## ABSTRACT

> GRALL, Ronald $C$. The identification and $\frac{\text { description of municipal park/recreation }}{\text { department sponsored adult softball programs. }}$ M. S. in Recreation, 1985,106 pp. (Dr. P. Trokan).

In general, this nationwide study identified and described municipal park/ recreation department sponsored adult softball programs implemented within incorporated places ranging from 45,000-55,000 in population. Furthermore, this study identified, on a national and regional basis, selected adult softball program elements associated with the cited population. More specifically, this study identified selected adult softball program elements which pertained to: participation numbers, league and teams structures, utilization of infield areas (diamonds), scheduling of games, program budgeting and maintenance of infield areas. Survey data was collected through the use of a questionnaire format. The comparative analysis of processed datum, was based on percentages (frequency of response) as indicated in the crosstabulation of data related to the cited population. Each site, identified as a municipal park and/or recreation department which sponsored adult softball ( $N=58$ ), and designated region $(N=9)$ was examined for uniqueness, or conversely, similarity in responses in relation to the other sites/regions. In addition to structured question responses, any notes, comments, or questions cited by the respondents in reference to the study were utilized.

The Identification and Description
of Municipal Park/Recreation
Department Sponsored Adult
Softball Programs

A Thesis Presented to<br>The Graduate Faculty University of Wisconsin - La Crosse

In Partial Fulfillment<br>of the Requirement for the<br>Master of Science Degree

By
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We recommend acceptance of this thesis in partial fulfillment of this candidate's requirements for the degree: Master of Science - Recreation. The candidate has completed his oral report.


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This thesis is approved for the College of Health, Physical Education and Recreation.


## DEDICATION

To my mother Mary Ann Grall, In memory of my Father

Benard C. Grall

## ACKNOWLEDGMENTS

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## CHAPTER I

## INTRODUCTION

The growth of sports has been one of the most remarkable trends in the recreation and leisure field during the past two decades (Weiskopf, 1975). One of the participation sports which gained most of its adherents after the turn of the century is softball (Kando, 1980). According to the Amateur Softball Association of America (ASA), softball is currently the nation's number one participation sport. An estimated 30 million Americans, 14 percent of the U.S. population, play either in organized leagues or on an informal pick-up game basis (Ritter, 1984). Internationally, softball is played in more than 55 countries on every continent of the planet (Sobel, 1980).

Specifically concerning this study, the United States Bureau of the Census has been charting participation rates for selected recreation activities since 1960 (Russell, 1982). It reports that amateur softball participation for adults increased from 16 million to 29 million participants between the years 1970 and 1978 (U.S. Dept. of Commerce, 1979).

In the city of La Crosse, Wisconsin (population 48,000 ), the adult softball program, sponsored by the Department of Parks and Recreation, has experienced similar dramatic growth (98 teams in 1970, 200 teams in 1980 ) coinciding with the national trend. Presently, the adult softball program, in terms of participation numbers, is the largest sport activity which is sponsored by the department. In 1984, 265 men's and women's adult softball teams participated in department sponsored
league and/or tournament play. This present volume of teams has placed increased demands on existing facilities and operating budgets concerning the La Crosse Park and Recreation Department. It was concerns of this nature which prompted the La Crosse Department and this writer to investigate other municipal adult softball programs, found in similar incorporated places, throughout the United States.

There can be little dispute as to the desirability of placing softball as an activity in any instructional or recreational program. The official game or its modifications can be played by all ages and both sexes. It can provide physical activity and fun for everyone. It is not limited to those who are in the best of physical condition or necessarily limited to those who are athletically inclined.

Softball affords numerous educational as well as social and recreational possibilities, since it allows the mastery of individual skills and requires team cooperation (Dodson \& Sisley, 1971).

The school systems have recognized the value and versatility of a sound softball program. It is estimated that well over 90 percent of the junior high and high school programs in the fifty states play softball in their physical education classes. Many also sponsor afterschool league competition (Sobel, 1980).

Furthermore, there is a place for everyone in softball from the bat girl/boy through players, coaches, sponsors, scorekeepers, and umpires to the spectators. More men and women are realizing the total family enjoyment softball can bring to their community. Within the many leagues and classifications, players with different socio-economic levels and civic backgrounds are brought together in this "truly American sport."

## Statement of the Problem

## General Problem

This study attempted to identify and generally describe municipal park and/or recreation department sponsored adult softball programs, implemented wihin incorporated places ranging from 45,000-55,000 in population, throughout the United States.

## Sub-Problems

1. To develop a questionnaire, to serve as an instrument for obtaining data, concerning the general problem. Further, to develop and determine the selection of: (a) relevant and concise questions which are related to the general problem, (b) valid responses appropriate for each question, and (c) proper cover letter content and format in order to better educate the respondent(s) on the nature of the study and questionnaire.
2. To determine the current total number of incorporated places ranging 45,000-55,000 in population, within the United States. Further, to determine: (a) appropriate geographic regions concerning the placement of random samples used to pre-test the instrument (questionnaire), and (b) appropriate geographic regions concerning the placement of the sample population (incorporated places of 45,000-55,000 in population, which were not utilized in the development or pre-test of the questionnaire) into like-groups in order to conduct comparative analysis.
3. To determine the approximate total number and percentage of municipal park and/or recreation departments which currently sponsor, or co-sponsor, some type of an adult softball program, within the sample population. Further, to determine, the percentage most prevalent among similar departments (i.e., all municipal recreation departments and/or all
municipal park and recreation departments, etc.) concerning the: (a) total number of professional park/recreation staff currently employed, and (b) approximate total budget for all department operations and functions.
4. To identify other agencies/organizations which sponsor some type of an adult softball program, within the sample population. Further, to determine: (a) the percentage of the sample population which currently have adult softball programs sponsored by other agencies/organizations; in addition to the municipal park and/or recreation department program (duplication of service), and (b) which other agencies/organizations sponsor an adult softball program, if any, when one is not offered by the municipal park and/or recreation department.
5. To identify selected adult softball program elements associated with: participation numbers, league and team structures, utilization of infield areas/ diamonds, scheduling of games, program budgeting and maintenance of infield areas, associated with municipal park and/or recreation department sponsored adult softball programs, within the sample population. Further, to determine, the percentage of municipal park and/or recreation departments which indicated that: (a) adult softball, in terms of participation numbers, is the largest team sport program currently sponsored, (b) the number of adult softball teams has generally increased over the last five year period (since 1979), (c) there is a need for additional softball areas, in order to adequately meet the present demand for adult softball participation, (d) all, or some, of the umpires officiating in the adult softball program, are supplied and/or paid for by the department, (e) adult softball participation (the total number of teams), concerning all league play, is currently limited, (f) adult softball games, when
cancelled, are rescheduled for play at a later time/date, (g) nonresidents are allowed to participate in the adult softball program; and that non-residents participating, are charged a user fee (additional fee) of some type, (h) all, or some, of the infield areas utilized for the adult softball program, are maintained by the department, (i) synthetic surfaces are incorporated, as part of the permanent infield area, in diamonds utilized for adult softball play, (j) completely skinned infield areas were most frequently the playing area responsible for cancellations due to unplayable conditions created by rain and/or snow, and (k) 12" slow-pitch softball is currently one of the types/forms of play offered in the adult program.

Problem number five also concerns, the determination of the most prevalent percentage indicated among similar municipal park and/or recreation departments and/or geographic regions (i.e., all municipal park and recreation departments located in the Pacific region states), within the sample population, concerning the following selected adult softball program elements; the approximate total: (a) amount of monies specifically budgeted for program purposes, (b) number of teams which participated in league play, including the approximate total number of women's and corecreational teams, (c) number of weeks in which softball areas were utilized for league and/or tournament play, including the seasonal periods and daily times of day (during the designated season), in which games were played, (d) number of infield areas utilized for league and/or tournament play, including the approximate total number of utilized softball areas which were lighted, (e) cost for maintaining outdoor infield areas utilized, (f) percentage of all infield maintenance costs (man hours included) in
which accountable for, and (g) percentage of scheduled games, which were cancelled due to unplayable field conditions created by rain and/or snow, within the last year period.

## Need for the Study

Municipalities, school systems, and colleges across the country are experiencing a revolution in recreational participation; a revolution that, although welcome, is placing a serious limitation on existing facilities. Men and women of all ages and capabilities are demanding the opportunity to take part in sports and other recreational activities (Leach, 1980).

With this in mind, the national popularity of softball as a competitive and recreational team sport coupled with the phenomenal growth within the past decade (1970-80) of organized league play, has created similar participation/facility concerns and considerations involving the public programming of adult softball play.

The interest shown in a community toward softball/baseball usually indicates how extensively facilities are developed for these sports (Rodney, 1964). Many parts of the United States have reacted to the softball "boom" by building more diamonds. In other parts of the country, fields and parks are being upgraded to accommodate the growing numbers wishing to compete. Furthermore, many cities are scheduling softball programs day and night in order to keep up with the demand (Sobel, 1980). The heavy and continuous use to which softball and baseball infield areas are subjected presents a serious maintenance problem (Butler, 1960).

Conversely, the sharp declines in school enrollments and subsequent school closings in some cities have resulted in a loss of available fields.

For the most part, public recreation departments (municipal, county, school and special districts, etc.) have been financially unable to build and maintain softball areas and/or complexes required to meet the increased demand for softball participation, in particularly adult leagues and tournaments (Ritter, 1984).

In example, a recent publication quoted a statement made by Santa Clara, California, Parks and Recreation Director Earl Carmichael, which indicated that hundreds of teams have been turned away from their playing fields due to unavailability of sites. In addition, Carmichael summarized that he felt this type of problem is not unique to California, but rather, a problem prevalent nationally. In many cases local officials have turned to the private sector, encouraging investors to launch new sports facilities (Ritter, 1984).

In the City of La Crosse, Wisconsin, the problems identified are prevalent. The park and recreation department annually schedules 260 or more teams in the adult softball program. This ratio of teams to available softball diamonds had exceeded the carrying capacity of existing softball sites, even though the number of teams has been limited. This limitation has, in turn, denied potential participants the chance for involvement in organized leagues. The option of constructing additional softball playfields is doubtful due to lack of adequate space and funding. When games are cancelled due to rain, traditional skinned infields are, in many cases, unplayable for several days causing already limited schedules to be shortened due to dates unavailable for make-up games.

The need to alleviate cited problems were presented to this writer. It was determined that before any changes and/or modification could be implemented in the present program, it would be necessary to obtain additional data/information pertaining to selected areas of adult softball programming. The suggestion of conducting a descriptive study concerning the present nature of other municipal park and/or recreation department sponsored adult softball programs, within incorporated places similar to the City of La Crosse, was deemed as an appropriate and feasible method. There has been a considerable amount of published material dealing with the game of softball. The majority of related literature pertains to the game itself (how to play softball, types of play, modifications, etc.). Unfortunately little, if any, literature or research has been devoted to the area of softball programming.

In other words, who sponsors softball programs in communities? How are they funded and maintained? How are programs structured? What problems are faced by providers? Such questions, and other related, need to be further recognized and evaluated.

## Assumptions

1. It was assumed that those individuals, who completed the questionnaire, were most knowledgeable about the particular agency, department and program which they represented.
2. It was assumed that those individuals, who completed the questionnaire, responded to the selected questions in a truthful and thorough manner.

## Limitations

The study had the following limitations:

1. The selection of the specific population utilized in the study was based on the 1980 United States census of the population.
2. The survey was limited to the utilization of $95 \%$ of the total designated population (99 out of 104) possible). The remaining $5 \%$ of the population was utilized in the pre-test and/or development of the instrument (questionnaire).
3. The random samples utilized in the pre-test were placed into four general geographic regions (West, South, North Central, and North East) representing the United States.
4. One site (incorporated place ranging 45,000-55,000 in population) was randomly selected to represent each individual pre-test region.
5. The sample population utilized in the survey was placed into nine specific geographic regions (Pacific, Mountain, West North Central, East North Central, West South Central, East South Central, South Atlantic, Middle Atlantic, and New England) representing the United States.
6. Questions utilized in the instrument, concerning adult softball program aspects, were limited to the following areas: (a) participation numbers, (b) league and team structures, (c) utilization of infield areas/ diamonds, (d) scheduling, (e) program budgeting, and (f) maintenance of infield areas.

## Definition of Terms

Adult Softball Leagues/Teams - consist of participants 18 years, or more, of age and/or any other age group(s) which may be included in softball programs considered to be at the adult level.

Adult Baseball Infield Area - consists of sand/clay or aggregate material used in most if not all the area. Most adhere to regulation baseball standards which includes $90^{\circ}$ distances between bases and home plate, a $60^{\prime} 6^{\prime \prime}$ distance from pitchers plate to home plate, and a 95' radius of skinned andor turf area from pitchers plate to the beginning of the outfield turf.

Agency - an administrative division (as of a government). In example: municipalities, counties, school districts, and park districts.

Carrying Capacity - the natural, physical, or social capability of a recreation area to withstand use and provide a desired quality of recreation experience, or the amount of appropriate recreation use of a resource.

Co-recreational - activities engaged in jointly by both sexes, such as dances, mixed choruses, hiking, and softball (Athletic Institute \& American Association for Health, Physical Education, Recreation and Dance [AI \& AAHPERD], 1982).

Department - a major functional and/or territorial administrative division commonly found in government, business, and school operations. In example: park and recreation departments are prevalently associated with municipal government.

Fast-pitch Softball - a form of softball play which incorporates: nine players in the field, base stealing, shorter home plate to outfield
fence dimensions, and a much higher degree of velocity asserted on underhand pitches (speeds up to $90-100 \mathrm{~m} . \mathrm{p} . \mathrm{h}$. ) as major differences.

Incorporated Place - an area (city) which is united in one body. In most cases, a primarily urban political unit having coporate status and powers of self-government.

Modified Softball - adheres to similar rules governing fast-pitch play with the exception of pitching. In modified play, the pitcher may not use a windmill, whip, or sling shot delivery and the wrist may not be outside the elbow at any time during the delivery (ASA, 1985).

MPRDS - abbreviation for: municipal park and/or recreation departments which sponsored adult softball programs (utilized for reader convenience in Chapter 4 "Discussion of Selected Adult Softball Program Elements").

