |

TABLE X (Continued)

| City | No. Schools with Soccer 1975-76 | No. Schools with Soccer 1977-78 | Net Increase or Decrease | Pct. Increase or Decrease |
|------------------|---------------------------------------|---------------------------------------|-----------------------------|------------------------------|
| Providence | 2 | 7 | 5 | 250.0 |
| Charlotte | 4 | 6 | 2 | 50.0 |
| Worcester | 4 | 6 | 2 | 50.0 |
| Asheville | 3 | 5 | 2 | 66.7 |
| Birmingham | 2 | 5 | 3 | 150.0 |
| Fort Lauderdale | 1 | 5 | 4 | 400.0 |
| Norfolk | 2 | 5 | 3 | 150.0 |
| St. Petersburg | 1 | 5 | 5 | 400.0 |
| Syracuse | 5 | 5 | 0 | 0 |
| Albany | 3 | 4 | 1 | 33.3 |
| Austin | 0 | 4 | 4 | 400.0 |
| Cambridge | 2 | 4 | 2 | 100.0 |
| Columbia | 2 | 4 | 2 | 100.0 |
| Dayton | 1 | 4 | 3 | 300.0 |
| Fort Worth | 0 | 4 | 4 | 400.0 |
| Houston | 2 | 4 | 2 | 100.0 |
| Nashville | 0 | 4 | 4 | 400.0 |
| Omaha | 2 | 4 | 2 | 100.0 |
| Pasadena | 5 | 4 | -1 | -20.0 |
| Columbus | 3 | 3 | 0 | 0 |
| Jersey City | 3 | 3 | 0 | 0 |
| Metairie | 2 | 3 | 1 | 50.0 |
| Minneapolis | 4 | 3 | -1 | -25.0 |
| Riverside | 3 | 3 | 0 | 0 |
| Savannah | 1 | 3 | 2 | 200.0 |
| Oklahoma City | 1 | 3 | 2 | 200.0 |
| Albuquerque | 1 | 2 | 1 | 100.0 |
| Anaheim | 1 | 2 | 1 | 100.0 |
| Chattanooga | 2 | 2 | 0 | 0 |
| Detroit | 1 | 2 | 1 | 100.0 |
| Indianapolis | 2 | 2 | 0 | 0 |
| Jackson | 0 | 2 | 2 | 200.0 |
| Kansas City, Mo. | 6 | 2 | -4 | -66.7 |
| Salt Lake City | 1 | 2 | 1 | 100.0 |
| San Antonio | 2 | 2 | 0 | 0 |
| Tampa | 0 | 2 | 2 | 200.0 |
| Toledo | 1 | 2 | 1 | 100.0 |
| Tulsa | 1 | 2 | 1 | 100.0 |
| Charleston | 1 | 1 | 0 | 0 |
| El Paso | 0 | 1 | 1 | 100.0 |
| Flint | 1 | 1 | 0 | 0 |
| Grand Rapids | 1 | 1 | 0 | 0 |

TABLE X (Continued)

| City | No. Schools with Soccer 1975-76 | No. Schools with Soccer 1977-78 | Net Increase or Decrease | Pct. Increase or Decrease |
|----------------------|---------------------------------------|---------------------------------------|-----------------------------|------------------------------|
| Green Bay | 0 | 1 | 1 | 100.0 |
| Greensboro | 1 | 1 | 0 | 0 |
| Kansas City, Ks. | 0 | 1 | 1 | 100.0 |
| Knoxville | 0 | 1 | 1 | 100.0 |
| Mobile | 0 | 1 | 1 | 100.0 |
| Spokane | 1 | 1 | 0 | 0 |
| Winston-Salem | 1 | 1 | 0 | 0 |
| Pensacola | 1 | 0 | -1 | -100.0 |
| Total (87 cities) | 553 | 824 | 271 | 49.0 |

Cities with 10 or more high schools which do not participate in soccer:

Baton Rouge
 Corpus Christi
 Erie
 Fort Wayne
 Lafayette
 Lake Charles
 Little Rock
 Macon
 Memphis
 Montgomery
 New Orleans
 Pensacola
 Phoenix
 Saginaw
 Shreveport
 Tucson
 Wichita
 Youngstown

Source: The National Directory of High School Coaches, 1975-76 and 1977-78.

significance. St. Louis, for example, ranked second to New York in schools (41), though 15 cities with soccer had more population.

Cities with populations less than 500,000 which were among the top 20 soccer participants included: Atlanta (third); Cincinnati (seventh); Miami (twelfth); Rochester (thirteenth); Portland (fifteenth); and Louisville and Richmond (tied for twentieth).

Besides New York, Philadelphia, Chicago and Los Angeles were the other cities with populations of one million or more found in the top 20. Cities with large populations, but with low soccer participation, were Detroit, Houston, Indianapolis and San Antonio.

In assessing the significance of city high school soccer to the total interscholastic participation of a state, the following guidelines were established. Cities were considered to dominate soccer in a state if their schools accounted for more than 50 per cent of total participation. Cities whose schools accounted for 40 to 49 per cent of a state's participation were deemed less important in dominating the sport, but were classified as major centers of interscholastic soccer participation.

Thirty of these metropolitan cities reported one-half or more of their high schools competing in soccer. States whose interscholastic participation was dominated by major cities were: Alabama, Mississippi, Tennessee, Nebraska, Missouri, Oklahoma, Texas, Oregon and Hawaii. In the above nine states, city school soccer comprised from 60 to 100 per cent of the total participation. Five additional states, Florida, Georgia, Kentucky, Ohio and Washington, had 40 to 49 per cent of their soccer participation confined to metropolitan cities.

Where the greatest proportion of soccer participation was located in metropolitan cities, the diffusion of the sport to other areas of the states was the most restricted. Also, contrasts in spatial variations of participation were most evident in these states. Omaha accounted for 60 per cent of Oregon's interscholastic soccer.

St. Louis was a prime example of a city dominating high school soccer within a state. Though diffusion has taken place in various sections of Missouri, 41 of the 63 soccer schools were situated in St. Louis. Diffusion has also been widespread in Texas, but almost two-thirds of the soccer schools are located in large urban areas. Dallas and Fort Worth alone accounted for 27 of the state's 58 schools.

If all 14 states are considered to be dominated by metropolitan cities in their soccer participation, a definite regional pattern is formed. At this time, soccer in the South and central United States is primarily a large urban phenomenon. Diffusion of the sport in these areas of the United States has shown little evidence of being adopted by less populated communities.

On a national basis, the influence of metropolitan cities on the level of soccer participation is not significant. If the present pattern of participation in the South is indicative of the natural diffusional process of the sport, conceivably, the large cities in the Northeast may have been the innovating impetus of soccer in the past. However, there is nothing to substantiate this hypothesis. In fact, several states currently participate in school soccer where few if any of the major cities offer the sport. In Arizona, Phoenix and Tucson do not participate. High school soccer in Louisiana is not found in the five most populous cities of New Orleans, Shreveport, Baton

Rouge, Lafayette and Lake Charles. The single city of any size that plays soccer is Metairie, a part of the New Orleans SMSA.

Another illustration depicting the relative insignificance of large, densely populated cities to the total number of schools playing soccer in the United States can be derived from the impact cities in New York and California have on participation in their respective states. Collectively, Albany, Buffalo, Rochester, Syracuse and New York City comprised 48 per cent of the state's 18 million inhabitants, but account for only 17.5 per cent of the total interscholastic participation. In California, the nine metropolitan cities surveyed in 1977-78 made up 30 per cent of the total population and 24 per cent of the participating schools.

As a group, cities located outside the regions where soccer participation was considered to be essentially a metropolitan city sport accounted for 17.5 per cent of the nation's high school soccer. This figure is eight per cent below the national percentage of metropolitan soccer participation. By comparison, cities found within these regions of high urban participation accounted for 53 per cent of the schools involved in soccer, or twice the average participation rate.

Emphasis of soccer in the metropolitan cities of the United States also varies regionally. Table XII (Appendix) offers a means for measuring the intensity of soccer participation by comparing the number of soccer coaches to the number of coaches in a dozen of the more prevalent sports in American schools. The 12 sports compared to soccer were: baseball, basketball, football, cross country, golf, gymnastics, hockey, skiing, swimming, track, wrestling and tennis.

Cities which exhibited a high number of participating schools and a mean number of coaches of 1.18 (the national norm) or higher were labeled as primary emphasizees of interscholastic soccer. Atlanta, with 39 of its total 44 schools playing soccer, merited consideration as the most prominent city in respect to a coaches mean of 1.90. Other cities that were classified as major emphasizees of high school soccer were Oakland, San Jose and Seattle in the West, Hartford, Baltimore and Rochester in the Northeast, and Honolulu. All of these cities had means of 1.33 or more.

Another observation of interscholastic soccer participation in some metropolitan cities was that a high percentage of the schools active in the sport were either private or parochial institutions. In the large cities with the greatest number of participating schools, parochial and private schools comprised about one-third of the total high school soccer (Table XI). Collectively, the top 20 soccer-participating cities were found to have 527 schools with soccer, 180 of which were private or parochial (34.2 per cent). Jacksonville had 61.5 per cent (8 of 13) of interscholastic soccer being played by non-public schools. Cities which had the highest number of Catholic schools engaged in soccer were St. Louis, Chicago and Philadelphia. New York City had the largest number (28) of parochial and private schools of any city.

In the 20 cities which ranked the lowest in soccer participation, the proportion of soccer schools which were parochial or private was extremely high. Twenty-five of the total 29 schools (86.2 per cent) competing in soccer in the lower 20 cities were either private or parochial. Interscholastic soccer in 16 of these low participating cities was restricted solely to private or parochial schools.

TABLE XI
 COMPARISON OF PUBLIC SCHOOLS TO PAROCHIAL
 AND PRIVATE SCHOOLS OFFERING SOCCER
 IN METROPOLITAN CITIES
 1977-78

| Top 20 Soccer Cities | Total No. of Soccer Schools | Number of Public Schools with Soccer | Number of Catholic Schools with Soccer | No. of other Parochial/Private Soccer Schools | Pct. Soccer Parochial or Private School |
|----------------------------|-----------------------------------|--|--|---|---|
| 1. New York | 77 | 48 | 6 | 23 | 37.7 |
| 2. St. Louis | 41 | 22 | 13 | 6 | 46.3 |
| 3. Atlanta | 39 | 34 | 2 | 3 | 12.8 |
| 4. Philadelphia | 38 | 22 | 8 | 8 | 42.1 |
| 5. Chicago | 35 | 22 | 10 | 3 | 37.1 |
| 6. Baltimore | 27 | 19 | 5 | 3 | 29.6 |
| 7. Cincinnati | 23 | 15 | 5 | 3 | 34.8 |
| 8. Dallas | 23 | 18 | 2 | 3 | 21.7 |
| 9. San Jose | 23 | 17 | 2 | 4 | 26.1 |
| 10. Seattle | 23 | 16 | 2 | 5 | 30.4 |
| 11. Los Angeles | 22 | 13 | 7 | 2 | 40.9 |
| 12. Miami | 21 | 13 | 2 | 6 | 38.1 |
| 13. Rochester | 21 | 13 | 7 | 1 | 38.1 |
| 14. Washington, D.C. | 19 | 11 | 3 | 5 | 42.1 |
| 15. Portland | 17 | 11 | 3 | 3 | 35.3 |
| 16. San Diego | 15 | 15 | 0 | 0 | 0 |
| 17. Boston | 13 | 9 | 3 | 1 | 30.8 |
| 18. Jacksonville | 13 | 5 | 1 | 7 | 61.5 |
| 19. San Francisco | 13 | 10 | 2 | 1 | 23.1 |
| 20. Louisville | 12 | 7 | 3 | 2 | 41.7 |
| Richmond | 12 | 7 | 1 | 4 | 41.7 |

TABLE XI (Continued)

| Bottom 20 Soccer Cities | Total No. of Soccer Schools | Number of Public Schools with Soccer | Number of Catholic Schools with Soccer | No. of other Parochial/Private Soccer Schools | Pct. Soccer Parochial or Private School |
|-------------------------------|-----------------------------------|--|--|---|---|
| 1. Detroit | 2 | 0 | 2 | 0 | 100 |
| 2. Indianapolis | 2 | 1 | 0 | 1 | 50 |
| 3. Jackson | 2 | 0 | 1 | 1 | 100 |
| 4. Kansas City, Mo. | 2 | 0 | 1 | 1 | 100 |
| 5. Salt Lake City | 2 | 0 | 0 | 2 | 100 |
| 6. San Antonio | 2 | 0 | 0 | 2 | 100 |
| 7. Tampa | 2 | 0 | 1 | 1 | 100 |
| 8. Toledo | 2 | 1 | 0 | 1 | 50 |
| 9. Tulsa | 2 | 0 | 0 | 2 | 100 |
| 10. Charleston | 1 | 0 | 0 | 1 | 100 |
| 11. El Paso | 1 | 1 | 0 | 0 | 0 |
| 12. Flint | 1 | 0 | 1 | 0 | 100 |
| 13. Grand Rapids | 1 | 0 | 0 | 1 | 100 |
| 14. Green Bay | 1 | 0 | 1 | 0 | 100 |
| 15. Greensboro | 1 | 1 | 0 | 0 | 0 |
| 16. Kansas City, Ks. | 1 | 0 | 0 | 1 | 100 |
| 17. Knoxville | 1 | 0 | 0 | 1 | 100 |
| 18. Mobile | 1 | 0 | 0 | 1 | 100 |
| 19. Spokane | 1 | 0 | 0 | 1 | 100 |
| 20. Winston-Salem | 1 | 0 | 1 | 0 | 100 |

Several implications can be derived from Table IX. In cities where soccer participation is low, it would appear that schools which are providing sport are likely to be parochial or private institutions. The high percentage of non-public schools playing soccer in the lower 20 participating cities further suggests that private and parochial schools have been the innovators of interscholastic soccer participation. It is probable that the development and dispersion of high school soccer in many of the metropolitan cities of the United States originated in the private sector and subsequently diffused to the public schools in a fashion similar to the growth of high school soccer in St. Louis.

