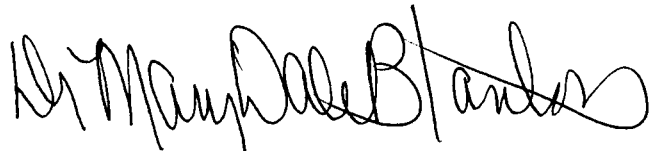


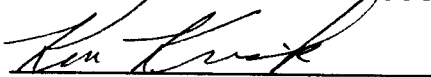
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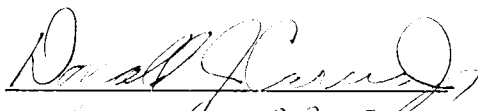
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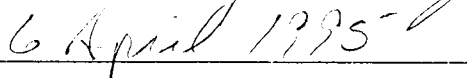
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The Development of a Methodology to
Assess the Amount of Money Spent on
Youth Sport Programs

A Thesis Presented
for the
Master of Science
Degree
The University of Tennessee, Knoxville

Donald J. Carnes, Jr.

May 1995

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DEDICATION

This thesis is dedicated to my wonderful wife Patti, who said I should not do it, but helped me every step of the way, and to the joy of our life our beautiful daughter Stephanie for being the perfect little girl she is.

ACKNOWLEDGEMENTS

I would like to thank my major professor, Dr. Mary Dale Blanton, for her guidance, support, and above all her friendship without which I would never have attempted this project. I would also like to thank the other members of my committee, Dr. Patricia Beitel for her considerable help in the development of the problem and the analysis of data and Dr. Ken Krick for his assistance in formulating the idea and his guidance in the area of economic impact.

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ABSTRACT

Recreation programs are under constant scrutiny to demonstrate their worth to the community in which they exist especially now in the era of shrinking budgets. Professional recreators must be able to determine the economic impact of their programs. The literature review indicated the lack of an adequate tool to accomplish this task. The purpose of this study was to develop a methodology to assess the dollars spent on youth soccer programs in Knoxville, Oak Ridge, and Farragut, Tennessee. This methodology is the first step in the development of an assessment tool for use in determining the economic impact of recreational sports programs.

The sample of 275 families was drawn from three Recreational Soccer Regions of the American Youth Soccer Organization. The soccer population of the three Regions consisted of approximately 1200 families representing 2400 children aged 5 to 19. A questionnaire was developed and distributed on site during registration for the Spring 1995 season. A total of 275 questionnaires were distributed with 252 (90%) returned.

The results of the survey indicated that the typical soccer family in the studied area consists of four members,

with parents under 40, having an average income in excess of \$54,000. Total expenditures by each regional sample was determined and compared using descriptive statistics. Pair-wise T-tests were performed to determine the significance of the relationship between cost per family between the three Regions. The results of the T-tests indicated that there was no significant difference between the three Regions, ($p > .05$). A single per child cost factor of \$295.87 was then derived.

The application of this cost factor to the soccer population indicated that over \$1.0 million was spent by soccer families in Knox County, Tennessee and another \$250,000 in Oak Ridge during 1994.

Recommendations for further research include the development and application of indirect cost multipliers; the study of Competitive Soccer programs; and the use of this methodology to assess the impact of other sporting activities.

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CHAPTER 1

INTRODUCTION

The Youth sport movement of today is growing at an ever increasing rate with more and more children getting involved at an earlier age. The types and numbers of programs available are also changing with soccer becoming more and more popular. City and County Recreation Departments manage these programs in some areas, while in others private clubs and organizations manage them. Parents, more than ever before, are supporting these programs with both time and money. Costs of uniforms and equipment continue to rise along with the child's "need" to have the best available. Just how much does it cost to support one child for a season of soccer or baseball? What does this mean to the community that supports these programs? Are there any tools available to help recreation managers assess the impact that their programs have upon the local economy? These are a few of the questions needing answers.

Sport programs are big business (Akervall (1988), Sailor (1993)). Sporting goods companies are making a great deal of money selling clothing and equipment to team members, coaches, officials, and parents. There is no evidence of any recent research regarding the economic

impact of a youth sport programs. The research that has been conducted only investigated the psychological and sociological aspects of participation, not economics. A limited number of studies have dealt with the economic impact at the community recreation program level, (Akervall (1988), Hope (1988)). Akervall's (1988) study dealt with the impact of ice skating arenas upon the economy of Thunder Bay, Ontario, Canada. This was accomplished by collecting data from the users of the arena, about 15% of the population. His data showed that the arena users, primarily sport groups, directly contributed over \$3.9 million per year supporting their sport at the arena. Akervall (1988) concluded that, even though the arena lost money in operations, the local economy actually gained substantially from the arena.

One of the critical problems facing the growing youth sport movement today is the shortage of facilities and the time available for their use (Berrett, Slack, & Whitson (1993)). Competition for time is intense and sometimes very emotional with competing programs vying for the same space at the same times. The program administrators usually use the number of children involved as the only rationale for establishing their requirements with the governing board or controlling agency. The discipline of economics is an

obvious place to turn for suggestions to accomplish the fair allocation of resources for sport among competing groups (Berrett et al. (1993). Economic impact information can also be used, along with the other factors, to sell programs and gain additional support for the creation of additional facilities. The traditional arguments, that promote youth sport, as enhancing the quality of life of the participants, need a stronger position including evidence that the program also improves the economy. The establishment of economic impact fosters support which in turn results in additional funding. Kanters & Botkin (1993) in their study of public recreation programs in the state of Illinois indicated that the economic impact was in excess of \$3.1 billion a year. This type of economic data cannot be ignored. Decision making boards and commissions are much more likely to support programs that present accurate demographic, as well as, economic data, and can demonstrate the value of their program to the community (Gaskill & Starr (1992). Studies have shown that overall revenues generated by a community program or event normally far exceed the actual cost of the event to the community, (Turco & Kelsey (1993), Wang & Irwin (1993), Akervall (1988)). Sailor (1993) found that politicians are as supportive of recreational programs as the recreation professional but that a lack of understanding

of the economic factors exists in both groups. The problem that Sailor (1993) identified was the use of only the economic efficiency data of the program itself rather than looking at the total economic impact to the local economy.

Thus, there is a need to: (a) determine the costs associated with a families participation in a youth sport program; and (b) develop a simple criteria to assess the direct impact of the program on the local economy. This would then give the recreation professional additional information to be used in gaining support for the establishment of new programs or the continuance of existing ones. The recreation, sport, and leisure programmers have not been required to conduct this type of examination in the past, but now, more than ever, they must be prepared to defend themselves when challenged (Berrett et al. (1993).

Richardson, Long, & Perdue (1988) in their study of the importance of economic indicators highlighted the need for the collection and study of economic information. They also described the need for a useful, cost-effective, and simple to use model that the local recreation professional could use to evaluate his/her programs.

Problem Statement

The purpose of this study was to develop a simple methodology to assess the dollars spent on youth soccer programs in Knoxville, Oak Ridge, and Farragut, Tennessee.

Subproblems

The following sub-problems were investigated:

1. Identify the population involved in soccer in these areas by use of demographics.
2. Determine the average amount of money spent supporting each soccer player.
3. Determine if there is a difference in the average amount of money spent between the three organizations.
4. Establish whether or not a single cost factor can be derived.
5. Identify the effect of the soccer programs upon the community tax base.

Definition of Terms

The terms listed below are defined theoretically and operationally in order to increase the understanding of this

study.

Cost factor - The average value assigned to each child participating in a particular program. Operationally, this is defined as the total number of participants divided into the total dollars spent as determined through the analysis of the data received from the sample.

Community - Defines a general area of residence. For the purposes of this study the communities are Knoxville, Farragut, and Oak Ridge Tennessee.

Demographics - The age, economic level, location, and family size of the parents of the participants. Determined by the completion of questions 1 - 5 of the survey document.

Direct Impacts - Those that benefit the provider of the service or its primary support structure, i.e. the sporting goods industry. They are based upon sales to participants and the sponsoring activities. Determined by questions 6 - 22 of the survey.

Economic Impact - The net change in the economy of the sponsoring community as a result of spending that is attributed to a particular sports program. Operationally determined by the application of the determined cost factor to the studied population, (cost factor x population = direct economic impact).

Secondary Impacts - Those that occur in the local community

resulting from money being spent and respent. They involve retail sales, employment, taxes, and the development of related industries, (Akervall, 1988). They involve the portion of the recreation dollars that are spent and respent and are beyond the scope of this study.

Tax Base - The amount of sales tax revenue returned to the local community governments. Usually a percentage of the total sales tax collected, i.e. Knoxville 8.5%. Determined by multiplying the total dollars spent by the appropriate percentage.

Youth Sports - Formal sporting activities provided by a community or within a community for children 8 years old thru age 19. Typically include baseball, soccer, softball, basketball, and football. In this study, soccer is the representative sport.

Assumptions

The assumptions in this study were:

1. The subjects will answer the questions included in the questionnaire honestly.
2. The questions in the questionnaire are valid and reliable.
3. The data received was accurate.

Delimitations

The study was delimited as follows:

1. Three recreational soccer programs were used. All are part of the American Youth Soccer Organization Regions 128 (Farragut), 275 (Ceder Bluff, Karns, Blugrass), and 390 (Oak Ridge).
2. The sample was drawn from the parents of participants in age groups five to nineteen.

Limitations

This study was limited by:

1. Utilizing only recreational soccer programs in the local area as a basis for the study.
2. Not determining the indirect cost multiplier for the communities studied.

Significance of the Study

The implications of this study are many. Almost all of the previous research studies were one of a kind studies that require validation. The lack of a good, solid measurement tool at the local level for the measurement of

the economic impact of programs was a problem. The call from the field is for good, efficient, and accurate measurement tools. Without these tools the professionals are left using the same benefit position as before. The need to augment these arguments with solid understandable data is growing as the financial burden upon the communities grows. Recreation professionals must be able to prove their worth and the worth of their programs in order to compete for funding. This is especially true when evaluating programs that only benefit a portion of the community directly. The study of the economic impact of recreation is just beginning. There is a great deal of work to be done.

The findings of this study will provide the recreation sports programmer with information to use to demonstrate the economic value of creating or supporting youth sport activities in the community. It will also give the private sport club organizer another option to use in negotiating for additional time on the existing facilities, as well as, the construction of new and better facilities. This study also will give the administrator some much needed assistance in the areas of determining priority of use, budgeting for new facilities, and convincing town councils of the need to support these activities. Once the economic value of a program can be shown fund raising activities may achieve

greater results in the area of corporate sponsorships as they are they true beneficiaries of them.

CHAPTER 2

REVIEW OF RELATED LITERATURE

This study is concerned with the economic impact of youth sports programs upon the communities in which they exist. This review of literature was conducted to study the relationship between economic impact and public recreation activities and to identify previous studies conducted relating economic indicators to youth sport. The previous economic impact studies, models, methodology's, and other information gathering tools were also reviewed for possible use. Materials gathered from across the country were reviewed and the results are presented in the following sections: (a) sources regarding the importance and perceptions of the use of economic indicators in recreation, (b) studies pertinent to the determination of the economic impact of recreation activities upon the economy, and (c) a review of pertinent sources of information to help in calculating economic impact.

Sources Regarding the Importance and Perceptions of the Use of Economic Indicators in Recreation

This section presents the importance of economic impact upon the recreational Community and its relationship to the Community as a whole. The first study was conducted by Richardson, Long, and Perdue (1988). The stated purpose of the study was to understand the importance of economic impact information to recreation programming decisions at all levels. The study had four objectives: (a) to assess the importance of economic impact information to recreational professionals; (b) to identify the perceived importance of selected programs; (c) to identify how economic impact information is used in decision making; and (d) to identify those characteristics that generate concern for economic impact.

Richardson et al. (1988) conducted this study in two phases. In the first phase they interviewed six professionals to gain insight into the study questions. Secondly, they mailed a self-administered questionnaire to eighty members of the directors' section of the Colorado Park and Recreation Association. Richardson et al. (1988)

achieved an 85% response rate with their initial mailing.

The questionnaire developed by Richardson et al. (1988) solicited information using a Likert-type scale of responses. Three types of comparisons were made: (a) revenue-and-tax-dependent; (b) service areas greater than and less than 20,000; and (c) tourism and nontourism dependent communities. These comparisons were made using difference-of-means tests ($p < .05$).

The results achieved by Richardson et al. (1988) indicated that 54% of the respondents were greatly concerned with the economic impact of their programs but few gathered this type of data. A significant finding was found between revenue producing agencies and tax dependent agencies ($p = .02$). Richardson et al. (1988) also showed that special events and facility's usage contributed the most economically. The study also revealed that the subjects felt that economic impact information enhances their image within the local economy (89%), helps to win tax support (82%) and make budget decisions (73%), and is useful in deciding what programs to support (52%).

Richardson et al. (1988), in their discussion, thought that the most significant finding was the difference between

their perception of importance and those of the local decision makers. Richardson et al. (1988) made a strong statement to say that if the pure economic impact of a program or service is used to judge program effectiveness and thus the need for its existence, that program or service may be lost or reduced.

In their conclusion, Richardson et al. (1988), highlighted the need for the collection and study of economic information to better understand the effects of economic information upon delivery systems. They also highlighted the need for useful, cost-effective, simple to use models for the collection of this data by the local professional. Richardson et al. (1988) conclude with a challenge to others to continue this line of inquiry in other regions and with other populations.

