# A GEOGRAPHIC ANALYSIS OF A PROPOSED MINOR LEAGUE FOR FOOTBALL

Ву

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Thesis Approved:

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### TABLE OF CONTENTS

Chapter	r	Page
I.	INTRODUCTION	1
,	Why Suggest Minor League Football History	3 4 7 9
II.	LITERATURE REVIEW	14
III.	METHODOLOGY	26
IV.	ANALYSIS OF VARIABLES	37
V.	POSSIBLE FRANCHISE LOCATIONS	54
	Other Possible Sites	61
VI.	CONCLUSION	62
BIBLIO	GRAPHY	66
YDDENU.	TY - COMPLETE ADT FOOTBALL PROFILE	60

#### LIST OF TABLES

Table		Page
I.	Minor League Football System, 1990 Team Locations	10
II.	Rooney's Super Collegiate Football League	12
III.	Factors Influencing Attendance	21
IV.	Triple A Baseball Viewing	31
V.	Above Average Professional Football Viewing	40
VI.	Above Average College Football Viewing	42
VII.	Above Average College Football Player Production, 1960-86	48
VIII.	Quantitatively Chosen Minor League Sites	51
IX.	Possible Geographical Conference	65

#### LIST OF FIGURES

Figu	re				Page
1.	Early Minor League Franchises	•	•	•	5
2.	Early N.F.L. Franchises	•	•	•	8
3.	Minor League Football System, 1990	•	•	•	11
4.	Super College and N.F.L. Locations by ADI, 1990	•		•	13
5.	Areas of Dominant Influence	•	•	•	25
6.	N.F.L. Team Locations, 1990	•	•	•	28
7.	Boy's High School Football Participation,	•	•	•	30
8.	Triple A Baseball Team Locations and Above Average Viewing by ADI	•	•	•	33
9.	College and Professional Football Viewership	•	•	•	38
10.	Conference Television Viewing Regions	•	•	•	45
11.	Per Capita Football Player Production, 1960 - 1986	•	•	•	47
12.	Proposed Minor League Team Locations				56

#### CHAPTER I

#### INTRODUCTION

"You reap what you sow," is the title of the Sports <u>Illustrated</u> article of February 13, 1989, wherein the trials and tribulations of the Oklahoma football program were unmercifully outlined. Three felony rape convictions, one drug related offense, and a shooting with intent to injure charge were detailed to the public. The "I told you so" attitude of university faculty and supporters reverberated throughout college campuses. Telender and Sullivan, coeditors of the story, made an obvious link of the Oklahoma football woes to the lack of control that coaches and academic administrators have over their players. A link which is sequentially coupled with big money television deals and a win at any cost attitude. Are the well documented problems of the Oklahoma programs indicative of what is occurring throughout college football? A viable alternative must be offered to the present college game. John F. Rooney (1985) attempted to devise viable alternatives to the not so obvious professional pay for play college game that exists today. He suggested legal profit sharing and subsidy of players, admitting that money rather than tradition, has become the driving force of college athletics and football in particular. Debate will continue, however, over the proposed professionalism suggested by Rooney and many others.

The college football fiasco is presently one of professionalism masked by the tradition of pride in place and alma mater. The proverbial cancer is worsened through lower academic standards for athletes and a work week for players in excess of forty hours. One could possibly suggest professional college football already exists. Institutions actually depend on athletic victories to create alumni support and community pride not to mention helping to open the coffers of legislative funding for higher education.

Geographically, big time professional style college football has gained support by filling the void across the United States where the legitimate professional sport does not exist. Why are college programs so willing to fill this void? Money, once again, is the root of the evil. Could there be a solution wherein college football could serve the purposes of generating alumni and legislative support, while at the same time retaining some semblance of integrity? Some have suggested a minor league system much like professional baseball. Proponents of college football suggest that a minor league is infeasible and could only be detrimental to their sacred game. The sacred game that actually graduates less than half of its participants. The college monster is most likely here to stay, so any discussion concerning a viable minor league would be theoretical.

#### Why suggest minor league football?

I've just been thinking about..starting a new football league," Al Davis told a reporter while lounging by the pool. The idea would be to field eight teams to stage eight games a month. The broadcast rights would be sold to cable and pay television outlets. There are 17 million cable pay televisions. By 1981, they project 30 million cable and 12 million If, in 1981, we play eight football games a pay cable. month, we could charge \$10 a piece to show those games on each cable T.V. If the stations kept \$5 and we kept \$5, we would get \$20 per set, per season. If twenty percent of those sets tuned in, the league would net \$48 million, \$6 million per team...I'm not planning this or anything, Davis had pointed out, I'm just thinking about it. You know, just talking...

An excerpt taken from <u>The League: The Rise and Decline of the NFL</u> (Harris, 1986, p. 286). Al Davis' sentiment is common among the franchise owning wealthy.

Earning potential has long been the driving force in professional football. The book by Harris is one of many recent works focusing upon the character and problems of professional sport. Indeed, how could a professional minor league obtain respect and financial success? The problem with minor league football is finding the right atmosphere and places for it to exist.

A minor league would provide an athlete the opportunity to forego the unnecessary ceremony of playing college football. Academicians have long believed that a player is a student first and an athlete second, but few football programs on the major college level actually allow their players to value academics over athletics. What could be possibly wrong with de-emphasizing college athletics and letting the professional teams have the true professionals on

their rosters. One can look to the Ivy League for a prime example of how to put the word college back into the phrase "college football."

#### History

How could minor league football be successful? To be able to predict and plan success, one must look at the early days of professional football and specifically minor league football.

The era before World War II could be called "the heyday of the pro football minor leagues." In the 1930's, several flourishing regional "circuits" of independent teams coalesced into outstanding minor leagues. From today's perspective, one of the least likely locales for such a circuit was the New York-New Jersey area, where fans had the New York Giants and the Brooklyn Dodgers to satisfy their hunger for pro football. Despite that, the area produced the best of all the prewar minor leagues: the American Association (AA) (Figure 1).