Whereas the contributions of private and parochial schools to the diffusion of interscholastic soccer in some metropolitan cities are quite apparent, the influence of ethnic groups on the growth of the sport is not readily discerned. Of the 41 cities listed in Table XI, the great majority showed no meaningful relationship between soccer participation and the percentage of ethnic groups comprising the total population.

Demographic data obtained from the Bureau of the Census' Statistical Abstract of the United States reported the percentage of foreign stock (first and second generation Americans) found in cities with populations of 25,000 and more.¹¹ Cities which exhibited a significant number of schools offering soccer and a foreign stock accounting for 40 per cent or more of the population were Miami (54.4), San Francisco (44.3) and New York City (41.9). More than two-thirds of the ethnic populace in Miami is of Cuban descent, a country which is both strongly Catholic and active in soccer. The largest ethnic block in

San Francisco is Chinese, who have historically ignored soccer, but many Italians and other European nationalities reside in the Bay area and have undoubtedly influenced soccer participation. Twenty per cent of the ethnic groups in New York are Italian, but due to the vast array of foreign stock found in the city, ethnicity does not seem to play any significant role in the level of soccer participation.

Atlanta is an example of a city which has a high number of schools playing soccer but a low percentage of foreign stock population. Only 3.5 per cent of the city's inhabitants are first or second generation Americans, but 39 of its 44 schools participate in soccer. Atlanta's high school soccer is basically a public school sport, also as only five of the soccer schools are private or parochial. One factor which seems to have influenced the development of school soccer in Atlanta is the sponsorship of youth soccer programs by private and commercial establishments. The Coca-Cola Bottling Company, which is headquartered in Atlanta, has promoted soccer in the city for a number of years and has been the chief financial supporter of several soccer leagues and teams.¹²

Summary

Geographically, interscholastic soccer participation is largely confined to the heavily populated northeastern United States. The analysis of the diffusion of soccer at the high school level during the last 10 years reveals an increase in participation in most areas of the nation.

Interscholastic soccer participation appears to be closely associated with the level of intercollegiate participation found

throughout the different regions of the country. Perhaps one factor which serves to explain the high participation of high school soccer in the Northeast and various other localities is the presence of private and parochial schools, which were among the first institutions in many cities to adopt the sport.

Population density seems to be another factor conducive to the level of soccer participation. The less populated regions of the United States, such as the Great Plains and Southwest, exhibit a minimal degree of interscholastic soccer in comparison to the more populous Northeast, Midwest and West.

Spatial variations are prevalent at all levels of participation: national, state, regional and city. The pattern of soccer's development and diffusion within the nation's secondary school system resembles settlement patterns which occurred in the United States. The earlier settled areas of the Northeast, Midwest and West show a higher degree of soccer participation than do more recently inhabited sections of the country.

Competition with other sports may also affect the level of soccer participation. Regional or traditional sports which are heavily emphasized may preclude any progressive development of soccer on the high school level. School officials, athletic administrators and the public, who influence the sports participation opportunities of youth, have been criticized for not implementing athletic programs which stress the "minor" sports on a par basis with which they promote football, baseball and basketball.¹³

No one specific type of spatial diffusion has been responsible for the dispersion of the sport in this country. Soccer had been

introduced to the United States by immigrants from Great Britain, who acted as agents for relocating the sport from their native land to their newly adopted homeland. Over time, soccer became associated with the larger cities of the northeastern United States, where enclaves of numerous ethnic groups settled. From the city, soccer began to expand to smaller communities. Private soccer clubs and leagues replaced the colonists as the agents of soccer diffusion in the latter decades of the Nineteenth Century. These amateur organizations were instrumental in the subsequent growth of soccer on the intercollegiate level, and ultimately, on the high school level.

Analysis of interscholastic soccer in this chapter points to a national trend of increasing participation. It also indicates that in some quarters of the United States, high school soccer has emerged as an important, if not major, competitive sport.

FOOTNOTES

¹National Federation of State High School Athletic Associations, Official Handbook, 1967 (Elgin, Illinois).

²National Federation of State High School Athletic Associations, Sports Participation Survey, 1976 (Elgin, Illinois).

³National Federation of State High School Athletic Associations, Official Handbook, 1967.

⁴National Federation of State High School Athletic Associations, Official Handbook, 1972 (Elgin, Illinois).

⁵Rooney, A Geography of American Sport: From Cabin Creek to Anaheim, pp. 264-265.

⁶National Federation of State High School Athletic Associations, Sports Participation Survey, 1976.

⁷The National Directory of High School Coaches (Montgomery, Alabama, 1975).

⁸Rooney, A Geography of American Sport: From Cabin Creek to Anaheim, p. 74.

⁹Ibid., pp. 77-78.

¹⁰U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1975. Washington, D.C., U.S. Government Printing Office, 1975, pp. 11-13.

¹¹Ibid.

¹²Interview with John F. Rooney, Stillwater, Oklahoma, March 17, 1978.

¹³Hughes and Williams, p. 90.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

At the present, interscholastic soccer participation is on the rise, but there are variances in the number of participation opportunities among geographical regions of the United States. A decisive majority of American high school students have either a restricted opportunity, or none at all, to become actively involved in the sport and cultivate their skills.

Earlier chapters of this thesis examined the role of soccer in American sports culture and disclosed the sport's ineptitude in achieving national recognition and a mass following. The preceding chapter traced the recent growth of soccer within U.S. high schools and assessed the areal differences in its development and significance as a competitive sport. Although soccer has diffused to a majority of states, the number of high schools that participate comprise a small percentage of the nation's total number of schools.

Implications

For soccer to emerge as an important interscholastic sport, it must be more profusely adopted by schools in regions outside of the northeastern United States. Extensive diffusion has to take place in the South and Midwest, where, at present, soccer is in a somewhat stagnated position. Any decline in an already low level of high

school participation in these particular regions could foreseeably prove to be disastrous to the future expansion of interscholastic soccer in the United States.

Like all sports, soccer must establish itself as a viable component of high school athletics before entertaining any hopes of attaining national prominence. Soccer will not disappear from the American sports scene if it remains a minor high school sport, but it will probably never achieve the status in this country that it holds throughout much of the world.

The scarcity of soccer on any level in many areas of the nation suggests that the public possesses little knowledge of the sport. Subsequently, people are hard pressed to identify the relevance of incorporating soccer into local high school programs. In these "soccer-deprived" areas, exposure is considered to be of key importance. Continued diffusion of soccer into a greater number of schools within states is essential. Contemporary technology should be utilized, primarily via the television medium. National coverage of championship intercollegiate competition and World Cup matches would enhance public awareness and serve as an educational device.

School officials must assume the initiative in promoting soccer in the nation's high schools, if not on the varsity level than within the framework of physical education programs. Implementation of organized soccer on the elementary school level would hasten the growth of the sport in secondary schools. Increased opportunities for student participation should also include a higher degree of instruction and more qualified coaches. Local businesses and groups could finance and promote youth soccer programs in communities, also.

Recent trends of interscholastic soccer participation analyzed in this study point to a continuing national growth. Some observers are predicting that soccer will be the next major sport in the United States in the near future. Based on the current spatial variations of participation and the extent to which high school soccer has diffused, such a forecast does not appear to be all that much of a certainty because of the following reasons.

(1) Less than 20 per cent of the nation's high schools are participating in soccer at the present time. Of those which are playing the sport, more than 50 per cent are concentrated in one geographic region of the United States.

(2) Aside from the Northeast and California, soccer participation is generally insignificant. In many instances, where high school soccer is present, the sport is provided in only a handful of schools. Minimal growth has occurred in the South, Midwest, Great Plains and much of the West in the current decade.

(3) Adoption of the sport in the more populous cities of the United States has been erratic. In some metropolitan areas, soccer is a consequential sport; in others, it is barely visible or not to be found. The level of interscholastic soccer participation in metropolitan cities was seen to have no significant relationship with the degree of soccer participation in less urbanized soccer.

(4) Financial considerations must be taken into account. The repercussions of Proposition 13 in California have yet to be experienced. Possible tax reductions in many states could have an adverse effect on soccer as well as other sports. Budgetary constraints may eliminate soccer from athletic programs or prohibit its adoption.

(5) Social and cultural barriers seem to exist in many areas of the nation which are precluding the adoption of soccer into the athletic programs of the great majority of high schools. Public attitudes and preferences for more popular and traditional American sports are factors which have prevented the continued diffusion of soccer into regions outside the Northeast and California. Personal biases of some officials and coaches who favor and promote other sports have adversely affected the diffusion of interscholastic soccer participation in various parts of the United States. In several areas, such as the Great Plains and Southwest, there is little or no direct contact with soccer on any level of participation.

(6) Youth soccer programs, which have not been included in this thesis, are another element which requires closer examination. Local development of these programs should be observed to determine if they will provide an impetus to the sport's growth in elementary and secondary schools. Reports concerning numbers of youths involved in these programs have not been statistically confirmed, and there is no indication as to how widespread they are at the present time.

Further Investigation

Additional research is needed to more fully explain the spatial variation in interscholastic soccer participation. Some of the inquiries which have arisen from this study are: (1) What characteristics are found in regions of high participation as opposed to social and economic traits in areas of low participation?; (2) Have parochial and private schools been the innovators of interscholastic soccer in the larger cities of the United States? And, if so, have they been

a significant factor in the diffusion of the sport?; and (3) What is the extent of the public's knowledge and attitudes concerning soccer? Can their responses provide any insight to the geographic differences in participation?

Individual case studies of cities, states or micro regions may aid in identifying those factors which influence the significance of soccer as a high school sport. By discovering any factors which show a strong relationship with soccer, comparative analyses can be undertaken in areas where the sport has achieved little recognition and development on the interscholastic level.

Another aspect to consider is the relationship between soccer participation and population density. Are there significant differences in opportunities to participate between urban and rural communities? What population threshold exists, if any, which is conducive to soccer being incorporated into a high school's athletic program?

Different levels of analysis may divulge a better comprehension of the spatial variations associated with interscholastic participation. Further research on the county, SMSA or city level may provide some additional information on the subject.

These and other investigatory procedures are viewed as integral research approaches in accumulating more accurate and pertinent information of a sport whose international stature has failed to impress the majority of Americans and be assimilated into their sports culture.