A contrasting study was conducted in Britain in 1992 in which the participants in recreation were the subjects rather than the professional recreators. While Richardson et al. (1988) conducted their research in the United States Lamb, Asturias, Roberts, & Brodie (1992) conducted a quantitative study in Britain to examine the financial expenditures of sport participants in pursuit of their

particular sport. The study consisted of 1364 sport participants (669 males, 695 females) aged 16 and above who had participated in a nationwide user survey the previous year. Home interviews were conducted to collect data on the following variables: (a) total weekly expenditures in all sports, (b) an estimate of expenditures on clothing and equipment, and (c) an index of sports participation.

The sample was divided into five age groups and assigned a social class category. The results in each category were then compared by age, sex, sport, and level of participation. Total weekly expenditure data was subjected to t-test and ANOVA testing. Lamb et al. (1992) found that the difference between males and females was significant ($p < .001$), with males being higher. The difference for age groups showed a significant inverse relationship ($p < .0001$). The difference in social class was also significant ($p < .0001$) with the middle class higher than the working class. The results also showed a significant increase in expenditures as participation increases ($p < .0001$). Lamb et al. (1992) summarized their data to indicate that sport participants spent about \$10 on sport each week with males (60%) spending more than females (40%).

Lamb et al. (1992) concluded that their findings indicate that the typical sports participant is young, middle class, and male. The figures are skewed by the fact that males spent more on sport than did the females. Lamb et al. (1992) felt that males do tended to spend more and be more frequently involved in more expensive sports, while females tended to pursue less expensive sports. Lamb et al. (1992) concluded that as pursuits in sport activities increase, the cost of taking part will also increase for the participants.

Another way of looking at the economics of sport is as it related to the overall economy. Hart (1992) presented an overview of Britain's sports economic situation. Hart's (1992) brief article for Sport & Leisure examined the economics of sport. Sport is big business in Britain with an overall value to the economy of well over \$10 billion and 467,000 jobs. These numbers are increasing as Hart (1992) indicated that there was an increase of over 40% in the span between 1985 and 1990. However, Hart (1992) also indicated that capitol expenditure on facilities was down about 40% even though the demand had not dropped at all. Hart (1992) spoke to the fact that sponsorship revenues from the

commercial sector has also dropped even though the sector benefits the most from the sports economy. Hart (1992) pointed to the need for those in sport to develop a clearer understanding of how important sport is to the overall economy of the country and the need to support growth rather than stagnation.

A completely different type of study was conducted by Huston (1993). Her study examined the financial resource allocation patterns within the recreation service budget of two earner Canadian households". Huston (1893) chose to use data for this study derived from the 1986 Canadian Family Expenditure Survey and the Economic Model of Consumer Behavior as developed by Becker in 1965 as her method.

Huston's (1993) sample of 3,628 was derived by selecting the two wage earner families from the total of 10,356 families that responded to the original survey. Huston (1993) characterized the sample as earning \$945 per week, the head of household being 39 years old and male, having at least one child under 15, and 2.3 adults (18 and over) living around large cities and having at least one car.

Huston (1993) used as the dependent variable a

Participatory Recreation Ratio (PRR) which was derived by calculating the proportion of total recreation service expenditures allocated to participatory recreation expenditures (PREX). The independent variables were: wage rates, income levels, age, sex, number of cars, home location, language, education level, and family composition. Huston applied a multivariate regression model where $p=.10$ and found 16 of the 26 independent variables producing significant results.

Huston's (1993) results indicated that those families who are younger, higher educated, with higher pay and position, and having younger children were more likely to spend more money in their pursuit of personal participation activities than those of older families with lower wages, education, etc. Huston (1993) suggested that, from a marketing perspective, recreation programmers should be looking at programs that make the best use of time rather than cost. Time efficiency and quality of service were the key factors that Huston (1993) derived from her profile of the families.

Huston (1993) recommended that recreation marketers, industry marketers, and public policy planners be accurate

in their identification of target groups before deciding upon strategy's for future policy regarding availability, access, and cost of services. Huston (1993) in her final comment called for the development of sound recreational policy as critical in preserving the health and welfare of the nation.

The previous studies sought answers to the various questions concerning why economic indicators are important to the sports and recreation program through empirical research data. Berrett, Slack, & Whitsons (1993) review of the current literature provided a look at the ways in which economic analysis can be used to describe how the municipal provision of sport and leisure facilities and services are effected.

Berrett et al. (1993) divided their discussion into three general areas: (a) the allocation of recreation resources to using the "free market system" in other words, to those who can pay the most for them; (b) the problems associated with using economic indicators to determine user fees full-cost pricing versus willingness to pay; and (c) current issues and alternative approaches to be considered. Berrett et al. (1993) noted in their introduction that it is

surprising that the literature on sport/leisure economics has failed to provide clear and authoritative guidance in the economic areas of government involvement, allocation of resources, and demands for new types of facilities.

The first section of the study by Berrett et al. (1993) talked about that problem of allocation of resources. It discussed the distinction between public goods (those that should be available to everyone), and merit goods (those for individuals personal benefit). Economic theory, according to the Berrett et al. (1993) predicts that in order to provide sport and leisure services appropriately, both social costs and private costs must be considered. The increase of private providers of sport and leisure may lead to the loss of such activities to the majority of the public. Berrett et al. (1993) felt that unless the private providers are managed in some way, the social benefits derived from using them will dissolve.

The second section identified the problems associated with the use of full-cost pricing in the establishment of user fees. Berrett et al. (1993) presented four emotional factors that counter those posed by the utilization of economic factors alone. They are: (a) price threshold, (b)

quality/ price relationship, (c) the perceived value decrease, and (d) price tolerance. These factors play an important role in determining facility use by participants. Berrett et al. (1993) predicted that, if any were broached, the results would be a decrease in activity usage and a loss of revenue. They felt that it was important to assess both the benefits and the costs associated with the imposition of fees for services.

Berrett et al. (1993) in their third section identified the four models of equity as equality, need, demand, and market. Equality was subsequently defined as either equality for all and/or equal opportunity for all. The allocation of resources was also identified as an area needing work. Berrett et al. (1993) stressed the need for fair and equitable distribution of resources, but realized, that there is not one sure way to avoid the problems of preferred times. The Berrett et al. (1993) study presented the many problems associated with time allocation as well as a discussion of the many alternatives.

In conclusion, Berrett et al. (1993) stated that the inflexible employment of economic doctrine, raised more questions than it can answer. Their review ended with a

statement that the current literature contained few of the answers to the many questions concerning the economics of sport and leisure.

The final study in this section helped to bring the previous discussions into perspective. The recreation professionals are dependent upon community leaders for their existence and the existence of their programs. Sailor (1993) conducted a quantitative study that compared the perceptions of professionals in the recreation field with those of politicians concerning the benefits of recreation and leisure services. Sailor (1993) in her introduction talked to the concern about excessive spending by government agencies and the tendency to search for ways to reduce expenses by only funding those which are deemed most important. It was her conjecture that recreational services fall into this category mainly because those in government do not fully appreciate the overall benefits of the programs.

Sailor's (1993) study used as its subjects the entire membership of the Society of Directors for Municipal Recreation in Ontario (SDMRO) (n=442) to represent the practitioners. A random sample of elected officials from

the Ontario Public Sector Supplement (4th Edition) stratified to equally represent the proportion of SDMRO members in their communities (n=207) was selected to represent politicians.

Sailor (1993) sent a self-administered questionnaire to all participants. The questionnaire was set up in three sections: (a) benefits (a 7 point Likert-type scale); (b) information concerning the community, (a 7 point Likert-type scale), and (c) personal information. The analysis was undertaken initially using the Statistical Package for Social Sciences (SPSS). Means were computed and frequencies determined. Variables used were (a) sex, (b) length of service, (c) age, (d) other agencies ability to provide the service, (e) community agencies currently responsible for the service, (f) Other municipal services, and (g) 27 benefit statements. The results of the demographic survey showed the sample to be approximately 708 male, had worked less than 5 years, and ranged in age from 22 to 73 with the majority in the 44 to 54 age group.

Sailor (1993) applied statistical analysis to compare the two groups and to look within the groups for additional comparisons. Sailor (1993) first used Spearman's rank order

correlation to determine if there were any significant differences in the order in which the benefits appeared within the two groups. She followed with t-tests that compared the results between the two groups and to see if the results were significant ($p=.05$ and $.01$). One way ANOVAs were used to compare separate categories against a number of independent variables with t-tests used to follow up ($.05$ and $.01$ levels). The independent variables were: (a) how needs were currently being met, (b) the number of years spent in public service, (c) tax allocation towards recreation, (d) age, and (e) other agencies ability to do the job.

Sailor's (1993) results indicated that both groups ranked the four benefit dimensions the same with personal benefits first, social second, environmental third and economics fourth. A comparison of Spearman's rank order correlations revealed no significant difference between the two groups.

Sailor (1993) was surprised to find that the politicians were as supportive of the benefits of recreation as the practitioners. She was equally surprised to find both groups in agreement of the order of importance of the

benefits. Sailor (1993) concluded that politicians seem to be supportive of public recreation in accordance with its established values of the promotion of quality of life for all. However, Sailor (1993) did identify a problem, i.e., the disregard for the economic benefits of recreation could result in a loss of services. Sailor (1993) called for the use of economic efficiency to not be the only means of evaluating a recreational program, but as just one of the criteria. The generation of revenue from the service itself should not always be the key to determining the need for retaining that service.

Studies Pertinent to the Determination of the Economic Impact of Recreation Activities upon the Economy

This section includes some of the more recent descriptive studies which attempted to utilize current economic impact models in the pursuit of an effective tool in measuring this effect. Akervall (1988) conducted his descriptive study to determine the economic impact of ice arenas on the town of Thunder Bay, Ontario, Canada. Participants, spectators, sponsors, and parents

participated. Four teams from each of fourteen age groups were chosen using the stratified random sampling technique to represent the participants, both players and coaches were surveyed. A total of 900 players, 224 coaches, managers, or officials received questionnaires. Additionally, 30 sport clubs, associations, and 50 business and industry concerns were surveyed. The key variables were the amount of money actually spent by the participants, the profit or loss experienced in the operations of the arenas, and the amount of money received from the government as grants in support of the operation of the arenas. Akervall (1988) subdivided each of these variables into several sub-categories for data collection and comparison.

Akervall's (1988) results revealed that participants spent \$3,952,300 while participating at the facility. The arenas, however, lost \$407,806 during the same period. Akervall (1988) also inferred from his data that industry would donate approximately \$1,065,636 in support of arena activities and Government grants would account for another \$43,000. Akervall (1988) then applied the multiplier for the local area, as derived using Tiebout's formula, and determined that the total economic impact for the area was

in excess of \$8 million. He also stated that the primary recipients of this money were the sporting goods outlets which supplied the equipment necessary for participation.

The results led Akervall (1988) to conclude that if such an impact came from the support of just 15% of the population in only six arenas might not the city consider this a boon to its business rather than considering the bottom line loss figure in evaluating the worth of the arenas? Akervall (1988) went on to recommend that where normally a loss in operations results in increased fees, the opposite approach should be taken in order to increase participation and thus increase revenues and overall economic impact. Akervall (1988), in a final comment, stated that community governments must be aware of all the various economic factors that come into play when making decisions concerning support for arena operations.

The Akervall (1988) study looked at a single activity within a community and developed a methodology for measuring economic impact. The next study attempted to look at the economic impact of recreation activities to the community as a whole.

Hope (1988) conducted a qualitative case study to

develop and test a vehicle for use in the collection of data to best indicate the economic merit of recreation services. Hope (1988) divided his problem into three parts: (a) the development and testing of the instrument, (b) the evaluation of the current instruments, and (c) the provision of information regarding the business activities benefiting from the spending of participants in recreational activities. Hope (1988) used two current instruments as his baseline. They were (a) the Public Area Recreation Visitors Survey (PARVS), and (b) the U.S. Forest Services Impact Analysis for Planning (IMPLAN) input- output modeling system. Hope (1988), in order to answer the first part of his problem, modified the 3 part PARVS instrument and developed his own instrument for use at the local level called LPARVS.

The field test of this instrument was conducted in a rural county of Georgia which had its own recreation department with a comprehensive program. The sample consisted of a group of 204 adult users of the recreational facilities. Hope's (1988) variables were demographics, facility use, activity, and expenditures.

Mail back questionnaires were given to 204 persons who

agreed to participate. Seventy-five of the 200 surveys were returned and none of them was filled out completely. The resulting data, while providing some demographic and expenditure data, did not allow for the complete analysis that Hope (1988) had intended. It also did not allow for the further study of the IMPLAN model that Hope (1988) had programmed into his study.

Hope (1988) when discussing his results considered his new LPARVS instrument not ready for use at the local recreation agency level without modifications. The primary problem with PARVS was its length and density. While he did get some data, Hope (1988) was unable to complete the study as intended.

Hope (1988) concluded that recreation services do have a positive economic impact upon the region and that few studies have focused upon the expenditure patterns of the users. A method must be found to accomplish this task. Hope (1988), in his final statement, states that neither the LPARVS nor the IMPLAN instruments are appropriate for use at the local level and that the difficulties he experienced may render this type of study impractical for a small rural community.

A similar study, also using IMPLAN, was conducted by Kanthers & Botkin (1992). Their purpose was to estimate the economic impact of public recreation and leisure activities in the state of Illinois. To accomplish this goal Kanthers and Botkin (1992) sampled 5,579 residents from 5 state regions. The sample was selected randomly using the telephone book and a computerized random number generator and stratified by population density and region. The key questions were: (a) visitor satisfaction and expenditures, and (b) leisure service agency expenditures.