Municipal Park/Recreation Department - provides public park and/or recreation services primarily for persons residing within the municipal (city) unit. It is financed, for the most part, by taxation and includes the establishment, operation, conduct, control and maintenance of programs, areas, and facilities (AI \& AAHPERD, 1982).

Park District - a subdivision, or special district, of state government exercising within its jurisdiction and the authority of a municipality. It may operate and maintain parks, recreational programs, airports and other such facilities and programs as established in Legislation.

Program Sponsorship - in most cases would involve the organization, supervision, and coordination of the activity; while providing monies, staff, and equipment necessary for the existence of the program.

Public Park/Recreation Department - provides public park and/or recreation services for persons residing in any one of the several types
of governmental units having the power of local self-government, such as: municipalities, counties, school districts, park districts, etc. (AI \& AAHPERD, 1982).

Skinned Area - completely void of turf (natural or synthetic), usually consisting of sand/clay or aggregate material.

Skinned Infield - constructed of pre-mixed surface materials which traditionally consists of one-third sand and two-thirds clay silt. This type of infield area is completely void of turf (Wisconsin Department of Natural Resources [WI DNR], 1981).

Slow-pitch Softball - considered to be the most popular form of softball play. In slow-pitch, the pitcher throws underhand while required to pitch the ball a minimum of three feet ( $16^{\prime \prime}$ game) to six feet (12" game) in arc to the batter. The ball used for play, usually measures $12^{\prime \prime}$ in circumference. In addition, rules prohibit base stealing and require 10 players on the field.

Softball - a game related to baseball played on a smaller infield/ diamond with a ball that is larger than a baseball and that is pitched underhand; also: the official ball used in the game, which can vary from $12^{\prime \prime}$ to $16^{\prime \prime}$ in circumference, depending upon the specific modification of the game. Involves, in most cases, nine to ten players on the field of play.

Softball Infield Area - commonly known as a diamond, almost always consists of sand/clay or aggregate materials throughout the entire area. The majority of areas utilize $60^{\prime}$ to $65^{\prime}$ distances between bases and home plate, a $35^{\prime}$ to $46^{\prime}$ distance from pitchers plate to home plate, and a $60^{\prime}$ to $70^{\prime}$ radius of skinned area from pitchers plate to the beginning
of the outfield turf.
Synthetic Turf - grass-like textile carpet material, usually of nylon or polypropylene composition.

User Fee - an additional fee associated with participation in a selected activity and/or use of a facility. Usually a charge assessed to an entry or membership fee due to requirements/policies set by the agency and/or department.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

The review of related literature presented in this chapter has been divided into five sections: (a) historical background of the game of softball, (b) popularity of softball, (c) types of softball play, (d) softball playing field considerations, and (e) summary.

Historical Background of Softball
Unlike many other team sports, which have had a long history, softball has gained recognition as an international sport in less than forty years. The present game of softball is a direct descendent of baseball, which is a version of the English game called "rounders". Because softball is a variation of baseball and similar bat-and-ball games, it is impossible to identify a precise time and place for the birth of the game (Dodson \& Sisley, 1971). The game of softball, as we know it, did not take shape until the $1880^{\circ}$ s.

One version of its origin gives credit for inventing the game to Goerge W. Hancock in 1887, who at the time, was a reporter for the Chicago Board of Trade.

In the late afternoon of a cold Thanksgiving Day in 1887 some young men were relaxing in the gymnasium of the Chicago Farragut Boat Club. Having nothing better to do, Hancock and several of his club friends tied a battered boxing glove into a ball and began throwing it carelessly to each other. One of them, using a broom handle for a bat, batted the glove back to the thrower. Thereupon, Hancock concocted the idea of using a huge wrestling mat for a diamond, forming teams and playing a game similar to baseball. The afternoon "scrub"
game proved to be so much fun that Hancock suggested he make up some rules and devise an appropriate bat and ball so that they could gather again the following Saturday and play a more organized game. (Dodson \& Sisley, 1971, p. 40)

Softball was born in the gymnasium of a Chicago boat club, some historians say on Thanksgiving Day in 1887. A reporter for the Chicago Board of Trade, by his version, took a beat-up boxing glove and tied it into a ball, and he and his chums passed away a cold afternoon with an indoor version of baseball. (Costello, 1981, p. 84)

Most historians credit Hancock as the "inventor", since he wrote out the first known set of rules.

The second known set of rules for a similar version of a baseballlike game known as Diamond Ball (earlier known as Kitten Ball) was published by playground leaders in Minneapolis and St. Paul in 1900. This set of rules, which is fundamentally the framework of the rules today, was worked out to formalize the first known organized softball league play (Dodson \& Sisley, 1971).

Softball came into being around 1900 as an adaptation of baseball to the inside of a firehouse in Minneapolis. It went outdoors soon afterwards and was a slowed-down game which involved more people than the more demanding baseball. (Tillman, 1973, p. 113)

In 1933, the Amateur Softball Association of America was formed.
By 1938 the softball association boasted that there were 8,000 softball diamonds in the nation, with up to 10 million players (Kando, 1980).

The amateur Softball Association, the main governing body in softball today, has almost twenty different tournament categories in which teams from all over the country compete. They range from the little known Men's Church Slow-Pitch tourney to the giant Men and Women's Fast-Pitch action which highlights the softball season. (Sobel, 1980), p. I)

After World War II, softball began to grow and develop as never before. Many parks began to incorporate lighted diamonds and facilities for players and spectators. Various levels of softball competition became an important activity for church, social, and recreational groups of all types.

Softball was first introduced to foreign countries by American servicemen during World War II. Since that time it has been reintroduced throughout the world by many of the missionary and Peace Corps workers.

In 1950, the International Softball Federation was formed. Since 1962 this organization has grown from four (United States, Australia, Japan, Mexico) to 47 member countries (ASA, 1983).

By 1967 softball was introduced to the Pan American Games, while in 1969 the first Women's College World Series, an event sanctioned by the Division for Girls and Women's Sports and the Amateur Softball Association, was staged.

Between the years 1970-1980, amateur softball participation for both youth and adults, had experienced annual substantial growth. This was particularly true for adult participation levels.

Subsequently, the rapid growth of amateur softball participation has promoted the formalization of other major softball governing bodies, such as the United States Slowwitch Softball Association (USSSA). In addition, professional softball (slow-pitch), was organized and appeared in the 1970's.

The early $1980^{\prime}$ s has seen the tapering of adult softball participation levels around the 30 million mark, while youth participation has continued to grow at a steady rate (U.S. Dept. of Commerce, 1984).

In 1981, softball was one of 17 sports on the official program of World Games One in Santa Clara, California. The International Olympic Committee officially recognized softball in 1977; thus paving the way for softball's inclusion in future Olympic Games (ASA, 1983).

## Popularity of Softball

Softball, in particularly slow-pitch, has enjoyed great popularity. From summer recreation programs to professional leagues, millions of individuals play softball each year. "Softball became very popular after World War II', according to past president of the International Softball Congress, Frank Porth. The reason softball remains popular, is that it's one of the few team games both young and old can play after high school or college (Costello, 1981). In addition, an activity such as softball has exhibited a relatively defused participation pattern, that is, participation is no longer class based (Kando, 1980).

Across America and around the world, in small cities and sprawling metropolises, the game of softball is flourishing. Played now by 30 million Americans, it ranks as this nation's number one team participant sport. It exceeds football, baseball, basketball, soccer, hockey and many others combined. (Sobel, 1980, p. 1)

The popularity of softball is best illustrated by a statistic released by the ASA. It reported that team registration in 1978 had topped the 100,000 mark for the first time in history. In contrast, the ASA had just 15,195 registered teams in 1964 . Furthermore, the ASA reported that $80-85 \%$ of the 120,000 teams registered in 1980 were participating in slow-pitch softball play (Costello, 1981).

In Sacramento, California, alone, slow-pitch has grown to more than 600 teams in the last three years. While top fast-pitch teams drop from competition, slowmitch teams grow in popularity. Men's and women's slow-pitch tournaments are drawing large numbers of people to the parks, and senior slow-pitch leagues for those fifty years of age or older have helped skyrocket interest. Slow-pitch softball holds no magical spell over its participants, but it does provide the felicities of relaxation, fun and satisfaction. (Hoehn, 1979, p. 7)

Slow-pitch softball has been a tremendously popular activity among
men too old to play fast-pitch softball or baseball. Even though teens, collegians, and women are playing more than ever before, it is the middleaged businessman out for the quick workout and the fading baseball star who seem the most eager to participate (Weiskopf, 1975).

Fast-pitch softball remains popular at the more competitive levels of women's play. Many high schools and colleges have added fast-pitch softball to their women's varsity sport programs as a counterpart to men's varsity baseball. Each year the best university and college women's teams play in districts and regionals which culminate in a softball world series.

In 1980, the Sporting Goods Dealer Magazine counted over 13 million players competing in organized league play. Eight million of the participants were male and $60 \%$ of the men fell within the $18-34$ age bracket. Conversely, of the five million women participating, $56 \%$ were 16 years of age or younger (Costello, 1981).

In the advent of heightened interest in softball play, the National Sporting Goods Association reported $\$ 158$ million worth of softball and baseball equipment was bought in 1980 , with softball players buying the majority of goods.

More people than ever before are participating in softball activity. Consequently, the prominence of injuries related to softball/baseball play have been recognized. In 1981, the Consumer Product Safety Commission and its National Electronic Injury Surveillance System (NEISS), which does not differentiate softball from baseball related injuries, reported a total of 471,744 softball/baseball related injuries for that year. According to Department of the Army (1981) safety statistics, softball/baseball is exceeded only by football as the leading cause of sports injuries.

Furthermore, in a study dealing with slow-pitch softball injuries, it was reported that half of the incidents involved sliding and injury to the lower extremities (Wheeler, 1984).

Softball's appeal is universal and knows no cultural, age or racial barriers, as demonstrated by the 50 million men, women, and children who are participating in some form of competition (Dodson \& Sisley, 1971). More than 55 countries with 47 of them members of the International Softball Federation, have some type of softball program (Wheeler, 1984).

There are more than two million participants who play softball under the ASA banner with 62,000 umpires, making the ASA Federation umpires the largest officiating organization in the world (ASA, 1983). Also, the ASA reported over 155,000 adult and Junior O1ympic teams and more than 400,000 youngsters who participated in Junior Olympics softball.

Parallel to softball's nationwide boom, is a surging interest in privately funded complexes. In Detroit, Michigan, one of the finest facilities in the world, appropriately named "Softball City", is stretched over forty acres and operates 12 diamonds. It is also the home field for over 1,600 slow-pitch softball teams (Sobel, 1980). The "Twin Creeks" complex, located in Santa Clara County, California, bills itself as the nation's most elaborate multi-diamond (10) facility. The Twin Creek facility budgets $\$ 225,000$ a year for field maintenance alone. Aside from impeccable playing fields, complexes of this nature feature large concession area, big screen television, video taping, beer gardens, and pro shops (Ritter, 1984).

Other areas have experienced similar popularity in softball participation. In example, the U.S. Army reported over 25,000 servicemen who
had participated in softball while stationed in Europe (Fox, 1982). Further, a nationwide survey of federal and state prison recreation service indicated softball as the most popular activity (Weiskopf, 1975) and Walsh (1978) noted softball as the most popular playground activity.

Those who play softball come from many different walks of life; that is what makes the sport so unique, interesting and exciting. It would not be uncommon to find a doctor, school teacher, factory worker or store owner all playing on the same team or against each other, and all with equal desire to participate and be part of a sport that although does not capture the newspaper headlines or $T$. V. spotlight, it still excites and interests participatns and spectators alike. (ASA, 1983, p. 2).

## Types of Softball Play

At the 1933 World's Fair in Chicago, the first national softball tournament was held in both men's and women's fast-pitch divisions. During the tournament confusion arose due to each team maintaining to various sets of rules (Walsh, 1978). To eliminate the problem, the Amateur Softball Association was formed within the same year. Major goals for the organization included the establishment of standardized rules and national tournament formats.

Since 1933 the ASA has developed and promoted softball on an organized basis. Softball once a sport that was played under no less than 12 different sets of rules on a national basis, today is played under one set of rules in over 50 countries. Standardization and uniformity of the playing rules and the ASA are primarily the reason that softball today is played the world over on such an organized bases that many other amateur sports have followed softball's pattern. (ASA, 1983, p. 2)

Eventually, a rules committee known as the International Joint Rules Committee on Softball (IJRC) was formed. At the present time softball. is played internationally with one set of rules.

With the organization of the International Federation of Softball in 1950-51, softball, at the international level, became greater unified.

The major goals outlined by the Federation included the organization of all national associations, the recognition of softball by the International Olympic Committee, and the inclusion of softball in the Olympics as well as in all other types of national and international sporting events (Walsh, 1978).

Through the standardization of rules, softball has become a viable sport at both the competitive and recreational level. Among the many types of softball play available to the potential participant; fast-pitch, slow-pitch ( $12^{\prime \prime} \& 16^{\prime \prime}$ ), and modified play have become the most prevalent.

Fast-pitch is a form of softball which incorporates: nine players on the field, base stealing, $12^{\prime \prime}$ softball, shorter home plate to outfield fence dimensions, (refer to Appendix G) and a much greater degree of velocity asserted on pitches as major characteristics of the game. Fast-pitch reached its greatest level of popularity in the middle 1940's (Sobel, 1980).

One major factor for its growth was the novelty of watching spectacular underhand pitching performances (velocity on pitches recorded up to 90 100 m.p.h.). With larger team sponsors recruiting the majority of pitchers, many smaller sponsored teams disbanded. the long-range effect was a lack of interest universally and fewer youngsters being exposed to the game. As a result, the young pitchers were not being developed (Walsh, 1978). Through youth programs, sponsored by various community groups, interest in fast-pitch is on the rise again.

With the gradual decline in fast-pitch play during the 1950 's, interest and participation in slow-pitch softball began to gain momentum. In slow-pitch, the pitcher throws underhand while required to pitch the
ball a minimum of three feet ( 16 " play) or six feet ( $12^{\prime \prime}$ play) in arc to the batter. The official ball used for play varies from $12^{\prime \prime}$ to $16^{\prime \prime}$ in circumference depending upon the game modification. In addition, rules prohibit base stealing and require 10 players on the field.