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TABLE XII
 COMPARISON OF THE NUMBER OF SOCCER COACHES
 TO THE NUMBER OF COACHES
 IN 12 SELECTED SPORTS
 (By High School)

| City and High School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| BIRMINGHAM, AL. (M=1.60) | | | | | | | | | | | | | |
| Altamont School | 1 | 1 | 2 | | 1 | | | | | | 1 | | 1 |
| Banks | 2 | 2 | 1 | 4 | | 1 | | | | | 1 | 1 | 1 |
| George Washington Carver | 1 | 1 | 1 | 1 | | | | | | | 2 | | |
| Jones Valley | 2 | 1 | 2 | 1 | 1 | 2 | 2 | | | 2 | 2 | 1 | 2 |
| Mountain Brook | 2 | 2 | 2 | 4 | | 1 | 1 | | | 1 | 1 | 1 | 2 |
| MOBILE, AL. (M=2.00) | | | | | | | | | | | | | |
| University Military School | 2 | 2 | 1 | 8 | 1 | 1 | | | | | 1 | 1 | 1 |
| ANAHEIM, CA. (M=1.00) | | | | | | | | | | | | | |
| Canyon | 1 | 1 | 4 | 8 | 2 | 1 | | 1 | | | 2 | 1 | 2 |
| Servite | 1 | 2 | 4 | 9 | 1 | 1 | | | | 1 | 2 | | |
| LOS ANGELES, CA. (M=1.00) | | | | | | | | | | | | | |
| Belmont School | 1 | 1 | 2 | 2 | 1 | | 2 | | | | 2 | | 2 |
| Brentwood | 1 | 1 | 2 | 1 | | 1 | 1 | | | | | | |
| Cathedral | 1 | 2 | 3 | 5 | 1 | | | | | | 3 | | 1 |
| Daniel Murphy | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | 1 |
| Fairfax | 1 | 1 | 2 | 2 | | | 1 | | | 1 | | | 2 |
| Franklin School | 1 | 2 | 4 | 5 | 1 | | 2 | | | | 3 | 1 | 2 |
| Garfield | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 2 | 1 | 1 |
| Hamilton | 1 | 1 | 1 | 1 | | 2 | | | | 1 | 1 | | 1 |
| Kennedy | 1 | 1 | 4 | 2 | 1 | 2 | 2 | | | 1 | 3 | | 1 |
| Lincoln | 1 | 2 | 3 | 3 | 1 | | | | | | 3 | | 2 |
| Los Angeles | 1 | 1 | 2 | 1 | 1 | | 2 | | | 2 | 2 | | 2 |
| Loyola | 1 | 2 | 1 | 8 | | 1 | | | | 2 | 2 | | 1 |
| Lutheran | 1 | 1 | 2 | 1 | 1 | | | | | | 2 | | 1 |
| Lycee Francais | 1 | | 1 | | | | | | | | | | |
| Manual Arts | 1 | 1 | 2 | 1 | | 1 | 2 | | | 1 | 2 | 1 | 2 |
| Pater Noster | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | | |
| Roosevelt | 1 | 1 | 2 | 1 | 1 | | 2 | | | 1 | 2 | | 2 |

Key: So - Soccer
 Bb - Baseball
 B - Basketball
 F - Football
 Cc - Cross Country
 G - Golf
 Gy - Gymnastics
 H - Hockey
 Sk - Skiing
 S - Swimming
 T - Track
 W - Wrestling
 Te - Tennis
 M - Mean number of soccer coaches per city