Kanthers & Botkin (1992) contacted all 5,579 and asked them to participate in the survey by filling out a questionnaire. 1,749 agreed, but only 616 were returned.

The visitor sample was asked to record expenditures made during their last visit to one of the managed sites from which per person per trip values could be calculated. Recreation agencies were asked to complete a purchase and production survey using IMPLAN commodities and to submit a copy of their previous years budget. Kanthers & Botkin (1992) used this data to generate multipliers for total output and employment.

The results derived by Kanthers & Botkin (1992)

indicated that the subjects placed value upon the recreational facilities as they related to the quality of life contribution. They also indicated satisfaction with current services. Visitor characteristics indicated that the typical user was less than 40 years old, made less than \$40,000 per year, was married with one child and lived at home.

When evaluating the economic factors Kanthers & Botkin (1992) derived economic multipliers of 1.58 for output and 1.47 for employment. Kanthers & Botkin (1992) applied these multipliers to the visitor expenditure data and determined that the total economic impact of leisure services upon the state of Illinois to be in excess of \$3.1 billion. Kanthers & Botkin (1992) suggested that their findings indicated that recreational services in the state should receive economic benefits that exceed their costs for these services.

Kanthers & Botkin (1992) stressed in their discussion the difficulty of quantifying the impact of recreation and leisure services on local economies. They feel that the figures they derived from their study give recreators an opportunity to go beyond the quality of life argument and show that their services are important economic players.

Kanters & Botkin (1992), in their concluding comments, stated that recreation is big business and will continue to be an important economic player with other business interests within the state. The final comment made by Kanters & Botkin (1992) was that communities cannot afford to cut services because of the major effect it would have upon the economics of the region.

A discussion of economic impact is not complete without a look at special events and their special impact upon a community. Turco & Kelsey (1993) in an article for Parks and Recreation, discussed the current methodology used to measure the economic impacts of special events. The basic theme was that while event managers feel it is important to know the local impact of their events very few pursue it because, it is either too difficult to collect or it requires outside expertise to interpret.

Turco & Kelsey (1993) take us step by step through the procedures to follow beginning with definitions of key terms, determination of the scope of the study, through data collection and use of the multiplier, finally arriving at the conclusion, the tax benefits and return on investment.

Turco and Kelsey (1993) concluded that event managers

too often describe their events in terms of participation and satisfaction rates and ignore the positive and very important economic impact of the event upon the entire community. They further stressed that managers should only use economic impact to not only emphasize total economic impact but tax revenue generated and total return on investment as well.

The need to use economic impact as stressed by Turco & Kelsey (1993) is countered by the need to be conservative in that estimate. Wang & Irwin (1993) in their descriptive study described the procedures and benefits of utilizing a conservative economic impact measurement.

One hundred and three (103) participants in the U.S. Volleyball Association Midwest Regional Championship Tournament were randomly surveyed in order to determine a participant profile and the amount of money each participant spent. A questionnaire divided into two parts, participant profile and expenditure diary, was given to each of the participants. The sample was equally divided by gender, most were young adults under 40, most had traveled over 50 miles, and the annual income for most was over \$30,000.

Wang & Irwin (1993) determined that the average

participant spent \$65.83 during their stay at the tournament. They also realized that as the distance traveled so did spending. Two multipliers were applied to the results. The resulting economic impact figures showed a range of \$79,075 - \$151,560.

In their conclusion, Wang & Irwin (1993) stated that too often improper research techniques and multipliers are used thus resulting in inappropriately high economic impact figures. They stated the importance of including the direct expenditures, the multiplier, and a range of economic impact estimates when calculating the results. Wang & Irwin (1993) stressed that a conservative figure is better than an overly inflated one. They also emphasized the utility of using economic indicators in gaining public support for luring events to the local areas as well as additional support from the community as a whole in supporting such an event.

A Review of Pertinent Sources of Information to Assist in Calculating Economic Impact

Gaskill & Starr (1992) conducted a review of the literature in order to assist the professional recreator in demonstrating direct economic benefits associated with their programs. They discussed sources available in most libraries in the areas helpful in acquiring information such as: a) demographics; (b) government finances; (c) business and industry; and (d) determination of economic impact. Demographic data, according to Gaskill & Starr (1988) is critical in the early stages of the budget process. Census data was available in numerous sources including Metro insights, County and city data book, and Key indicators of county growth. Some of these were also available on CD-ROM including the County and city data book and Regional economic information system (REIS).

Financial reports and statistics according to Gaskill & Starr (1988) are available both internally and externally to the recreation administrator. Sources such as Moody's municipal and government manual, the Municipal year book, and Census of governments: Government finances series

provided excellent information.

When researching business and industry Gaskill & Starr (1988) recommended Metro insights, County and city data book, and County business patterns as excellent sources. Each state also publishes directories of the businesses and industries located within their state. Gaskill & Starr (1988) felt that the information found in these sources will help the administrator in identifying needs, interests and preferences of the population as well as indicate the willingness and ability of the population to pay for recreational services. They can also assist in identifying sponsors for events and services.

The determination of the economic impact of a program or service is sometimes difficult and rarely undertaken. Gaskill & Starr (1988) thought that the results would show that programs normally generate more revenue for the community as a whole than the program itself costs to run. Sources of economic information included: (a) the Simmons Study of media and markets and (b) the Survey of buying power data service. Those were both excellent sources of information concerning personal expenditures and purchasing power. Gaskill & Starr (1988) also cited sources such as

state travel and tourism agencies and university Recreation departments.

Gaskill & Starr (1988) pointed out that the information provided in the sources may not always be current and suggested consulting with the librarians for help. In conclusion, Gaskill & Starr (1988) encouraged recreational administrators to use some of the sources available in their work as their use would raise the administrator's likelihood of attainment of their goal.

CHAPTER 3

METHODOLOGY

This study was concerned with the development of a methodology for assessing the amount of money spent in the support of youth sport activities. This chapter contains the procedures used to: (a) identify the population and the sample, (b) develop, organize, and test the instrument, (c) distribute the survey and collect the data, and (d) analyze the data collected.

Population and Sample

The population used in this study consisted of the family units of the participants in three Regions of the American Youth Soccer Organization, (AYSO), currently operating in Knoxville, Oak Ridge, and Farragut Tennessee. These regions are: (a) **AYSO 275** Cedar Bluff, Karns, and Bluegrass consisting of approximately 750 boys and girls; (b) **AYSO 390** consisting of 850 boys and girls; and (c) **AYSO 128** consisting of 800 boys and girls. A sample size of 100 from each organization was chosen to represent the population of soccer families which consisted of

approximately 500 family units per organization. Sampling was accomplished by the solicitation of persons attending the registration periods and expressing their willingness to participate. It must be noted here that during the distribution process there were only two refusals to assist, one at Region 275 and one at Region 128. They both expressed the lack of time as their reason for refusal.

Instrument Development

The instrument (Appendix A) was developed to collect data on the demographics of the sample (questions 1-5), general participation (questions 12-13), and the family dollars spent during the past calendar year (questions 6-11 and 14-21). Questions were designed to require either a check mark or number on a line provided. The survey was organized with demographic questions appearing first, general participation questions next, with a matrix and additional questions designed to collect the critical elements of the economic data last. The instrument and informed consent documentation was then submitted for Human Subjects review by the University Office of Research Administration, (Appendix B).

After approval to proceed was received the instrument

was tested to determine the readability of the survey by a random selection of graduate students in the field of Recreation. This review by four students led to a few word changes, specifically block to line in questions 2,3,and 6. Readability was judged to be clear and easy to follow.

A pilot study was conducted using the seven member Board of Directors of AYSO 128 in Farragut, Tennessee. The results of the pilot study indicated that the survey took approximately 10 minutes to complete, and that some of the questions were either redundant or not necessary in order to achieve the best results. The group also suggested that the instrument be shortened, specifically the questions concerning age groupings, children, and income being too long. They also recommended the removal of question 1 concerning the identification of the region, and 8,9,10,11, and 12 concerning transportation costs as too confusing. Those questions were replaced with a single, simpler one asking them to report the average number of miles driven per week. They recommended modifying the ranges in the matrix to eliminate overlap. All recommendations and comments provided by all groups were incorporated into the final survey prior to distribution.

Validity

Validity was achieved through the use of face/logical techniques. This means that the questions were developed by referring directly to the research questions and designing questions that would provide the appropriate data required to answer them.

Procedures

The survey was conducted during registration for the Spring 95 season during the period 2-11 February 1995. Each survey was initially color coded to match the organization from which the data was collected. The researcher personally attended each of the eight registration sessions and solicited 75 to 100 parents at each site to complete the survey. The parents were approached as they processed through the stations, given a brief explanation of what the study was about, and asked if they would be willing to assist in the collection of data. A cover letter accompanied each survey (Appendix C) which further explained the purpose of the study, the confidentiality of the information provided, informed consent, how the information is going to be used, and a request for their assistance.

The parents were asked to either complete the survey on site or take it home and mail it to the researcher within 7 days. A self addressed, stamped envelope was provided for this purpose. As surveys returned they were organized by sponsoring organization and stored for analysis. Confidentiality was maintained by not requiring names on any document requested.

Data Analysis

The data was analyzed utilizing descriptive statistics and Lotus 1,2,3 version 4. Frequencies, standard deviation, standard error, and means were used to determine whether or not a relationship could be established between the three regions and T-tests were used to determine whether or not this relationship was significant. The results of this analysis will determine the feasibility of determining a single cost factor for each participant in a recreational soccer program.

CHAPTER 4

RESULTS AND DISCUSSION

The purpose of this chapter is to outline the results that were attained by the investigation and to discuss those results and their relationship to the problem. The chapter is arranged to discuss the administration of the survey, the demographics of the sample, the determination of individual cost data, the statistical analysis of the cost data, the testing of that data, and the application of the cost factor. The final portion will discuss the total value of the programs and the tax value to the community. This is followed by a summary.

Survey Distribution

Two hundred and seventy-five surveys were distributed during the eight days of registration. Two hundred and thirty-eight surveys were completed and returned, and an additional 13 were mailed to the researcher within seven days for a total of 251 of 275 returned for 91%. The large sample of 275 families represents approximately 20% of the total population of soccer families within the three

regions. Post hoc comparisons were used to justify the non-use of random selection of the sample. The distribution of the surveys among the organizations is shown in Appendix D.

Demographics

The demographic data was derived using a spreadsheet produced using Lotus 1,2,3 Release 4 for Windows, (hereafter referred to as the spreadsheet), (Appendix E). After all of the data were entered into the spreadsheet it was totalled and averages were determined. The three regions were then compared (Table 1). This data revealed that these three regions resembled each other demographically. The close comparison of region 128 and 390 was expected, but the fact that all three were so close was not expected. The average family, based upon the above information, was a family of four in which the parents were under 40, with an average income in excess of \$54,000.

Table 1. Demographic comparison of groups by Region.

REGION	AVERAGE AGE	AVERAGE INCOME	CHILDREN IN HOME	% PER FAMILY	CHILDREN PLAY SOCCER	% PLAY SOCCER
128	40.3	\$56,654	200	2.15	159	79.5%
275	39.1	\$53,335	178	1.93	139	78%
390	40.0	\$52,556	130	1.97	105	80%
AVERAGE	39.8	\$54,182	169	2.02	134	79.3%

Determination of Expenses

The second step in the overall analysis of data was the determination of the per child cost factor. Before this calculation could be achieved several minor calculations had to be made on each of the returned surveys. The first was the conversion of question 11 into usable data. Mid-points were determined and multiplied by data provided by each family. This data, calculated by family, was then entered into a spreadsheet.

The second pre-calculation was the determination of the transportation costs associated with soccer practice and games. The numbers used here were reported in questions 6, 7, and 9 on the survey. These numbers, representing the number of seasons, number of weeks in a season, and number of miles driven per week, were combined to give total miles per year. This number was then multiplied by a U.S. Government standard \$.29 per mile resulting in a total mileage cost per family as reported on the survey. The resulting numbers were then entered onto the same Lotus spreadsheet as part of the total cost calculation.

The remaining portions of the cost data, registration fee, medical plus physical exam, insurance, and miscellaneous, were entered directly as answered on the

survey. This task had to be accomplished for each family within each region before any meaningful data could be obtained.

With all data now loaded into the spreadsheet total costs could be determined and from them the cost per family and cost per child derived. All of the data on the spreadsheet was added together both by column and row to determine the costs for each family to be used later, and the total costs for each of the variables (Appendix F) to be used later, and the total costs for each of the variables. The total costs reported by the sample were: (a) transportation \$42,718; (b) fees \$24,390; (c) equipment \$37,647; (d) medical \$4,431; (e) insurance \$250; and (f) miscellaneous \$9,801. The totals by region and the percentages of the total for each of the variables were calculated (Table 2). It was interesting that while it was expected that transportation costs would be high it was not expected that they would account for the highest percentage of expenditures (35.9%). Medical and insurance costs were lower than expected. Miscellaneous costs reported consisting mostly of soccer camp, end of season parties, trophies, and gifts to coaches and other volunteers. These numbers when added together totaled \$119,237 for the sample.

TABLE 2. Distribution of costs by Region and cost element.