The AA was formed in June 1936, in response to a proposal by Edwin Simandl, manager of the Orange Tornadoes. Charter members were Brooklyn, Mt. Vernon, New Rochelle, Orange, Passaic, Paterson, Staten Island and White Plains. The initial season saw many additional teams come into the league, specifically teams from Pennsylvania and Virginia. The AA and the Dixie League, consisting of traditional Southern city teams, both built strong followings in their

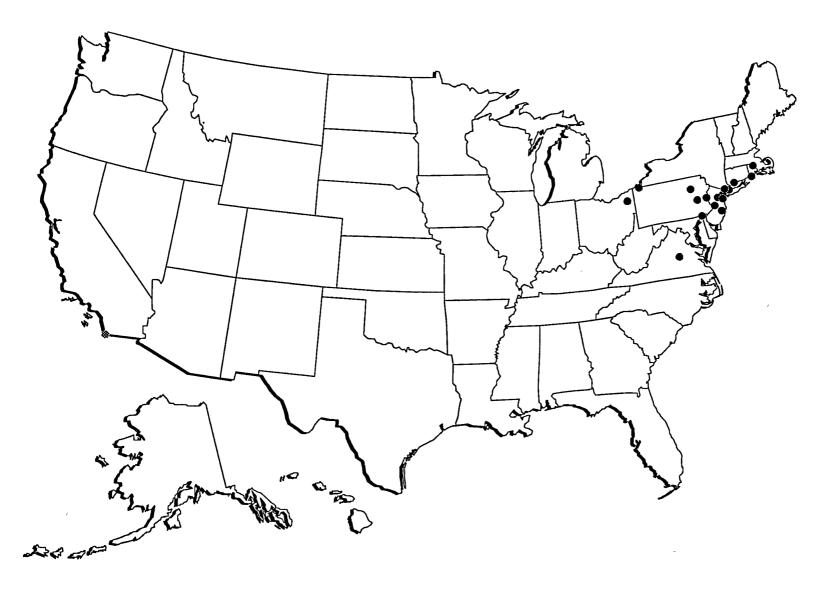


Figure 1. Early Minor League (American Association) Team Locations, 1936 - 1950

respective regions. California and Texas also became places where relatively less organized minor league football developed (Gill, 1989).

Theories abound as to how minor leagues initially succeeded and subsequently failed by the 1950's. Bob Gill, a researcher for the Professional Football Researchers Association, suggests that the "no rules" atmosphere of minor league football helped it to thrive. Minor league teams conducted their player recruitment in the same manner as the club or company owned football teams did in the 1910's and 20's. Players earned salaries on an individual game basis with their performance being a determining factor. Black players were allowed to compete (predominantly in the Northern circuits) and fans marveled at their athletic prowess. The actual rules of the game also could change if the competing teams would agree. For example, the time limit of game quarters were subject to change to accomodate weather or travel arrangements.

When the Chicago Bears signed Red Grange, from the University of Illinois in 1925, the team owners attempted to showcase their acquisition in every area of the country. Chicago Bears owner George Halas offered cash incentives to cities and specifically local teams, to provide an opposition for the hallowed "Galloping Ghost." Here specifically, one can see a main catalyst for minor league football development. With crowds as high as 35,000 to 75,000 in average sized cities, minor league organizers found

the incentive to establish a team. Strong community pride and regional rivalry led team owners to the belief that all an organizer needed was an open field and two competing teams. As the National Football League (NFL) gained a strong hold on big name players and optimum locations (Figure 2), minor league teams struggled for their piece of the pie.

In 1946, when Halas purchased the Newark franchise and actually labeled it a farm team, a precedent was set for many owners to follow, however a surplus of quality players did not exist at that time to supply all teams involved, and the prospective fan bellowed for more competitive entertainment — the NFL.

World War II also provided a tremendous damper to the growth of minor league football because the typical player soon found himself on the front lines of a real war, and only NFL teams could stomach the financial losses. Many teams continued to compete, but soon realized their place; a "place" featuring hobby playing athletes. Gill claims that by the 1950's television revenues had become an integral part of financing a viable professional team. Smaller cities had to be satisfied with semi-pro minor league teams.

#### The Future

Rooney has proven that a vast surplus of players exist in the United States today (Rooney, 1987). Therefore, I feel it is prime time to evaluate a theoretical alternative that could possibly benefit all involved: the NFL, universities,

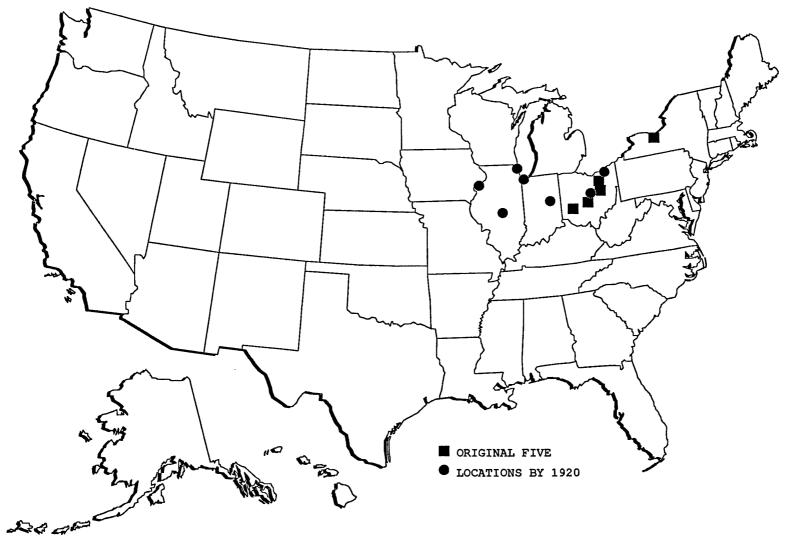


Figure 2. Early N.F.L. Franchises

and a minor league.

Today, a minor league is attempting to enter the professional football market. The Minor League Football System (MLFS) is a three year old association consisting of twelve teams. Teams are located in medium to large size metropolitan areas (Table I, Figure 3). The goal of the organization is to become a farm system for the NFL. However, this lofty goal is going to be difficult to achieve because of the dominance of college football or the NFL in most areas thereby reducing the likelihood of success.

#### Study Objectives

In each of the previous years, the MLFS has failed to maintain financial stability, and to find jobs for its players. There has been player discontent and fan interest has been lacking for this fledgling league. Could a minor league actually be successful? The right conditions must exist nationwide for minor league football to flourish.

This study is a theoretical approach, assuming that the redirection of college football is further implemented.

Rooney's collegiate super league idea will be used to define where big time football most likely will remain (Table II, Figure 4).