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|--------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Salesian | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | | |
| University | 1 | 1 | 2 | 1 | 1 | 2 | 2 | | | 1 | 2 | | 2 |
| Venice | 1 | 1 | 2 | 2 | 1 | 1 | 2 | | | 2 | 1 | | 1 |
| Verbum Dei | 1 | 2 | 3 | 8 | | | | | | | 1 | | |
| Wilson | 1 | 1 | 2 | 1 | 1 | | 2 | | | | 2 | 1 | 2 |
| OAKLAND, CA. (M=1.33) | | | | | | | | | | | | | |
| Bishop O'Dowd School | 1 | 1 | 4 | 3 | 1 | 1 | | | | 1 | 2 | | 2 |
| Castlemont | 1 | | 2 | 1 | 1 | 1 | 2 | | | 1 | 2 | 1 | 1 |
| College Prep School | 2 | | 2 | | | 1 | | | | | | | 1 |
| McClymonds Senior | 1 | 1 | 2 | 2 | 1 | 1 | 2 | | | | 1 | 1 | 1 |
| Oakland | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Oakland Technical | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 2 | 1 | 2 |
| Royce | 3 | 1 | 4 | | 1 | | 1 | | | 1 | | | 2 |
| Saint Elizabeth | 1 | 2 | 1 | 1 | | | | | | | 1 | | 1 |
| Skyline | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 2 | 2 | | 2 |
| PASADENA, CA. (M=1.00) | | | | | | | | | | | | | |
| Chandler | 1 | 1 | 1 | 1 | | 1 | | | | | 1 | | 1 |
| La Salle | 1 | 1 | 1 | | 1 | 2 | | | | 1 | 1 | | |
| Muir School | 1 | 1 | 3 | 2 | 1 | | 1 | | | 2 | 3 | 1 | 2 |
| Pasadena | 1 | 1 | 2 | 3 | 1 | 1 | 2 | | | 2 | 3 | | 2 |
| RIVERSIDE, CA. (M=1.00) | | | | | | | | | | | | | |
| John W. North | 1 | 1 | 1 | 5 | 1 | 1 | 1 | | | 1 | 2 | | 1 |
| Poly Riverside | 1 | 1 | 2 | 3 | 1 | 1 | 1 | | | 2 | 2 | 1 | 1 |
| Rubidoux | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 1 |
| SACRAMENTO, CA. (M=1.00) | | | | | | | | | | | | | |
| Burbank Senior | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 2 |
| C. K. McClatchy | 1 | 3 | 4 | 4 | 2 | 1 | | | | 2 | 3 | 1 | 2 |
| El Camino | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 2 |
| Encina | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 2 |
| Foothills School | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 2 |
| Grant | 1 | 2 | 1 | 1 | 1 | 2 | 1 | | | | 2 | 1 | 1 |
| Jesuit | 1 | 1 | 3 | 1 | 1 | 1 | | | | 1 | 2 | | 1 |
| John F. Kennedy | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 2 |
| Norte Del Rio | 1 | 2 | 3 | 4 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Rio Americano | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Sacramento | 1 | 2 | 4 | 3 | 1 | 1 | 1 | | | | 3 | 1 | 2 |
| SAN DIEGO, CA. (M=1.13) | | | | | | | | | | | | | |
| Abraham Lincoln | 1 | 1 | 2 | | 1 | | 1 | | | 1 | 2 | 1 | 2 |
| Clairemont | 1 | 2 | 3 | 3 | 1 | 1 | | | | 2 | 3 | 1 | 2 |
| Crawford | 2 | 2 | 1 | 4 | 1 | | | | | 1 | 2 | 1 | 1 |
| Kearney | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Madison | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Marian | 1 | 2 | 3 | 4 | 1 | 1 | 1 | | | | 1 | 1 | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Mission Bay | 1 | 2 | 2 | 3 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Montgomery | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 2 |
| Mt. Carmel | 1 | 1 | 2 | 6 | 1 | 1 | 1 | | | 1 | 1 | | 3 |
| Patrick Henry | 1 | 1 | 2 | 4 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Point Loma | 2 | 2 | 1 | 4 | 1 | | 1 | | | 1 | 3 | 1 | 1 |
| Samuel F. B. Morse | 1 | 1 | 2 | 1 | 1 | | 1 | | | 1 | 2 | 1 | 2 |
| San Diego | 1 | 2 | 1 | 3 | 1 | 1 | | | | | 2 | 1 | 1 |
| Southwest | 1 | 1 | 1 | | 1 | | | | | | 1 | 1 | 1 |
| University | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| SAN FRANCISCO, CA. (M=1.08) | | | | | | | | | | | | | |
| Abraham Lincoln School | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Balboa | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Galileo | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| George Washington | 1 | 2 | 4 | 4 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| J. Eugene McAteer | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 2 |
| John A. O'Connell School | 1 | 1 | 1 | 1 | | | | | | | | 1 | |
| Lick-Wilmerding | 1 | 1 | 2 | | 1 | | | | | 1 | 1 | | 1 |
| Lowell | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 2 | 1 | 1 | 2 |
| Mission | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Riordan | 2 | 2 | 3 | 4 | 1 | 1 | | | | | 3 | | 1 |
| Sacred Heart | 1 | | 1 | 1 | 1 | 1 | | | | | 1 | | 1 |
| San Francisco Christian | 1 | 1 | 1 | | | | | | | | | | |
| Woodrow Wilson | 1 | 2 | 2 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| SAN JOSE, CA. (M=1.39) | | | | | | | | | | | | | |
| Abraham Lincoln | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 2 | 1 | 2 |
| Andrew Hill | 3 | 2 | 2 | 7 | 1 | 1 | 1 | | | 2 | 2 | 2 | 2 |
| Archbishop Mitty | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | | 2 |
| Bellarmino College Prep | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Blackford | 1 | | 1 | 3 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Branham | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Camden | 1 | 2 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 |
| Del Mar | 1 | 1 | 3 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 2 |
| James Lick | 1 | 1 | 1 | 2 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Leigh | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| Leland | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 2 | 2 | 1 | 2 |
| Liberty Christian | 1 | 1 | 2 | | 1 | | | | | | 1 | | |
| Mount Pleasant | 1 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 2 | 1 | 1 |
| Oak Grove | 1 | 2 | 3 | 6 | 1 | 1 | | | | 4 | 4 | 2 | 2 |
| Piedmont Hills | 2 | 2 | 3 | 7 | 1 | 1 | | | | 1 | 3 | 1 | 1 |
| Pioneer | 1 | 1 | 2 | 3 | 1 | 1 | 1 | | | 1 | 1 | 1 | 2 |
| San Jose Christian | 1 | 1 | 2 | | 1 | | | | | | 1 | | 1 |
| San Jose | 2 | 2 | 3 | 3 | 1 | | 1 | | | | 1 | 1 | 2 |
| Santa Theresa | 2 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 2 | 1 | 2 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-------------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| WASHINGTON, D.C. (M=1.11) | | | | | | | | | | | | | |
| Anacostia | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | | 1 |
| Calvin Coolidge | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | | 2 | | 2 |
| Cynthia Warner | 1 | 1 | 1 | 1 | | | | | | | | | 1 |
| Dunbar | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | 1 | 2 | | 2 |
| Fairmont Heights | 1 | 1 | 2 | 1 | | 1 | | | | | 1 | 1 | |
| Gonzago | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | 1 |
| Howard P. Woodson | 1 | 1 | 2 | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Immaculata Prep School | 1 | | 1 | | | | 1 | | | | 2 | | 1 |
| Mackin | 1 | 1 | | | | | | | | | 1 | | |
| Maret School | 2 | 1 | 2 | 1 | | | | | | | | | 1 |
| McKinley | 1 | 1 | 2 | 4 | | | 1 | | | | 2 | | |
| Sidwell Friends School | 2 | 2 | 2 | 5 | 1 | 1 | 1 | | | | 2 | 1 | 3 |
| Springharn | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | | | 2 | | |
| St. Albans | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 2 | 1 | |
| St. Anthony | 1 | 1 | 2 | | 1 | | 1 | | | | 2 | | |
| St. Johns | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 2 | 1 | |
| Western | 1 | | 1 | | | 1 | | | | | 1 | | 1 |
| Woodrow Wilson | 1 | 2 | 3 | 1 | 1 | 1 | 1 | | | 1 | 2 | | 1 |
| Woodson Senior | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| FORT LAUDERDALE, FL. (M=1.00) | | | | | | | | | | | | | |
| Dillard | 1 | 1 | 2 | 1 | 2 | 1 | | | | 2 | 2 | 1 | 1 |
| Pine Crest School | 1 | 1 | 1 | 2 | 1 | 1 | | | | 1 | | 1 | 1 |
| St. Thomas Aquinas | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 2 |
| University School | 1 | | 2 | | 1 | 1 | | | | | | | 2 |
| Westminster Academy | 1 | | 2 | 1 | 1 | | | | | | 1 | | |
| JACKSONVILLE, FL. (M=1.08) | | | | | | | | | | | | | |
| Bishop Kenny | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 1 |
| DuPont | 2 | 1 | 2 | 3 | | | | | | | 2 | | |
| Duncan U. Fletcher | 1 | 1 | 2 | 1 | 2 | 2 | | | | 2 | 2 | 1 | 2 |
| Edward H. White | 1 | 1 | 2 | 1 | 2 | 2 | | | | 2 | 2 | 1 | 2 |
| Jacksonville Episcopal | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Nathan B. Forrest | 1 | 1 | 3 | 7 | 2 | 3 | | | | 2 | 2 | 1 | 1 |
| North Jacksonville Academy | 1 | 1 | 2 | 1 | | | 1 | | | | 1 | | |
| Southside Country Day | 1 | | | | 1 | | | | | 1 | | | |
| Southside Estates Academy | 1 | 1 | 2 | 1 | | | | | | | | | |
| Temple Christian School | 1 | 1 | | | | | | | | | | | |
| Terry Parker | 1 | 1 | 2 | 1 | 2 | 2 | | | | 2 | 2 | 1 | 2 |
| The Bolles School | 1 | 1 | 2 | 1 | 2 | 1 | | | | 1 | 2 | 1 | 1 |
| Victory Christian Academy | 1 | 1 | 4 | 2 | 1 | 1 | | | | | 1 | | |
| MIAMI, FL. (M=1.00) | | | | | | | | | | | | | |
| Archbishop Curley School | 1 | 1 | 2 | 4 | | 1 | | | | | | | |
| Loyola School | 1 | 2 | 3 | 2 | 1 | | | | | | 1 | | 1 |
| Miami Central | 1 | 1 | 2 | 1 | | | | | | 1 | 2 | 1 | 1 |
| Miami Coral Park | 1 | 1 | 1 | 2 | | | 2 | | | 1 | 2 | 1 | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|------------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Miami Country Day School | 1 | 2 | 1 | 2 | | | | | | 2 | 2 | | 2 |
| Miami Edison | 1 | 1 | 2 | 1 | | 1 | | | | | 1 | 1 | 1 |
| Miami High School | 1 | 1 | 1 | | | 2 | | | | 1 | 1 | 1 | 1 |
| Miami Jackson | 1 | 1 | 2 | 1 | 2 | 1 | 2 | | | | 2 | 1 | 1 |
| Miami Killiam | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Miami Norland | 1 | 1 | 1 | 1 | 2 | 1 | | | | 1 | 2 | 1 | 1 |
| Miami Southridge | 1 | 1 | 2 | 1 | 2 | | 1 | | | 1 | 2 | 1 | 1 |
| Northwestern | 1 | 1 | 2 | 1 | 2 | | 2 | | | 1 | 2 | | |
| Palmer Prep School | 1 | 1 | 2 | 1 | 1 | 1 | | | | | | 1 | 2 |
| Palmetto Senior | 1 | 1 | 3 | 4 | 1 | 1 | | | | 1 | 3 | 2 | 1 |
| Ransom-Everglades | 1 | 1 | 2 | 1 | 2 | 1 | 2 | | | 2 | 2 | 1 | 1 |
| South Fla. Military Academy | 1 | 1 | 1 | 1 | | | | | | | | | |
| South Miami | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Southwestern Miami | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| St. Brendan | 1 | 1 | 3 | | 1 | | | | | 2 | 1 | | 2 |
| The Lear School | 1 | 1 | 2 | | | | | | | | | | |
| Westminster Christian | 1 | 1 | 2 | 1 | 2 | 1 | | | | 2 | 1 | | 1 |
| ORLANDO, FL. (M=1.20) | | | | | | | | | | | | | |
| Bishop Moore School | 1 | 1 | 2 | 1 | 1 | 2 | | | | 1 | 1 | 1 | 2 |
| Colonial | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Edgewater | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | 1 | 1 | 2 | 2 |
| Jones | 1 | 1 | 2 | 1 | 1 | | | | | | 2 | | 2 |
| Lake Highland Prep School | 1 | 1 | 2 | 1 | 1 | | | | | 1 | 1 | | 2 |
| Maynard Evans School | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Oak Ridge | 1 | 1 | 3 | 4 | 2 | 1 | 1 | | | 1 | 2 | 1 | 2 |
| Tabernacle Christian Sci. | 1 | 2 | 2 | 1 | | | | | | | | | |
| Trinity Prep School | 3 | | | 3 | 1 | | | | | 2 | 1 | | 2 |
| William R. Boone | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| ST. PETERSBURG, FL. (M=1.20) | | | | | | | | | | | | | |
| Admiral Farragut Academy | 1 | 1 | 1 | 2 | | 1 | | | | 1 | 2 | | 1 |
| Canterbury School | 1 | 1 | 2 | | | | | | | | | | 1 |
| Keswick Christian School | 2 | 1 | 2 | | | | | | | 2 | | | |
| Shorecrest School | 1 | 1 | 2 | 1 | | | | | | 1 | 2 | | 2 |
| St. Petersburg Christian | 1 | 1 | 2 | | | | | | | | | | |
| TAMPA, FL. (M=1.00) | | | | | | | | | | | | | |
| Bayshore Meth. Ch. Science | 1 | 1 | 2 | | | | | | | | | | |
| Tampa Prep School | 1 | | 1 | | | 1 | | | | 2 | | 1 | 1 |
| ATLANTA, GA. (M=1.90) | | | | | | | | | | | | | |
| Archer | 1 | 2 | 5 | 5 | 1 | 1 | | | | | 3 | 1 | 1 |
| B. T. Washington | 1 | 2 | 4 | 4 | | | | | | | 2 | | 1 |
| Bass School | 1 | 2 | 4 | 4 | | | | | | | 3 | | 1 |
| Briarcliff School | 2 | 2 | 7 | 6 | 1 | | 2 | | | 2 | 3 | 2 | 1 |
| Brown | 1 | 2 | 3 | 5 | 2 | 1 | | | | | 2 | | |
| Carver | 1 | 2 | 4 | 6 | 1 | 1 | 1 | | | | 4 | | 1 |
| Crestwood | 2 | 1 | 3 | 6 | 1 | 1 | 1 | | | | 3 | 2 | 1 |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|----|----|---|----|---|----|---|---|---|----|
| Cross Keys School | 2 | 2 | 7 | 6 | 1 | | 2 | | 1 | 3 | 2 | 1 | |
| Druid Hills School | 2 | 2 | 5 | 7 | 1 | | | | 1 | 4 | 1 | 1 | |
| Dunwoody | 1 | 2 | 5 | 7 | 1 | | 2 | | 1 | 3 | 3 | 1 | |
| East Atlanta | 1 | 2 | 3 | 5 | 1 | 1 | | | | 2 | | 1 | |
| Frederick Douglass School | 1 | 2 | 3 | 5 | 1 | 1 | | | | 3 | | 1 | |
| Fulton | 1 | 2 | 4 | 5 | 2 | 1 | | | | 3 | | 1 | |
| Galloway | 2 | | 3 | | 1 | 1 | | | | 1 | | 3 | |
| George School | 1 | 2 | 4 | 6 | 1 | 1 | | | | 4 | | 1 | |
| Grady School | 2 | 2 | 3 | 5 | 1 | 1 | | | | 3 | 1 | 1 | |
| Harper | 2 | 2 | 3 | 6 | 1 | 1 | | | | 3 | | 1 | |
| Howard School | 1 | 2 | 4 | 6 | 1 | 1 | | | | 3 | | 1 | |
| Lakeside School | 3 | 2 | 6 | 7 | 1 | 1 | 3 | | 1 | 3 | 2 | 1 | |
| Lovett | 2 | 2 | 5 | 7 | 1 | | 1 | | | 5 | 3 | 6 | |
| Marist School | 3 | 3 | 4 | 9 | 1 | 1 | | | 1 | 2 | 3 | 1 | |
| Murphy School | 2 | 3 | 5 | 6 | 1 | 1 | | | | 2 | | | |
| North Fulton | 1 | 1 | 1 | 3 | 1 | 1 | | | | 2 | | 1 | |
| North Springs | 2 | 1 | 4 | 6 | | | | | 1 | 2 | | | |
| Northside | 2 | 1 | 3 | 5 | 1 | 1 | | | | 4 | 2 | 1 | |
| O'Keefe | 1 | 2 | 5 | 4 | | 3 | | | | 2 | | | |
| Pace Academy | 5 | 2 | 9 | | 1 | 1 | 1 | | 1 | 3 | 1 | 2 | |
| Price | 2 | 2 | 5 | 5 | | 1 | | | | 3 | | 1 | |