REGION	FEES	TRANS	MEDICAL	INS	EQUIP	MISC
128	\$11,475 (25.6%)	\$14,216 (31.7%)	\$2,340 (5.2%)	\$250 (.6%)	\$13,356 (29.8%)	\$3,214 (7.2%)
275	\$ 9,030 (20.8%)	\$15,484 (35.7%)	\$1,052 (2.4%)	\$0.0 (0%)	\$13,513 (31.1%)	\$4,302 (10%)
390	\$ 3,885 (12.5%)	\$13,018 (42%)	\$1,039 (3.4%)	\$0.0 (0%)	\$10,778 (34.8%)	\$2,285 (7.3%)
TOTAL:	\$24,390 (20.5%)	\$42,718 (35.8%)	\$4,431 (3.7%)	\$250 (.2%)	\$37,647 (31.6%)	\$9,801 (8.2%)

The regional determination of the individual cost factor could now be made (Table 3). The total dollars spent by the sample group (\$119,237) was divided by the number of children playing soccer (403) to determine the average cost per child to be \$295.87. This figure is the derived cost factor which when applied to the population will result in the total economic value of the programs in terms of dollars spent.

TABLE 3. Cost per child playing soccer by Region.

REGION	TOTAL COSTS	NUMBER OF CHILDREN	COST PER CHILD
128	\$44,851	159	\$282.08
275	\$43,381	139	\$312.09
390	\$31,005	105	\$295.29
TOTALS:	\$119,237	403	\$295.87

Statistical Analysis

The next step in the analysis of data was to determine if the groups were enough alike to allow for the use of the cost factor derived above. This was accomplished by first determining the total costs per family per region. This was accomplished by using a continuation of the spreadsheet previously designed (Appendix G). The costs for each family within each region was determined. Descriptive statistics were used to determine the values within the group for standard deviation, standard error, and the mean (Table 4). The data clearly shows large within group dispersion, but it also shows the dispersion among the groups is small.

TABLE 4. Statistical data by region.

REGION	N	SD	SE	MEAN
128	94	200.24	20.65	333.71
275	92	194.62	20.29	291.74
390	66	193.82	23.78	281.79

Utilizing the derived data pairwise t-tests were performed between the groups, two to establish whether or not there was any significant difference between the Regions. The t-test comparisons were run using a feature of

the spreadsheet program. When each region was compared separately to each of the others the results clearly show that there was no significant difference between the three regions ($p > .05$). Table 5 illustrates the results.

TABLE 5. Pair-wise T-test Comparisons of Regions.

REGIONS	128/275	128/390	275/390
	0.7642	0.1039	0.1747
$P > .05$			

The derived cost factor was then compared to the means of the three groups and found to be within the mid-range. This confirms the assumption that the single cost factor can be derived from the data and total economic value of the recreational soccer programs can be calculated by applying this cost factor to the recreational soccer population in this area.

Total Economic Value

Once it was shown that the single cost factor was usable, the next step was to use it to determine the overall value of the soccer programs in terms of real dollars spent by the soccer population. Information provided by the AYSO Area Headquarters (Appendix H) indicated that the

recreational soccer population for Knoxville/ Knox County was approximately 3,500 children. Applying the cost factor to this population indicated that the value of the total program to the county was \$1,035,545 for the calendar year 1994. This amount of money spent in the county generated \$88,021 in sales tax revenue. The Oak Ridge soccer population of approximately 800 children generates \$236,696 in spending and \$20,119 in total sales tax revenue. The approximate total value of each of the surveyed regions was also calculated (Table 6).

TABLE 6. Comparison of program value by region surveyed.

REGION	# OF CHILDREN	COST FACTOR	VALUE
128	808	\$295.87	\$239,063
275	722	\$295.87	\$213,618
390	800	\$295.87	\$236,696

Summary

This chapter detailed the step by step approach in determining the overall costs for the single child to participate in a recreational soccer program for a year. The compilation of data was accomplished through the use of

a Lotus,1,2,3 Revision 4 for Windows spreadsheet software program. The computations completed included the determination the sample population to consist of families of four, with parents under the age of 40, and an average income in excess of \$54,000. Further calculations of total dollars spent by each family resulted in the determination of an average cost per child of \$295.87.

The data was then subjected to additional analysis to determine the validity of using the derived cost factor. Pair-wise t-tests were calculated and resulted in no significant difference among the three groups. This confirmed that the cost factor could be used.

Applying the cost factor to the total recreational soccer population resulted in a figure of over \$1.0 million in direct costs within Knox County and another \$240,000 in Oak Ridge. These numbers can only get larger as multipliers are derived and applied to account for the indirect value of the programs.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to develop a simple methodology to assess the dollars spent on youth soccer programs in Knoxville, Oak Ridge, and Farragut, Tennessee. Sub-problems included:

1. Identify the population involved in soccer in these areas by use of demographics.
2. Determine the average amount of money spent supporting each soccer player.
3. Determine if there is a difference in the average amount of money spent between the three organizations,
4. Establish whether or not a single cost factor can be derived.
5. Identify the effect of the soccer programs upon the community tax base.

For this study 275 soccer families from the three soccer Regions were asked to complete a questionnaire concerning their spending on soccer during the past year.

Conclusions

Based on the results of this study the following conclusions have been drawn by the researcher:

1. The soccer community is comprised of families consisting of four members, with parents under 40 years of age, whose average annual income exceeds \$54,000 a year.
2. The average amount of money spent supporting each child in soccer was determined to be \$295.87.
3. There was no significant difference in the average amount of money spent between the three organizations.
4. Based upon the results of the statistical analysis a single cost factor could be derived from the data which could then be applied to the population.
5. The soccer programs do have an effect upon the community tax base. Generating total sales at over \$1.0 million in Knox County and \$250,000 in Oak Ridge the direct tax benefit exceeds \$20,000 for Knox County and about \$5,000 for Oak Ridge.

The study of the methodology achieved its purpose as a simple method for assessing the dollars spent in support of youth soccer was developed. This methodology can easily be adapted to assess the costs associated with other sports as well.

Recommendations

This study achieved a first step in the determination of the total value of Youth Sports programs to their communities. It is hoped that this work continues to expand and that definitive results are published that establish that recreation programs have a large economic impact upon the community as well as a behavioral and social impact. The following recommendations were made as a result of this study:

1. Conduct a study to assess the costs associated with the other youth sports, i.e. baseball, football, basketball, and softball.

2. Develop indirect cost multipliers so that the total value of the programs might be known.

3. Conduct a study to determine the cost differential in supporting private organizations versus community government provision of sporting activities for children, with manpower being the key element.

4. Repeat this study looking at the other members of the soccer community, the competitive leagues, and adult leagues.

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REFERENCE LIST

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APPENDIX

APPENDIX A

SOCCER ECONOMIC IMPACT SURVEY

The completion of this document is totally voluntary with no penalty for refusal or withdrawal from participation. The purpose of the survey is to determine the average costs associated with your child's/children's participation in a Youth Soccer League in order to determine the economic impact of the overall soccer program upon the community. Please be as truthful and as accurate as you can in answering the questions. Completion of this survey constitutes informed consent.

1. To what age group do you and your spouse (if any) belong?
(check the appropriate line or lines)

- | | | |
|-----------------|-----------------|-----------------|
| (1) 20-25 _____ | (2) 26-30 _____ | (3) 31-35 _____ |
| (4) 36-40 _____ | (5) 41-45 _____ | (6) 46-50 _____ |
| (7) 51+ _____ | | |

2. How many children do you have living with you that are
ages 5 - 19? _____

3. How many play soccer? _____

4. What is your Zip code? _____

5. What is the approximate annual income of your family?
(check the appropriate line)

- | | |
|-------------------------------|-------------------------------|
| (1) Under \$20,000 _____ | (2) \$20,001 - \$40,000 _____ |
| (3) \$40,001 - \$60,000 _____ | (4) Over \$60,001 _____ |

6. How many seasons do your children participate in per
year? _____ seasons

7. How many weeks are in a season? _____ weeks

8. How many times per week do your children have formal
sessions, practice and games? _____

9. How many miles do you drive per week, on the average, to
games and practices? _____ miles

10. How much money do you estimate you spend on clothing
and equipment for soccer per year?

\$0 - \$50 _____ \$51 - \$100 _____ \$101 - \$150 _____ \$201 + _____

11. How many of the following soccer items have you or your child/children purchased in the past year and what was the cost? (Place the number bought in the appropriate cost column)

Item	\$0-5	\$6-10	\$11-15	\$16-20	\$21-30	\$31-40	**
JERSEY							
SHORTS							
SHOES							
SOCKS							
SHIN GUARDS							
BALL							
KEEPER GLOVES							
WARM UPS							
GEAR BAG							
WATER BOTTLE							
SPORTS DRINK							
HAT							
SWEAT SUIT							
SWEAT BANDS							
*							
*							
*							
*							
*							

* List other items in the open spaces

** For items over \$40 write in the cost

12. Do you buy most of your equipment in your local area or from out-of-town stores?

(1) In town ____ (2) Out-of-town ____ (3) Mail Order ____

13. Where do you buy most sport clothing and equipment for your child/children? (Choose one)

- (1) Sporting goods store _____
- (2) Discount Store (K-Mart, Walmart, etc) _____
- (3) Department store (Sears, Penneys, etc) _____
- (4) Catalog _____
- (5) Other(describe) _____

14. Is there an individual registration fee for participation? Yes _____ No _____

15. If yes, how much is it and how is it paid?

By season? \$ _____ By year? \$ _____

16. Are your children required to have physical exams for soccer every year? Yes _____ No _____

17. If yes, how much does the physical exam cost per child?
\$ _____

18. What were your child's/children's total medical expenses related to soccer during 1994? \$ _____

19. Do you provide insurance specifically for your children to play soccer? yes _____ no _____

20. If yes, how much does it cost per child? \$ _____

21. Are there any other expenses associated with your child's participation in soccer other than those listed? List below and include an approximate cost. (i.e. Soccer camp, lessons, practice equipment, etc.)

DESCRIPTION OF EXPENSE

COST

22. Do you have any comments concerning this survey or the soccer programs?

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

APPENDIX B



Research Administration
Compliances
Grants & Contracts
Research Advancement
404 Andy Holt Tower
Knoxville, Tennessee 37996-0140
(615) 974-3466
FAX (615) 974-2805

12/20/94

CRP #: 4626 A

Title: The Development of a Methodology to assess the Amount of Money spent
on Youth Sports Programs

Carnes, Donald J.
Health, Leisure & Safety
1914 Andy Holt Ave.
Campus

Blanton, Dr. Mary Dale
Health, Leisure & Safety
1914 Andy Holt Ave.
Campus

The project listed above has been certified exempt from review by the Committee on
Research Participation and is approved.

This certification is for a period ending one year from the date of this letter. Please make
timely submission of renewal or prompt notification of project termination (see item #2).

Responsibilities of the investigator during the conduct of this project include the following:

1. Prior approval from the Coordinator of Compliances must be obtained before
any changes in the project are instituted.
2. Submission of a Form D at 12-month intervals attesting to the current status of
the project (project is still in effect, changes in the project, project is terminated).

We wish you success in your research endeavors.

Sincerely,

Lee L. Riedinger
Associate Vice Chancellor for Research

cc: Dr. Charles Hamilton
1914 Andy Holt Ave.

Attachment: Form A

NOTE: In the introduction to the survey, you will need to complete the first sentence by stating
participation is totally voluntary with no penalty for refusal or withdrawal from participation.



FORM A

(This form is federally
auditable and
MUST BE TYPED)

Certification of Exemption from Review by Full Committee
for Research Involving Human Subjects

CRF # 4626-A
Date received in ORA DEC 14 1994

- A. PRINCIPAL INVESTIGATOR(s) and/or CO-PI(s): (For student projects, list both the student and the advisor.)
Donald J. Carnes Jr. Dr. Mary Dale Blanton
Graduate Student Student Advisor
- B. DEPARTMENT:
Health Leisure and Safety Sciences
- C. COMPLETE MAILING ADDRESS AND PHONE NUMBER OF PI(s) and CO-PI(s):
1914 Andy Holt Ave 1914 Andy Holt Ave
Knoxville TN 37996 2710 Knoxville TN 37996 2710
(615) 974 1285 (615) 974 1285
- D. TITLE OF PROJECT:
The Development of a Methodology to assess the Amount of Money spent
on Youth Sports Programs
- E. EXTERNAL FUNDING AGENCY AND ID NUMBER (if applicable):
N/A
- F. GRANT SUBMISSION DEADLINE (if applicable):
N/A
- G. STARTING DATE: Upon certification by Coordinator of Compliances. (NO RESEARCH MAY BE INITIATED
UNTIL CERTIFICATION IS GRANTED.)

II. ESTIMATED COMPLETION DATE (Include all aspects of research and final write-up):
April 1985

I. Objective(s) of Project (Use additional page, if needed.):

See attached

II. Subjects (Use additional page, if needed.):

See attached

III. Methods or Procedures (Use additional page, if needed.):

See attached

IV. CATEGORY(S) FOR EXEMPT RESEARCH PER 45 CFR 46 (see reverse side for categories): 3

CERTIFICATION: The research described herein is in compliance with 45 CFR 46 101(b) and presents subjects with no more than minimal risk as defined by applicable regulations.

Principal Investigator Name Donald J. Carnes Jr. Signature [Signature]

Date 12/14/94

Advisor Name Dr. Mary Dale Blanton Signature [Signature]

Date 12/14/94

Dept. Review Comm. Chair Name Dr. Ken Krick Signature [Signature]

Date 12/14/94

Dept. Head Name Dr. Charles B. Hamilton Signature [Signature]

Date 12/14/94

APPROVED: Coordinator of Compliances
Office of Research Administration

Signature [Signature]

Date 12-20-94

APPENDIX C

Dear Parent,

My name is Don Carnes and I am a graduate student at the University of Tennessee in the field of Recreation. The study in which you are being asked to help is part of my Masters Thesis entitled, "The development of a methodology to assess the amount of money spent on recreational youth soccer programs."