At first, the game of slow-pitch was thought to be for older players, retired from fast-pitch or baseball play. The growth of slow-pitch popularity has exceeded that of the early years of fast-pitch dominance (Costello, 1981). Presently more than $80 \%$ of all softball participants are playing some form of slow-pitch.

Slow pitch offers the participant a lot of action as hits and runs are plentiful. It offers an opportunity for the fierce competitor to participate in highly skilled leagues. But it also provides the average person who wishes an outlet for recreation a chance to play on his/her local neighborhood team. People of both sexes and all ages all over the world, have found slow-pitch one of the most enjoyable team sports available. (Walsh, 1978, p. 3)

The most prevalent forms of slow-pitch softball implemented in competitive and/or recreational programs include $12^{\prime \prime}$ (ball) slow-pitch and $16^{\prime \prime}$ slow-pitch. Other variations of the game, such as 14 " "Mush Ball", have become popular regionally.

According to Kraus (1977), the major difference between $16^{\prime \prime}$ and $12^{\prime \prime}$ play (other than ball size) is that gloves, in many cases, are not permitted to be utilized by fielders. Some forms of $16^{\prime \prime}$ league play may permit certain positions, such as first base, the option to wear a glove or mitt. In addition, $16^{\prime \prime}$ play incorporates shorter pitching (38') and base (55') distances (ASA, 1985), while the distance and speed of the ball, after contact with the bat, are considerably less than that of the 12" ball (Kraus, 1977).

The $16^{\prime \prime}$ slow-pitch version of softball has evolved and retained
popularity in areas which have had limited playing field dimensions. The Chicago urban area is a prime example.

The most popular form of softball is $12^{\prime \prime}$ slow-pitch. In 1953, the first national (men's) $12^{\prime \prime}$ slow-pitch tournament was held in Cincinnati, Ohio (Walsh, 1978). Since the $1950^{\prime}$ s $12^{\prime \prime}$ slow-pitch has continued to gain adherents in the United States to reach its current status.

Depending upon the particular division (male, female, youth, etc.) of $12^{\prime \prime}$ slow-pitch play at hand, the pitching distances can range between $34^{\prime}-46^{\prime}$ while distances between the bases and home plate consist of either $60^{\prime}$ or $65^{\prime}$ (ASA, 1985). In comparison to other forms of slowpitch play, 12 " is a "faster" game. This is largely attributed to the greater velocity and distance which can be achieved when the ball is batted or thrown. In some cases, a restricted flight $12^{\prime \prime}$ ball has been introduced in leagues/programs wishing to modify batted ball distance in order to better accomodate limited playing field dimensions.

Another form of softball is modified play. In modified softball, the rules are the same as regular fast-pitch with the exception of pitching. The modified pitcher may not use a windmill, whip or sling shot delivery and the wrist may not be outside the elbow at any time during the period (ASA, 1985). The result, is a pitch to the batter which is delivered at a slower velocity (in comparison to fast-pitch) with little or no arc. The modified game "bridges" the gap between fast-pitch and slow-pitch play.

With the tremendous growth in intramural and recreational sports, the problem of recruiting, training, and paying sports officials has become a recreation director's nightmare (Butts \& Kingery, 1982). As a result,
many college campus and public recreation programs have made their own modifications of the rules and playing formats of softball.

In order to make softball at Wichita State University a game that provides favorable opportunities for total team participation and offers quick-packed action that interests a larger portion of the campus population, the nature of the game has been changed substantially. (Rokosz, 1978, p. 52)

At Michigan Technological University, the high level of frustration with the arguments created by the calling of balls and strikes by game officials has led to the implementation of three-pitch slow-pitch softball (rather than the popular 3 ball 2 strike or ASA 4 ball 3 strike game). The underlying principle of three-pitch play is to.increase the opportunities in the more enjoyable participative aspects of softball: hitting, fielding, running and scoring. This is accomplished, through the requirement of the batter to hit a fair vall within three pitches and the use of "team" pitchers (pitchers supplied by the team at bat), who would attempt to deliver pitches desirable for hitting (Carey, 1981). In addition, there is no requirement for arc placed on a pitched ball and the pitcher is no longer considered a member of the defensive unit (team in the field). At the University of Mississippi, a similar version of the threepitch slow-pitch game has been implemented into the intramural softball program due to a deficient number of officials.

Two-pitch softball was to be followed if teams did not provide officials or if they mutually agreed to use one volunteer official. to rule on all aspects of the game. Under the two-pitch rule, the team provided a pitcher to pitch to his/her own team members, with a maximum of two pitches per batter. For each game, the intramural office provided a "game monitor" to handle duties other than actual officiating. (Butts \& Kingery, 1982, p. 64)

While many public recreation agencies sponsor softball programs directly sanctioned with a national association; a good number, have made their
own modifications in order to better meet the needs of their particular program.

In example, the municipal recreation department in la Crosse (WI) has incorporated the use of "strike mats" in order to better assist umpires in making ball and strike call decisions. The objective, for the pitcher, is to deliver the ball toward home plate in a fashion which meets arc requirements while simultaneously attempting to place the pitch on a mat, located behind home plate, representing the strike zone.

Modifications of softball play can also be found in the teaching/learning aspects of game skills. As noted by Peterson (1981), in order to ensure that each participant learns to bat with as little frustration and anxiety as possible, it is necessary to develop a teaching progression for a skill that has as its central theme "no child will sit down after a turn at bat without having hit the ball".

Batting a softball is one of the most difficult sports skills for children to master. But how can such a difficult task ever be learned properly or at all if children strike out more often than not at bat? Anxiety due to repeated failure makes learning more difficult and often creates negative anticipation toward learning other skills. (Peterson, 1981, p. 72)

There are many modifications of the game of softball in use today. No matter if a person desires to participate in a men's, women's, or coed league, there is likely to be a form of softball play offered, within his or her community, which would cater to the individual's age and/or skill level.

## Softball Playing Field Considerations

Although millions of people enjoy spectator sports, participant sports have even greater appeal. The sharp growth in sports participation can
be attributed to such significant factors as increased leisure time, growing affluence and emphasis on the importance of physical fitness (Weiskopf, 1975). The rise of softball as the most popular participation sport in the United States has, in turn, created increased demands on park/recreation agencies to supply and maintain softball playing fields for use by the public.

As indicated by Rodney (1964), the generally accepted standard for the number of softball diamonds, which should be available within a community, is one for every 3,000 inhabitants. This figure varies with the specific interest shown in a community toward softball and baseball. Many diamonds found in community areas are multi-purpose. It would not be uncommon to find softball diamonds utilized by youth baseball groups during the day and adult softball league play during the evening (Weiskopf, 1975). In most cases, softball areas are included in playfield development and should be accessible to people in all neighborhoods.

If space is available (a minimum of 4.65 acres), four softball fields are ideal for a recreational/school complex. Two fields, providing adequate space and facilitating supervision for a large program, require a layout area of 2.35 acres (Hall \& Whiddon, 1980). Furthermore, for a single softball diamond, $250^{\prime} \times 250^{\prime}$ of space is recommended (Rodney, 1964).

There are two basic types of infield for softball play. One type is the turf or grass infield. Infields of this nature consist of skinned materials located only in baseline, home plate, and pitching areas. The second type is the skinned infield which is completely void of turf, Most softball diamonds, which are used for recreational leagues, utilize the
skinned type infield (WI DNR, 1981).
Softball fields vary in types from "cow-pasture" variety to wellkept diamonds. The best fields have skinned diamonds with all grass, weeds, and rocks eliminated. (AI \& AAHPERD, 1982, p. 62)

It is recommended that a skinned infield be used. If a skinned infield is used, the area is determined by measuring a 60' arc from the front center of the $46^{\prime}$ ( 14.0208 m ) pitcher's plate. (National Federation of State High School Association [NFSHSA], 1984, p. 10)

In the construction of a skinned infield area, a pre-mixed surface material consisting of one-third sand and two-thirds clay/silt should be spread at a depth of three to six inches. The sub-base below the prepared mix should consist of approximately three inches of one-half to one and one-half inch crushed stone. If subsoil condition requires a final sub-base, four to six inches of filter coarse material should be included. (WI DNR, 1981). On the average, a skinned softball infield area requires five tons of sand (brick type) annually for regrading and reconditioning purposes (Infield Spreader, 1984).

Prior to field construction, soil content should be tested as large amounts of clay (over 15 percent) prevent proper drainage (Penman, 1977). If subdrain tile is required or desired, it should be encased in coarse material and the use of four inch (minimum) diameter tile is recommended. The skinned infield, if constructed properly, requires less maintenance than a grass infield (WI DNR, 1981).

One of the greatest hazards of infield play is the "bad bounce" created by unmanaged "lips" or "humps" found in the actual playing surface (Hilliker, 1980). The raking of surface material smooths and levels the infield area and helps eliminate the indicated hazards. This process is generally called "dragging" the infield. For proper maintenance, raking must be
done regularly and also before each competitive event (Hall \& Whiddon, 1980). Whenever holes start to develop at stress areas (such as pitchers plate, batters box, and around the bases), add surfacing materials promptly and tamp thoroughly.

On skinned diamonds the infield should be raked, leveled, dragged with a rail, woven wire fencing, or mat and rolled from time to time. Dragging should start outside the base paths and progress toward the center. For a diamond with a turf infield, a steel door mat serves as an effective drag for the baselines. (Butler, 1960, p. 54)

Another infield maintenance need to consider involves the marking of playing field lines. Lines commonly marked within the infield include: foul line, batter box, and coaches box. The material used for marking must not be injurious to the eyes or skin, therefore, eliminating the use of lime or any other caustic material (NFSHSA, 1984).

During periods of above normal hot and dry weather conditions the skinned areas of the infield should be dampened with water when necessary, unless it is treated with an appropriate dust binder (calcium chloride). Further, when infield areas are too saturated from wetness or otherwise unfit for activity, the utilization of such areas should not be permitted (Butler, 1960).

As indicated by Long (1981), there are alternatives to the traditional mix of sand, clay and silt for skinned areas, one of which includes the use of stone dust as the prime surface material.

Before deciding on the traditional mixture of sand, silt and clay for the skinned area of a baseball field, grounds managers may wish to study alternatives. Six years ago the Holy Cross College grounds department switched to stone dust, a crushed stone by-product that has met the department's needs. The dust, available from any sand and gravel company, has a granular sand-like consistency. (Long, 1981, p. 70)

The traditional mix has several disadvantages. The sand, clay and
silt mixture promotes: weed growth, grass encroachment, poor drainage, and greater man hours. The major disadvantage to the use of stone dust is that it can become too dry (Long, 1981).

In addition to natural surface material alternatives, there is the synthetic option. The use of synthetic surfaces reduce maintenance (since skinned areas are only needed around base, plate, and pitching areas) and provide an attractive playing area. However, according to Hall and Whiddon (1980), the synthetics have definite disadvantages. The hard, rug-like surface absorbs heat and causes sliding burns, sore legs, and difficulty in handling hard ground balls. Furthermore, the initial cost of laying the surface is a major inhibitor for most programs.

While infield areas absorb much of the play activity, the outfield area also must be considered. The best grasses for general purpose fields are bluegrass and bermuda (Hall \& Whiddon, 1980). Ideal maintenance includes annual fertilizing, frequent repair of damaged areas, installation of watering systems, and mowing of the grass regularly at one and one-half to two inches high.

For natural turf outfields, water outlets should be conveniently placed around turf areas and covered by rubber safety caps level with the ground. An automatic sprinkling system is more expensive to install, but may be less expensive in the long run when labor savings and convenience are considered (AI \& AAHPERD, 1982). In periods of exceptionally dry weather, the turf should be soaked thoroughly once or twice a week (Butler, 1960). The field, as a whole, should drain toward the foul lines with a one percent slope (Hall \& Whiddon, 1980).

Miscellaneous, but important, playing field items to consider include
the installation of adequate fencing, bleachers and benches, lighting (recommended 100 footcandles on the task), and backstop. Also, for best all around orientation for late afternoon, twilight, fall schedule, and early afternoon games, the apex of home plate should be positioned 20 degrees north of northwest.

The Athletic Institute and American Association for Health, Physical Education, Recreation, and Dance note three features which are present in a quality playing area. These features are: good construction, proper soil structure, and careful maintenance. This is particularly true in the case of softball playing areas. A "good" field should be playable early in the spring and soon after a moderate rain fall. Most importantly, a well kept infield and outfield area give each player a chance to perform at the best of his or her ability.

## Summary

The purpose of this chapter was to acquaint one with the historical background of the game of softball, the popularity of softball, the types/ forms of softball play, and the considerations involved in softball playing field areas. Review of the related literature reaffirms softball as a relatively new game, which incorporates many similar, but different, forms of play. Many of these forms, have become extremely popular in the United States as both a competitive and recreational participative sport. Additionally, many aspects related to the construction and maintenance of softball playing areas have been identified (see Appendix G for specific details concerning softball playing field dimensions and requirements).

Although much has been written on the topic of softball, in general,
little has been devoted to programing concerns. The need to further investigate such matters is reinforced throughout the review of related material.

## CHAPTER III

METHODS

The intent of this descriptive study was to identify and describe municipal park and/or recreation department sponsored adult softball programs, implemented within incorporated places ranging from 45,000-55,000 in population, throughout the United States. Furthermore, this study intended to identify selected adult softball program elements associated with the cited population. In addition, the study attempted to analyze data from two perspectives: first, as a whole (cumulative responses, which represented the sample population); and second, as a geographic region (separate cumulative responses, which represented the designated regions within the sample population).

In order to facilitate the intent of the study, several methods had to be initiated. These methods involved the: (a) identification of survey population, (b) determination of appropriate geographic regions, (c) development of questionnaire (instrument) and cover letter, and (d) implementation of a pre-test.

After the above measures were completed and deemed satisfactory, the questionnaire was distributed to all known incorporated places, within the United States, meeting site requirements. Upon response, data was compiled from the questionnaires (processed by computer) and municipal park and/or recreation departments, which sponsored adult softball programs, were identified. Only data related to the cited population and associated
with selected adult softball program elements, was utilized in the comparative analysis of study results. The comparative analysis was based on percentages (frequency of response) as indicated in the crosstabulation of received data.