| Ridgeview | 1 | 1 | 3 | 5 | 1 | 1 | 1 | | | 3 | 2 | 1 | |
| Riverwood | 1 | 1 | 5 | 6 | 1 | 1 | 1 | | | 3 | 2 | 1 | |
| Roosevelt | 2 | 2 | 5 | 6 | | 1 | | | | 3 | | 1 | |
| Saint Pius X School | 2 | 3 | 6 | 3 | 1 | | | | | 4 | | 2 | |
| Smith School | 1 | 2 | 4 | 6 | 1 | 1 | | | | 2 | | 2 | |
| Southwest | 1 | 2 | 4 | 6 | 1 | 1 | | | | 4 | | 1 | |
| Sylvan School | 3 | 3 | 4 | 6 | 1 | 1 | | | | 3 | | 3 | |
| Therrell | 3 | 2 | 4 | 8 | | 2 | | | | 3 | | 2 | |
| Turner | 2 | 3 | 3 | 6 | 1 | 1 | | | | 3 | | 1 | |
| Walker | 2 | 5 | 6 | 11 | 1 | 3 | | | | 2 | 6 | 3 | 2 |
| Westminster | 8 | 3 | 6 | 5 | 3 | 1 | 1 | | | 2 | 8 | 3 | 3 |
| SAVANNAH, GA. (M=2.00) | | | | | | | | | | | | | |
| Benedictine Military School | 2 | 1 | 4 | 5 | | 3 | | | | 1 | 1 | 1 | |
| Jenkins | 1 | 1 | 3 | 5 | 1 | 1 | | | | 3 | | 2 | |
| Savannah Country Day School | 3 | | 4 | 2 | | 1 | | | | 2 | | 1 | |
| HONOLULU, HA. (M=1.36) | | | | | | | | | | | | | |
| Farrington | 1 | 2 | 4 | 9 | 1 | 1 | | | | 2 | 1 | 1 | 2 |
| Iolani School | 2 | 4 | 4 | 19 | 3 | 2 | 1 | | | 1 | 3 | 1 | 3 |
| Kaimuki | 1 | 2 | 5 | 6 | 1 | 1 | | | | 1 | 3 | 1 | 2 |
| Kaiser | 2 | 1 | 7 | 9 | 2 | 1 | | | | 2 | 4 | 4 | 1 |
| Kalani | 1 | 1 | 3 | 6 | 1 | 1 | | | | 6 | 6 | | 2 |
| Kamehameha | 2 | 4 | 3 | 11 | 2 | 1 | 1 | | | 4 | 3 | 1 | 1 |
| Mid-Pacific Institute | 1 | 4 | 4 | 7 | 1 | | | | | 1 | 2 | 1 | 2 |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|----|----|---|----|---|----|---|---|---|----|
| Moanalua | 1 | 2 | 2 | 8 | 1 | 1 | | | | | 3 | 2 | 1 |
| Punahou | 1 | 1 | 5 | 2 | 2 | 2 | 1 | | | 1 | 2 | | 3 |
| Roosevelt | 1 | 3 | 3 | 6 | 1 | 1 | | | | | 3 | | 2 |
| St. Louis | 1 | 2 | 2 | 12 | 1 | 1 | | | | | 2 | 2 | 1 |
| CHICAGO, IL. (M=1.11) | | | | | | | | | | | | | |
| Bowen | 1 | 1 | 1 | 1 | | 1 | | | | 2 | 1 | | 2 |
| Brother Rice | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Carter H. Harrison School | 1 | 2 | 2 | 2 | 1 | | | | | 1 | 1 | 1 | |
| Clemente | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 |
| De La Salle D'Institute | 1 | 1 | 1 | 1 | | | | 1 | | | | 1 | 1 |
| Farragut | 1 | 1 | 2 | 1 | 1 | | | | | | 2 | 1 | 1 |
| Foreman | 1 | 1 | 1 | 1 | | 2 | | | | 1 | 1 | | 1 |
| Francis W. Parker | 3 | 1 | 2 | | 1 | 1 | | | | | 1 | | 1 |
| George Washington | 1 | 1 | 2 | 3 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Gordon Technical | 1 | 1 | 1 | 1 | | | | | | | 1 | 1 | |
| Hales Franciscan School | 1 | 2 | 2 | | | | | | | | | | 1 |
| Harrison | 1 | 1 | 3 | 2 | 1 | | | | | 2 | 1 | 1 | 2 |
| Holy Trinity | 1 | 2 | 3 | | 1 | | | | | | | 1 | |
| Kenwood | 1 | 1 | 2 | 1 | 1 | | | | | 2 | 2 | | 2 |
| Lake Forest Academy | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Lake View School | 1 | 2 | 2 | 4 | 1 | 1 | 1 | | | 1 | 3 | 1 | |
| Lane Technical | 2 | 1 | 2 | 1 | 1 | 1 | 2 | | | 3 | 2 | 1 | 2 |
| Latin School of Chicago | 1 | 1 | 2 | | | 1 | | | | 1 | 1 | | 2 |
| Marie Curie | 1 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 2 | 1 | 1 |
| Marist | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | | 1 |
| Nicholas Senior | 1 | 2 | 2 | 3 | 1 | | | | | 1 | 1 | 1 | 1 |
| Orr | 1 | 2 | 3 | 2 | 1 | | | | | 2 | 2 | 1 | 2 |
| Quigley Prep-Seminary North | 1 | 1 | 3 | | 1 | 1 | | | | 1 | | | 2 |
| Roosevelt | 2 | 2 | 1 | 2 | 1 | | | | | 1 | 1 | | 1 |
| Schurz | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 1 | 1 | 2 |
| South Quigley School | 1 | 1 | 2 | | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| South Shore | 1 | | 4 | 3 | 1 | 1 | 4 | | | 3 | 2 | 1 | |
| St. Francis DeSales School | 1 | 4 | 2 | 7 | | | | | | | | 2 | 1 |
| St. Ignatius | 1 | 1 | 1 | | 1 | 1 | | | | 1 | 1 | | 1 |
| St. Michael's Central | 1 | 1 | 1 | | | | | | | | 1 | | |
| St. Rita | 1 | 1 | 1 | 1 | | | | | | | | | |
| Taft | 1 | 1 | 2 | 2 | 1 | 1 | | | | 1 | | | 1 |
| Tilden | 1 | 1 | 2 | | | | | | | 1 | | 1 | |
| University Chicago | 1 | 1 | 2 | | 1 | | 1 | | | 1 | 1 | | 1 |
| Von Steuben | 1 | 1 | 1 | | 1 | | | | | 1 | 2 | | 1 |
| INDIANAPOLIS, IN. (M=1.00) | | | | | | | | | | | | | |
| Indianapolis Baptist | 1 | | 2 | | 1 | 1 | | | | | 2 | 1 | |
| Pike School | 1 | 1 | 3 | 3 | 1 | 2 | 2 | | | 2 | 2 | 1 | 2 |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| KANSAS CITY, KS. (M=2.00) | | | | | | | | | | | | | |
| Savior of the World | 2 | 2 | 2 | | 1 | | | | | | 1 | | 2 |
| LOUISVILLE, KY. (M=1.08) | | | | | | | | | | | | | |
| Atherton | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Ballard | 1 | 1 | 2 | 1 | 1 | 2 | | | | 1 | 2 | 1 | 2 |
| Bishop David | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | 1 |
| Central | 1 | 1 | 2 | 1 | 2 | 2 | | | | 1 | 1 | 1 | 1 |
| De Sales | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 |
| Jesse Stuart | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| Kentucky Country Day School | 2 | 1 | 1 | 2 | 1 | 2 | 1 | | | 1 | 1 | | 2 |
| Marion C. Moore | 1 | 1 | 3 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Saint Xavier | 1 | 1 | 1 | 1 | 2 | 1 | | | | 1 | 1 | 1 | 1 |
| Thomas Jefferson | 1 | 1 | 1 | 1 | 2 | | | | | | 2 | 1 | 1 |
| Trinity | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Westport | 1 | 2 | 4 | 4 | 2 | 2 | | | | | 2 | 1 | 1 |
| METAIRIE, LA. (M=1.00) | | | | | | | | | | | | | |
| Bonnabel | 1 | 2 | 1 | 7 | 1 | 1 | | | | 1 | 2 | 2 | 1 |
| Rummel School | 1 | 1 | 1 | 1 | | 1 | | | | 1 | 1 | 1 | 1 |
| St. Martin's Episcopal | 1 | | 6 | 6 | 1 | 1 | | | | 1 | 6 | 1 | 2 |
| BALTIMORE, MD. (M=1.41) | | | | | | | | | | | | | |
| Archbishop Curley | 2 | 2 | 3 | 5 | 1 | | | | | | 3 | 2 | |
| Baltimore City College | 1 | 2 | 2 | 4 | | | | | | 1 | 2 | 2 | |
| Baltimore Polytechnic Inst. | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Boys Latin School | 2 | 2 | 2 | 4 | 1 | 1 | | | | | | 1 | 2 |
| Brooklyn Park | 1 | 1 | 2 | 5 | 1 | | | | | | 1 | 1 | 1 |
| Cardinal Gibbons School | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 |
| Eastern Vocational Tech | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| Edmondson | 2 | 1 | 3 | 5 | 1 | | 1 | | | 1 | 3 | 1 | 2 |
| Friends School | 3 | | 5 | 2 | | 1 | 1 | | | | | | 4 |
| Gilman School | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Lake Clifton | 1 | 1 | 2 | 1 | | | 1 | | | 2 | 2 | 1 | 2 |
| Landsdowne | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 1 |
| Loch Raven Senior | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| Lutheran | 3 | 5 | 2 | | 1 | | | | | | | 2 | |
| Mergenthaler Voc. Tech. | 1 | 1 | 1 | 1 | 1 | | | | | 2 | 2 | 1 | 1 |
| Milford Mill School | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 1 |
| Mt. Saint Josephs | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| Northern | 2 | 2 | 3 | 5 | 1 | | | | | 3 | 3 | 2 | 3 |
| Our Lady of Mr. Carmel | 1 | 1 | 2 | | | | | | | | | | |
| Our Lady of Pompeii | 1 | 1 | 2 | | | | | | | | | | |
| Overlea Senior | 2 | 2 | 4 | 3 | 2 | | 2 | | | | 3 | 2 | 1 |
| Patapsco School | 1 | 1 | 2 | 1 | 1 | | | | | | 2 | 1 | 1 |
| Pikesville Senior | 2 | 2 | 3 | 3 | 2 | 1 | 1 | | | | 3 | 1 | 1 |
| Southwestern | 1 | 1 | 2 | 1 | 1 | | | | | 2 | 2 | 1 | 2 |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|------------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Sparrows Point Senior | 1 | 1 | 3 | 3 | 1 | | | | | | 1 | 1 | 1 |
| Walbrook | 1 | 1 | 2 | 2 | 1 | | 1 | | | 2 | 3 | 1 | 2 |
| Woodlawn | 2 | 3 | 4 | 5 | 2 | 1 | 1 | | | | 4 | 2 | 1 |
| BOSTON, MA. (M=1.08) | | | | | | | | | | | | | |
| Boston English | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 1 | 2 | | 1 |
| Boston Latin School | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 2 | 2 | 1 | 2 |
| Boston Tech | 1 | 2 | 1 | | | 1 | | 1 | | 2 | 1 | 1 | 1 |
| Brighton | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 2 |
| Cathedral | 1 | 1 | 4 | 4 | | | | | | | 2 | | |
| Catholic Memorial | 2 | 2 | 3 | 5 | 3 | 1 | | 1 | | 1 | 4 | 2 | 1 |
| Charlestown | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 1 | 2 | 1 | 2 |
| Commonwealth | 1 | | | | | | | | | 1 | | | |
| Copley | 1 | 1 | 1 | | | | | 1 | | | | | 1 |
| Don Bosco Technical | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 |
| East Boston | 1 | 1 | 2 | 1 | 1 | | | 1 | | | 2 | | |
| J. E. Burke | 1 | 1 | 2 | 1 | 1 | | | 1 | | 1 | 2 | | |
| South Boston | 1 | 1 | 2 | 1 | | | | 1 | | 1 | 2 | | |
| CAMBRIDGE, MA. (M=1.25) | | | | | | | | | | | | | |
| Buckingham, Browne & Nichols | 2 | 1 | 2 | 1 | 2 | | | 1 | | | 1 | 1 | 2 |
| High and Latin | 1 | 1 | 2 | 1 | 2 | | | 1 | | 3 | 2 | | 2 |
| Rindge Technical Academy | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| The New Preparatory | 1 | 1 | 1 | | | 1 | | 1 | | 1 | | | 1 |
| WORCESTER, MA. (M=1.17) | | | | | | | | | | | | | |
| Assumption Prep School | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | | 1 |
| Bancroft | 1 | 1 | 2 | | | | | | | | | | 1 |
| Holy Name Central Catholic | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | | |
| North | 1 | 1 | 3 | 4 | 2 | 1 | | 1 | | | 1 | | 2 |
| St. Peter-Marrian CC | 1 | 1 | 2 | 1 | | | | 1 | | | | | |
| Worcester Academy | 2 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 |
| DETROIT, MI. (M=1.00) | | | | | | | | | | | | | |
| De LaSalle School | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | | 1 |
| Saint Gabriel | 1 | 1 | 2 | | | | | | | | | | |
| FLINT, MI. (M=1.00) | | | | | | | | | | | | | |
| Holy Rosary | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| GRAND RAPIDS, MI. (M=1.00) | | | | | | | | | | | | | |
| Grand Rapids Christian | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | | 2 | 2 | 1 | 2 |
| MINNEAPOLIS, MN. (M=1.00) | | | | | | | | | | | | | |
| Blake | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 2 |
| Breck | 1 | 1 | 1 | 1 | | 2 | 1 | | 1 | | 2 | | 1 |
| Minnehaha Academy | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | | 1 | | 1 |
| ST. PAUL, MN. (M=1.20) | | | | | | | | | | | | | |
| Cretin | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Frank B. Kellogg School | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | | 2 | 2 | 1 | 2 |
| Harding | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|----|----|---|----|---|----|---|---|---|----|
| Henry Sibley Senior | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 2 | 2 | 1 | 1 |
| Hill-Murray | 2 | 1 | 3 | 6 | 1 | 1 | 1 | 3 | | 2 | 3 | 1 | 1 |
| Irondale | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 2 | 1 | 1 | 1 |
| Mounds View | 2 | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 4 |
| Saint Thomas Academy | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 2 | 1 |
| St. Paul Academy and Summit | 1 | 1 | 2 | 1 | 2 | 1 | | 1 | 1 | | 2 | 1 | 1 |
| Tartan | 1 | 1 | 3 | 4 | | | 2 | 2 | | 1 | 3 | 2 | 5 |
| JACKSON, MS. (M=1.00) | | | | | | | | | | | | | |
| Saint Joseph | 1 | 2 | 2 | 1 | | 1 | | | | 1 | 2 | | 1 |
| St. Andrew's Episcopal | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | | | 1 |
| KANSAS CITY, MO. (M=1.00) | | | | | | | | | | | | | |
| Barstow School | 1 | 1 | 3 | | | 1 | | | | | 4 | | 1 |
| De LaSalle School | 1 | 1 | 1 | 2 | 1 | | 1 | | | | | 1 | 1 |
| ST. LOUIS, MO. (M=1.20) | | | | | | | | | | | | | |
| Affton School | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | |
| Bayless | 1 | 2 | 4 | | 1 | | | 1 | | | 2 | | 1 |
| Beaumont School | 1 | 1 | 2 | 1 | 1 | | 1 | | | 2 | 2 | 1 | 1 |
| Bishop Dubourg School | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | | |
| Central School | 1 | 1 | 2 | 1 | 1 | | 1 | | | | 1 | 1 | 1 |
| Chaminade School | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Chriktion Brothers | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Cleveland School | 1 | 1 | 3 | 1 | 1 | | 2 | | | 1 | 3 | 1 | 1 |
| Country Day School | 1 | 1 | 2 | 2 | 1 | 1 | | 1 | | 1 | 1 | 1 | |
| De Andreis | 1 | 1 | 1 | 1 | | | | | | | 1 | | |
| De Smet Jesuit | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Hazlewood Central | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 2 |
| Horton Watkins | 2 | 3 | 4 | 5 | 1 | 2 | 2 | 1 | | 2 | 4 | 2 | 2 |
| John Burroughs School | 3 | 2 | 5 | 5 | 1 | 1 | 1 | | | | 3 | 1 | 3 |
| Kirkwood School | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Lindbergh | 2 | 1 | 7 | 10 | 2 | 2 | 2 | | | 3 | 6 | 2 | 1 |
| Lutheran | 2 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | | 1 |
| Luthern North | 1 | 1 | 2 | | 1 | 1 | | | | | 2 | | 1 |
| McKinley School | 1 | 1 | 2 | 4 | | | 1 | | | | | 2 | 1 |
| Mercy | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | | |
| Northwest School | 1 | 1 | 2 | 1 | 1 | | 1 | | | | 2 | 1 | 1 |
| Oakville | 1 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 1 | 1 | 1 |
| Parkway West | 1 | 1 | 2 | 1 | 1 | 2 | 1 | | | 2 | 2 | 1 | 2 |
| Principia School | 2 | 1 | 1 | 2 | 1 | 1 | | | | 1 | 2 | | 3 |
| Riverview Gardens Senior | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Roosevelt School | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | |
| Saint Johns | 1 | 1 | 2 | | 1 | | | | | | | | |
| Saint Louis Prep Seminary | 1 | 1 | | | | | | | | | | | |
| Saint Louis University | 1 | 1 | 1 | 1 | | 1 | | 1 | | 3 | 1 | 1 | |