Its purpose is to find a way to determine how much money you as parents and tax payers spend on soccer related items. The research involves collecting information about how much money is spent each year on clothing and equipment, and other support items related to soccer participation.

You are asked to complete the attached survey, 5-10 minutes, and mail it back in the envelop provided by February 17, 1995. Your information will then be combined with that of over 500 other parents to determine an average.

Your responses to the survey are completely confidential. No names are required and there will be no reference made to your participation at any time. Returned surveys will be kept in a locked file cabinet and will be destroyed at the conclusion of the research project in May 1995.

If you have any questions about the research project, this document, or the survey please contact, Don Carnes, at the University of Tennessee, 974-1285.

Thank you for your participation.

Donald J. Carnes, Jr.
Graduate Student
The University of Tennessee

APPENDIX D

SURVEY DISTRIBUTION AND RETURN
BY REGION

REGION	SURVEYS DISTRIBUTED	SURVEYS RETURNED	PERCENT RETURNED
128	100	93	93%
275	100	92	92%
390	75	66	88%
TOTAL	275	251	91.2%

APPENDIX E

REGION 128 - FARRAGUT

AVERAGE AGE COMPUTATION

1	20-25	0	25.5	0	0
2	26-30	25.5	30.5	2	56
3	31-35	30.5	35.5	22	726
4	36-40	35.5	40.5	82	3116
5	41-45	40.5	45.5	54	2322
6	46-50	45.5	50.5	26	1248
7	51	50.5	50.5	2	101
				188	7569

AVERAGE 40.26 YEARS OF AGE

AVERAGE SALARY COMPUTATION

1	0-20	0	20.5	0	\$0.00
2	20-40	20.5	40.5	5	\$152,500.00
3	40-60	40.5	60.5	20	\$1,010,000.00
4	60	60.5	60.5	66	\$3,993,000.00
				91	\$5,155,500.00

AVERAGE \$56,653.85

REGION 128 FARRAGUT TENNESSEE

#	QUESTION	#	1	AGE	GROUP		#2	#3	#4	#	5	INCOME	
	1	2	3	4	5	6	7			1	2	3	4
1				2				3	2	37922			1
2			1	1				3	3	37922			
3						2		1	1	37922			
4					2			2	2	37922			1
5						2		2	2	37922			1
6				2				1	1	37922			1
7				1	1			2	1	37922			1
8					2			4	3	37922			1
9				2				1	1	37922			1
10					1	1		3	0	37922	1		
11				1	1			1	1	37922			1
12			2					1	1	37922		1	
13					2			2	1	37922			1
14						2		1	1	37922			1
15					2			4	2	37922		1	
16				1	1			2	1	37922	1		
17					2			2	2	37922			1
18			1	1				3	2	37922			1
19				2				3	2	37922		1	
20				2				2	2	37922			1
21				2				2	2	37922			
22				2				2	1	37922		1	
23				2				2	1	37922		1	
24					2			3	2	37922			1
25				1			1	1	1	37922			1
26					2			3	3	37922			1
27				1	1			1	1	37922			1
28						2		2	2	37922			1
29			2					3	2	37922		1	
30					2			2	1	37922			1
31			1		1			1	1	37922			1
32				2				3	2	37922			1
33				2				1	1	37922		1	
34				2				3	2	37922			1
35				2				2	2	37922			1
36					2			4	2	37922	1		
37				2				2	2	37922			1
38					2			2	2	37922		1	
39				2				2	2	37922			1
40					2			2	2	37922			1

REGION 128 FARRAGUT TENNESSEE

#	QUESTION	# 1	AGE	GROUP	#2	#3	#4	# 5	INCOME			
	1	2	3	4	5	6	7	1	2	3	4	
41						2		3	3	37922	1	
42			1	1				2	2	37922		1
43				2				2	2	37922	1	
44					2			2	1	37922		1
45				2				1	1	37922	1	
46					1		1	2	2	37922		1
47		2						1	1	37922		1
48				1	1			2	2	37922	1	
49		2						1	1	37922		1
50		2						2	1	37922		1
51				2				2	2	37922		1
52				2				1	1	37922		1
53			2					1	1	37922		1
54						2		1	1	37922		1
55						2		2	2	37922		1
56				2				5	4	37922		1
57				2				2	1	37922		1
58						2		1	1	37922	1	
59				2				2	2	37922	1	
60				1	1			2	1	37922		1
61				2				2	1	37922		1
62			1		1			2	2	37922		1
63				2				2	1	37922	1	
64				2				1	1	37922		1
65			1	1				4	4	37922		1
66					2			2	1	37922	1	
67					2			3	2	37922	1	
68		1	1					2	2	37922		1
69					2			2	2	37922		1
70				2				2	2	37922	1	
71		1		1				1	1	37922	1	
72				2				1	1	37922		1
73						2		2	1	37922		1
74					2			3	3	37922		1
75					2			3	2	37922		1
76				2				2	1	37922		1
77				2				2	2	37922		1
78				2				3	2	37922		1
79					2			2	1	37922		1
80					2			2	1	37922		1
81					2			4	4	37922		1
82				2				2	1	37922	1	
83				2				5	3	37922		1
84					2			2	2	37922		1
85				2				3	2	37922		1

REGION 128 FARRAGUT TENNESSEE

#	QUESTION	#	1	AGE	GROUP		#2	#3	#4		#	5	INCOME	
	1	2	3	4	5	6	7				1	2	3	4
86						2		2	2	37922				1
87				2				2	2	37922			1	
88				1	1			3	2	37922				1
89				1	1			3	3	37922				1
90						2		2	1	37922				1
91						2		2	2	37922				1
92			2					1	1	37922			1	
93				1		1		1	1	37922				1
94			1	1				2	2	37922				1
TOT	0	2	22	82	54	26	2	200	159		0	5	20	66

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

Average Age Computation

20 - 25	0	25.5	0	0
26 - 30	25.5	30.5	3	84
31 - 35	30.5	35.5	35	1155
36 - 40	35.5	40.5	82	3116
41 - 45	40.5	45.5	45	1935
46 - 50	45.5	50.5	12	576
51+	50.5	50.5	4	202
		Total	181	7068
		Average Age		39.05

Average Income Computation

0 - 20	0	20.5	2	20.5	\$20,500.00
21 - 40	20.5	40.5	8	244	\$244,000.00
41 - 60	40.5	60.5	29	1464.5	\$1,464,500.00
60+	60.5	60.5	49	2964.5	\$2,964,500.00
		Total	88	4693.50	\$4,693,500.00
		Average Income		\$53,335.23	

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

#	QUESTION		# 1	AGE GROUP				#2	#3	#4	# 5 INCOME			
	1	2	3	4	5	6	7				1	2	3	4
1			1	1				3	3	37891				1
2				2				2	1	37922				1
3				1	1			4	2	37922				1
4			2					1	1	37922				1
5				1	1			2	2	37922				1
6				2				3	2	37922				1
7				2				2	1	37922			1	
8					2			2	2	37922				1
9			2					2	1	37922				1
10				2				1	1	37922			1	
11				2				1	1	37922				1
12				2				1	1	37922			1	
13					2			2	2	37922				1
14			2					2	2	37922				1
15				2				1	1	37922				1
16				2				4	1	37922				1
17				2				1	1	37922				1
18				2				2	2	37922				1
19				2				2	2	37922				1
20					2			2	1	37922			1	
21			2					1	1	37922			1	
22			2					2	2	37922				1
23					1	1		2	2	37922				1
24				2				3	1	37922				1
25					2			2	2	37922				1
26				1	1			1	1	37922				1
27				2				2	2	37922				1
28				2				1	1	37922			1	
29				2				2	2	37922				1
30				2				2	1	37922			1	
31					2			2	2	37922			1	
32				2				1	1	37922				1
33				2				2	1	37922				1
34				1	1			2	2	37922			1	
35				1		1		1	1	37922			1	
36				2				2	1	37923		1		
37					2			3	1	37923			1	
38				2				2	2	37923			1	
39				1		1		1	1	37923				1
40					2			2	2	37923				

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

#	QUESTION		#	AGE GROUP				#2	#3	#4	#	INCOME			
	1	2		4	5	6	7					1	2	3	4
41				2				3	1	37923				1	
42					2			3	3	37923					1
43					2			2	1	37923		1			
44				2				1	1	37923			1		
45			2					1	1	37923		1			
46		1	1					1	1	37923			1		
47			1	1				1	1	37923					1
48					2			3	2	37923			1		
49			1		1			2	2	37923			1		
50							2	2	2	37923					1
51			2					3	2	37923			1		
52			2					1	1	37923			1		
53			2					5	5	37923					1
54					2			1	1	37923			1		
55					2			1	1	37923					1
56					2			3	3	37923					
57					2			1	1	37923					1
58				2				1	1	37923					1
59				2				3	1	37923			1		
60				2				2	2	37931			1		
61			2					3	2	37931			1		
62				2				2	1	37931					1
63		2						1	1	37931			1		
64			2					1	1	37931					1
65				1	1			1	1	37931					
66							2	2	1	37931					1
67				2				2	2	37931		1			
68			2					2	2	37931		1			
69				1		1		3	1	37931	1				
70				2				2	1	37931		1			
71			2					1	1	37931					1
72					2			2	2	37931			1		
73			2					1	1	37931			1		
74								2	2	37931					1
75				2				2	2	37931					1
76				2				1	1	37931					1
77				1	1			2	2	37931					1
78			2					2	1	37931	1				
79					2			2	1	37932		1			
80				1		1		2	2	37932					1

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

#	QUESTION		#	1	AGE		GROUP		#2	#3	#4	#	5	INCOME	
	1	2	3	4	5	6	7					1	2	3	4
81				1		1		1	1	37932					1
82					2			2	1	37932					1
83					1			3	3	37932					1
84				2				3	1	37932					1
85						2		3	2	37932		1			
86				2				2	2	37932					1
87					2			2	2	37932				1	
88						2		2	2	37932					1
89						2		2	1	37932					
90				2				1	1	37949				1	
91			1	1				2	2	37931					1
92				2				3	1	37923				1	
TOT	0	3	35	82	45	12	4	178	139			2	8	29	49

REGION 390 - Oak Ridge Tennessee

Average Age Computation

20-25	20	25.5	0	0
26-30	25.5	30.5	9	252
31-35	30.5	35.5	17	561
36-40	35.5	40.5	42	1596
41-45	40.5	45.5	44	1892
46-50	45.5	50.5	15	720
51	50.5	51	5	253.75
			132	5274.75

Average Age 39.96

Average Income Computation

0-20	0	20.5	2	20.5	\$20,500.00
20-40	20.5	40.5	8	244	\$244,000.00
40-60	40.5	60.5	16	808	\$808,000.00
60	60.5	0	37	2238.5	\$2,238,500.00
			63	3311	\$3,311,000.00

Average Income \$52,555.56

REGION 390 - Oak Ridge Tennessee

#	QUESTION #			1	AGE GROUP			#2	#3	#4	#	INCOME		
	1	2	3		4	5	6					7	1	2
1				1	1			1	1	37830				1
2				2				4	4	37830			1	
3			2					1	1	37830			1	
4						2		1	1	37830				1
5						2		2	2	37830				1
6				1	1			2	2	37830			1	
7				1		1		1	1	37830			1	
8				2				4	4	37830				1
9				2				2	1	37831			1	
10					2			1	1	37830				1
11			2					1	1	37830				1
12					2			2	2	37830				1
13					2			1	1	37830				1
14					2			2	2	37830		1		
15					2			2	1	37830		1		
16					2			2	1	37830				
17						1	1	2	2	37830				1
18					2			3	1	37840			1	
19		2						1	1	37830				1
20					2			2	1	37830			1	
21			1		1			4	1	37830				1
22			2					3	1	37840	1			
23							2	0	4	37830		1		
24				1	1			2	2	37830				1
25		1	1					1	1	37830		1		
26				2				1	1	37830				1
27				1	1			2	2	37830				1
28				2				3	2	37830				1
29				2				2	1	37830				1
30			2					3	1	37830				1
31		2						2	2	37830			1	
32				2				1	1	37830				1
33			2					1	1	37830				1
34		2						1	1	37830			1	
35						2		2	1	37830				1
36			2					1	1	37830		1		
37				1	1			1	1	37830			1	
38					1	1		2	2	37830				1
39				2				1	1	37830				1
40				1		1		2	2	37830			1	

REGION 390 - Oak Ridge Tennessee

#	QUESTION	# 1	AGE	GROUP	#2	#3	#4	# 5	INCOME				
1	2	3	4	5	6	7		1	2	3	4		
41				2			3	2	37830		1		
42			2				1	1	37830			1	
43			2				5	3	37830	1			
44				2			2	1	37830			1	
45		1	1				1	1	37830			1	
46					2		3	1	37830			1	
47			2				2	2	37830			1	
48			1	1			4	2	37830		1		
49			1	1			3	3	37830			1	
50						2	4	2	37830			1	
51			1	1			2	2	37830			1	
52					2		1	1	37830			1	
53				2			2	2	37830		1		
54	2						1	1	37830		1		
55				2			1	1	37830		1		
56				2			3	1	37830			1	
57			2				2	2	37830			1	
58		2					1	1	37830		1		
59				2			2	2	37830		1		
60			2				2	2	37830				
61				2			3	3	37931			1	
62			2				1	1	37830			1	
63			2				2	2	37830			1	
64				2			3	3	37748				
65			1		1		2	1	37716			1	
66				2			2	2	37830		1		
TOT	0	9	17	42	44	15	5	130	105	2	8	16	37