This thesis has two objectives:

- 1. To analyze multiple variables, which could help locate NFL owned minor league teams.
- 2. To generate geographic and qualitative limits that enable minor league site selection.

#### TABLE I

# MINOR LEAGUE FOOTBALL SYSTEM TEAM LOCATIONS

Tacoma, WA
Fresno, CA
California (Los Angeles, CA)
Pueblo, CO
Colorado Springs, CO
Oklahoma City, OK

Wilke Barre-Scranton, PA
New England (Boston, MA)
Middle Georgia (Columbus, GA)
Florida (Orlando, FL)
Harrisburg, PA

\*Source: Minor League Football System, 1990



Figure 3. Minor League Football System, 1990

TABLE II

#### ROONEY'S SUPER COLLEGIATE FOOTBALL LEAGUE

Air Force	Iowa State	Penn State
Alabama	Kansas	Pittsburgh
Arizona	Kentucky	Purdue
Arizona State	Louisiana State	Rutgers
Arkansas	Maryland	Southern Methodist
Army	Miami, Florida	South Carolina
Auburn	Michigan	Stanford
Baylor	Michigan State	Syracuse
Boston College	Minnesota	Tennessee
Brigham Young	Mississippi	Texas
California	Mississippi State	Texas A&M
Clemson	Missouri	Texas Tech
Colorado	Navy	UCLA
Florida	Nebraska	USC
Florida State	North Carolina	Virginia
Georgia	North Carolina State	Virginia Tech
Georgia Tech	Notre Dame	Washington
Houston	Ohio State	West Virginia
Illinois	Oklahoma	Wisconsin
Iowa	Oklahoma State	

Source: The Recruiting Game, John F. Rooney, 1987, p. 207.



Figure 4. Super College and N.F.L. Locations, 1991

#### CHAPTER II

#### LITERATURE REVIEW

The subdiscipline of sports geography has grown in terms of numbers of advocates and academic works since its embryonic stages in the early to mid 1970's. With Rooney's publication of A Geography of American Sport in 1974, sport geography began to be recognized as an academically legitimate field. In this and subsequent work, Rooney has developed ideas on the regionalization of most American sports. Why football, for example, is followed with such a frenzy in certain areas of the country. The origins of players and the formal explanations of the histories and diffusions of sports have been described and explained.

Rooney and others have completed some work in disseminating the factors involved in locating prospective sports franchises. However, no research has been published on minor league football.

Referring to Christaller's Central Place Theory, commercial sports activities are considered to be "high order services" (King, 1984). If the (fan) consumer perceives the quality of a particular sport spectating opportunity as satisfactory there is a willingness to travel some distance to obtain that service; fans will travel greater distances

if they are more satisfied, or if they have fewer competing or intervening sports watching opportunities. The cases of Nebraska and Wyoming football exemplify what some call the "only show in town" syndrome. Nebraska and Wyoming have developed highly successful sports entertainment programs in spite of being located in sparsely populated areas. fans offer unwavering support by their regular attendance. If the consumer resides in a market saturated with comparable entertainment, the fan will be willing to travel a much smaller distance. As with all goods and services, the perceived quality is the key ingredient. Professional football is also only offered during a specific season and usually in very large cities; both factors optimizing earning potential. As mentioned previously, college football has grown throughout the country to fill the professional service void.

Rooney (1974) supported the idea that when sport becomes an integral part of place, whereby regionalization takes place emphasizing the accepted sport to different degrees. As in the case of the early minor leagues, New York-New Jersey became regionally accepted areas where teams could maintain fan attendance and generate a small profit. To locate minor league teams today, areas of high football interest must be disseminated.

Rooney also experimented with television market areas (or population) to locate professional franchises. His ideas are being tested indirectly by the college football

conferences of the 1990's, in regard to their inevitable realignments for producing better television revenues (Rooney, 1990). However, his specific model did not take into account interest levels in sport, specifically football.

Minor league football could be considered a minor sport (Bale, 1981). Using the British example, Bale contends that there are distinct barriers to the acceptance of "minority" sports. For example, soccer is still considered to be less important than football, baseball or basketball in the United States. The American appetite, however, seems quite large for football, regardless of league type. Proper planning and college football's redirection could solve the minority acceptance problem.

If a minor league for professional football is to become a reality, more factors concerning franchise location must be considered. Many prospective owners are engaged in promoting their city in order to lure an NFL franchise. The precedent has been set to finance a stadium for a prospective team through municipal bonds or private investment. The latter proving to be least successful in the case of the Florida Sun Coast Dome in St. Petersburg. In this case, one can see how a relatively large population base area with a modern stadium still remains unused.

Noll (1972) says that to qualify as a major league sport city an area must have "an orchestra, a large library, a system of parks, a transportation system, a university and a public stadium in which to gather and a professional team to

play there." Minor league football could locate in cities with fewer amenities. Major league baseball, for example, has Triple A franchises located in many amenity lacking areas. The only prerequisites for approval of a Triple A baseball team are a playing facility that seats in excess of 10,000 and management with sound financial backing, coupled with a league vote (Tulsa Tribune Staff, October 21, 1990). One can see the need for more detailed geographic variables to be used in making location decisions.

Sports market analysts have detailed many demographic factors used for locating a potential professional franchise. Of course, population size has been the critical denominator concerning franchise location. Coinci-dentally, Noll (1974) noted that an area with a large black population was associated with lower attendance.

The official historian of the National Football League, the late Leo Lyons, offered his insight to the location problems of franchises.

To keep a professional football team afloat in a moderate sized city, takes the sort of energy and ambition that might lead a man to the presidency. He must always be thinking in larger and larger terms and must be continually concerned with capturing the star that will draw the crowd and beat the enemy. He soon discovers that nothing wins devotion more than victories do, yet he must seek always mightier foes, lest his club finds itself cast among the once-were-goods and the second rate (Smith, 1972, p. 81).

Lyons' words are poignant referring to the 1910's and 1920's, but still pertinent today.

Sport sociologists offer many supporting theories concerning the viability of a place and its people to support professional sport. Is professional sport an institution? For the sake of argument let us assume that it is.

"Institutions are social arrangements that channel behavior in prescribed ways in the important areas of societal life (Eitzen and Sage, 1978, p. 12)." To look at sport at its most basic level, what societal needs are served by sport?