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| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|---------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Saint Marys | 2 | 1 | 2 | 2 | 1 | | | | | | 1 | | |
| Soldan School | 1 | 1 | 2 | 1 | 1 | | 1 | | 2 | 2 | 1 | 1 | |
| South County Technical | 1 | | 2 | | 1 | | | | | 1 | 1 | 1 | |
| Sotuhwest | 1 | 1 | 3 | 3 | 1 | | 1 | | 2 | 2 | 2 | 1 | |
| St. Louis Priory | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | | 1 | |
| Ursuline Academy | 1 | | 1 | | | | | | | | | | 1 |
| Vashon | 1 | 1 | 3 | 3 | 1 | | 1 | | 2 | 2 | 2 | 1 | |
| Vianney | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | |
| Villa Duquesne | 1 | | 1 | | | | | | 1 | | | | 1 |
| Whitefield School | 1 | 1 | | | | | | 1 | | | | | 1 |
| Hazlewood East | 2 | 1 | 3 | 2 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 |
| OMAHA, NE. (M=1.00) | | | | | | | | | | | | | |
| Archbishop Rummell | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 |
| Brownell Talbot School | 1 | 1 | 2 | 1 | | 1 | 1 | | | 2 | | | 3 |
| Roncalli | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | 1 | 2 | 1 | | |
| Westside | 1 | 1 | 1 | 1 | 1 | 2 | 2 | | 1 | 2 | 1 | 2 | |
| JERSEY CITY, NJ. (M=1.00) | | | | | | | | | | | | | |
| Hudson Catholic | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 |
| Saint Aloysius | 1 | 1 | 2 | | | | | | 1 | | | | 1 |
| Saint Peter's Prep School | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| NEWARK, NJ. (M=1.00) | | | | | | | | | | | | | |
| Arts | 1 | 2 | 3 | | 1 | 1 | | | | | 1 | | 1 |
| Barringer | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 |
| Central | 1 | 1 | 2 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| East Side | 1 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | | 1 | 2 | 1 | |
| Essex Catholic | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Essex County Voc-Tech | 1 | 1 | 1 | | | | | | | 1 | | | |
| Malcolm X Shabazz | 1 | 1 | 2 | 1 | 1 | 1 | | | 1 | 2 | 1 | | |
| Vailburg | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 | |
| Weequahic | 1 | 1 | 2 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 | |
| Westside | 1 | 1 | 3 | 2 | 1 | 1 | | 1 | 1 | 3 | 1 | 1 | |
| ALBUQUERQUE, NM. (M=1.00) | | | | | | | | | | | | | |
| Albuquerque Academy | 1 | 1 | 2 | 1 | 1 | 1 | | | 2 | 2 | 1 | 1 | |
| Sandia Prep School | 1 | | 1 | | | | 1 | | | 1 | | | |
| ALBANY, NY. (M=1.00) | | | | | | | | | | | | | |
| Albany | 1 | 1 | 2 | 1 | 1 | 1 | | | 2 | 1 | 1 | 2 | |
| Coline Central | 1 | 1 | 2 | 1 | 1 | | | | | 1 | 1 | 1 | |
| Milne | 1 | 1 | 2 | | 1 | | | | | | | | |
| The Albany Academy | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|--------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| NEW YORK, NY. (M=1.18) | | | | | | | | | | | | | |
| <u>Bronx</u> | | | | | | | | | | | | | |
| A. E. Smith | 1 | 1 | 1 | | 1 | | 1 | | | | 1 | 1 | |
| Adlai E. Stevenson | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Christopher Columbu | 1 | 1 | 2 | | 1 | 1 | 2 | | | 2 | 1 | 1 | 1 |
| DeWitt Clinton | 2 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Evander Childs | 1 | 1 | 2 | 1 | 2 | 1 | 2 | | 1 | 2 | 2 | 1 | 2 |
| Harry S. Truman | 1 | 1 | 1 | | 1 | 1 | | | | 2 | 1 | 1 | |
| Horace Mann | 3 | 2 | 4 | 3 | 1 | 1 | 1 | | | 2 | 2 | 2 | 4 |
| James Monroe | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | | 1 |
| John F. Kennedy | 1 | 1 | 2 | | | | 2 | | | | 2 | 1 | 1 |
| Lehman | 1 | 1 | 1 | 1 | | | 1 | | | | | 2 | 1 |
| Morris | 1 | 1 | 2 | | 1 | | | | | 1 | 1 | | |
| Mt. St. Michael Academy | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 | | |
| Our Savior Lutheran | 1 | | 2 | | | | | | | | 1 | | |
| Riverdale Country School | 1 | 1 | 2 | 1 | | | | | | 1 | 1 | 1 | |
| Saint Raymonds Boys | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | | |
| Samuel Gompers | 1 | 1 | 1 | | 1 | | | | | 1 | 1 | | 1 |
| William H. Taft | 1 | 1 | 2 | | 1 | 1 | 1 | | | 1 | 1 | | 2 |
| <u>Brooklyn</u> | | | | | | | | | | | | | |
| Adelphi Academy | 1 | 1 | 2 | | | | | | | | | | 1 |
| Alexander Hamilton VTHS | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | | 1 |
| Automotive | 1 | 1 | 1 | | | | | | | | | | |
| Boys and Girls | 1 | 1 | 3 | 2 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Bushwick | 1 | 1 | 1 | | 1 | | 1 | | | 2 | 3 | 1 | 1 |
| Canarsie | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | | 1 |
| Eat NY Voc-Tech | 1 | 1 | 1 | | 1 | | | | | | 1 | | |
| Eastern District | 1 | 1 | 1 | | 1 | | | | | 2 | 3 | | 2 |
| Erasmus Hall | 1 | 1 | | 1 | 1 | | 1 | | | | 1 | | |
| Fort Hamilton | 1 | 1 | 2 | | 1 | 1 | 1 | | | 2 | 2 | | 2 |
| George W. Wingate | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| George Westinghouse | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 |
| James Madison | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| John Jay | 1 | 1 | 2 | 1 | 1 | | 1 | | | 1 | 2 | | 1 |
| Lafayette | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| Nazereth Regional | 1 | 1 | 1 | | 1 | | 1 | | | | 1 | 1 | 1 |
| New Utrecht | 1 | 1 | 1 | 2 | 2 | 1 | | | | 1 | 2 | | 1 |
| Poly Prep | 1 | 3 | 3 | 3 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| S. J. Tilden | 1 | 1 | 2 | 2 | 1 | | | | | 2 | 2 | | 1 |
| Franklin Lane | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | | 1 |
| Sheepshead Bay | 1 | 1 | 2 | 1 | 1 | | 2 | | | 1 | 2 | 1 | 2 |
| South Shore | 1 | 1 | 2 | 2 | 1 | 1 | 2 | | 1 | | 2 | 1 | 2 |
| Thomas Jefferson | 1 | 1 | 2 | 1 | 1 | | 2 | | | 1 | 2 | | 1 |
| W. E. Gracy Voc-Tech | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|------------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| Westinghouse Voc-Tech | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | | 1 |
| Xaverian | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| <u>New York City</u> | | | | | | | | | | | | | |
| Adams School | 1 | | 1 | | | | | | | | | | |
| Birch Wathen | 1 | | 1 | | | | 1 | | | | | | 1 |
| Charles Evans Hughes | 1 | 2 | 1 | | 1 | | | | | 1 | 1 | | |
| Collegiate | 3 | 2 | 2 | 1 | | 1 | | | | | 2 | 1 | 1 |
| Columbia Prep School | 1 | 1 | 2 | | | | | | | 1 | | | 1 |
| Dwight | 1 | | 2 | | | 1 | | 1 | | | 1 | | 1 |
| Forest Hills | 1 | 1 | 2 | | 1 | 1 | 2 | | | | 2 | | 2 |
| Franklin School | 1 | 1 | 2 | | | | | | | 2 | 2 | | 2 |
| George Washington | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| High School of Science | 1 | 1 | 2 | | 1 | 1 | 2 | | | 1 | 2 | | 2 |
| Julia Richman School | 1 | 1 | 2 | 1 | 1 | | | | | 1 | 1 | 1 | 1 |
| Louis D. Brandeis | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 2 | 1 | 2 |
| Loyola | 1 | 1 | 1 | | | 1 | | | | | 1 | | |
| Manhattan Voc-Tech | 1 | 1 | 1 | | 1 | | 1 | | | | 1 | 1 | |
| McBurney School | 1 | | 2 | 1 | | | | | | 1 | | | |
| N.Y. School of Printing | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | | 1 |
| Rhodes School | 2 | 1 | 3 | | | | | | | 1 | | | |
| Regis | 1 | | 1 | | 1 | | | | | 1 | 1 | | |
| Seward Park | 2 | 1 | 1 | | 1 | | | | | 1 | 1 | | 1 |
| Trinity School | 1 | 1 | 1 | 1 | | | 1 | | | 1 | 1 | 1 | 2 |
| UN International School | 1 | | 2 | | 2 | | 3 | | 2 | | 2 | | 1 |
| Walden School | 1 | 1 | 2 | | | | | | | | | | |
| Bedford Park Academy | 1 | | 1 | | | | 1 | 1 | | | | | |
| Elizabeth Irwin | 1 | | 1 | | | | | | | | | | |
| Riverdale Country | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 1 | 1 | 2 |
| Rushford | 3 | 2 | 1 | | | | | | | | | | |
| The Calhoun School | 2 | 1 | 2 | | 3 | 2 | 1 | | 1 | 1 | 2 | 1 | 1 |
| <u>Staten Island</u> | | | | | | | | | | | | | |
| McKee Voc-Tech | 1 | 1 | 2 | | 1 | 1 | | | | | 1 | | |
| Monsignor Farrell | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| New Dorp | 1 | 1 | 2 | 3 | 1 | 1 | 2 | | | 4 | 2 | | 3 |
| Port Richmond | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 1 | 2 | | 1 |
| Staten Island Academy | 5 | 2 | 5 | | | | | | | | | | 1 |
| Tottenville | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 3 | 1 | 2 |
| Wagner | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 |
| <u>BUFFALO, NY. (M=1.14)</u> | | | | | | | | | | | | | |
| Amherst Central | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Buffalo Seminary | 1 | | 1 | | | | | | | | 1 | | 1 |
| Buffalo St. Camens | 1 | | 2 | | | | | | | 2 | | | 1 |
| Canisius | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| Nicholas | 1 | 1 | 2 | 1 | 1 | | | 1 | | | 2 | 1 | 2 |
| Sweet Home | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| The Park School of Buffalo | 2 | 1 | 2 | | | | | 1 | | | | | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| ROCHESTER, NY. (M=1.57) | | | | | | | | | | | | | |
| Aquinas Institute | 1 | 1 | 3 | 1 | 2 | 1 | | 1 | 1 | | 1 | 1 | 1 |
| Benjamin Franklin Senior | 1 | 1 | 2 | 1 | 1 | | 1 | | | 2 | 2 | 1 | 2 |
| Bishop Kearney | 2 | 1 | 2 | 1 | 1 | 1 | | 1 | | | 1 | 1 | 2 |
| Brighton | 4 | 3 | 5 | 5 | 2 | 1 | 1 | 1 | 1 | 1 | 5 | 2 | 3 |
| Cardinal Mooney | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| Charlotte | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 1 | | 2 |
| East | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | 2 | 2 | 1 | 2 |
| Eastridge | 1 | 3 | 4 | 4 | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| Edison Tech | 2 | 3 | 3 | 2 | 1 | 1 | 1 | | 1 | 1 | 2 | 1 | 2 |
| Gates Chili School | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 2 | 1 | 1 | 1 |
| Greece Athena | 1 | 1 | 1 | 1 | | 1 | 2 | | | 1 | 1 | 1 | 1 |
| Greece Olympia | 3 | 1 | 4 | 7 | 1 | 1 | 2 | | | 1 | 1 | | 1 |
| Harley-Allendale Columbia | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | 2 | 2 | | 2 |
| Irondequoit | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 |
| Jefferson Jr.-Sr. High | 1 | 1 | 2 | 1 | 1 | | 1 | | 1 | 2 | 2 | 1 | 1 |
| Madison | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| McQuaid Jesuit School | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Monroe | 2 | | 3 | 2 | 1 | 1 | 1 | | 1 | 2 | 3 | 1 | 2 |
| Nazereth Academy | 1 | | 1 | | | | | | | | | | |
| Our Lady of Mercy | 1 | | 1 | | | | | | | 1 | | | 1 |
| West | 2 | 2 | 3 | 4 | | 1 | | | | 2 | | 2 | |
| SYRACUSE, NY. (M=1.40) | | | | | | | | | | | | | |
| Christian Brothers Academy | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| Corcorcon | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 2 | 2 | 1 | 2 |
| Henninger | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | | 2 | 2 | 1 | 1 |
| Nottingham School | 2 | 1 | 3 | 4 | 1 | | 2 | | | 1 | 3 | 1 | 1 |
| Westhill Central | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 2 |
| ASHEVILLE, NC. (M=1.20) | | | | | | | | | | | | | |
| A. C. Reynolds | 1 | 3 | 6 | 7 | 1 | 1 | | | | | 2 | 2 | 2 |
| Asheville Country Day | 2 | 2 | 5 | | | | | | | | 1 | | 1 |
| Asheville | 1 | 1 | 2 | 5 | | | 1 | | | | 2 | 2 | 2 |
| Ben Lippen School | 1 | 1 | 2 | | 1 | | | | | | 1 | | 1 |
| The Asheville School | 1 | 1 | 2 | 1 | 1 | | | | | 1 | 1 | | 2 |
| CHARLOTTE, NC. (M=1.17) | | | | | | | | | | | | | |
| Country Day | 1 | 1 | 2 | 3 | 1 | | | | | | 1 | 1 | |
| Garinger | 1 | 1 | | 2 | | 1 | | | | | 2 | 1 | 1 |
| Independence School | 1 | 1 | 2 | 4 | | 1 | | | | | 3 | 1 | 2 |
| Myers Park | 2 | 3 | 5 | 7 | 1 | 1 | | | | | 3 | 1 | 2 |
| Olympic | 1 | 3 | 4 | 7 | 1 | 2 | | | | | 2 | 1 | 2 |
| West Mecklenburgh | 1 | 2 | 4 | 6 | 1 | 1 | | | | | 3 | 1 | 3 |
| GREENSBORO, NC. (M=1.00) | | | | | | | | | | | | | |
| Grimsley Senior | 1 | 2 | 5 | 5 | 1 | 2 | | | | 1 | 5 | 2 | 2 |
| WINSTON-SALEM, NC. (M=1.00) | | | | | | | | | | | | | |
| Bishop McGuinness | 1 | 1 | 3 | | | 1 | | | | 1 | | | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|---------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| AKRON, OH. (M=1.00) | | | | | | | | | | | | | |
| Ellet | 1 | 1 | 3 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Firestone Senior | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Garfield | 1 | 1 | 3 | 4 | 1 | 1 | 1 | | | 1 | 3 | 1 | 1 |
| Hoban | 1 | 1 | 2 | 2 | 1 | 1 | 1 | | | | 3 | 1 | 1 |
| John R. Buchtel | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 1 |
| Manchester | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 1 |
| North | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| CINCINNATI, OH. (M=1.04) | | | | | | | | | | | | | |
| Aiken Senior | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| Anderson | 1 | 1 | 2 | 1 | 1 | 2 | 1 | | | 2 | 2 | 1 | 2 |
| Cincinnati Country Day | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 2 | 1 |
| Colerain | 1 | 2 | 3 | 5 | 1 | 2 | | | | | 4 | 1 | 1 |
| Elder | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Finneytown | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Forest Park | 1 | | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Greenhilla | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Indian Hill | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 2 |
| La Salle | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 1 |
| Madeira | 1 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 2 | 1 | 1 |
| Mariemont | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Moeller | 1 | 1 | 1 | 1 | 1 | | | | | | 1 | 1 | 1 |
| Oak Hills | 1 | 1 | 2 | 1 | 1 | 1 | | | | 2 | 2 | 1 | 2 |