APPENDIX F

REGION 128 FARRAGUT TENNESSEE

# 6 SEASONS	#7 MPW	# 9 WEEKS	MILEAGE COST	# 11 EQUIP	#15 A R. FEE	#15 B BY YEAR	# 18 MEDICAL	# 20 INS	# 21 MISC	TOTAL EXPENSES
2	50	10	\$290.00	\$78.50	\$75.00	\$150.00	\$0.00	\$0.00	\$500.00	\$1,093.50
2	28	10	\$162.40	\$151.50	\$85.00	\$170.00	\$0.00	\$0.00	\$0.00	\$568.90
2	20	10	\$116.00	\$133.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$369.00
2	10	10	\$58.00	\$198.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$481.00
2	10	10	\$58.00	\$187.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$470.50
4	10	10	\$116.00	\$93.00	\$40.00	\$160.00	\$200.00	\$0.00	\$0.00	\$609.00
2	15	10	\$87.00	\$191.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$503.00
2	100	10	\$580.00	\$351.00	\$85.00	\$170.00	\$0.00	\$0.00	\$80.00	\$1,266.00
1	2	10	\$5.80	\$200.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$285.80
1	8	10	\$23.20	\$50.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$153.20
2	25	10	\$145.00	\$77.50	\$40.00	\$80.00	\$0.00	\$0.00	\$35.00	\$377.50
1	10	10	\$29.00	\$118.00	\$40.00	\$40.00	\$0.00	\$0.00	\$65.00	\$292.00
2	12	10	\$69.60	\$60.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$249.60
2	15	10	\$87.00	\$30.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$237.00
2	25	10	\$145.00	\$162.00	\$75.00	\$150.00	\$0.00	\$0.00	\$170.00	\$702.00
1	5	10	\$14.50	\$37.50	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$132.00
2	10	10	\$58.00	\$65.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$348.50
2	8	10	\$46.40	\$196.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$467.40
2	75	10	\$435.00	\$368.50	\$75.00	\$150.00	\$0.00	\$0.00	\$100.00	\$1,128.50
2	60	10	\$348.00	\$185.00	\$75.00	\$150.00	\$45.00	\$0.00	\$55.00	\$858.00
2	10	10	\$58.00	\$25.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$308.00
2	44	10	\$255.20	\$55.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$430.20
2	44	10	\$255.20	\$60.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$435.20
2	20	10	\$116.00	\$81.50	\$75.00	\$150.00	\$0.00	\$0.00	\$150.00	\$572.50
2	15	10	\$87.00	\$203.00	\$40.00	\$80.00	\$0.00	\$0.00	\$150.00	\$560.00
2	50	10	\$290.00	\$265.00	\$85.00	\$170.00	\$0.00	\$0.00	\$200.00	\$1,010.00
1	5	10	\$14.50	\$245.50	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$340.00
4	36	10	\$417.60	\$110.50	\$75.00	\$300.00	\$0.00	\$0.00	\$0.00	\$903.10
2	10	10	\$58.00	\$199.00	\$75.00	\$150.00	\$0.00	\$0.00	\$22.00	\$504.00
2	10	10	\$58.00	\$33.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$211.00
2	20	10	\$116.00	\$77.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$313.50
2	5	10	\$29.00	\$225.00	\$75.00	\$150.00	\$0.00	\$0.00	\$70.00	\$549.00
2	5	10	\$29.00	\$170.00	\$40.00	\$80.00	\$50.00	\$0.00	\$0.00	\$369.00
2	50	10	\$290.00	\$25.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$540.00
2	30	10	\$174.00	\$163.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$562.00
2	20	10	\$116.00	\$104.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$445.00
2	40	10	\$232.00	\$55.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$512.50
2	15	10	\$87.00	\$117.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$429.50
2	35	10	\$203.00	\$213.00	\$75.00	\$150.00	\$0.00	\$0.00	\$150.00	\$791.00
2	100	10	\$580.00	\$80.50	\$75.00	\$150.00	\$0.00	\$0.00	\$125.00	\$1,010.50

REGION 128 FARRAGUT TENNESSEE

# 6 SEASONS	#7 HPW	# 9 WEEKS	MILEAGE COST	# 11 EQUIP	#15 A R. FEE	#15 B BY YEAR	# 18 MEDICAL	# 20 INS	# 21 HISC	TOTAL EXPENSES
3	40	10	\$348.00	\$181.50	\$85.00	\$255.00	\$0.00	\$0.00	\$0.00	\$869.50
2	5	10	\$29.00	\$85.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$339.00
2	30	10	\$174.00	\$45.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$444.00
2	15	10	\$87.00	\$17.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$224.50
2	10	10	\$58.00	\$83.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$261.50
2	15	10	\$87.00	\$564.00	\$75.00	\$150.00	\$135.00	\$0.00	\$200.00	\$1,211.00
1	10	10	\$29.00	\$50.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$159.00
2	5	10	\$29.00	\$560.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$814.00
2	20	10	\$116.00	\$173.00	\$40.00	\$80.00	\$0.00	\$0.00	\$20.00	\$429.00
2	10	10	\$58.00	\$150.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$328.00
2	30	10	\$174.00	\$96.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$495.00
2	25	10	\$145.00	\$45.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$310.50
3	20	10	\$174.00	\$60.50	\$40.00	\$120.00	\$0.00	\$0.00	\$0.00	\$394.50
2	40	10	\$232.00	\$98.00	\$40.00	\$80.00	\$75.00	\$0.00	\$0.00	\$525.00
4	50	10	\$580.00	\$378.50	\$75.00	\$300.00	\$0.00	\$0.00	\$500.00	\$1,833.50
2	100	10	\$580.00	\$137.50	\$85.00	\$170.00	\$0.00	\$0.00	\$0.00	\$972.50
2	30	10	\$174.00	\$30.00	\$40.00	\$80.00	\$0.00	\$0.00	\$50.00	\$374.00
2	3	10	\$17.40	\$87.00	\$40.00	\$80.00	\$0.00	\$0.00	\$50.00	\$274.40
2	40	10	\$232.00	\$195.50	\$75.00	\$150.00	\$0.00	\$0.00	\$40.00	\$692.50
2	2	10	\$11.60	\$75.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$206.60
2	25	10	\$145.00	\$35.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$300.00
2	40	10	\$232.00	\$97.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$554.50
2	10	10	\$58.00	\$45.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$223.50
2	5	10	\$29.00	\$65.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$214.50
3	6	10	\$52.20	\$499.00	\$85.00	\$255.00	\$0.00	\$0.00	\$60.00	\$951.20
3	30	10	\$261.00	\$17.50	\$40.00	\$120.00	\$0.00	\$0.00	\$87.50	\$526.00
3	80	10	\$696.00	\$240.00	\$75.00	\$225.00	\$0.00	\$0.00	\$85.00	\$1,321.00
2	15	10	\$87.00	\$163.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$475.50
1	3	10	\$8.70	\$100.00	\$75.00	\$75.00	\$0.00	\$0.00	\$130.00	\$388.70
2	20	10	\$116.00	\$218.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$559.50
2	55	10	\$319.00	\$125.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$564.50
2	30	10	\$174.00	\$62.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$356.50
2	10	10	\$58.00	\$155.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$333.50
2	2	10	\$11.60	\$351.00	\$85.00	\$170.00	\$0.00	\$250.00	\$0.00	\$867.60
2	10	10	\$58.00	\$198.00	\$75.00	\$150.00	\$100.00	\$0.00	\$0.00	\$581.00
1	15	10	\$43.50	\$95.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$218.50
2	7.5	10	\$43.50	\$217.00	\$75.00	\$150.00	\$200.00	\$0.00	\$0.00	\$685.50
2	40	10	\$232.00	\$122.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$579.50
2	6	10	\$34.80	\$60.00	\$40.00	\$80.00	\$1,500.00	\$0.00	\$0.00	\$1,714.80
3	25	10	\$217.50	\$75.00	\$40.00	\$120.00	\$0.00	\$0.00	\$0.00	\$452.50

REGION 128 FARRAGUT TENNESSEE

# 6 SEASONS	#7 MPW	# 9 WEEKS	MILEAGE COST	# 11 EQUIP	#15 A R. FEE	#15 B BY YEAR	# 18 MEDICAL	# 20 INS	# 21 MISC	TOTAL EXPENSES
1	4	10	\$11.60	\$71.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$162.60
1	5	10	\$14.50	\$115.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$209.50
4	25	10	\$290.00	\$219.50	\$85.00	\$340.00	\$0.00	\$0.00	\$0.00	\$934.50
2	8	10	\$46.40	\$106.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$272.90
2	12	10	\$69.60	\$81.00	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$375.60
2	30	10	\$174.00	\$323.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$722.50
2	10	10	\$58.00	\$154.00	\$75.00	\$150.00	\$0.00	\$0.00	\$100.00	\$537.00
2	5	10	\$29.00	\$198.00	\$75.00	\$150.00	\$0.00	\$0.00	\$20.00	\$472.00
1	20	10	\$58.00	\$262.00	\$85.00	\$85.00	\$35.00	\$0.00	\$0.00	\$525.00
2	60	10	\$348.00	\$12.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$480.50
2	55	10	\$319.00	\$223.50	\$75.00	\$150.00	\$0.00	\$0.00	\$0.00	\$767.50
1	30	10	\$87.00	\$55.00	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$222.00
2	10	10	\$58.00	\$0.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$178.00
1	35	10	\$101.50	\$35.00	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00	\$211.50
189	2305	940	\$14,215.80	\$13,355.50		\$11,475.00	\$2,340.00	\$250.00	\$3,214.50	\$44,850.80
								cost per	child	\$282.08
								value		\$225,664.40
								sales tax	value	\$19,181.47

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

# 6 SEASONS	#7 WEEKS	# 9 HPW	MILEAGE COST	# 11 EQUIP	# 15 R. FEE	# 18 MEDICAL	# 20 INS	# 21 MISC	TOTAL EXPENSES
3	10	120	\$1,044.00	\$495.00	\$130.00	\$0.00	\$0.00	\$300.00	\$1,969.00
2	10	20	\$116.00	\$100.00	\$70.00	\$0.00	\$0.00	\$0.00	\$286.00
2	10	20	\$116.00	\$68.00	\$130.00	\$0.00	\$0.00	\$42.00	\$356.00
2	10	60	\$348.00	\$157.50	\$70.00	\$0.00	\$0.00	\$50.00	\$625.50
2	10	30	\$174.00	\$200.50	\$130.00	\$0.00	\$0.00	\$300.00	\$804.50
2	10	28	\$162.40	\$37.50	\$70.00	\$0.00	\$0.00	\$42.00	\$311.90
2	10	60	\$348.00	\$130.00	\$70.00	\$0.00	\$0.00	\$0.00	\$548.00
3	10	12	\$104.40	\$132.50	\$130.00	\$0.00	\$0.00	\$65.00	\$431.90
2	10	75	\$435.00	\$476.00	\$70.00	\$0.00	\$0.00	\$250.00	\$1,231.00
2	10	10	\$58.00	\$167.00	\$70.00	\$150.00	\$0.00	\$0.00	\$445.00
2	10	50	\$290.00	\$190.00	\$70.00	\$0.00	\$0.00	\$0.00	\$550.00
2	10	10	\$58.00	\$72.50	\$130.00	\$0.00	\$0.00	\$26.00	\$286.50
3	10	6	\$52.20	\$143.50	\$70.00	\$0.00	\$0.00	\$80.00	\$345.70
2	10	5	\$29.00	\$93.00	\$130.00	\$0.00	\$0.00	\$20.00	\$272.00
2	10	10	\$58.00	\$47.50	\$70.00	\$0.00	\$0.00	\$0.00	\$175.50
2	10	30	\$174.00	\$220.00	\$130.00	\$0.00	\$0.00	\$100.00	\$624.00
1	10	10	\$29.00	\$119.50	\$70.00	\$0.00	\$0.00	\$0.00	\$218.50
2	10	30	\$174.00	\$51.00	\$70.00	\$0.00	\$0.00	\$0.00	\$295.00
2	10	60	\$348.00	\$58.00	\$130.00	\$0.00	\$0.00	\$130.00	\$666.00
2	10	30	\$174.00	\$30.00	\$70.00	\$0.00	\$0.00	\$0.00	\$274.00
2	10	7	\$40.60	\$12.50	\$70.00	\$0.00	\$0.00	\$0.00	\$123.10
2	10	25	\$145.00	\$393.00	\$130.00	\$0.00	\$0.00	\$69.00	\$737.00
2	10	50	\$290.00	\$187.50	\$130.00	\$0.00	\$0.00	\$142.00	\$749.50
3	10	50	\$435.00	\$160.50	\$70.00	\$0.00	\$0.00	\$155.00	\$820.50
2	10	60	\$348.00	\$304.50	\$70.00	\$0.00	\$0.00	\$40.00	\$762.50
2	10	20	\$116.00	\$227.50	\$130.00	\$0.00	\$0.00	\$0.00	\$473.50
2	10	50	\$290.00	\$196.50	\$70.00	\$0.00	\$0.00	\$0.00	\$556.50
2	10	60	\$348.00	\$65.50	\$70.00	\$0.00	\$0.00	\$0.00	\$483.50
2	10	42	\$243.60	\$26.00	\$130.00	\$0.00	\$0.00	\$44.00	\$443.60
2	10	10	\$58.00	\$227.50	\$70.00	\$20.00	\$0.00	\$0.00	\$375.50
2	10	35	\$203.00	\$107.50	\$70.00	\$0.00	\$0.00	\$0.00	\$380.50
2	10	25	\$145.00	\$102.50	\$70.00	\$0.00	\$0.00	\$0.00	\$317.50
1	10	10	\$29.00	\$12.50	\$70.00	\$0.00	\$0.00	\$0.00	\$111.50
2	10	48	\$278.40	\$92.50	\$70.00	\$0.00	\$0.00	\$0.00	\$440.90
2	10	6	\$34.80	\$142.50	\$130.00	\$0.00	\$0.00	\$40.00	\$347.30
1	10	5	\$14.50	\$125.00	\$70.00	\$30.00	\$0.00	\$0.00	\$239.50
2	10	18	\$104.40	\$93.00	\$70.00	\$0.00	\$0.00	\$0.00	\$267.40
1	10	20	\$58.00	\$125.00	\$70.00	\$0.00	\$0.00	\$0.00	\$253.00
2	10	5	\$29.00	\$692.50	\$180.00	\$0.00	\$0.00	\$100.00	\$1,001.50
2	10	10	\$58.00	\$127.00	\$70.00	\$0.00	\$0.00	\$0.00	\$255.00