- Sport serves as a safety valve for both spectators and participants, dissipating excess ener-gies, tensions and hostile feelings in a socially acceptable way;
- 2) Athletes serve as role models, possessing the proper mental and physical traits to be emulated by the other members of society;
- 3) Sport is a secular, quasi-religious institution using ritual and ceremony to reinforce the values of society, and thereby regulating behavior to the channels prescribed by custom (Eitzen and Sage, p. 11).

Sport is the perfect outlet, and as Beisser (1967) suggests, sport consumption serves a number of social functions.

"...sport consumption is a socially sanctioned mode of behavior wherein an individual can share something in common, on an equal basis, with others in the community." He noted that this is not possible in other spheres of anonymous society. In addition, Beisser indicates that sport spectating, as opposed to participation, enables both males and females to play the role at any stage of the life cycle (Beisser, pp. 124-141).

One could raise the question of how a fan develops loyalty. Loyalty, one could assume, affects attendance. As Gregory Stone states, "Team loyalties formed in adolescence and maintained through adulthood may serve to remind one, in a nostalgic way, that there are areas of comfortable stability in life - that some things have permanence amid the harassing interruptions and discontinuous transitions of daily experience (Snyder and Spreitzer, 1983, p. 21)." A consensus seems to exist stating that spectating serves as a catharsis for the "wanna-be" athlete. Contrary to most problems, the inner thoughts and feelings concerning the spectator can be assumed without much research...after all we all live in the body of a prospective fan. The question still remains: What factors make the fan become an actual spectator?

The advocates of a minor league would surely be interested in knowing what a "fan" is as well as where he or she live. What is a fan? Barry McPherson has indicated that the typical fan (live consumer) is usually a single male, under the age of 35, boasting a higher than average socioeconomic background (also related to education) and, least important, residing in close proximity to the arena or stadium. This outline must consider many derivations but this would be considered the North American "hi-tech" direct sport consumer (Ball and Loy, 1975).

Armed with the preceding information, one must examine other areas that might influence the prospective consumer. A

study done by Charles Patti compares professional sports. This comparison, done via a survey, outlined the factors influencing attendance (Table III). As noted, the win-loss record is the most statistically significant criterion influencing the football consumer. Does this suggest a fickle fan? Hay and Rao (1982) conducted a similar survey polling college coaches hoping their results could be used in a broader sense. Their study yielded a hierarchy of attendance factors for all sports:

First	Winning
Second	Availability of parking facilities
Third	Promotion of game
Fourth	Right personnel to seal the game
Fifth	Right time to play the game
Sixth	Right place to play the game
Seventh	Price
Eight	Concessions
Nine	Pom Pon Girls

It is easy to assume that sport, as a product, is influenced by the same marketing as many common products. Marketers take in to account that football is associated with the American work ethic (work hard and you will excel). Hero worship coupled with most men (the common fan) desiring to be identified as masculine or doing masculine things are definitely factors influencing attendance and how to market to these prospective buyers. Rooney contends that professional football is a consumer service and all sports combine in an overall package - The Sports Delivery System. Prospective fans are pressured to spend their entertainment dollar on the sport of their choice (Rooney, 1974).

TABLE III

FACTORS INFLUENCING ATTENDANCE\*

Factor	Presence of a Superstar on Your Team	Won-Loss Record of Your Team	Team is Covered in	Won-Loss Record of Your Opponent
Sport		,		
Baseball	43.8%	93.8%	75.0%	25.1%
Basketball	20.0%	80.0%	60.0%	20.0%
Football	66.6%	88.9%	66.6%	55.5%
Hockey	66.6%	100.0%	83.3%	16.7%
Volleyball	75.0%	50.0%	50.0%	25.0%
Tennis	100.0%	0.0%	44.4%	0.0%
Soccer	38.5%	71.4%	71.5%	0.0%
Factor	Presence of a Superstar on Opposing Team	Your Team Standing in the League	Use of Promotional Give-Aways	Adver- tising in the Media
Sport	opposing ream	·	dive mays	one neara
Baseball	18.8%	93.8%	31.3%	31.3%
Basketball	40.0%	60.0%	40.0%	40.0%
Football	33.3%	77.8%	0.0%	12.5%
Hockey	16.7%	66.7%	16.7%	0.0%
Volleyball	50.5%	50.0%	50.0%	25.0%
Tennis	100.0%	0.0%	0.0%	66.6%
	100.00			

<sup>\*</sup>Respondents were asked to evaluate each of the above factors on a seven-point scale ranging from "very important" (a score of 1.0) to "very unimportant" (a score of 7.0). The percentages shown above indicate the percentage of respondents who selected the particular factor as either a 1 or a 2, the top two choices.

<sup>\*</sup>Source: Etzel and Gasky, 1982

Is the popularity of football ubiquitous or is it regionalized, as is football player production? This question is raised hoping the answer will help define why fans attend games. Rooney contends that football in the South and Southwest is directly related to the "American work ethic-hero worship" tendencies mentioned previously. His formal definition includes Texas specifically:

- 1. There is an emphasis on rugged individualism which finds expression in football.
- 2. There is an emphasis on militarism which is reflected in the attraction for games that emphasize discipline.
- 3. The state-related "rationalism" finds expression at the local community level through the prestige of the football team.
- 4. The long autumn provides time for a long season and "play-off" games.
- 5. There is an absence of other opportunities in small towns in the South and Southwest; football simply offers something to do and a focus for community activities.
- 6. There are numerous local opportunities to play major college football for the most outstanding high school players (Rooney, 1981, pp. 157-158).

One cannot assume that attendance at all games can be explained by Rooney's six reasons, but it would be safe to postulate that most fans would be in agreement that most of these explanations are genuine.

Noll (1974) attempted to settle the dispute whether city size or other variables accounted for vast differences in attendance. Using baseball as an example, Noll stated "in order to draw one million fans, and average team would have to have a metro population of 1.9 million." This was believed to be related to playing success and it was observed that in only six Metropolitan Statistical Areas (MSA's) - New

York, Los Angeles, Chicago, Detroit, Philadelphia and Boston - will a consistent loser draw one million fans each year. A New York team would gain over 500,000 fans with the addition of a star player, while a city of 1.5 million would add about 65,000. Conversely, A.F. Smythe (1987) concluded using this analysis that NFL football has an 'obvious excess demand for its product' as most games were sold out regardless of stipulations.