## Identification of Survey Population

The identification of all incorporated places, ranging between 45,000 55,000 in population, within the United States was based on figures released in the 1980 census of the population. Census information of this nature was obtained through the careful review of the 1983 Statistical Abstract City and County Data Book issued by the U.S. Department of Commerce, Bureau of the Census.

In total, 104 incorporated places met site requirements (refer to Appendix A). Incorporated places which recorded exact total population extremes ( 45,000 or 55,000 ) were pre-designated to be included among the survey population.

Once the survey population was established, the next task involved the location of pertinent information concerning the identification of public park/recreation agencies serving within the designated incorporated places. This procedure entailed obtaining the names of agency contact persons (department directors), addresses, and telephone numbers.

Through the utilization of the 1984 Municipal Index, published by the Morgan-Grampian Company of Pittsfield, Massachusetts, the majority of the cited work was accomplished. The use of telephone directories, associated with specific survey sites, also proved helpful.

## Determination of Appropriate Geographic Regions

The use of United States census regions (Appendix C), as established by the U.S. Department of Commerce, Bureau of the Census (1984), was concurred as an adequate and appropriate method for the determination of general geographic regional placement of survey sites.

In the above format, nine geographic regions represented the nation. These regions were as follows: Pacific, Mountain, West North Central, East North Central, West South Central, East South Central, South Atlantic, Middle Atlantic, and New England. The states identified within each region (refer to Appendix D) served as the basis for survey site placement.

In example, the Pacific region; which encompassed the states of Washington, Oregon, California, Alaska, and Hawaii, would include any survey site geographically located among the listed states (such as Redwood City, CA).

## Development of Questionnaire and Cover Letter

The development and selection of questionnaire content (Appendix F) was primarily based on adult softball programming concerns expressed by the City of La Crosse (WI) Park and Recreation Department (sponsor of the study). Additional question areas were suggested by the writer and thesis committee. Furthermore, the overall format and condition of the instrument was scrutinized by the thesis committee and others related to the project.

Upon the completion of instrument questions, appropriate responses were furnished to accompany each statement. The range of responses for each question was established through pre-testing. The pre-test,
conducted in conjunction with the La Crosse Park and Recreation Department, utilized the person most knowledgable of the adult softball program. Instructions advised the respondent to give exact or "best" answers to the questions. These responses established the mean for each range (where applicab1e).

In example, if the response for the number of softball infield areas available was 10 , the range of responses offered within the questionnaire format would be zero (or none) to 20 . In all cases, the greatest numerical number/percentage offered among the possible responses were left openended (in reference to the example, 10 or more). This was implemented in order to account for responses which exceeded the range.

Many questions did not require numerical response offerings (such as: which type(s) of softball does your department offer?). In these situations, the best known possible responses were given. The writer, with assistance from the thesis committee and others concerned, attempted to supply the best assortment of possible responses. In all cases, except if a committed response was required, an "other" category was supplied in order to accommodate for any miscellaneous answers which may have been omitted among the choice of responses.

The questionnaire was divided into two major sections. The first section identified the background and basic structure of the survey site (agency). The second section sought approximate answers regarding the nature of the agency's adult softball program (if one was sponsored). The selected areas of interest, to the study, pertained to the identification of municipal park and/or recreation department sponsored adult softball programs (within the given population) and the participation
numbers, league and team structures, utilization of softball areas, scheduling of games, program budgeting and maintenance of infield areas associated with them.

A very important accessory to the questionnaire was the corresponding cover letter (Appendix E). The purpose of the cover letter was to explain and relate needs of the study and questionnaire to the potential respondent.

To create a better understanding of the study and applied instruments among the recipients of the questionnaire, it was imperative to communicate, in writing; the following concerns; the: (a) purpose of the study, (b) importance of their compliance, (c) definition of critical terms, (d) content of all enclosed materials, (e) return of completed questionnaire target date or deadline, (f) appropriate contact person(s), address and telephone numbers related to the study, and (g) acknowledgement of appreciation for their assistance and cooperation.

In order to reinforce the overall scope of the study, the inclusion of a name list was utilized in conjunction with the questionnaire and cover letter. The list (Appendix A) identified all the incorporated places which were included in the survey population.

## Implementation of Pre-Test

The pre-test of survey materials (site selection, questionnaire, and cover letter) was necessary in order to increase the validity of the study. The returns of the pre-test provided valuable insight into potential problem areas of questionnaire content and format. In addition, the pretest return rate ( $75 \%$ ) served as an indicator of what to expect in terms of an actual survey return rate.

The selection of survey sites utilized in the pre-test was determined through the random sample process. Specifically, the "Illustrative Table of Random Numbers", as presented by Conway, Jennings, and Milstein (1974), was implemented.

In the pre-test, four general regions represented the nine specific regions utilized in the survey/study (West, North Central, Northeast, and South). These regions, as outlined in Appendix C, were determined in conjunction with the nine cited regions by the U.S. Department of Commerce, Bureau of the Census (1984).

The four pre-test sites selected randomly were: Redwood City, California (West), Kokomo, Indiana (North Central), Pittsfield, Massachusetts (Northeast), and Bossier City, Louisiana (South). A11 but one site returned a completed pre-test questionnaire (75\%). Responses were examined for potential misinterpretation. After review, noted problem areas were corrected for clarification and rectified.

## Miscellaneous Procedures

Before the finalized questionnaire materials were distributed to the survey population, several procedures had to be administered. First, to insure proper identification, survey sites were assigned a number. The corresponding numbers were then marked on the questionnaires and, upon return, matched against a master check list for verification. Second, both mailing and return envelopes were addressed correctly. All utilized envelopes were proofread for any mistakes in listing of agency name, contact person, address and zip code. Third, the correct amount of postage was determined and applied to each mailing and return envelope. Lastly, survey
materials were carefully packaged in the mailing envelopes and delivered to the local post office.

In conclusion, it was the general concensus of all concerned, that through the successful implementation of the identified methods and procedures the odds of a greater initial return rate were improved. Furthermore, a one week return period, of the completed questionnaire, was requested in the cover letter in order to expedite the analysis of collected data.

CHAPTER IV
RESULTS AND DISCUSSION

The return rate of completed questionnaires was $74 / 99$ or $74.7 \%$ of the sample population．This percentage was in correspondence with the pre－test return ratio of $3 / 4$ or $75 \%$ ．

The study results are presented in 30 individual topic areas represented by the given tables．Table results，are in reference to the frequency of response to each question area outlined in the instrument．Discussion material corresponds directly to the given table results and other collected data related to the topic areas．

Regions represented in the table results include：Region $⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十 一 ~-~ P a c i f i c, ~$ Region \＃2－Mountain，Region \＃3－West North Central，Region \＃4－East North Central，Region \＃6－East South Central，Region $⿰ ⿰ 三 丨 ⿰ 丨 三^{\text {7－South Atlantic，Region }}$ \＃8－Middle Atlantic，and Region \＃9－New England．The West South Central Region（非5）was omitted from the table results，with the exception of Table 1 ，since no adult softball programs were sponsored by municipal park and／or recreation departments within the region（no programs indicated as such）．The identification of states represented within each region is outlined in Appendix D．

Tables 2－30，are based on data received from 58 agencies identified as municipal park and／or recreation departments，which sponsored adult softball programs within the return sample．

## Results

Table 1

Type of Agency/Department

| Response | Frequency | Percent |
| :---: | :---: | :---: |
| Municipal |  |  |
| Park and Recreation | 46 | 62.2\% |
| Recreation (only) | 10 | 13.5\% |
| Park, Recreation and other Division(s) | 7 | 9.5\% |
| ```(i.e., Arts, Streets, Golf Courses, Public Property, -Waterfronts, etc.)``` |  |  |
| Park, Recreation \& Forestry | 3 | 4.0\% |
| Other |  |  |
| County, Park/Recreation District, School District, and other combination public park/recreation departments | 8 | 10.8\% |
| Total: | 74 | 100\% |

Table 2
\# of Full-time Professional Park/Recreation Staff

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |  |
| 3 or less | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 11/ | 19.0\% |
| 4 | 4 | - | - | 2 | - | - | 2 | - |  | 13.8\% |
| 5 | - | - | 3 | 2 | 4 | - | - | - | $9 /$ | 15.5\% |
| 6 | 1 | - | 1 | 2 | - | 2 | 1 | 2 | $9 /$ | 15.5\% |
| 7 or more | 9 | 5 | 0 | 2 | 0 | 5 | 0 | 0 | 21/ | $36.2 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 /$ | 100\% |

Table 3
Approx. Total Operation Budget

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| $\begin{aligned} & \text { Less than } \\ & \$ 800,000 \end{aligned}$ | 3 | 1 | - | 1 | - | - | 2 | 2 | 9/15.5\% |
| $\begin{aligned} & \$ 800,000 \\ & \text { to } \$ 1.0 \mathrm{mil} . \end{aligned}$ | 4 | 1 | - | 1 | - | 2 | 1 | - | 9/15.5\% |
| $\begin{aligned} & \$ 1.0 \mathrm{mi} 1 \\ & \text { to } \$ 1.2 \mathrm{mil} \end{aligned}$ | 1 | - | 2 | 1 | 3 | 1 | 1 | - | 9/15.5\% |
| $\$ 1.2 \mathrm{mil}$. to $\$ 1.4 \mathrm{mil}$. | 3 | 1 | 2 | 1 | 1 | - | - | 1 | 9/15.5\% |
| $\begin{aligned} & \$ 1.4 \mathrm{mil} \\ & \text { to } \$ 1.6 \mathrm{mil} . \end{aligned}$ | - | 1 | - | 1 | - | - | - | - | 2/3.4\% |
| $\begin{aligned} & \$ 1.6 \mathrm{mil} \\ & \text { to } \$ 1.8 \mathrm{mil} \end{aligned}$ | 1 | - | 1 | - | 1 | - | - | - | 3/5.2\% |
| $\$ 1.8 \mathrm{mil}$. <br> to $\$ 2.0 \mathrm{mil}$. | - | - | - | 1 | - | 1 | 1 | - | 3/5.2\% |
| $\$ 2.0 \mathrm{mil}$. or more | 4 | 3 | - | 3 | - | 4 | - | - | 14/24.1\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 4
Distribution of Municipal Departments

| Region Frequency |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |

Yes,
$\begin{array}{llllllllllll}\text { Municipal } & 16 & 7 & 5 & 9 & 5 & 8 & 5 & 3 & 58 / 100 \%\end{array}$
Park and/or
Recreation
Department with
adult softball

Column Tot. N/A

Table 5
Types of Softball Play


12" Slow-pitch

| Yes | 15 | 7 | 5 | 8 | 5 | 7 | 5 | 3 | $55 / 94.8 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| No | 1 | - | - | 1 | - | 1 | - | - | $3 / 5.2 \%$ |

14" Slow-pitch

| Yes | 3 | - | - | 1 | - | - | - | 1 | $5 / 8.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| No | 13 | 7 | 5 | 8 | 5 | 8 | 5 | 2 | $53 / 91.4 \%$ |

16" Slow-pitch

| Yes | 3 | 1 | 1 | 2 | - | 2 | - | - | $9 / 15.5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| No | 13 | 6 | 4 | 7 | 5 | 6 | 5 | 3 | $49 / 84.5 \%$ |

Fast-pitch

| Yes | 6 | 4 | 3 | 4 | 1 | 2 | 2 | 1 | $23 / 39.7 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 10 | 3 | 2 | 5 | 4 | 5 | 3 | 2 | $35 / 60.9 \%$ |

Other

| Yes | - | - | - | - | - | 1 | - | 1 | $2 / 3.4 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 16 | 7 | 5 | 9 | 5 | 6 | 5 | 2 | $56 / 96.6 \%$ |

Table 6
Approx. Total $\#$ of Teams in Program

| Region Frequency |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| Less than 30 | 3 | - | - | - | - | 1 | - | - | $4 / 6.9 \%$ |
| 30 to 59 | - | - | - | 1 | - | - | 3 | 2 | $6 / 10.3 \%$ |
| 60 to 89 | 5 | 3 | - | 1 | 2 | 3 | - | - | $14 / 24.1 \%$ |
| 90 to 119 | 2 | - | 1 | 2 | 2 | 1 | 2 | - | $10 / 17.2 \%$ |
| 120 to 149 | 1 | - | 3 | 1 | 1 | 1 | - | - | $7 / 12.1 \%$ |
| 150 to 179 | 2 | 2 | - | 2 | - | 1 | - | - | $7 / 12.1 \%$ |
| 180 to 209 | - | - | - | - | - | - | - | 1 | $1 / 1.7 \%$ |
| 210 to 239 | 1 | 2 | - | 2 | - | 1 | - | - | $6 / 10.3 \%$ |
| 270 or more | 2 | - | 1 | - | - | - | - | - | $3 / 5.2 \%$ |

Table 7
Approx. Total \# of Women's Teams in Program

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| None | 3 | 1 | - | - | - | - | 1 | - | $5 / 8.6 \%$ |
| Less than 20 | 5 | 2 | - | 4 | 1 | 4 | 2 | 2 | $20 / 34.5 \%$ |
| 20 to 39 | 4 | 1 | 4 | 1 | 4 | 3 | 2 | 1 | $20 / 34.5 \%$ |
| 40 to 59 | 3 | 1 | - | 4 | - | - | - | - | $8 / 13.8 \%$ |
| 60 to 79 | 1 | 2 | 1 | - | - | 1 | - | - | $5 / 8.6 \%$ |

Table 8


| Response | Region Frequency |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| None | 7 | 1 | - | 5 | 2 | 5 | 5 | 3 | 28/48.3\% |
| Less than 10 | 1 | 2 | - | 1 | 2 | 1 | - | - | 7/ 12.1\% |
| 10 to 19 | 2 | 2 | 3 | 1 | 1 | 1 | - | - | 10/17.2\% |
| 20 to 29 | 1 | 1 | - | 1 | - | 1 | - | - | 4/6.9\% |
| 30 to 39 | - | 1 | 1 | 1 | - | - | - | - | 3/5.2\% |
| 40 to 49 | 1 | - | - | - | - | - | - | - | 1/ 1.7\% |
| 50 to 59 | 1 | - | - | - | - | - | - | - | 1/1.7\% |
| 60 to 69 | 1 | - | - | - | - | - | - | - | 1/ 1.7\% |
| 80 or more | 2 | - | 1 | - | - | - | - | - | 3/5.2\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 9
Similar Adult Softball Programs Offered

| Response | Region Frequency |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| Yes | 7 | 3 | 3 | 6 | 3 | 7 | 3 | 1 | 33/56.9\% |
| No | 9 | 4 | 2 | 3 | 2 | 1 | 2 | 2 | 25/43.1\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 10
Non-resident Participation