| Reading Community | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Roger Bacon | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Saint Xavier | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Seven Hills | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | | 1 |
| Summit Country Day School | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 1 | | 1 |
| Sycamore | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Walnut Hills | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 2 |
| Western Hills | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 2 |
| Withrow | 1 | 1 | 4 | 2 | 1 | 1 | | | | 2 | 2 | 1 | 1 |
| CLEVELAND, OH. (M=1.00) | | | | | | | | | | | | | |
| Brecksville | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 1 | 1 |
| Byzantine Catholic School | 1 | 2 | 4 | 4 | 2 | 2 | 1 | | | | 1 | 2 | |
| Collinwood | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 1 |
| James Ford Rhodes | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | |
| John Marshall | 1 | 1 | 3 | 1 | 2 | 1 | 2 | | | 1 | 2 | 1 | 1 |
| Mayfield | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Saint Ignatius | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Saint Joseph | 1 | 1 | 3 | 6 | 2 | 1 | | 1 | | | 3 | 2 | 1 |
| West Technical | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 1 |
| COLUMBUS, OH. (M=1.00) | | | | | | | | | | | | | |
| Bexley | 1 | 1 | 3 | 4 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 |
| Saint Charles School | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| Upper Arlington | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 2 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| DAYTON, OH. (M=1.25) | | | | | | | | | | | | | |
| Carroll | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | |
| Dayton Christian | 1 | 1 | 2 | | 1 | | | | | | 2 | | |
| Miami Valley | 2 | 1 | 2 | | | | | 1 | | | | | 1 |
| Wayne | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | | 1 | 2 | 1 | 2 |
| TOLEDO, OH. (M=1.00) | | | | | | | | | | | | | |
| Maumee Valley Country Day | 1 | 1 | 2 | 1 | 1 | | 1 | | | | 1 | 1 | 2 |
| Rogers | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 2 |
| OKLAHOMA CITY, OK. (M=1.33) | | | | | | | | | | | | | |
| Bishop McGuinness School | 1 | 1 | 3 | 1 | | 1 | | | | | 1 | 1 | 1 |
| Casady | 2 | 1 | 1 | 1 | 1 | 1 | | | | | 2 | 1 | 3 |
| Putnam City | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 2 |
| TULSA, OK. (M=1.50) | | | | | | | | | | | | | |
| Cascia Hall Prep School | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | 1 |
| Holland Hall School | 2 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | | 1 |
| PORTLAND, OR. (M=1.65) | | | | | | | | | | | | | |
| Benson Polytechnic | 2 | 2 | 3 | 6 | 1 | 1 | 1 | | | | 4 | 2 | 1 |
| Bishop Dagwell | 2 | | 1 | | | 1 | | | | | 1 | | 2 |
| Catlin-Gabriel | 4 | | 4 | | 1 | | 1 | | | | 2 | | 2 |
| Central Catholic | 1 | 1 | 3 | 3 | 1 | 1 | | | | | 1 | | 1 |
| Cleveland | 2 | 3 | 3 | 5 | | 1 | 1 | | | 1 | 4 | 2 | 1 |
| Columbia Christian | 1 | 1 | 3 | | | | | | | | 1 | | |
| David Douglas | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | |
| Franklin | 2 | 3 | 3 | 5 | 1 | 2 | 1 | | | 1 | 3 | 1 | 2 |
| Grant | 1 | 1 | 2 | 1 | 1 | 2 | 1 | | | 1 | 1 | 1 | 1 |
| James Monroe | 1 | | 3 | | | | | | | 2 | 2 | | 1 |
| Jesuit | 2 | 2 | 1 | 4 | 1 | 1 | | | | 1 | 1 | | |
| John Marshall | 2 | 1 | 5 | 3 | 1 | 1 | 2 | | | 1 | 1 | 1 | 2 |
| Madison | 1 | 1 | 4 | 7 | 1 | 1 | | | | 1 | 2 | 1 | 2 |
| Oregon Episcopal | 2 | | 1 | | 1 | | 1 | | | | 1 | | 2 |
| Roosevelt School | 1 | 3 | 4 | 5 | 1 | 1 | 1 | | 1 | 1 | 3 | 3 | 2 |
| The Hall School | 1 | 1 | 1 | | | | 1 | | | | 1 | | 1 |
| Woodrow Wilson | 2 | 1 | 4 | 3 | 1 | 2 | 2 | | | 1 | 1 | 1 | 2 |
| PHILADELPHIA, PA. (M=1.08) | | | | | | | | | | | | | |
| Archbishop Ryan Boys | 1 | 1 | | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Benjamin Franklin | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 2 | 1 | 1 |
| Bishop Neumann | 1 | 1 | 1 | 1 | 1 | | | | | | | | 1 |
| BOK Area Voc-Tech School | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | | 2 |
| Cardinal Dougherty | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Cedar Grove Academy | 1 | 1 | 2 | | | | | | | | | | |
| Central | 2 | 2 | 2 | 5 | 1 | 1 | 1 | | | 1 | 3 | 1 | 1 |
| Dobbins Tech | 2 | 3 | 3 | 4 | 2 | 2 | 1 | | | 2 | 3 | 1 | 2 |
| Edison | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | 1 | 1 |
| Episcopal Academy | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 |
| Father Judge | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-----------------------------|----|----|---|----|----|---|----|---|----|---|---|---|----|
| CHARLESTON, SC. (M=1.00) | | | | | | | | | | | | | |
| Porter-Gaud | 1 | | 2 | 2 | | 1 | | | | | | | 2 |
| COLUMBIA, SC. (M=1.00) | | | | | | | | | | | | | |
| A. C. Flora | 1 | 1 | 1 | 1 | | 1 | | | | | 2 | 1 | 2 |
| Columbia | 1 | 1 | 4 | 5 | | | 1 | | | | 2 | | 1 |
| Dreher | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 2 | | 1 |
| Spring Valley | 1 | 1 | 3 | 9 | 1 | 1 | | | | 1 | 4 | 2 | 1 |
| CHATTANOOGA, TN. (M=1.00) | | | | | | | | | | | | | |
| Baylor School | 1 | 3 | 4 | 6 | 1 | 1 | | | | 1 | 4 | 2 | 1 |
| McCallie School | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| KNOXVILLE, TN. (M=1.00) | | | | | | | | | | | | | |
| Webb School of Knoxville | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | | 1 |
| NASHVILLE, TN. (M=1.00) | | | | | | | | | | | | | |
| Father Ryan | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 2 |
| McGovock | 1 | 1 | 4 | 3 | 1 | 1 | | | | | 2 | 1 | 2 |
| Montgomery Bell Academy | 1 | 1 | 1 | 5 | 1 | 1 | | | | | 1 | 1 | 1 |
| Nashville Christian School | 1 | 2 | 4 | 3 | 1 | 1 | | | | | 1 | | |
| AUSTIN, TX. (M=1.25) | | | | | | | | | | | | | |
| John H. Reagan | 1 | 2 | 5 | 8 | 1 | 1 | 2 | | | 1 | 4 | 1 | 2 |
| Johnston | 1 | 1 | 3 | 4 | 1 | 1 | | | | | 2 | | 2 |
| Lanier School | 1 | 2 | 3 | 8 | | | 2 | | | 1 | 4 | 1 | 1 |
| St. Stephens Episcopal | 2 | 1 | 2 | 2 | 1 | 1 | | | | | 1 | | 2 |
| DALLAS, Tx. (M=1.13) | | | | | | | | | | | | | |
| Bishop Lynch | 1 | 1 | 3 | 2 | 1 | 1 | | | | | 2 | 1 | 1 |
| Bryan Adams | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 2 | | 1 |
| David Carter | 1 | 1 | 2 | 4 | | 1 | | | | | 2 | | 1 |
| Franklin D. Roosevelt | 1 | 1 | 3 | 4 | 1 | 1 | | | | 1 | 2 | | 1 |
| Greenhill School | 2 | 1 | 3 | 4 | | 1 | | | | | 1 | | 1 |
| H. G. Spruce | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 2 | | 1 |
| Highland Park | 1 | 1 | 2 | 4 | 1 | 1 | | | | 1 | 2 | | 1 |
| Hillcrest | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 1 | | 1 |
| J. F. Kimball | 1 | 1 | 3 | 5 | 1 | 1 | | | | 1 | 2 | | 2 |
| Jefferson | 1 | 1 | 3 | 4 | | 1 | | | | 1 | 1 | | 1 |
| Jesuit | 1 | 1 | 2 | 3 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 |
| Lake Highlands | 1 | 1 | 3 | 3 | 1 | 1 | 1 | | | 2 | 1 | | 1 |
| Lakehill Prep School | 1 | 1 | 2 | 1 | | 1 | | | | | 1 | | 1 |
| Lincoln | 1 | 1 | 3 | 6 | | 1 | | | | 1 | 3 | | 1 |
| North Dallas | 1 | 1 | 2 | 6 | | 1 | | | | 1 | 2 | | 1 |
| Saint Marks School of Texas | 1 | 1 | 2 | 4 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Samuell | 2 | 1 | 3 | 6 | | 1 | | | | 1 | 3 | | |
| Skyline | 1 | 3 | 4 | 10 | 1 | 1 | | | | 1 | 3 | 1 | 1 |
| South Oak Cliff | 1 | 2 | 2 | 3 | 1 | | 1 | | | 1 | 2 | 2 | |
| Sunset | 2 | 2 | 4 | 9 | 1 | 1 | | | | 1 | 3 | 1 | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | De |
|------------------------------|----|----|---|----|----|---|----|---|----|---|---|---|----|
| W. H. Adamson | 1 | 1 | 4 | 3 | | 1 | | | | 1 | 1 | | |
| Wilmer-Hutchins | 1 | 1 | 3 | 10 | | 1 | | | | | 3 | | 1 |
| Woodrow Wilson | 1 | 1 | 3 | 3 | 1 | 1 | | | | 1 | 2 | | 1 |
| EL PASO, TX. (M=1.00) | | | | | | | | | | | | | |
| Socorro | 1 | 1 | 3 | 4 | 1 | 1 | | | | | 3 | | 1 |
| FORT WORTH, TX. (M=1.75) | | | | | | | | | | | | | |
| Arlington Heights | 1 | 1 | 3 | 5 | 1 | 1 | | | | 1 | 1 | | 1 |
| Ft. Worth Country Day | 2 | | 2 | 1 | 1 | | | 1 | | | 2 | 1 | 1 |
| Trinity Valley | 3 | | 3 | 4 | | 1 | 1 | 2 | | | 2 | | 1 |
| Nolan Catholic | 1 | 2 | 6 | 10 | 2 | 2 | 1 | | | | 3 | | 2 |
| HOUSTON, TX. (M=1.00) | | | | | | | | | | | | | |
| Kinkaid | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 2 | | 2 |
| Lutheran | 1 | 1 | 5 | 4 | | 1 | | | | | 1 | | 1 |
| Saint Johns | 1 | | 3 | 4 | 1 | 1 | | | | | 3 | | 2 |
| Strake Jesuit School | 1 | 1 | 2 | 3 | 1 | 1 | | | | 1 | 1 | | 1 |
| SAN ANTONIO, TX. (M=1.50) | | | | | | | | | | | | | |
| St. Anthony Seminary | 1 | 1 | 2 | 2 | | | | | | | 1 | | 1 |
| Texas Military Institute | 2 | | 1 | 3 | | 1 | | | | | 2 | | 1 |
| SALT LAKE CITY, UT. (M=1.50) | | | | | | | | | | | | | |
| Cottonwood Senior | 2 | 2 | 3 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | 1 |
| East School | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | | 2 | 2 | 1 |
| ALEXANDRIA, VA. (M=1.00) | | | | | | | | | | | | | |
| Bishop Ireton | 1 | 2 | 1 | 1 | 1 | 1 | | | | 1 | 2 | | 1 |
| Episcopal School | 1 | 2 | 3 | 6 | 1 | 1 | | | | 1 | 2 | 1 | 3 |
| George Washington | 1 | 1 | 2 | 1 | 1 | | 1 | | | | 2 | 1 | 2 |
| Groveton School | 1 | 1 | 1 | 2 | 2 | 1 | 2 | | | 1 | 3 | | 2 |
| Hammond | 1 | 1 | 2 | 1 | 1 | | 1 | 1 | | | 1 | 1 | 2 |
| Mount Vernon | 1 | 1 | 2 | 4 | 1 | 1 | 2 | | | 1 | 2 | | 2 |
| Saint Stephens School | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| St. Marys Academy | 1 | | 1 | | | | 1 | | | 1 | | | |
| T. C. Williams | 1 | 1 | 2 | 1 | 2 | 1 | 1 | | | | 2 | | 2 |
| Thomas Jefferson | 1 | 2 | 1 | 1 | 1 | 2 | 1 | | | 1 | 2 | | 2 |
| NORFOLK, VA. (M=1.00) | | | | | | | | | | | | | |
| Eastern Academy School | 1 | 1 | 1 | | 1 | | | | | | 1 | | |
| James-Barry Robinson | 1 | 2 | 2 | | 1 | 1 | | | | | | | 1 |
| Norfolk Academy | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | 1 | 2 |
| Norfolk Christian | 1 | 1 | 2 | | 1 | | | | | | 1 | | |
| Norfolk Collegiate School | 1 | 1 | 2 | | 1 | 1 | | | | | 2 | 1 | 1 |
| RICHMOND, VA. (M=1.08) | | | | | | | | | | | | | |
| Benedictine School | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Collegiate School | 1 | 1 | 2 | 2 | 1 | 1 | | | 2 | | 1 | | 1 |
| Douglas S. Freeman School | 1 | 1 | 4 | 4 | 1 | 1 | 1 | | | | 2 | 1 | 2 |
| Henricho | 1 | | 6 | 5 | 1 | 1 | 2 | | | | 4 | 1 | 1 |
| Hughuenot | 1 | 1 | 4 | 4 | 1 | 1 | 1 | | | | | 1 | 2 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|-------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| J. R. Tucker | 1 | 2 | 5 | 5 | 1 | 1 | | | | | 3 | 1 | 2 |
| Maggie L. Walker | 1 | 1 | 2 | 1 | 1 | 1 | | | | | 1 | 1 | 2 |
| St. Catherines School | 1 | | 2 | | | | | | | | | | 1 |
| St. Christophers School | 1 | 1 | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 |
| St. John Vianney Prep | 1 | 1 | | | 1 | 1 | | | | | | | 1 |
| Thomas Jefferson | 1 | 1 | 2 | 1 | 1 | | | 1 | | | 1 | | 2 |
| Varina School | 2 | 1 | 2 | 1 | | | 1 | | | | 1 | 1 | 1 |
| SEATTLE, WA. (M= 1.74) | | | | | | | | | | | | | |
| Ballard | 1 | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | | 1 |
| Blanchet School | 2 | 2 | 2 | 1 | 2 | 1 | | | | 1 | 2 | 1 | 1 |
| Bush School | 2 | | 2 | | | | 1 | | | | 1 | 1 | 1 |
| Chief Sealth | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Cleveland | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | | 1 | 1 |
| Franklin | 2 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 |
| Garfield | 2 | 1 | 3 | 2 | 1 | 1 | 1 | | | 1 | 3 | 1 | 1 |
| Ingraham School | 1 | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| John F. Kennedy | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | 2 | 1 | 2 |
| Kings Temple Christian | 1 | 1 | 1 | | | | | | | | | | |
| Lakeside | 4 | 1 | 5 | 3 | 1 | 1 | 1 | | | | 2 | 1 | 3 |
| Lincoln | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Nathan Hale | 1 | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| O'Dea School | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | | 1 |
| Queen Anne | 2 | 2 | 2 | 1 | 1 | 1 | 2 | | | | 2 | 1 | 1 |
| Roosevelt | 2 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | | 1 |
| Seattle Christian | 2 | 1 | 1 | | | | | | | | | | |
| Seattle Prep School | 1 | 1 | 3 | 3 | 1 | | | | | | 3 | | 1 |
| Shorecrest | 2 | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 1 |
| Shoreline | 2 | 2 | 2 | 1 | 2 | 1 | 2 | | | 1 | 2 | 1 | 1 |
| Shorewood | 2 | 1 | 3 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| Watson Groen | 2 | | 1 | | 1 | | | | | | | | |
| West Seattle | 2 | 2 | 2 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 |
| SPOKANE, WA. (M=1.00) | | | | | | | | | | | | | |
| Saint Georges School | 1 | 1 | 2 | | 1 | 2 | | | | | 2 | | 1 |
| TACOMA, WA. (M=1.20) | | | | | | | | | | | | | |
| Bellarmino Prep School | 1 | 2 | 2 | 1 | 1 | 1 | | | | | 2 | 1 | 2 |
| Charles Wright Academy | 3 | 2 | 2 | 2 | 1 | 1 | 1 | | 1 | | 3 | 2 | 2 |
| Clover Park | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 1 | 2 | 1 | 1 |
| Henry Foss | 1 | 1 | 2 | 1 | 1 | | 2 | | | 2 | 2 | 1 | 2 |
| Lakes | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 1 | 2 | 1 | 2 |
| Lincoln | 1 | 2 | 3 | 4 | 1 | 1 | 1 | | | 2 | 3 | 1 | 2 |
| Mount Tahoma School | 1 | 1 | 1 | 1 | 1 | | 2 | | | 1 | | 1 | 2 |
| Stadium | 1 | 1 | 2 | 1 | 1 | 1 | 2 | | | 2 | 2 | 1 | 1 |
| Tacoma Baptist School | 1 | 1 | 1 | | | | | | | | | | |
| Woodrow Wilson | 1 | 1 | 2 | 1 | 1 | 1 | 1 | | | 2 | 2 | 1 | 1 |