Michener (1976) claims that television plays a major role in deciding where a franchise can be located. He also contends that favorable press in newspapers is better than paid advertising, radio, or television on a minor league level, television ratings are only one of the deciding factors, but fan interest and direct marketing potential would be of great interest also.

Rooney (1987) attempted to align a superconference for college football. Included in his analysis were three categories, wherein football programs were placed: Prime Candidates and Good Bets, Long Shots, and Dropouts. He assumed limited professionalization (or payment of players) and arrived at 59 locations where a collegiate super league should exist (Figure 4). Using results based mainly on population and geographical differences in ability and interest, Rooney outlined areas where true collegiate football should be able to flourish. Considering competition at the same site with the NFL, he also listed primary institutions or surplus fan states boasting the ability to

support many teams. The New England states, New York, and Pennsylvania were quoted as having 'a huge potential market.' Illinois, Ohio, and Michigan were also seen as bastions of football rich traditions. States with considerably less support potential, Rooney states, could 'pool their resources' and support teams. This same format and analysis could be used as a reference for solving the minor league location dilemma.

As previously mentioned, television plays a major role in the commercial success of sports organizations and teams. Recently, market analysts have employed the use of Areas of Dominant Influence (ADI). The ADI simply reflects the area in which a traditional television signal penetrates. J. Weiss, author of The Clustering of America (1988), used these specialized geographic areas to describe the lifestyle of the people living therein. Weiss asserts that people identify with the common geographic area of their respective ADI. Consequently, data have been collected concerning purchasing and lifestyle tendencies. The ADI is an aggregation of counties, therefore allowing comparisons to actual populations. Since television revenues will play a major role in the establishment of a minor league for football, the obvious choice for spatial analysis must include ADI information (Figure 5).



Figure 5. Areas of Dominant Influence (ADI)

#### CHAPTER III

#### **METHODOLOGY**

Management or Geographic Information Systems (GIS) have recently become very popular ways of utilizing large data bases. In the world of business, companies gather multiple variable data. They combine these data sets and perform various quantitative and/or qualitative tests to assist with financial planning. A GIS actually employs the use of variables in a spatial format; overlaying maps and arriving at an integrated interpretation of a particular place (Star and Estes, 1990). Sports geography is no exception in adopting a specialized GIS.

Those interested in sports information systems gather data concerning basic facets of sport. Specifically, Rooney has gathered supply and demand data variables concerning numerous sports. Clients wishing to know where to market a particular sports product utilize these data sets to assist in their decision making process. This study uses mapped data and a GIS approach to advise prospective minor league franchise owners where to locate their teams.

For the purposes of this study, it is assumed that relative de-professionalization will occur at the college level. We must assume, however, that college football is

here to stay. As Rooney stated in the Recruiting Game, successful revenue producing college football should be limited to a super league. In this study, it was decided to use Rooney's super league featuring player production (demand for product) as a means of limiting where college football was to remain, whether they continue to be large revenue producers or not. This process of elimination would be the first step in locating minor league football teams (Figure 4).

Presently 26 cities accommodate 28 NFL teams (Figure 6). These teams are commonly associated with the larger population centers and television markets. A viable minor league system would most likely have NFL ownership, therefore, stay out of these existing professional marketplaces. Ideally, the 28 NFL owners would own and operate the 28 minor league teams produced using this methodology. The existing Minor League Football system has one geographic prerequisite; cities with a population base of over 100,000. As mentioned previously, a purpose of this study is to offer additional geographical variables that will assist in identifying optimal franchise locations.

College and professional football television viewing habits and 26 year player production indices were collected. This study focuses on areas of relatively high population, better than average college/professional television viewing patterns, and high college football player production. The assumption is that these variables will identify the best



Figure 6. N.F.L. Team Locations, 1990

possible locations for minor league teams. The Area of Dominant Influence (ADI) was chosen to be the common geographic boundary file (Figure 5). The ADI, designed by the marketing firm of Arbitron, Inc., provides county/population groupings which represent the network viewing areas of individual stations (Weiss, 1985). Therefore, all ADI variables can be mapped on a per capita basis. Rooney (1974) has suggested that an actual number of viewers/players might not be an accurate representation of the importance of the variable. It has been established that interest in sport is regionalized, so using per capita indices emphasizes relative football interest.

Participation in football at the high school level is ubiquitous, but interest in the sport reflected by player production is not (Figure 7). Higher player production suggests better coaching, winning, and more community involvement. Relatively high viewing behavior patterns suggest a base interest, however, few conclusive studies suggest that the fan that watches a game will actually attend, given the chance.

A positive correlation exists between high television viewing and the location of a minor league baseball team (Table IV). It must be assumed that high viewing of baseball in a particular ADI could justify the location of a Triple A team. One may assume that we could locate a minor league football team using television viewing averages.

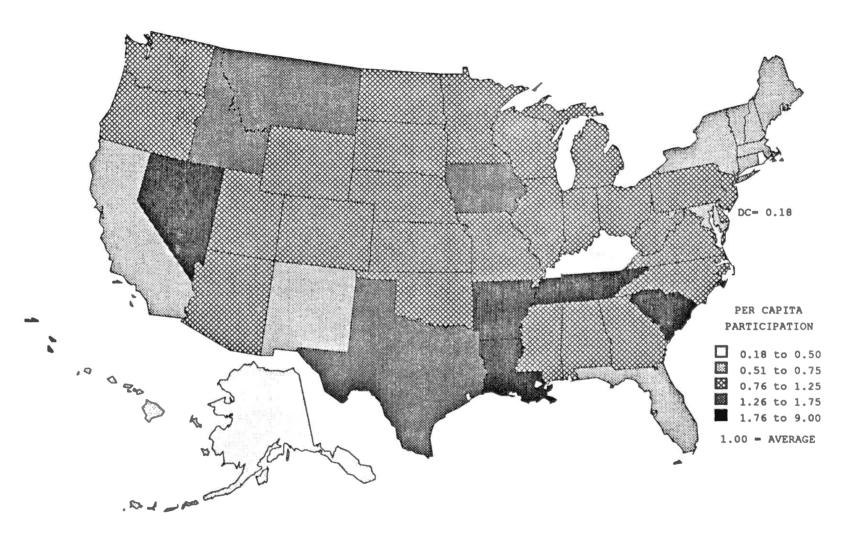


Figure 7.Per Capita Boy's High School Football Participation, 1990

TABLE IV TRIPLE A BASEBALL VIEWING

Triple A Affiliate		Sample 1	Sample 2	
1.	Albuquerque	78	76	
*2.		96	128	
3.	Colorado Springs	92	98	
	Columbus	94	92	
5.	Denver	59	72	
<b>*</b> 6.	Indianapolis	98	127	
**7.	Iowa	122	129	
**8.	Las Vegas	144	194	
**9.	Louisville	115	144	
*10.	Nashville	98	151	
*11.	Oklahoma City	114	91	
*12.	Omaha	150	129	
*13.	Phoenix	92	119	
14.	Portland	89	58	
*15.	Rochester	75	120	
*16.	Syracuse	89	109	
17.	Tacoma	90	62	
*18.	Toledo	180	90	
*19.	Tucson	143	126	
<b>*</b> 20.	Wilke Barre-Scranton	126	98	