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes | 16 | 6 | 5 | 9 | 5 | 8 | 4 | 2 | $55 / 94.8 \%$ |
| No | - | 1 | - | - | - | - | 1 | 1 | $3 / 5.2 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 11
Non-resident Additional Fee (User Fee)

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes | 5 | 3 | 2 | 6 | - | 5 | 1 | 1 | $23 / 41.8 \%$ |
| No | 11 | 3 | 3 | 3 | 5 | 3 | 3 | 1 | $32 / 58.2 \%$ |
| Column Tot. | 16 | 6 | 5 | 9 | 5 | 8 | 4 | 2 | $55 / 100 \%$ |

Table 12
Utilization of Adult Baseball Infield Areas

| Response | Region Frequency |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| Yes | 5 | 4 | 1 | 3 | 2 | 4 | 4 | 2 | 25/43.1\% |
| No | 10 | 3 | 4 | 6 | 3 | 4 | 1 | 1 | 32/55.2\% |
| Uncertain | 1 | - | - | - | - | - | - | - | 1/1.7\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 13
participation Levels Since 1979

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 14 | 7 | 5 | 7 | 5 | 7 | 5 | 2 | $52 / 89.7 \%$ |
| Increased <br> Remained the <br> Same | 2 | - | - | 2 | - | 1 | - | 1 | $6 / 10.3 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 14
Approx. Total 非 of Weeks in Season(s)

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| 11 to 13 | - | - | - | 1 | - | - | - | 1 | 2/ 3.4\% |
| 14 to 16 | 5 | 3 | 3 | 4 | - | 1 | 1 | - | 17/ 29.3\% |
| 17 to 19 | - | 1 | - | 2 | - | - | - | - | 3/ 5.2\% |
| 20 to 22 | 1 | 1 | - | 1 | 3 | 3 | - | - | 9/ 15.5\% |
| 23 to 25 | - | - | 2 | 1 | - | - | 2 | 1 | 6/ 10.3\% |
| 26 to 28 | 2 | 2 | - | - | 1 | - | 1 | 1 | 7/ 12.1\% |
| 29 to 31 | 2 | - | - | - | - | 1 | - | - | 3/ 5.2\% |
| 32 or more | 6 | - | - | - | 1 | 3 | 1 | - | 11/ 19.0\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 15

| Region Frequency |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row | Total |

Sept./Oct.

| Yes | 11 | 5 | 2 | 2 | 4 | 6 | 5 | 1 | $36 / 62.1 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 5 | 2 | 3 | 7 | 1 | 2 | - | 2 | $22 / 37.9 \%$ |

Nov./Dec.

| Yes | 8 | 1 | - | - | - | 3 | - | - | $12 / 20.7 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 8 | 6 | 5 | 9 | 5 | 5 | 5 | 3 | $46 / 79.3 \%$ |

Jan. /Feb.

|  | 4 | - | - | - | - | 1 | - | - | $5 / 8.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes | 42 | 7 | 5 | 9 | 5 | 7 | 5 | 3 | $53 / 91.4 \%$ |

None of the
Above

| Yes | 5 | 2 | 3 | 7 | 1 | 1 | - | 1 | $20 / 34.5 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 11 | 5 | 2 | 2 | 4 | 7 | 5 | 2 | $38 / 65.5 \%$ |

Column Total
$\begin{array}{lllllllllllll}\text { for all Sub- } & 16 & 7 & 5 & 9 & 5 & 8 & 5 & 3 & 58 / 100 \%\end{array}$
topics

|  | Seasonal Periods of Play (Mar.-Aug.) |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |

Mar./Apr.

| Yes | 9 | 3 | 1 | 1 | 3 | 7 | 2 | 1 | $27 / 46.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 7 | 4 | 4 | 8 | 2 | 1 | 3 | 2 | $31 / 53.4 \%$ |

May/June

| Yes | 12 | 6 | 5 | 9 | 5 | 8 | 5 | 3 | $53 / 91.4 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 4 | 1 | - | - | - | - | - | - | $5 / 8.6 \%$ |

July/Aug.

| Yes | 15 | 7 | 5 | 9 | 5 | 7 | 5 | 3 | $56 / 96.6 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No | 1 | - | - | - | - | 1 | - | - | $2 / 3.4 \%$ |

None of the
Above
$\begin{array}{lllllllllll}\text { No } & 16 & 7 & 5 & 9 & 5 & 8 & 5 & 3 & 58 / 100 \%\end{array}$

Column Total
$\begin{array}{llllllllllll}\text { for } \begin{array}{ll}\text { all }\end{array} \text { Sub- } & 16 & 7 & 5 & 9 & 5 & 8 & 5 & 3 & 58 / 100 \%\end{array}$
Topics

Table 16
Times of Day Utilized for League Play

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Region Frequency |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |

Evening
(6:00 to 12:00
midnight)

|  | Yes | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Late Night
(12 midnight
to 6:00 a.m.)
$\begin{array}{lllllllllll}\text { No } & 16 & 7 & 5 & 9 & 5 & 8 & 5 & 3 & 58 / 100 \%\end{array}$

Column Total

| for all sub- | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | topics.

Table 17

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| No Games Cancelled | 2 | - | - | - | - | - | - | - | 2/ 3.4\% |
| Less than 5\% | 9 | 1 | 1 | 3 | 1 | 4 | 2 | 1 | 22/37.9\% |
| 5 to $9 \%$ | 2 | 3 | 2 | 4 | - | 3 | - | 1 | 15/ $25.9 \%$ |
| 10 to $14 \%$ | 3 | 2 | 2 | 2 | 3 | 1 | 3 | 1 | 17/ 29.3\% |
| 15 to $19 \%$ | - | - | - | - | 1 | - | - | - | 1/1.7\% |
| 25 to $29 \%$ | - | 1 | - | - | - | - | - | - | 1/1.7\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |
| Table 18 |  |  |  |  |  |  |  |  |  |
| Play Areas Responsible for Cancellations |  |  |  |  |  |  |  |  |  |
| Response | Region Frequency |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| Infield <br> (skinned) | 14 | 7 | 5 | 8 | 3 | 6 | 4 | 3 | 50/ 86.2\% |
| Infield <br> (skinned with turf) | 1 | - | - | 1 | 2 | 2 | 1 | - | 7/ 12.1\% |
| $\begin{aligned} & \text { Outfield } \\ & \text { (turf) } \end{aligned}$ | 1 | - | - | - | - | - | - | - | 1/1.7\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 19
Cancelled League Games Rescheduled

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 20
Approx. 非 of Fields Utilized

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Rogion Frequency Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Less than 7 | 10 | 3 | 2 | 5 | 1 | 6 | 4 | 2 | $33 / 56.9 \%$ |
| 7 to 8 | 2 | 3 | 1 | - | 1 | - | - | - | $7 / 12.1 \%$ |
| 9 to 10 | 3 | 1 | 2 | 1 | 2 | - | - | 1 | $10 / 17.2 \%$ |
| 11 to 12 | - | - | - | - | 1 | - | - | - | $1 / 1.7 \%$ |
| 13 to 14 | 1 | - | - | 2 | - | 2 | - | - | $5 / 8.6 \%$ |
| 17 to 18 | - | - | - | - | - | - | 1 | - | $1 / 1.7 \%$ |
| 21 to 22 | - | - | - | 1 | - | - | - | - | $1 / 1.7 \%$ |

Table 21
Utilization of Synthetic Infield Areas

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| None | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 22
Approx. Total \# of Lighted Fields

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| Less than 7 | 14 | 5 | 3 | 8 | 1 | 6 | 5 | 3 | 45/ 77.6\% |
| 7 to 8 | 1 | 1 | 2 | - | 2 | - | - | - | 6/ 10.3\% |
| 9 to 10 | 1 | 1 | - | 1 | 1 | - | - | - | 4/ 6.9\% |
| 11 to 12 | - | - | - | - | 1 | - | - | - | 1/ 1.7\% |
| 13 to 14 | - | - | - | - | - | 2 | - | - | 2/ 3.4\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 23
Responsible Infield Maintenance Proportion

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| All Infields | 13 | 6 | 5 | 9 | 4 | 8 | 5 | 2 | $52 / 89.7 \%$ |
| Some | 1 | - | - | - | 1 | - | - | - | $2 / 3.4 \%$ |
| None | 2 | 1 | - | - | - | - | - | 1 | $4 / 6.9 \%$ |

Table 24
Approx. Total Cost of Outdoor Infield Maintenance

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| Less than $\$ 10,000$ | 5 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 13/ 22.4\% |
| $\begin{aligned} & \$ 10,000 \text { to } \\ & \$ 15,000 \end{aligned}$ | 7 | 1 | 3 | 3 | 2 | 1 | 2 | 1 | 20/34.5\% |
| $\begin{aligned} & \$ 15,000 \text { to } \\ & \$ 20,000 \end{aligned}$ | 1 | 2 | 1 | - | 1 | 3 | - | 1 | 9/ $15.5 \%$ |
| $\begin{aligned} & \$ 20,000 \text { to } \\ & \$ 25,000 \end{aligned}$ | - | 2 | - | 1 | - | - | - | - | 3/5.2\% |
| $\begin{aligned} & \$ 25,000 \text { to } \\ & \$ 30,000 \end{aligned}$ | 2 | - | - | 1 | 1 | - | - | - | 4/ 6.9\% |
| $\begin{aligned} & \$ 30,000 \text { to } \\ & \$ 35,000 \end{aligned}$ | 1 | - | - | 2 | - | - | - | - | $3 / 5.2 \%$ |
| $\begin{aligned} & \$ 35,000 \text { to } \\ & \$ 40,000 \end{aligned}$ | - | - | - | 1 | - | 1 | 1 | - | 3/5.2\% |
| $\begin{aligned} & \$ 50,000 \text { or } \\ & \text { more } \end{aligned}$ | - | 1 | - | - | - | 1 | 1 | - | 3/ 5.2\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 25
Accountable \% of Total Infield Maintenance Cost

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| 0\% | 1 | 1 | - | - | - | - | - | 1 | 3/5.2\% |
| Less than 40\% | 4 | - | 1 | 1 | - | $\sim$ | - | 1 | 7/ 12.1\% |
| 40 to 60\% | 1 | - | - | - | - | - | - | - | 1/1.7\% |
| 70 to $99 \%$ | - | - | - | - | 1 | - | 1 | - | 2/ 3.4\% |
| 100\% | 10 | 6 | 4 | 8 | 4 | 8 | 4 | 1 | 45/ 77.6\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 26
Supply and Pay Umpires

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes, all | 9 | 6 | 3 | 6 | 3 | 5 | 2 | 1 | $35 / 60.3 \%$ |
| Yes, some | 1 | 1 | - | 2 | 1 | - | - | 1 | $6 / 10.3 \%$ |
| No, none | 6 | - | 2 | 1 | 1 | 3 | 3 | 1 | $17 / 29.3 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 27
Largest Sponsored Team Sport Program

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| Yes | 16 | 5 | 5 | 9 | 4 | 8 | 5 | 3 | 55/ 94.8\% |
| No | - | 2 | - | - | 1 | - | - | - | 3/ 5.2\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 28
Program Limitation of the Total \# of Teams

| Response | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Yes | 8 | 6 | 3 | 9 | 1 | 7 | 4 | 1 | $39 / 67.2 \%$ |
| No | 8 | 1 | 2 | - | 4 | 1 | 1 | 2 | $19 / 32.8 \%$ |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | $58 / 100 \%$ |

Table 29
Approx. Total Program Budget

| Response | Region Frequency |  |  |  |  |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 |  |
| Less than $\$ 30,000$ | 9 | 2 | 3 | 3 | 3 | 5 | 2 | 3 | 30/ 51.7\% |
| $\begin{aligned} & \$ 30,000 \text { to } \\ & \$ 35,000 \end{aligned}$ | 3 | - | - | 1 | - | 1 | - | - | 5/ 8.6\% |
| $\begin{aligned} & \$ 35,000 \text { to } \\ & \$ 40,000 \end{aligned}$ | - | 1 | - | 2 | 1 | 1 | 1 | - | 6/ 10.3\% |
| $\begin{aligned} & \$ 40,000 \text { to } \\ & \$ 45,000 \end{aligned}$ | 1 | - | 2 | 1 | - | - | 1 | - | 5/8.6\% |
| $\begin{aligned} & \$ 45,000 \text { to } \\ & \$ 50,000 \end{aligned}$ | 1 | 1 | - | 2 | - | 1 | - | - | 5/8.6\% |
| $\begin{aligned} & \$ 50,000 \text { to } \\ & \$ 55,000 \end{aligned}$ | - | - | - | - | 1 | - | - | - | 1/1.7\% |
| $\begin{aligned} & \$ 55,000 \text { to } \\ & \$ 60,000 \end{aligned}$ | - | 1 | - | - | - | - | - | - | 1/1.7\% |
| $\begin{aligned} & \$ 65,000 \text { to } \\ & \$ 70,000 \end{aligned}$ | - | - | - | - | - | - | 1 | - | 1/ 1.7\% |
| $\$ 70,000 \text { or }$ more | 2 | 2 | - | - | - | - | - | - | 4/ 6.9\% |
| Column Tot. | 16 | 7 | 5 | 9 | 5 | 8 | 5 | 3 | 58/ 100\% |

Table 30
Need for Additional Softball Areas

|  | Region Frequency |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 9 | Row Total |
| Yes | 13 | 5 | 3 | 5 | 4 | 5 | 3 | 3 | $41 / 70.7 \%$ |
| No | 3 | 2 | 2 | 4 | 1 | 3 | 2 | - | $17 / 29.3 \%$ |

## Discussion of Results

Description of Sample Population (Tables 1-5)
A large majority, $89.2 \%(66 / 74)$, of the respondent agencies (return sample) classified themselves as municipal park and/or recreation departments. Of the 66 municipal park and/or recreation departments, 58 or $87.9 \%$ sponsored adult softball programs of some form. Furthermore, $51.7 \%$, of the municipal departments, which sponsored adult softball programs, employed six or more full-time professional park/recreation personnel and $53.4 \%$ indicated total department operation budgets of $\$ 1.2$ million or more.