TABLE XII (Continued)

| City and School | So | Bb | B | F | Cc | G | Gy | H | Sk | S | T | W | Te |
|----------------------------|----|----|---|---|----|---|----|---|----|---|---|---|----|
| GREEN BAY, WI. (M=1.00) | | | | | | | | | | | | | |
| Premontre | 1 | | 2 | 2 | 1 | 1 | | 1 | | | 1 | | |
| MILWAUKEE, WI. (M=1.00) | | | | | | | | | | | | | |
| Bay View | 1 | 3 | 4 | 1 | 2 | 1 | 2 | | | 3 | 7 | 2 | 2 |
| De Sales Prep | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | | 1 |
| John Marshall Jr.-Sr. High | 1 | 3 | 6 | 5 | 2 | 1 | 4 | | | 3 | 8 | 2 | 3 |
| Marquette | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 |
| Riverside | 1 | 2 | 5 | 4 | 1 | 1 | 1 | | | 2 | 3 | 2 | 2 |
| University School of Mil. | 1 | 1 | 2 | 1 | 1 | | 1 | 1 | | 1 | 3 | | 2 |
| Washington | 1 | 1 | 2 | 1 | 1 | 1 | | | | 1 | | 1 | 3 |

Source: The National Directory of High School Coaches, 1977-78.

VITA 2

Michael William Johnson

Candidate for the Degree of

Master of Science

Thesis: A SPATIAL ANALYSIS OF INTERSCHOLASTIC SOCCER IN THE
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Major Field: Geography

Biographical:

Personal Data: Born in Sioux Falls, South Dakota, February 16,
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Education: Graduated from Watertown Senior High School, Water-
town, South Dakota, in May, 1965; received Bachelor of
Science degree in Journalism from South Dakota State
University in 1974; completed requirements for the Master
of Science degree at Oklahoma State University in December,
1978.

Professional Experience: Graduate teaching assistant, Department
of Geography, Oklahoma State University, 1975-1978; graduate
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University, 1975-76.

Professional Organizations: Member of Association of American
Geographers, the Society for the North American Cultural
Survey and Sigma Delta Chi.