<sup>\* = 1</sup> sample above average
\*\* = both samples above average

<sup>14</sup> of 20 ADI's above average

<sup>121.32</sup> average of 14 ADI's (n = 28)

Actually, 14 of 20 ADI's with a Triple A baseball team reflect above average viewing patterns (Figure 8). There is a +.70 correlation between team location and above average viewing patterns. Subsequently, the average score of Triple A ADI's boast an average slightly over 120 (Table IV). A positive relationship exists between team location and above average viewing. Based on this 1985 eight game baseball sample, it is apparent that television football ratings should play a role in selecting potential minor league football sites. One could expect football viewing statistics to reflect potential fan support. The ADI offers a convenient way to overlay each variable and enable graphic representation of high football interest areas.

The assumption has been made that ADI's with collegiate and NFL teams should be avoided. However, the decision was made to analyze these areas and overlay the player production data which would reveal definitive interest. Smythe (1987) stated, "if an area produces many players, this is probably due to good high school programs in the area, good coaching, good facilities or other similar factors; that is, a high level of interest in soccer. Correspondingly this area might also be conducive to locating a professional franchise given the local emphasis." Smythe's analysis could also be applied to football. Smythe continues: "The assumption made here is that if interest in general is high then so will be the desire to spectate. At the very least, propensity to spectate will be higher than in an area with a lower level of

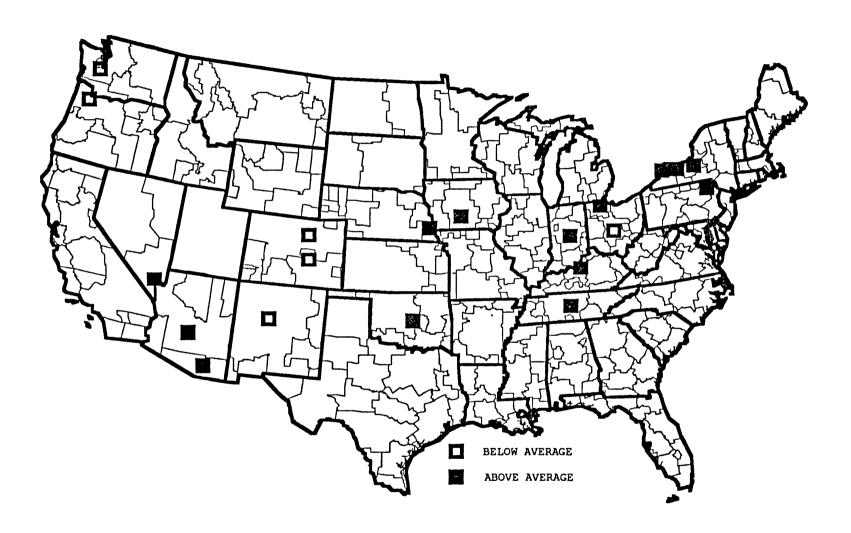


Figure 8. Triple A Baseball Team Locations and Viewing Indices, 1985

interest" (Smythe, 1987, p. 43).

Television sporting events differ. All sports have a unique group of followers, and each sport evokes a particular fan type. In this study it was decided to use football viewing statistics only in the overlay. Using baseball viewing patterns as an indicator of television interest and Triple A team location. The samples reflect four collegiate games of national scope, and a four game sampling of professional football viewership. It is assumed that any regional viewing bias would be removed by using many different teams/games.

Definitive interest variables such as television popularity and player production must also be supplemented. Large population ADI's not serviced by big time football would be prime candidates for minor league teams. However, areas that have had NFL teams are eliminated from consideration. It is highly unlikely that St. Louis and Baltimore, long time NFL cities, would opt for minor league football. Obviously, historical or qualitative information concerning metropolitan support must be weighed heavily in actually locating teams.

Simply stated, it is safe to assume that team location can be partly determined by television ratings. Of course, in the case of football, supporting variables will be used to supplement analysis.

Football player production data collected from 1960-1986 will be aggregated by ADI, and presented (as will all

variables) on a per capita basis with 100 being the national average (Rooney, 1987). An ADI's per capita player production constitues a measure of community involvement with the sport. High per capita player production is associated with great community involvement, a football tradition, and a high propensity to spectate. An actual Football Interest Index (FII) can be measured for each ADI. Player production represents 50% of the football interest index. It is combined with ratings for college and NFL football viewing.

Population also has to be taken into account, therefore ADI's of 600,000 or more are considered as franchise prospects. ADI's having 600,000 or more generally have metropolitan centers that would numerically provide potential support. The actual population is divided by the 600,000 base population, accounting for the larger spectator bases in the larger ADI's such as Memphis, Louisville, Grand Rapids, and Norfolk. By multiplying the population quotient and the FII, a Football Support Index (FSI), can be calculated. The formula for the FSI is as follows;

(Population Quotient) x (FII) = FSI

ADI Population = Population Quotient

600,000

(FSI) Weighted Index Revealing Fan Potential

(All based on 100 being average)

The actual ADI elimination factors can be summed using simple terms:

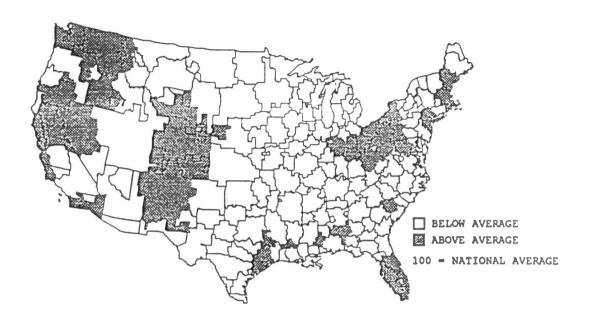
- 1. Lack of sufficient urban (market) size results in elimination.
- 2. Weak fan interest results in elimination (measured by player production and viewing indices).
- 3. Nearness to NFL franchise results in elimination.
- 4. Nearness to super collegiate program results in elimination.
- 5. Lack of adequate facility results in elimination.