REGION 275 - CEDAR BLUFF, KARNs, BLUEGRASS

# 6 SEASONS	#7 WEEKS	# 9 NPW	MILEAGE COST	# 11 EQUIP	# 15 R. FEE	# 18 MEDICAL	# 20 INS	# 21 MISC	TOTAL EXPENSES
2	10	36	\$208.80	\$120.50	\$130.00	\$400.00	\$0.00	\$95.00	\$954.30
1	10	12	\$34.80	\$25.00	\$130.00	\$0.00	\$0.00	\$0.00	\$189.80
2	10	20	\$116.00	\$247.00	\$70.00	\$0.00	\$0.00	\$45.00	\$478.00
1	10	10	\$29.00	\$50.50	\$70.00	\$0.00	\$0.00	\$0.00	\$149.50
2	10	4	\$23.20	\$10.00	\$130.00	\$0.00	\$0.00	\$40.00	\$203.20
2	10	50	\$290.00	\$184.50	\$180.00	\$0.00	\$0.00	\$240.00	\$894.50
3	10	40	\$348.00	\$150.00	\$70.00	\$0.00	\$0.00	\$130.00	\$698.00
2	10	100	\$580.00	\$217.00	\$180.00	\$0.00	\$0.00	\$0.00	\$977.00
2	10	2	\$11.60	\$125.00	\$70.00	\$0.00	\$0.00	\$85.00	\$291.60
2	10	30	\$174.00	\$55.00	\$130.00	\$12.00	\$0.00	\$0.00	\$371.00
1	10	20	\$58.00	\$27.00	\$70.00	\$0.00	\$0.00	\$50.00	\$205.00
2	10	12	\$69.60	\$80.00	\$70.00	\$0.00	\$0.00	\$42.00	\$261.60
1	10	15	\$43.50	\$55.50	\$130.00	\$0.00	\$0.00	\$0.00	\$229.00
2	10	5	\$29.00	\$82.50	\$70.00	\$0.00	\$0.00	\$42.00	\$223.50
2	10	36	\$208.80	\$424.00	\$130.00	\$0.00	\$0.00	\$200.00	\$962.80
2	10	10	\$58.00	\$15.00	\$70.00	\$0.00	\$0.00	\$42.00	\$185.00
2	10	12	\$69.60	\$80.00	\$70.00	\$0.00	\$0.00	\$0.00	\$219.60
2	10	20	\$116.00	\$80.50	\$70.00	\$0.00	\$0.00	\$42.00	\$308.50
4	10	60	\$696.00	\$481.50	\$70.00	\$0.00	\$0.00	\$42.00	\$1,289.50
2	10	25	\$145.00	\$128.00	\$130.00	\$0.00	\$0.00	\$0.00	\$403.00
2	10	30	\$174.00	\$121.00	\$70.00	\$0.00	\$0.00	\$42.00	\$407.00
2	10	5	\$29.00	\$88.00	\$70.00	\$0.00	\$0.00	\$0.00	\$187.00
2	10	20	\$116.00	\$98.00	\$130.00	\$0.00	\$0.00	\$0.00	\$344.00
2	10	120	\$696.00	\$301.25	\$130.00	\$0.00	\$0.00	\$200.00	\$1,327.25
2	10	18	\$104.40	\$47.50	\$130.00	\$0.00	\$0.00	\$0.00	\$281.90
2	10	60	\$348.00	\$196.00	\$130.00	\$0.00	\$0.00	\$190.00	\$864.00
2	10	25	\$145.00	\$80.00	\$70.00	\$0.00	\$0.00	\$20.00	\$315.00
2	10	15	\$87.00	\$112.50	\$70.00	\$0.00	\$0.00	\$0.00	\$269.50
2	10	6	\$34.80	\$155.00	\$70.00	\$0.00	\$0.00	\$42.00	\$301.80
1	10	10	\$29.00	\$100.00	\$70.00	\$0.00	\$0.00	\$0.00	\$199.00
2	10	10	\$58.00	\$141.00	\$130.00	\$0.00	\$0.00	\$25.00	\$354.00
2	10	20	\$116.00	\$226.00	\$130.00	\$100.00	\$0.00	\$42.00	\$614.00
2	10	10	\$58.00	\$95.50	\$130.00	\$0.00	\$0.00	\$0.00	\$283.50
2	10	5	\$29.00	\$180.00	\$70.00	\$0.00	\$0.00	\$0.00	\$279.00
2	10	12	\$69.60	\$149.50	\$70.00	\$80.00	\$0.00	\$0.00	\$369.10
2	10	45	\$261.00	\$137.50	\$130.00	\$0.00	\$0.00	\$62.00	\$590.50
3	10	30	\$261.00	\$59.00	\$70.00	\$0.00	\$0.00	\$20.00	\$410.00
2	10	30	\$174.00	\$75.00	\$70.00	\$0.00	\$0.00	\$78.00	\$397.00
2	10	18	\$104.40	\$57.50	\$70.00	\$0.00	\$0.00	\$42.00	\$273.90
2	10	18	\$104.40	\$70.50	\$70.00	\$0.00	\$0.00	\$42.00	\$286.90

REGION 275 - CEDAR BLUFF, KARNS, BLUEGRASS

# 6 SEASONS	#7 WEEKS	# 9 MPW	MILEAGE COST	# 11 EQUIP	# 15 R. FEE	# 18 MEDICAL	# 20 INS	# 21 MISC	TOTAL EXPENSES
2	10	5	\$29.00	\$97.00	\$130.00	\$0.00	\$0.00	\$0.00	\$256.00
2	10	72	\$417.60	\$559.00	\$130.00	\$0.00	\$0.00	\$250.00	\$1,356.60
2	10	30	\$174.00	\$95.00	\$70.00	\$0.00	\$0.00	\$0.00	\$339.00
2	10	10	\$58.00	\$72.50	\$130.00	\$0.00	\$0.00	\$0.00	\$260.50
2	10	25	\$145.00	\$47.50	\$180.00	\$0.00	\$0.00	\$0.00	\$372.50
2	10	15	\$87.00	\$160.50	\$130.00	\$60.00	\$0.00	\$0.00	\$437.50
2	10	65	\$377.00	\$199.00	\$130.00	\$200.00	\$0.00	\$95.00	\$1,001.00
3	10	5	\$43.50	\$151.00	\$70.00	\$0.00	\$0.00	\$42.00	\$306.50
1	10	30	\$87.00	\$142.50	\$70.00	\$0.00	\$0.00	\$20.00	\$319.50
2	10	30	\$174.00	\$450.00	\$180.00	\$0.00	\$0.00	\$0.00	\$804.00
1	10	0	\$24.00	\$0.00	\$130.00	\$0.00	\$0.00	\$0.00	\$154.00
1	10		\$0.00	\$0.00	\$70.00	\$0.00	\$0.00	\$0.00	\$70.00
			\$15,483.90	\$13,513.25	\$9,030.00	\$1,052.00	\$0.00	\$4,302.00	\$43,381.15
							cost per	child	\$312.09
							value		\$249,675.68
							sales tax	value	\$21,222.43

REGION 390 - Oak Ridge Tennessee

# 6 SEASONS	#7 WEEKS	# 9 MPW	MILEAGE COST	# 11 EQUIP	#15 A R. FEE	#15 B BY YEAR	# 17 P. EXAM	# 18 MEDICAL	# 21 MISC	TOTAL EXPENSES
1	3	10	\$8.70	\$35.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$83.70
4	60	10	\$696.00	\$275.00	\$60.00	\$240.00	\$0.00	\$0.00	\$0.00	\$1,271.00
2	10	10	\$58.00	\$75.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$193.00
2	25	10	\$145.00	\$151.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$356.00
2	20	10	\$116.00	\$1,160.00	\$40.00	\$80.00	\$0.00	\$50.00	\$0.00	\$1,446.00
2	3	10	\$17.40	\$20.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$157.40
2	15	10	\$87.00	\$27.50	\$20.00	\$40.00	\$0.00	\$0.00	\$20.00	\$194.50
2	45	10	\$261.00	\$471.00	\$80.00	\$160.00	\$0.00	\$0.00	\$0.00	\$972.00
2	25	10	\$145.00	\$157.50	\$20.00	\$40.00	\$0.00	\$0.00	\$25.00	\$387.50
2	9	10	\$52.20	\$25.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$137.20
2	5	10	\$29.00	\$55.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$144.50
2	25	10	\$145.00	\$101.00	\$50.00	\$100.00	\$0.00	\$0.00	\$0.00	\$396.00
2	5	10	\$29.00	\$55.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$144.50
2.5	50	10	\$362.50	\$187.50	\$40.00	\$100.00	\$0.00	\$0.00	\$20.00	\$710.00
2	5	10	\$29.00	\$30.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$119.00
2	12	10	\$69.60	\$250.00	\$20.00	\$40.00	\$0.00	\$40.00	\$0.00	\$419.60
2	100	10	\$580.00	\$325.50	\$40.00	\$80.00	\$0.00	\$100.00	\$75.00	\$1,200.50
2	22.5	10	\$130.50	\$40.00		\$45.00	\$0.00	\$0.00	\$0.00	\$215.50
2	10	10	\$58.00	\$122.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$240.50
3	40	10	\$348.00	\$73.00		\$35.00	\$0.00	\$0.00	\$10.00	\$466.00
2	10	10	\$58.00	\$38.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$156.00
2	15	10	\$87.00	\$61.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$208.00
2	500	10	\$2,900.00	\$327.00	\$80.00	\$160.00	\$0.00	\$200.00	\$325.00	\$3,992.00
2	30	10	\$174.00	\$89.50	\$40.00	\$80.00	\$0.00	\$60.00	\$0.00	\$443.50
2	5	10	\$29.00	\$45.00		\$30.00	\$0.00	\$0.00	\$0.00	\$104.00
1	20	10	\$58.00	\$125.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$223.00
2	50	10	\$290.00	\$209.00	\$20.00	\$40.00	\$0.00	\$0.00	\$300.00	\$859.00
4	50	10	\$580.00	\$905.50	\$20.00	\$80.00	\$0.00	\$355.00	\$0.00	\$1,940.50
2	10	10	\$58.00	\$105.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$223.50
2	18	10	\$104.40	\$120.50		\$40.00	\$0.00	\$0.00	\$0.00	\$264.90
1	5	10	\$14.50	\$85.50	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$180.00
2	50	10	\$290.00	\$81.00		\$30.00	\$0.00	\$0.00	\$0.00	\$401.00
1	3	10	\$8.70	\$58.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$106.70
2	0.5	10	\$2.90	\$25.00		\$30.00	\$0.00	\$0.00	\$0.00	\$57.90
2	30	10	\$174.00	\$35.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$269.00
2	5	10	\$29.00	\$113.00	\$20.00	\$40.00	\$0.00	\$0.00	\$60.00	\$262.00
1	10	10	\$29.00	\$75.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$144.00
2	60	10	\$348.00	\$56.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$524.00
2	10	10	\$58.00	\$58.00	\$20.00	\$40.00	\$0.00	\$0.00	\$50.00	\$226.00
2	8	10	\$46.40	\$55.50	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$221.90