More specifically, municipal recreation (only) departments generally employed four or less professionals and had budgets under $\$ 600,000$. Conversely, municipal park, recreation and other division(s) departments (i.e., park, recreation and forestry) employed the greatest number of full-time professional staff and had the largest total budgets.

On a larger scope, $87.8 \%(65 / 74)$ of the return sample retained some form of a public park and/or recreation agency sponsored adult softball program. In situations where adult softball programs were not sponsored or co-sponsored by public park and/or recreation agencies, such programs were usually administered, supervised, and financed through local softball associations. In all cases, public park and/or recreation agencies were responsible for the maintenance of all or some of the infield areas/diamonds utilized for adult softball play.

In the West South Central Region (非), association sponsored adult softball programs seemed to be the rule rather than the exception. Of the four municipal park/recreation departments which responded, not one
sponsored adult softball as defined in the text. Though relieved of adult softball programming concerns, the maintenance of adult softball play areas remained the responsibility of the municipal park and/or recreation departments.

The predominance of consolidated municipal park and recreation department programs was evident in most regions. The Pacific, Middle Atlantic, and New England regions encompassed the majority of municipal recreation department programs without direct park ties (recreation only). The greatest percentage, $27.5 \%(16 / 58)$, of the municipal park and/or recreation departments, which sponsored adult softball programs, were identified within the Pacific region. This percentage corresponded with the total population identified in which $23.1 \%$ (24/104) of the incorporated places were identified as Pacific region sites.

Other public park/recreation agencies, which sponsored adult softball programs, included: park districts (identified in Illinois and California), county park/recreation departments (identified primarily in California), and school district recreation departments (identified mainly in the Midwest). Agenices of this nature only accounted for $10.8 \%$ of all adult softball programs represented within the return sample.

Description of Selected Adult Softball Program Elements (Tables 5-30)

In response to the type(s) of softball play offered, a significant percentage, $94.8 \%$, of the municipal park and/or recreation departments which sponsored adult softball programs (MPRDS), offered $12^{\prime \prime}$ slow-pitch play as part of their adult softball programs. Further, all regional areas indicated $12^{\prime \prime}$ slow-pitch play as the most prevalent form of soft-
ball offered.
Other notable forms of softball play were considerably less prevalent as program offerings within the MPRDS. In example, $39.7 \%$ offered fastpitch play and $15.5 \%$ offered $16^{11}$ slow-pitch play.

Regionally, fast-pitch was the second most prevalent form of softball play offered in all regions, with the exception of the South Atlantic, where $16^{\prime \prime}$ slow-pitch was equal to fast-pitch play in popularity. Sixteen inch slow-pitch was the third most prevalent form of softball play offered in all regions, with the exception of the Pacific, where $14^{\prime \prime}$ slow-pitch was equal to $16^{\prime \prime}$ slow-pitch play in popularity and in the South Atlantic, where $16^{\prime \prime}$ slow-pitch was equal to fast-pitch play in popularity.

Fourteen inch slow-pitch, modified, and other miscellaneous forms of softball play are the least prevalent offered within the MPRDS. There was no indication of $11^{\prime \prime}$ slow-pitch play in adult leagues.

Concerning the total number of adult softball teams (men's women's co-rec) involved in league play, the majority, $65.5 \%$, of the MPRDS programs consisted of 65-179 teams. Programs with the greatest number of teams were located in the Pacific, Mountain, West North Central, and East North Central regions, Teh programs with the least number of teams were located in the Middle Atlantic and New England regions.

A significant percentage, $91.4 \%$, of the MPRDS incorporated some type of women's softball league play, the majority of programs, $75.5 \%$, which indicated women's play, consisted of fewer than 40 women's teams. Programs with the largest number of women's teams were located in the Pacific, Mountain, West North Central, and South Atlantic regions.

In addition, over half, $51.7 \%$, of the MPRDS implemented some type of co-recreational league play. The majority of programs, $56.7 \%$, which
indicated co-recreational play, consisted of fewer than 20 co-recreational teams. The programs which indicated the greatest number of co-recreational teams were located in the Pacific region. Only the West North Central region had all programs indicate co-recreational play as part of their adult softball format. The Middle Atlantic and New England regions indicated no adult co-recreational softball league play.

It is the opinion of this writer, that co-recreational play will continue to gain adherents in public programs. This is based on comments made by several of the respondents, which stated that the interest and number of teams in co-recreational play has been on the increase.

In regard to program duplication, the majority, $56.9 \%$, of the MPRDS had similar adult softball programs sponsored by other local agencies/ organizations in addition to the municipal park and/or recreation department program. In most cases, the cited programs were sponsored by local church groups and/or YMCA's. Church leagues were most evident in the South Atlantic region. In the Pacific region, similar programs were less prevalent indicating a greater dependence on municipal programs.

In response to non-resident issues, a significant percentage, $94.8 \%$, of the MPRDS allowed non-resident participation in adult softball programs. Only three departments indicated no non-resident participation. Also, the majority, $58.2 \%$, of the MPRDS which allowed non-resident participation, did not assess any additional user fee charges (cost) to nonresident participants.

According to the vast majority, $89.7 \%$, of the MPRDS, participation levels for adult softball play has generally increased since the year
1979. The remaining $10.3 \%$ of the MPRDS indicated stable participation levels (no gain/no loss). Further, no programs, within any of the represented regions, indicated a decrease in adult softball participation levels since 1979.

In addition, a significant percentage, $94.8 \%$, of the MPRDS recognized adult softball, in terms of participation numbers, as the largest team sport program in which they sponsored and offered to the public. The only exceptions to be noted, involved larger participation numbers in youth baseball and/or soccer programs identified in some communities represented within the MPRDS.

Not surprisingly, the majority, $67.2 \%$, of the MPRDS had some type of program limitations on the total number of teams which could participate within a given season. Team limitation in program formats were most prevalent in the East North Central, Mountain, South Atlantic, and Middle Atlantic regions. The Pacific and East South Central regions indicated the greatest number of programs which have not presently set any team limitation quotas. It is the opinion of this writer, that these regions have yet to reach their carrying capacity in terms of adult softball participation numbers.

In response to total season length, $60.0 \%$ of the MPRDS indicated between 14-25 cumulative weeks of adult softball league and/or tournament play during the year period. Many regions featured programs which included more than a single season (i.e., summer and fall leagues). This was most prevalent in the Pacific and South Atlantic regions, where several programs indicated 32 or more weeks of play.

Correlated to season length, adult softball play in more than one seasonal period was evident. In example, $62.1 \%$ of the MPRDS indicated

September/October league play. In addition, fall seasons were identified in all represented regions; the West North Central, East North Central, and New England regions implemented the smallest percentage.

In regard to winter leagues, $20.7 \%$ of the MPRDS indicated November/ December league play. The Pacific and South Atlantic regions accounted for $91.7 \%$ of all programs which implemented games during the cited months. Also, $8.6 \%$ of the MPRDS indicated January/February league play. Only the Pacific and South Atlantic regions indicated such activity. Several "Northern" programs made comment to "snowball" (softball played in the snow) tournaments, which have continued to grow in popularity with each year.

Only $34.5 \%$ of the MPRDS did not implement any adult softball league play during the September through February month periods.

In reference to the months of March/April, $46.6 \%$ of the MPRDS indicated early spring league play. The South Atlantic and Pacific regions indicated the greatest percentage of programs which implemented March/April league play.

A significant percentage of the MPRDS, indicated May/June (91.4\%) and July/August (96.6\%) league play. Only a few programs located in the Pacific, Mountain, and South Atlantic regions indicated no league play within the "traditional" seasonal play periods associated with softball. Most programs which indicated no league play within the stated seasonal periods reported adverse heat conditions, associated with the weather characteristic for the time of year, as the basis for omission.

In response to morning ( $6 \mathrm{a} . \mathrm{m}$. to 12 noon ) league play, the large majority, $87.9 \%$, of the MPRDS did not utilize the cited hours for adult
softball. The East North Central region was an exception, as nearly half, $44.4 \%$ of the programs within the region offered adult softball league play in morning hours. Based on respondent comments, many of the identified morning programs were formed to accommodate industrial third shift workers. Early afternoon play ( 12 noon to $3: 30$ p.m.) was almost non-existant, as $3.4 \%$ of the MPRDS indicated such play time. Late afternoon play (3:30 to 6 p.m.) was only slightly more prevalent, as $5.2 \%$ of the MPRDS indicated such play time. Based on respondent remarks, the absence of daytime (6 a.m. to 6 p.m.) adult softball play was largely attributed to the popularity of youth baseball and softball programs, which traditionally utilized softball play areas during the daytime hours; and to work patterns generally associated with adults.

Lastly, all programs/regions represented within the MPRDS (100\%) indicated evening hours ( 6 p.m. to 12 midnight) as the prime adult softball league play time. No programs indicated play beyond midnight (12 midnight to 6 a.m.).

In reference to adult softball utilization of play areas, over half, $56.9 \%$ of the $M P R D S$ indicated programs which utilized less than eight playing fields (regulation softball and/or adult baseball type) to accommodate for all adult softball programming purposes. An additional $39.6 \%$ of the MPRDS, indicated programs which tilized 7 to 14 playing fields for such purposes. Further, a substantial majority, $77.6 \%$, of the MPRDS indicated the utilization of less than eight playing fields which were lighted and capable for night-time play.

Concerning playing field modifications and adaptations, a majority, $55.2 \%$, of the MPRDS did not utilize any adult baseball areas (in particular,
the infield area) for adult softball play. However, it should be noted, that many of the programs represented within the $43.1 \%$ of the MPRDS, which did utilize such areas; needed to do so in order to compensate for the lack of available regulation softball diamonds. In addition, the adaptation of synthetic surfaces as part of the permanent infield playing area was not evident in any of the programs represented within the MPRDS. Furthermore, there was no mention of any synthetic surface usage related to softball field adaptation.

In total, $70.7 \%$ of the MPRDS indicated a need for additional softball playing field areas to be created in order to adequately meet the present demand for adult softball participation. This demand was most prevalent in the Pacific region were $81.6 \%$ of the programs indicated additional playing field needs. The East North Central region seemed most stable in playing field needs, as several programs within the region indicated a greater need for the improvement and/or upgrading of existing playing fields/facilities rather than the construction of addtional softball playing field areas.

Respondent programs which have recently built or were in the planning stages of constructing new softball playing fields and/or facilities included: Ames (IA), Owensboro (KY), and Pocatello (ID); all of which indicated new four diamond complexes. Also, new diamonds were under construction in Livermore (CA) and Sandy City, (UT).

Directly related to softball playing field utilization, is the care for and proper maintenance of these areas. A significant percentage, $93.1 \%$, of the MPRDS were responsible for all or some of the infield maintenance required on areas utilized for adult softball program purposes.

A few respondent municipal recreation (only) departments, indicated no maintenance responsibility for infield areas utilized for adult softball programming. In these cases, the municipal park department was responsible for all maintenance associated with the cited play areas.

The majority, $55.2 \%$, of the MPRDS indicated approximate total cost of infield maintenance (including man hours), related to adult softball areas, in the range of $\$ 10,000-\$ 25,000$ per year. Programs with longer or more seasons of play, such as in the Pacific and South Atlantic regions, generally had greater infield maintenance costs. Furthermore, $77.6 \%$ of the MPRDS indicated total accountability ( $100 \%$ ) for expenditures related to maintenance of infield areas utilized for adult softball play.

A contributing factor to maintenance cost is the occurance of cancellations due to inclement weather. More than half, $55.2 \%$, of the MPRDS experienced $5-14 \%$ of their total amount of scheduled adult softball league games cancelled due to unplayable conditions created by rain and/or snow within the last year period. The second majority, $41.5 \%$, of the MPRDS experienced less than $5 \%$ total cancellations in relation to the cited conditions. The municipal park and recreation program in Casper (WY), indicated the largest percentage of cancellations due to the cited conditions (25-29\%).

In addition, the vast majority, $86.2 \%$, of the MPRDS recognized completely skinned infields as the most frequent playing area responsible for game cancellations due to unplayable conditions created by rain and/or snow. Aslo, in the advent of a cancellation, all of the MPRDS indicated provisions for make-up games to be played at a later date/time. It should be noted, that many programs indicated only rescheduling games which had
a bearing on the final standings (first place).
In regard to the approximate total amount of monies specifically budgeted for adult softball program purposes (excluding field maintenance cost), over half, $51.7 \%$, of the MPRDS indicated budgets which did not exceed $\$ 30,000$. Monies budgeted solely for adult softball program purposes varied with the extent (size/length) of the individual programs. In example, some programs identified in the Pacific, Mountain, and South Atlantic regions, which implemented extensive adult softball seasons coupled with large participation numbers, indicated program budgets of $\$ 65,000$ or more. Related to program budget concerns, the majority, $70.6 \%$, of the MPRDS were responsible for supplying and paying the cost for all or some of the umpires which officiated the programs. This practice was evident throughout all regional areas.

## CHAPTER V

## CONCLUSIONS AND RECOMMENDATIONS

## Summary

In general, this nationwide study identified and described municipal park and/or recreation department sponsored adult softball programs implemented within incorporated places ranging from 45,000-55,000 in population. Furthermore, this study identified, on a national and regional basis, selected adult softball program elements associated with the cited population.

More specifically, this study identified selected adult softball program elements, which pertained to: participation numbers, league and team structures, utilization of infield areas (diamonds), scheduling of games, program budgeting, and maintenance of infield areas.

The survey data was collected through the use of a questionnaire format and datum was processed by computer. Comparative analysis was based on percentages (frequency of response) as indicated in the crosstabulation of data related to survey sites and designated regions. Each site, identified as a municipal park and/or recreation department which sponsored adult softball ( $\mathrm{N}=58$ ), and designated region ( $\mathrm{N}=9$ ) was examined for uniqueness, or conversely, similarity in responses in relation to the other representative sites/regions. In addition to structured question responses; any notes, comments, or questions cited by respondents in reference to the study were utilized.