#### CHAPTER IV

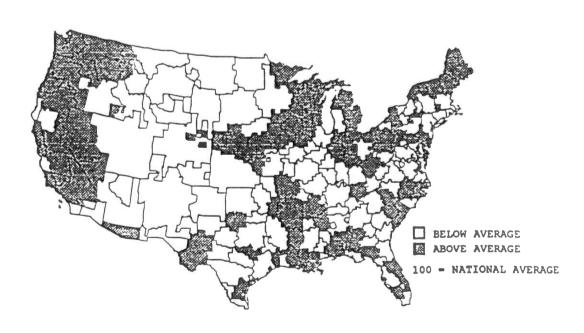
## ANALYSIS OF VARIABLES

Sport analysts have stated that college and professional football fans are distinctly separate: geographically and socially. Not all football fans have the chance to attend both varieties of the game on a regular basis, whether distance from or cost of the game is considered. Technically, professional fans have a much better chance of attending big time college games than do their counterparts of attending professional contests. Obviously, the fan in Los Angeles, Phoenix, Dallas, Chicago, and Miami are offered a virtual smorgasbord of college and professional games. However, television has allowed the fan to follow his/her particular team regardless of relative geographic location. Unfortunately, traditional college football was not designed for this big money television industry if it follows its own Nevertheless, television viewing patterns also rules. reflect the definitive interest areas for college or NFL football.

The professional viewing sample reflects the more professional fan areas. Obviously, as shown in Figure 9, we can see that below average viewing predominates in the college football dominant zone; the midwest and southeast.



PROFESSIONAL FOOTBALL VIEWING



COLLEGE FOOTBALL VIEWING

Figure 9. College and Professional Football Viewership, 1985

The northern Atlantic region, Ohio to Chicago, Houston to Dallas, Denver, Seattle, San Francisco, and San Diego ratings are a reflection of professional fan loyalty (Table V). The unadulterated size of the western ADI's portray great interest, but in reality only the urban centers of Phoenix, Denver, and Seattle provide for this seemingly clustered pattern.

Table VI or the college viewing sample denotes more basic football interest. The football hysterical southeast yields high ratings in both professional and college, but areas such as Minnesota and Nebraska might suggest more base interest (Figure 9). Regardless of personal opinion, certain hotbeds of football are easily disseminated using both samples. Pennsylvania, West Virginia, Ohio, and the South-Southeast are areas where football is emphasized, whether it be in television viewing or player production. California and Washington have very high viewing patterns, as does the Big 10 region (Figure 10). Historically the Pac 10 (formerly Pac 8) and Big 10 (now technically Big 11) were choice games to telecast, primarily because their areas had the greatest populations. Television networks are, of course, mainly interested in providing their advertisers a large potential market.

Sport geographers have long relied on gathering large data sets concerning player production. Regardless of sport type, it has been generalized that high player production is a result of high population. This obvious generalization has

TABLE V
PROFESSIONAL FOOTBALL VIEWING

1988-89 Arbitron ADI Market Name	Professional Vie
Denver	328
Grand Junction-Durango	300
Pittsburgh	242
Cheyenne-Scottsbluff-Sterling	237
Seattle-Tacoma	215
Wheeling-Steubenville	203
San Diego	200
Cleveland	198
Colorado Spring-Pueblo	192
Buffalo	189
Youngstown	174
Yakima	162
Johnstown-Altoona	159
Casper-Riverton	158
Tyler-Longview	152
Lima	150
Zanesville	148
North Platte	145
Cincinnati	142
West Palm Beach-Ft. Pierce-Vero Beach	140
Twin Falls	137
Chici-Redding	135
Missoula	134
Bend	132
Columbus, OH	131
Clarksburg-Weston	130
Indianapolis	129
Miami	128
Columbia, SC	121
San Francisco	119
Sacramento-Stockton	118
Houston	117
Boston	117
Erie	117
Dayton	116
Orlando-Daytona Beach-Melbourne	115
Ft. Myers-Naples	114
Charleston-Huntington	113
New York	113

# Table V (Continued)

1988-89 Arbitron ADI Market Name	Professional View
Tampa-St. Petersburg (Sarasota)	112
Hagerstown	112
Laurel-Hattiesburg	111
El Centro-Yuma	110
Washington, DC	108
Salinas-Monterey	107
Portland-Poland Springs	107
Albuquerque	107
Providence-New Bedford	107
Boise	106
Alexandria, LA	105
Palm Springs	105
Montgomery-Selma	104
Sarasota, FL	104
Reno	103
Santa Barbara-Santa Maria-San Luis Ob:	ispo 102
Medford	102

<sup>\*</sup>Arbritron, Inc., 1985

TABLE VI
COLLEGE FOOTBALL VIEWING

1988-89 Arbitron ADI Market Name	College Viewing
Sarasota, FL	239
Columbus, OH	238
Wheeling-Steubenville	203
Toledo	203
Columbus-Tupelo	191
Youngstown	189
Zanesville	184
Cleveland	177
Beaumont-Port Arthur	175
Cedar Rapids-Waterloo-Dubuque	173
Lima	171
Charlotte	169
Fresno-Visalia	161
Tallahassee-Thomasville	158
Santa Barbara-Santa Maria-San Luis Obispo	
Madison	155
Dayton	150
Dothan	150
Twin Falls	149
Bend	145
Duluth-Superior	145
Bakersfield	144
Marquette	142
Ft. Smith	137
Spokane	136
Knoxville	135
Lafayette, IN	134
Las Vegas	134
Raleigh-Durham	134
Baton Rouge	133
Yakima	133
Ft. Myers-Naples	133
Milwaukee	133
Salisbury	133
Waco-Temple	132
Wichita Falls-Lawton	129
Columbus, GA	129
Rochester-Mason City-Austin	129
Indianapolis	128
Lansing	128