REGION 390 - Oak Ridge Tennessee

# 6 SEASONS	#7 WEEKS	# 9 MPW	MILEAGE COST	# 11 EQUIP	#15 A R. FEE	#15 B BY YEAR	# 17 P. EXAM	# 18 MEDICAL	# 21 MISC	TOTAL EXPENSES
2	30	10	\$174.00	\$216.50		\$30.00	\$0.00	\$0.00	\$150.00	\$570.50
2	8	10	\$46.40	\$46.00		\$30.00	\$0.00	\$0.00	\$0.00	\$122.40
2	27.5	10	\$159.50	\$85.00		\$90.00	\$0.00	\$0.00	\$0.00	\$334.50
2	6	10	\$34.80	\$75.00		\$40.00	\$0.00	\$0.00	\$0.00	\$149.80
2	12	10	\$69.60	\$20.00		\$30.00	\$0.00	\$0.00	\$0.00	\$119.60
2	5	10	\$29.00	\$73.00	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$162.00
2	75	10	\$435.00	\$769.50		\$80.00	\$0.00	\$100.00	\$0.00	\$1,384.50
1	8	10	\$23.20	\$118.50	\$40.00	\$40.00	\$0.00	\$0.00	\$0.00	\$221.70
2	20	10	\$116.00	\$339.50	\$60.00	\$120.00	\$0.00	\$0.00	\$0.00	\$635.50
2	6	10	\$34.80	\$110.50	\$40.00	\$80.00	\$0.00	\$0.00	\$58.00	\$323.30
2	50	10	\$290.00	\$150.00		\$60.00	\$0.00	\$34.00	\$0.00	\$534.00
2	40	10	\$232.00	\$67.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$359.50
2	50	10	\$290.00	\$239.50	\$40.00	\$80.00	\$0.00	\$100.00	\$0.00	\$749.50
1	20	10	\$58.00	\$25.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$123.00
1	10	10	\$29.00	\$75.00	\$20.00	\$20.00	\$0.00	\$0.00	\$0.00	\$144.00
2	20	10	\$116.00	\$125.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$361.00
3	50	10	\$435.00	\$187.50	\$40.00	\$120.00	\$0.00	\$0.00	\$0.00	\$782.50
2	15	10	\$87.00	\$60.00		\$40.00	\$0.00	\$0.00	\$92.00	\$279.00
2	50	10	\$290.00	\$212.00		\$60.00	\$0.00	\$0.00	\$0.00	\$562.00
2	8	10	\$46.40	\$115.00	\$60.00	\$120.00	\$0.00	\$0.00	\$600.00	\$941.40
2	60	10	\$348.00	\$546.25	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$954.25
1	4	10	\$11.60	\$125.00	\$20.00	\$20.00	\$0.00	\$0.00	\$500.00	\$676.60
2	40	10	\$232.00	\$348.00		\$75.00	\$0.00	\$0.00	\$0.00	\$655.00
2	80	10	\$464.00	\$82.50	\$20.00	\$40.00	\$0.00	\$0.00	\$0.00	\$606.50
2	30	10	\$174.00	\$50.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$344.00
2	15	10	\$87.00	\$211.00	\$40.00	\$80.00	\$0.00	\$0.00	\$0.00	\$418.00
129.5	2118.5	10	\$13,018.10	\$10,778.25		\$3,885.00	\$0.00	\$1,039.00	\$2,285.00	\$31,005.35
								cost per	child	\$295.29
								value		\$236,231.24
								sales tax	value	\$20,079.66

APPENDIX G

REGION 128 STATISTICAL ANALYSIS

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/ CHILD		
128	2	1093.5	\$546.75	N	94
128	3	568.9	\$189.63		
128	1	369	\$369.00	SD	200.241
128	2	481	\$240.50		
128	2	470.5	\$235.25	STD ERR	20.653
128	1	609	\$609.00		
128	1	503	\$503.00	MEAN	333.705
128	3	1266	\$422.00		
128	1	285.8	\$285.80	M. DEV	123.453
128	1	153.2	\$153.20		
128	1	377.5	\$377.50	VAR	40096.526
128	1	292	\$292.00		
128	1	249.6	\$249.60	SKEW	3.858
128	1	237	\$237.00		
128	2	702	\$351.00		
128	1	132	\$132.00		
128	2	348.5	\$174.25		
128	2	467.4	\$233.70		
128	2	1128.5	\$564.25		
128	2	858	\$429.00		
128	2	308	\$154.00		
128	1	430.2	\$430.20		
128	1	435.2	\$435.20		
128	2	572.5	\$286.25		
128	1	560	\$560.00		
128	3	1010	\$336.67		
128	1	340	\$340.00		
128	2	903.1	\$451.55		
128	2	504	\$252.00		
128	1	211	\$211.00		
128	1	313.5	\$313.50		
128	2	549	\$274.50		
128	1	369	\$369.00		
128	2	540	\$270.00		
128	2	562	\$281.00		
128	2	445	\$222.50		
128	2	512.5	\$256.25		
128	2	429.5	\$214.75		
128	2	791	\$395.50		
128	2	1010.5	\$505.25		
128	3	869.5	\$289.83		
128	2	339	\$169.50		
128	2	444	\$222.00		
128	1	224.5	\$224.50		
128	1	261.5	\$261.50		
128	2	1211	\$605.50		
128	1	159	\$159.00		
128	2	814	\$407.00		
128	1	429	\$429.00		
128	1	328	\$328.00		
128	2	495	\$247.50		
128	1	310.5	\$310.50		
128	1	394.5	\$394.50		

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/ CHILD
128	1	525	\$525.00
128	2	1833	\$916.50
128	4	972.5	\$243.13
128	1	374	\$374.00
128	1	274.4	\$274.40
128	2	692.5	\$346.25
128	1	206.6	\$206.60
128	1	300	\$300.00
128	2	554.5	\$277.25
128	1	223.5	\$223.50
128	1	214.5	\$214.50
128	4	951.2	\$237.80
128	1	526	\$526.00
128	2	1321	\$660.50
128	2	475.5	\$237.75
128	2	388.7	\$194.35
128	2	559.5	\$279.75
128	1	564.5	\$564.50
128	1	336.5	\$336.50
128	1	333.5	\$333.50
128	3	867.6	\$289.20
128	2	581	\$290.50
128	1	218.5	\$218.50
128	2	685.5	\$342.75
128	2	579.5	\$289.75
128	1	1714.8	\$1,714.80
128	1	452.5	\$452.50
128	4	162.6	\$40.65
128	1	209.5	\$209.50
128	3	934.5	\$311.50
128	2	272.9	\$136.45
128	2	375.6	\$187.80
128	2	722.5	\$361.25
128	2	537	\$268.50
128	2	472	\$236.00
128	3	525	\$175.00
128	1	480.5	\$480.50
128	2	767.5	\$383.75
128	1	222	\$222.00
128	1	178	\$178.00
128	2	211.5	\$105.75

REGION 275 STATISTICAL ANALYSIS

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/ CHILD		
275	2	1969	\$984.50	N	92
275	1	286	\$286.00		
275	1	356	\$356.00	SD	197.822
275	1	625.5	\$625.50		
275	2	804.5	\$402.25	STD ERR	20.624
275	1	311.9	\$311.90		
275	1	548	\$548.00	MEAN	324.936
275	2	431.9	\$215.95		
275	2	1231	\$615.50	M. DEV	137.175
275	1	445	\$445.00		
275	1	550	\$550.00	VAR	39133.616
275	1	286.5	\$286.50		
275	2	345.7	\$172.85	SKEW	2.069
275	2	272	\$136.00		
275	1	175.5	\$175.50		
275	2	624	\$312.00		
275	2	218.5	\$109.25		
275	1	295	\$295.00		
275	2	666	\$333.00		
275	2	274	\$137.00		
275	1	123.1	\$123.10		
275	2	737	\$368.50		
275	2	749.5	\$374.75		
275	2	820.5	\$410.25		
275	2	762.5	\$381.25		
275	1	473.5	\$473.50		
275	1	556.5	\$556.50		
275	1	483.5	\$483.50		
275	1	443.6	\$443.60		
275	1	375.5	\$375.50		
275	1	380.5	\$380.50		
275	2	317.5	\$158.75		
275	1	111.5	\$111.50		
275	1	440.9	\$440.90		
275	1	347.3	\$347.30		
275	1	239.5	\$239.50		
275	1	267.4	\$267.40		
275	1	253	\$253.00		
275	5	1001.5	\$200.30		
275	2	255	\$127.50		
275	1	954.3	\$954.30		
275	1	189.8	\$189.80		
275	2	478	\$239.00		
275	1	149.5	\$149.50		
275	1	203.2	\$203.20		
275	3	894.5	\$298.17		
275	2	698	\$349.00		
275	3	977	\$325.67		
275	1	291.6	\$291.60		
275	2	371	\$185.50		
275	1	205	\$205.00		
275	2	261.6	\$130.80		
275	2	229	\$114.50		

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/ CHILD
275	1	223.5	\$223.50
275	2	962.8	\$481.40
275	1	185	\$185.00
275	1	219.6	\$219.60
275	1	308.5	\$308.50
275	1	1289.5	\$1,289.50
275	1	403	\$403.00
275	1	407	\$407.00
275	1	187	\$187.00
275	2	344	\$172.00
275	2	1327.25	\$663.63
275	1	218.9	\$218.90
275	2	864	\$432.00
275	1	315	\$315.00
275	1	269.5	\$269.50
275	2	301.8	\$150.90
275	1	199	\$199.00
275	2	354	\$177.00
275	2	614	\$307.00
275	1	283.5	\$283.50
275	2	279	\$139.50
275	1	369.1	\$369.10
275	2	590.5	\$295.25
275	1	410	\$410.00
275	1	397	\$397.00
275	1	273.9	\$273.90
275	1	286.9	\$286.90
275	2	256	\$128.00
275	2	1356.6	\$678.30
275	1	339	\$339.00
275	2	260.5	\$130.25
275	3	372.5	\$124.17
275	1	437.5	\$437.50
275	2	1001	\$500.50
275	1	306.5	\$306.50
275	1	319.5	\$319.50
275	3	804	\$268.00
275	2	154	\$77.00
275	1	70	\$70.00

REGION 390 STATISTICAL ANALYSIS

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/CHILD		
390	1	83.7	\$83.70	N	66
390	4	1271	\$317.75		
390	1	193	\$193.00	SD	193.822
390	1	356	\$356.00		
390	2	1446	\$723.00	STD ERR	472.924
390	2	157.4	\$78.70		
390	1	194.5	\$194.50	MEAN	281.789
390	4	972	\$243.00		
390	1	387.5	\$387.50	M. DEV	137.676
390	1	137.2	\$137.20		
390	1	144.5	\$144.50	VAR	37567.131
390	2	396	\$198.00		
390	1	144.5	\$144.50	SKEW	1.842
390	2	710	\$355.00		
390	1	119	\$119.00		
390	1	419.6	\$419.60		
390	2	1200.5	\$600.25		
390	1	212.5	\$212.50		
390	1	240.5	\$240.50		
390	1	466	\$466.00		
390	1	156	\$156.00		
390	1	208	\$208.00		
390	4	3992	\$998.00		
390	2	443.5	\$221.75		
390	1	104	\$104.00		
390	1	223	\$223.00		
390	2	859	\$429.50		
390	2	1940	\$970.00		
390	1	223.5	\$223.50		
390	1	264.9	\$264.90		
390	2	180	\$90.00		
390	1	401	\$401.00		
390	1	106.7	\$106.70		
390	1	57.9	\$57.90		
390	1	269	\$269.00		
390	1	262	\$262.00		
390	1	144	\$144.00		
390	2	524	\$262.00		
390	1	226	\$226.00		
390	2	221.9	\$110.95		
390	2	570.5	\$285.25		
390	1	122.4	\$122.40		
390	3	334.5	\$111.50		
390	1	149.8	\$149.80		
390	1	119.6	\$119.60		
390	1	162	\$162.00		
390	2	1384.5	\$692.25		
390	2	221.7	\$110.85		
390	3	635.5	\$211.83		
390	2	323.3	\$161.65		
390	2	534	\$267.00		
390	1	359.5	\$359.50		

REGION	# OF CHILDREN	TOTAL EXPENSES	EXPENSES/ CHILD
390	2	749.5	\$374.75
390	1	123	\$123.00
390	1	144	\$144.00
390	1	361	\$361.00
390	2	782.5	\$391.25
390	1	279	\$279.00
390	2	562	\$281.00
390	2	941.4	\$470.70
390	3	954.25	\$318.08
390	1	676.6	\$676.60
390	2	655	\$327.50
390	3	606.5	\$202.17
390	1	344	\$344.00
390	2	418	\$209.00

STATISTICAL SUMMARY

	REG 128	REG 275	REG 390
N	94	92	66
SD	200.24	197.82	193.82
STD ERR	20.65	20.62	23.78
MEAN	333.71	324.93	281.79
M. DEV	123.45	137.18	137.68
VAR	40096.53	39133.62	37567.13
SKEW	3.86	2.07	1.84

T-TEST RESULTS

REGIONS 128/275	REGIONS 128/390	REGIONS 275/390	
0.764	0.1038	0.174	2-TAIL

APPENDIX H

Soccer Participation in Knox County Tennessee

REGION	PARTICIPATION	% OF TOTAL
128 FARRAGUT	808	23.5%
275 CEDAR BLUFF	722	21.0%
4 OTHER REGIONS	1422	41.5%
KYS SOCCER	480	14.0%
TOTAL SOCCER	3432	100.0%

As compiled by AYSO National Registrations Department as of December 1994.
Provided by Headquarters AYSO Area 5.

VITA

Donald J. Carnes, Jr. was born in Richmond Indiana in May of 1951. His family moved to Nashville, Tennessee in 1960. He graduated from Father Ryan High School in 1969 and entered Middle Tennessee State University. After two years he transferred to The University of Tennessee, Knoxville and graduated in December 1973 with a Bachelor of Science Degree in Health, Physical Education, and Recreation and a Commission as a Second Lieutenant in the United States Army. He served with distinction, worldwide, for over 20 years in the field of logistics management culminating with his retirement at Fort Benning Georgia in February 1994. He reentered The University of Tennessee as a Graduate student in January 1994 and will graduate in May 1995. He is married to the former Patricia L. Byles of Cincinnati, Ohio. They have one child, Stephanie Michelle, who was born December 27, 1993.