## Conclusions

Through analysis of the data collected, the following are conclusions
based on this study of municipal park and/or recreation department sponsored adult softball programs, implemented within incorporated places ranging from 45,000-55,000 in population, throughout the United States:

1. Most public park/recreation adult softball programs are sponsored by municipal park and/or recreation departments. In addition, the majority of municipal park and/or recreation departments, which sponsor adult softball programs, are consolidated (park \& recreation).
2. Twelve inch slow-pitch is the most prevalent form of softball play offered in all regions. Conversely, other forms of softball play (fast-pitch, $16^{\prime \prime}$ slow-pitch, modified, etc.) are considerably less prevalent as program offerings.
3. Programs generally fall within a range of 65-179 teams (men's, women's, co-rec). The Pacific, Mountain, West North Central and East North Central regions retain programs with the largest number of teams. A contributing factor to participation numbers, is the prominence of women's league play in all regions. Programs which include women's league play, generally register fewer than 40 women's teams. Further, Programs which include co-recreational league play, generally register fewer than 20 co-recreational teams. The Pacific and West North Central regions retain the most programs offering such play.
4. Local church groups and/or YMCA's are generally responsible for similar adult softball programs offered in addition to the municipal park/ recreation program. Further, when adult softball programs are not offered by a public park/recreation agency, such programs are predominantly sanctioned by a local softball association. It should be noted, that many municipal park and/or recreation programs are run in conjunction with
local softball associations.
5. Non-residents are allowed to participate in a significant portion of programs (adult softball). In addition, slightly over half of the cited programs do not charge non-residents any additional user fee (cost).
6. Participation levels for adult softball play has generally increased or remained stable since 1979. In relation to the above, a significant number of departments recognize adult softball as their largest sponsored (in terms of participation numbers) team sport program. Further, program limitations on the total number of teams allowed to participate in league play are evident. The Pacific and East South Central regions retain the greatest number of programs which have not set any specific team limitation quotas.
7. Programs generally fall within a range of $14-25$ cumulative weeks of league and/or tournament play during a year period. Many regions feature programs which include more than a single season (i.e., summer and fall leagues). Specifically, fall league play (September/October) is evident in all regions. Further, only programs located in the Pacific and South Atlantic regions implement any significant number of winter league (November through February) formats. The most prominent seasonal period of league and/or tournament play, is late spring and summer (May through August).
8. Morning league play (6:00 A.M. - 12:00 noon) is not prevalent. Early and late afternoon play (12:00 Noon - 6:00 P.M.) is almost nonexistant. This is largely attributed to the popularity of youth baseball and softball programs, which traditionally utilize softball play areas during the daytime hours; and to work patterns generally associated with adults. In addition, Evening hours (6:00 P.M. - 12:00 midnight) are almost exclusively reserved (designated) for adult softball play. No programs
play beyond midnight (12:00 midnight - 6:00 A.M.).
9. Over half of the programs utilize less than eight playing fields to accommodate for all adult softball programming purposes. A lesser percentage of programs utilize between 7-14 playing fields. In addition, adult baseball fields are usually not utilized for adult softball play. When areas of this nature are utilized, it is in order to compensate for the lack of available regulation softball diamonds.
10. Synthetic surfaces are not being incorporated as part of the permanent infield area of any diamonds utilized for adult softball play. In addition, there is no evidence of any synthetic surface adaptations related to softball play areas.
11. The need for additional softball playing field areas to be created, in order to presently meet the demand for adult participation, is a concern for the majority of programs. The above is most evident in the Pacific region, while conversely, the East North Central region seems the most stable in playing field needs.
12. Public park/recreation agencies are almost always responsible for all or some of the infield maintenance associated with adult softball play. This holds ture, even if the agency is not involved directly with program sponsorship. Furthermore, program responsibility for all or some of the infield maintenance, required on areas utilized for adult softball play, is significant. Only a small percentage of municipal recreation (only) departments have other agencies/departments procure such maintenance (in most cases, the municipal park department).
13. Programs generally expend between $\$ 10,000-\$ 25,000$ per year for infield maintenance (including man hours) related to adult softball play areas. In addition, programs with longer or more seasons of play,
such as in the Pacific and South Atlantic regions, generally have greater infield maintenance costs.
14. Programs generally experience a yearly $5-14 \%$ cancellation rate of all scheduled Adult softball league games, due to unplayable conditions created by rain and/or snow. Further, completely skinned infields are frequently cited as the area most responsible for game cancellations due to the stated conditions. In addition, all programs implement some type of make-up (rescheduling) procedure. It should be noted that many programs only reschedule games which have a bearing on the final standings (first place).
15. Over half of the programs expend less than $\$ 30,000$ for adult softball programming purposes. Monies budgeted solely for adult softball programming, varied with the extent (size/length) of the individual programs. Further, program responsibility for the securement and payment of all or some of the umpires officiating adult softball is highly evident.

## Recommendations

The recommendations are divided into two sections. The first will deal with recommendations directed toward municipal park/recreation practitioners involved with adult softball programming in mid-sized communities (45,000-55,000 in population). The second section will deal with recommendations for future study.

This study led to the following recommendations concerning adult softball programming in municipal park/recreation settings within midsized communities:

1. Address other community organizations/agencies, who are sponsoring similar adult softball program opportunities, in order to avoid duplica-
tion of service and/or competition between programs.
2. Examine the practicality/feasibility of introducing co-recreational league play as part of the adult softball program, in order to evaluate potential community interest/need.
3. Examine the practicality/feasibility of introducing morning league play (6:00 am - 12 noon) as part of the adult softball program, in order to evaluate potential community interest/need.
4. Consider the need for the improvement and/or upgrading of existing softball playing fields/facilities, in order to make available a greater number of regulation diamonds commensurate for adult play.
5. Consider the need for additional lighted softball playing fields, in order to maximize the utilization of existing diamond areas.
6. Evaluate the need and plan for the construction of additional softball playing field areas, in order to better accommodate present and potential future demands for adult and youth participation.
7. Emphasize proper maintenance/construction of skinned infield areas, in order to reduce the number of rain/snow related cancellations. In addition, recognize and/or develop methods related to cost-saving maintenance.
8. Anticipate $12^{\prime \prime}$ slow-pitch to remain the most prevalent/popular form of adult league play offered in public softball programs.
9. Anticipate evening hours (6:00 p.m. - 12 midnight) to continue to be the "prime time" for adult softball league play (time period most appropriate to accommodate adult play).
10. Anticipate the request for non-resident participation to continue to increase. In addition, anticipate the demand for adult softball
participation to generally increase or remain stable.
This study led to the following recommendations for future study:
11. Conduct a similar study addressing a different segment of the U. S. population.
12. Conduct a similar study addressing adult softball play in a foreign country.
13. Study specific problems related to adult softball programming (i.e., when the demand for participation exceeds the capability of play areas and facilities).
14. Study specific problems related to maintenance associated with softball play areas (i.e., proper grooming and up-keep of skinned infield areas).
15. Conduct a study pertaining to cost factors involved in adult softball programming (i.e., cost for umpires/officials).
16. Conduct a study pertaining to cost factors associated with softball playing fields and/or facilities.
17. Study specific means to improve present programming and/or maintenance related with adult softball play (i.e., development of new playing surfaces).
18. Study in detail other organizations/agencies which provide adult softball program opportunities (i.e.: YMCA's, Church groups, Boys' Club, etc.).
19. Conduct a historical study of the development of recreational adult softball play.
20. Conduct a descriptive study concerning the formation and structure of national and/or international softball associations.
21. Study in detail the types of softball associated with adult softball tournament and/or league play.
22. As suggested by the Mount Prospect (IL) Park District, conduct a study pertaining to the various adult softball rules and policies adminitered by public recreation agencies.
23. As suggested by the Kokomo (IN) Park and Recreation Department, conduct a study pertaining to softball progranming for youth age groups.
24. As suggested by the Livermore (CA) Recreation Department, conduct a study specifically concerning staffing and equipment utilized for adult softball play.
25. Summized from problems faced by this writer, conduct a study involving the development of a public park/recreation directory listing agencies and/or contact persons.

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## APPENDIX A

POPULATION UTILIZED IN
THE SURVEY

## Population utilized in the survey

All incorporated places ranging $45,000-55,000$ in population within the United States

1. Alexandria, LA
2. Ames, IA **
3. Arcadia, CA **
4. Asheville, NC
5. Augusta, GA
6. Baldwin Park, CA **
7. Bellingham, WA
8. Bellflower, CA **
9. Berwyn, IL **
10. Biloxi, MS **
11. Bloomfield, NJ
12. Bloomington, IN **
13. Boca Raton, FL $\dot{x}$ *
*14. Bossier City, LA
14. Casper, WY **
15. Cerritos, CA
16. Chester, PA **
17. Cheyenne, WY
18. Clarksville, TN **
19. Covington, $K Y$
20. Danville, VA **
21. Daytona Beach, FL **
22. Denton, TX **
23. Des Plaines, IL **
24. Dothan, AL
25. East Lansing, MI **
26. East Providence, RI
27. Eau Claire, WI **
28. Edina, MN **
29. Enid, OK **
30. Everett, WA **
31. Gadsden, AL **
32. Gardena, CA **
33. Gastonia, NC **
34. Greeley, CO **
35. Harrisburg, Pa **
36. Haverhill, MA
37. Huntington Park, CA
38. Iowa City, IA **
39. Jackson, TN **
40. Janesville, WI **
41. Killeen, TX **
*43. Kokomo, IN
*44. La Crosse, WI
42. La Habra, CA
43. Lakeland, FL **
44. La Mesa, CA
45. Lancaster, CA
46. Lancaster, PA
47. Las Cruces, NM **
48. Lawrence, KS **
49. Lima, $\mathrm{OH} * *$
50. Lincoln Park, MI **
51. Livermore, CA **
52. Lynwood, CA **
53. Malden, MA
54. Mansfield, $\mathrm{OH} * *$
55. Melbourne, FL **
56. Meridian, MS **
57. Midwest City, OK
58. Milford, CT **
59. Moline, IL **
60. Montebello, CA **
61. Monterey Park, CA **
62. Mount Prospect, IL **
63. Napa, CA $* *$
64. National City, CA **
65. Oak Park, IL **
66. Orem, UT **
67. Oshkosh, WI
68. Owensboro, KY **
69. Passaic, NJ **
70. Peabody, MA **
71. Pico Rivera, CA **
*75. Pittsfield, MA
72. Plainfield, NJ
73. Plantation, FL
74. Pocatello, ID **
75. Pompano Beach, FL
76. Rapid City, SD **
*81. Redwood City, CA
77. Rock Island, IL **
78. Roseville, MI
79. Sandy City, UT
80. Sante Fe , $\mathrm{NM} * *$
81. Sarasota, FL $* *$
82. Schaumburg, IL
83. Sheboygan, WI **
84. South San Francisco, CA **
85. Suffolk, VA **

## -3-

91. Taunton, MA
92. Upland, CA **
93. Victoria, TX **
94. Vineland, NJ x*
95. Visalia, CA **
96. Walnut Creek, CA **
97. Waukesha, WI **
98. Wauwatosa, WI **
99. West Haven, CT
100. Westminster, $\mathrm{CO} * *$
101. White Plains, NY *\%
102. Wilkes-Barre, PA **
103. Woonsocket, RI **
104. Yakima, WA **

Smallest in population- Taunton, MA 45,001
Largest in population- Redwood City, CA 54,951

* Denotes incorporated places utilized in the development or pre-test of the questionnaire.
** Denotes incorporated places which completed and returned the survey.

Note: Selection of survey sites based on 1980 U.S. Census of the Population, U.S. Department of Commerce-Bureau of the Census.

## APPENDIX B

GEOGRAPHIC DISTRIBUTION
OF POPULATION UTILIZED
IN THE SURVEY

utilized in the survey
Geographic distribution of population

## APPENDIX C

U.S. DEPARTMENT OF COMMERCE, BUREAU

OF THE CENSUS NATIONAL GEOGRAPHIC
REGIONS

U.S. Department of Commerce, Bureau of the Census

APPENDIX D

States identified Within
GEOGRAPHIC REGIONS

## States identified within <br> geographic regions

| Pacific（\＃l） | Mountain（\＃2） | West North Central（\＃3） |
| :---: | :---: | :---: |
| Alaska | Arizona | Iowa |
| California | Colorado | Kans as |
| Hawaii | Idaho | Minnesota |
| Oregon | Montana | Missouri |
| Washington | New Mexico | Nebraska |
|  | Nevada | North Dakota |
|  | Utah | South Dakota |
|  | Wyoming |  |
| East North Central（非） | West South Central（非5） | East South Central（\＃6） |
| Illinois | Arkansas | Alabama |
| Indiana | Louisiana | Kentucky |
| Michigan | OkI ahoma | Mississippi |
| Ohio | Texas | Tennessee |
| Wisconsin |  |  |
| South Atlantic（扑7） | Middle Atlantic（非8） | New England（\＃9） |
| Delaware | New Jersey | Connecticut |
| Florida | New York | Maine |
| Georgia | Pennsylvania | Massachusetts |
| Maryland |  | New Hampshire |
| North Carolina |  | Rhode Island |
| South Carolina |  | Vermont |
| Virginia |  |  |
| West Virginia |  |  |
| Note：The states in which survey sites were located，determined their appropriate region classification． |  |  |

APPENDIX E

COVER LETTER DISTRIBUTED
TO SURVEY POPULATION

October 30, 1984

Dear Park and/or Recreation Director:
The University of Wisconsin-La Crosse Department of Recreation and Parks and the City of La Crosse Department of Parks and Recreation, request your needed assistance in providing necessary data for graduate thesis research. Specifically, this research concerns the identification and description of adult softball programs which are currently being sponsored by municipal park and/or recreation departments, serving incorporated places ranging 45,000-55,000 in population, throughout the United States.

As being one of the 104 municipalities which qualified within the designated survey population (population figures based on the 1980 U.S. Census), your completion of the enclosed questionnaire is vital to the success and validity of the study. Furthermore, it is important to note, that even if your particular agency does not sponsor a local adult softball program, please check responses concerning questions $1-7$ and write any comments in the space provided on the back of the second page of the questionnaire (this data is necessary in order to properly identify all the municipalities participating in the survey).

Please answer questions to the best of your knowledge and refer, when necessary, to personnel who are more directly involved with areas in question (i.e. a question concerning infield maintenance costs may be best answered by the park superintendent).

In order to better understand the nature of the questionnaire, the following terms should be defined:

1. Adult softball leagues/teams - consist of participants 18 years, or more, of age and/or age group(s) which may be included in softball programs considered to be at the adult level.
2. Program sponsorship - in most cases would involve the organization, supervision, and coordination of the activity; while providing monies, staff, and equipment toward the specific program (responsible for the existence of the program).

In addition, keep in mind the cost factors involved with adult softball programs, such as: staffing, equipment, awards, etc; and infield maintenance cost factors, which would include: infield preparation, special vehicle/equipment needs, sand/clay/loam replacement, chemical additives, and other miscellaneous items.

## -2-

It is hoped that your agency/department will find this study of interest, as we feel the final product will be one containing pertinent information for all participating agencies. Results of the study will be sent to your agency by checking the appropriate response located on the last side of the questionnaire.

In order to expedite the analysis of data, please return the completed questionnaire within a one week period (postage paid return envelope enclosed).

If you have any questions concerning the questionnaire/study, please feel free to contact:

```
Ron Grall
Department of Parks and Recreation
City Hal1
La Crosse,WI 54601
Phone: (608) 784-1905
```

Thank you for your time, consideration, and swift reply. Sincerely,

Ronald C. Grall
M.S. candidate

Dr. Patrick A. Trokan Thesis Committee Chairperson University of Wisconsin- La Crosse Department of Recreation and Parks

Eugene B. Fry
Director,
City of La Crosse Department
of Parks, Recreation, and Forestry

## APPENDIX F

QUESTIONNAIRE

## Questionnaire

The identification and description of adult softball programs currently sponsored by municipal park and/or recreation departments, serving incorporated places ranging 45,000-55,000 in population, throughout the United States.

Important: Please indicate a single response for all questions, unless otherwise noted (questions: $6,8,18, \& 19$ all may have more than a single response).

## Part One- Description of the Agency/Department

1. Type of agency:
_ A. Municipal (city)
_ B. County
—C. School District

- D. Special District
__E. Other
If other, please indicate: $\qquad$

2. Type of department (specific):
A. Park \& Recreation
B. Park (only)

- C. Recreation (only)
-D. Park, Recreation and Forestry
- E. Other
- If other, please indicate: $\qquad$

3. Please indicate the total number of full-time professional park/recreation staff presently employed:
A. 3 or less
-B. 4

- C. 5
-D. 6
- E. 7 or more

4. Please indicate the approximate 1984 total budget for your department operations:
I. Less than $\$ 1.4 \mathrm{mil}$.
A. Less than $\$ 800,000$
B. $\$ 800,000-\$ 1.0 \mathrm{mil}$.
C. $\$ 1.0 \mathrm{mil} .-\$ 1.2 \mathrm{mil}$.

- D. $\$ 1.2 \mathrm{mil} .-\$ 1.4 \mathrm{mil}$.
II. \$1.4 mil. or more
- A. $\$ 1.4 \mathrm{mil} .-\$ 1.6 \mathrm{mil}$.
- B. $\$ 1.6 \mathrm{mil} .-\$ 1.8 \mathrm{mil}$.
- C. $\$ 1.8 \mathrm{mil} .-\$ 2.0 \mathrm{mil}$.
—D. $\$ 2.0 \mathrm{mil}$. or more

5. As of 1984, does the department sponsor, or co-sponsor, any type of a adult softball program?
_A. Yes
B. No

If yes, please indicate responses to questions 8 - 32 inorder to complete the questionnaire.

If no, please only respond to questions $6 \& 7$.
Note: There may be more than a single response for question 非.
6. Please indicate what local agencies/organizations are presently sponsoring any type of a adult softball program:
A. Local softball association(s)

- B. YMCA/YWCA
- C. Church group(s)
-D. Other
-E. No local program
If other, please indicate: $\qquad$

7. Does the department maintain any infield areas which are utilized for organized adult softball play?
$\qquad$ A. Yes
B. No

Part Two- Description of Department Sponsored Adult Softball Program
Note: There may be more than a single response for question \#8.
8. Please indicate which type(s) of softball play is currently being offered in the adult program:
_ A. Slow pitch (12")

- B. Slow pitch (14")
- C. Slow pitch (16")
-D. Fast pitch
-E. Other
If other, please indicate:

9. Please indicate the approximate total number of teams which participated in 1984 adult softball league play:
I. Less than 150 teams
A. Less than 30
B. 30-59

- C. 60-89
-D. 90-119
_ E. 120-149
II. 150 or more teams
- A. 150-179
- B. 180-209
-C. 210-239
_ D. 240-269
_ E. 270 or more

10. Please indicate the approximate total number of women's teams which participated in 1984 adult softball league play:
I. Less than 80 teams

- A. None
—B. Less than 20
- C. 20-39
- D. 40-59
-E. 60-79
II. 80 or more teams
- A. 80-99
-B. 100-119
- C. 120-139
—D. 140-159
-E. 160 or more

11. Please indicate the approximate total number of co-recreational teams (formed with both men and woman, co-ed), which participated in 1984 adult softball league play:
I. Less than 40 teams

- A. None
B. Less than 10
-C. $\quad 10-19$
-D. 20-29
-E. $30-39$
II. 40 or more teams
A. $40-49$
- B. $50-59$
-C. 60-69
- D. 70-79
- E. 80 or more

12. Are similar adult softball programs currently being offered, to the public, by other local agencies/organizations?
-A. Yes

- B. No

13. Are non-residents allowed to participate in department sponsored adult softball programs?
_A. Yes
-B. No
I. If yes, are non-residents charged a user fee? (additional fee)
A. Yes

- B. No

14. Are adult baseball infield areas sometimes utilized to accommodate adult softball league and/or tournament play?

- 

A. Yes
B. No
C. Uncertain
15. In general, has the total number of teams participating in the adult softball program(s) increased since 1979 (five year period)?
$\qquad$ A. Yes
-B. No
-C. Remained the same
16. Please indicate the approximate tatal number of weeks in which softball areas are utilized for department sponsored adult softball league and/or tournament play:
I. Less than 20 weeks
A. Less than 8 wks.
B. $8-10$ wks.
C. 11-13 wks.
D. 14-16 wks.

- E. 17-19 wks.
II. 20 or more weeks
A. 20-22 wks.
- B. 23-25 wks.
-C. 26-28 wks.
-D. 29-31 wks.
-E. 32 or more wks.

17. Presently, does the department limit the total number of teams allowed to participate in any type of adult softball league play?
_ A. Yes

- B. No

Note: There may be more than a single response for questions $18 \& 19$.
18. Please indicate the seasonal period(s) in which department scheduled adult softball games are primarily played:
I. Fall/Winter
A. Sept./Oct.

- B. Nov./Dec.
- C. Jan./Feb.
- D. None of the above
II. Spring/Summer
- A. Mar./Apr.
-B. May/June
C. July/Aug.
- D. None of the above

19. Please indicate which daily time periods are reserved, during the the designated season(s), for adult softball league play sponsored by the department:
_A. Mornings ( 6 a.m. - noon)

- B. Early afternoon (noon - 3:30p.m.)
—C. Late afternoon ( $3: 30$ p.m. - 6 p.m.)
- D. Evening/night ( 6 p.m. - 12 midnight)
-E. Late night (12 midnight - 6 a.m.)

20. Please indicate the approximate number (in \% form) of department scheduled adult softball league games, which are cancelled due to unplayable field conditions created by rain and/or snow, within the last 12 month period:
I. Less than $20 \%$
_ A. No games cancelled
_B. Less than $5 \%$

- C. 5-9\%
D. 10-14\%
-E. 15-19\%
II. $20 \%$ or more
A. 20-24\%
- B. $25-29 \%$
-C. 30-34\%
D. 35-39\%
_ E. $40 \%$ or more

21. Please indicate which playing area is most frequently responsible for adult softball game cancellations, due to unplayable conditions caused by rain and/or snow:

- A. Infield (completely skinned)
- B. Infield (completely natural turf)
- C. Infield (with both skinned \& turf areas)
- D. Outfield (all natural turf)
- E. Outfield (void of natural turf)

22. Are adult softball league games rescheduled, by the department, for play at a later date/time (are there any make-up games)?
_ A. Yes
_ B. No
23. Please indicate approximately how many softball infield areas are utilized for department sponsored adult softball play:
I. Less than 15 infields
A. Less than 7
-B. 7 or 8

- C. 9 or 10
_D. 11 or 12
- E. 13 or 14
II. 15 or more infields
A. 15 or 16
-B. 17 or 18
- C. 19 or 20
- D. 21 or 22
- E. 23 or more

24. Approximately, how many of the infield areas, utilized for adult softball play, incorporate any type of synthetic turf surface as part of the permanent playing field:
A. None
B. 1

- C. 2 or more

25. Approximately, how many of the fields used for adult softball play are lighted?
I. Less than 15 fields
A. Less than 7

- B. 7 or 8
- C. 9 or 10
-D. 11 or 12
- E. 13 or 14
II. 15 or more fields
_ A. 15 or 16
- B. 17 or 18
- C. 19 or 20
-D. 21 or 22
- E. 23 or more

26. What proportion of infield areas, used for department sponsored adult softball programs, are maintained solely by the department?
A. All

- B. Some
—C. None

27. Please indicate the approximate total cost for maintaining outdoor infield areas, which are utilized for department sponsored adult softball play (include man hour cost):
I. Less than $\$ 30,000$
A. Less than $\$ 10,000$
-B. $\$ 10,000-\$ 15,000$
—C. $\$ 15,000-\$ 20,000$
-D. $\$ 20,000-\$ 25,000$
—E. $\$ 25,000-\$ 30,000$
II. \$30,000 or more
_A. $\$ 30,000-\$ 35,000$
—B. $\$ 35,000-\$ 40,000$
— C. $\$ 40,000-\$ 45,000$
—D. $\$ 45,000-\$ 50,000$
-E. $\$ 50,000$ or more
28. Approximately, what percentage of the total infield maintenance cost, as stated in question $\$ 27$, is the department presently accountable for?
_A. $0 \%$
-B. Less than $40 \%$
-C. 40-69\%
-D. $70-99 \%$

- E. 100\%

29. Is the department responsible for supplying and paying the cost for umpires officiating in the adult softball program?

- 

A. Yes, all

- B. Yes, some
- 

C. No
30. Please indicate the approximate total amount of monies specifically budgeted for adult softball program purposes (do not include maintenance cost):
I. Less than $\$ 50,000$
A. Less than $\$ 30,000$

- B. $\$ 30,000-\$ 35,000$
-C. $\$ 35,000-\$ 40,000$
-D. $\$ 40,000-\$ 45,000$
-E. $\$ 45,000-\$ 50,000$
II. $\$ 50,000$ or more
_ A. $\$ 50,000-\$ 55,000$
_B. $\$ 55,000-\$ 60,000$
- C. $\$ 60,000$ - $\$ 65,000$
_D. $\$ 65,000-\$ 70,000$
_E. $\$ 70,000$ or more

31. In terms of participation numbers, is adult softball the largest team sport activity currently being sponsored by the department?
_A. Yes

- B. No

32. In the opinion of the department, is there a need for more softball areas inorder to adequately meet the demand for adult softball participation?
$\qquad$ A. Yes
—B. No

Please make any further comments, concerning the study/questionnaire in the space provided:
$\qquad$
$\qquad$

For future reference purposes, please indicate the following:

## Your Name:

$\qquad$
Title: $\qquad$
Department Mailing Address: $\qquad$
$\qquad$
$\qquad$
Would the department like a copy of the results from the study?
A. Yes
-
B. No

## APPENDIX G

## SELECTED DIAGRAMS OF

CURRENT SOFTBALL PLAYING
FIELD AREAS

Official softball field dimensions
prepared by the Amateur Softball Association of America



17"




Note: From 1985 ASA Umpire Rule and Case Book (pp. 4-5) by the Amateur Softball Association of America (ASA), 1985, Oklahoma City, Oklahoma: Author. Copyright 1984 by the ASA. Reprinted by permission.
prepared by the National Federation of State High School Associations


## The field

A diamond (or infield) shall be a 60 -foot ( 18.288 m ) square. The outtield is the area between two toul tines tormed by extending two sides of the diamond as in the diagram. All lines on the playing fieid shall be marked with a material which is not injurious to the eyes or skin. Lime or caustic material of any kind is prohibited. Distance from home plate to the nearest obstruction on tair ground should be 200 feet ( 60.96 m ) for female or male fast pitch; 250 feet ( 76.2 m ) for female slow pitch; and 275 teet ( 83.82 m ) for male slow pitch. Outside (foul ground) the foul lines and between home plate and the backstop there should be an unobstructed area with a minimum distance of 25 feet ( 7.62 m ) or a maximum 30 feet ( 9.144 m ) wide. From the midpoint of the front edge of the pitcher's plate there shall be a circle drawn which is 16 feet 14.8768 . $\mathrm{m})$ in diameter. The catcher's box, bases, coaches' boxes, batters' boxes, and 3 -100t $(.9144 \mathrm{~m})$ ist base line shall be as in the diagram. The intield and outtield, including the boundary marks trom home base io ist and 3rd and their extended foul lines, are fair ground. All other area is foul ground.

Note: From 1984 Official High School Softball Rules (p. 8) by the National Federation of State High School Associations (NFSHSA), 1984, Kansas City, Missouri: Author. Copyright 1984 by the NFSHSA.
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Official softball field dimensions
prepared by the Athletic Institute and the American Association for Health,


Note: From Planning Facilities for Athletics, Physical Education, and Recreation (p. 65) by the Athletic Institute and the American Association for Health, Physical Education, Recreation, and Dance (AI \& AAHPERD), 1983, Washington, DC: Author. Copyright 1979 by the AI \& AAHPERD. Reprinted by permission.