# TABLE VI (Continued)

1988-89 Arbitron ADI Market Name	College Viewing
Seattle-Tacoma	127
Ft. Wayne	127
Odessa-Midland	126
South Bend-Elkhart	126
Tucson	126
Detroit	124
Monroe-El Dorado	123
Rockford	123
Orlando-Daytona Beach-Melbourne	122
Omaha	122
Cheyenne-Scottsbluff-Sterling	121
Alpena	121
San Francisco	120
Sacramento-Stockton	120
Flint-Saginaw-Bay City	120
Watertown-Carthage	120
Los Angeles	118
Traverse City-Cadillac	118
Columbia, SC	117
Charleston, SC	116
Palm Springs	116
Florence, SC	116
West Palm Beach - Ft. Pierce-Vero Beach	115
Wausau-Rhinelander	115
Binghamton	114
Medford	113
Presque Isle	113
Montgomery-Selma	112
North Platte	112
Topeka	112
Davenport-Rock Island-Moline:Quad City	112
Cincinnati	111
Lincoln-Hastings-Kearney	111
Portland-Poland Springs	110
Green Bay-Appleton	110
Des Moines	109
Philadelphia	108
Lafayette, LA	107
Burlington-Plattsburgh	107
New Orleans	106
Mobile-Pensacola	106
Springfield, MO	106
Pittsburgh	105
Johnstown-Altoona	105
Memphis	105
Greenville-New Bern-Washington	105
Portland, OR	105
Corpus Christi	104
Eugene	104

# TABLE VI (Continued)

1988-89 Arbitron ADI Market Name	College Viewing
Mankato	103
Harrisburg-York-Lancaster-Lebanon	102
Reno	102
Bangor	102
Missoula	101
Buffalo	101
Alexandria, LA	101
Boston	100
Greensboro-Winston Salem-High Point	100

\*Source: Arbitron, Inc., 1985

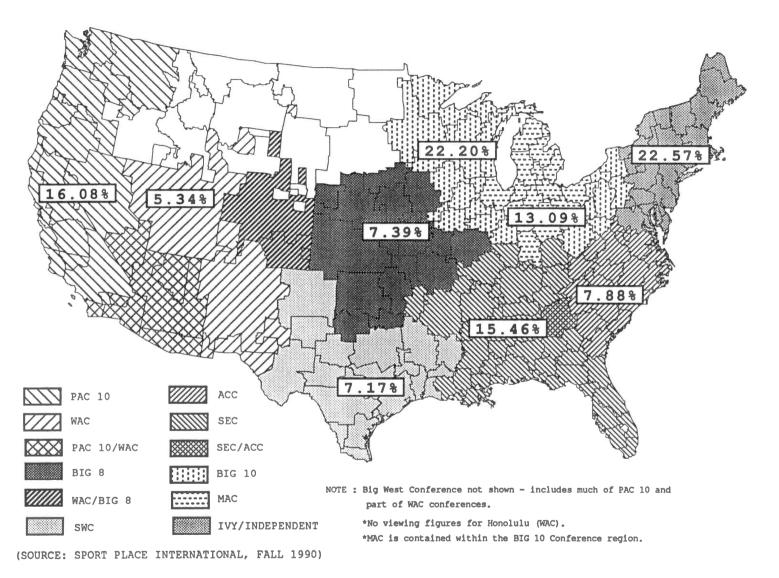


Figure 14. Division 1 College Football Television Viewing Regions, 1990

also led those who study sport spatially to argue that high production also is reflective of the specific culture. shown in Figure 11 and Table VII, one can see the traditional areas of Pennsylvania and Ohio being extremely proficient in the production of college talent. The area in the southern United States also is high in production. Texas, Louisiana, and Mississippi have held the prestigious position as the highest ranking states concerning production in the past twenty years (Rooney, 1987). The Idaho-Montana region is also a football player producing "mecca," however, low population rates and small college playing opportunities may account for the cluster of above average indices. Southern California has been a steady producer of college talent. ample playing opportunities at the small or junior college level might offer some explanation. In fact, population figures in the Los Angeles area might tend to skew the indices slightly, but this area must be considered when assessing franchise location potential.

Several attempts to locate teams for a particular fledgling professional league have been undertaken. In 1984, the United States Football League (USFL) located teams in cities such as Tulsa, Oklahoma; Birmingham, Alabama; and Portland, Oregon. But, unfortunately these areas that were not NFL locations were very few. The World Football League (WFL) attempted to locate teams in Orlando and Jacksonville, Florida, and also in Memphis, Tennessee. However, just as its counterpart, the USFL, most sites chosen were those

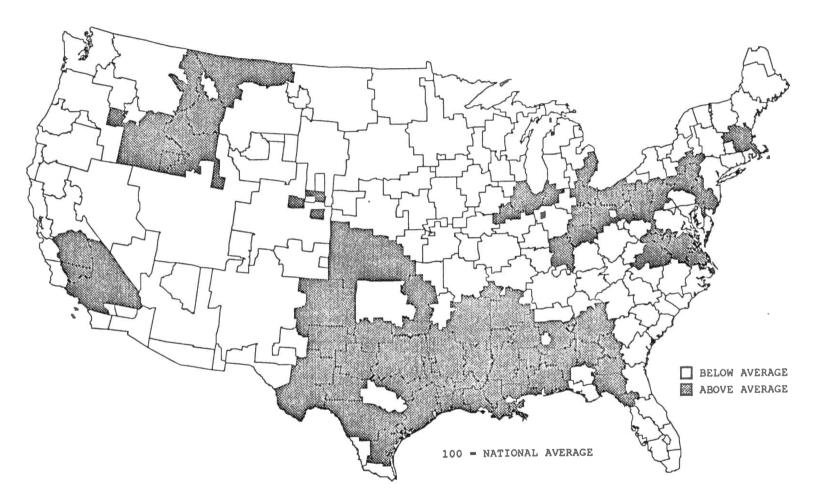


Figure 11. Per Capita College Football Player Production, 1960 - 1986

TABLE VII
PER CAPITA PLAYER PRODUCTION

1988-89 Arbitron ADI Market Name	Players 60-86	LQ
Lake Charles	143	481
Beaumont-Port Arthur	245	401
Monroe-El Dorado	235	331
Youngstown	291	297
Odessa-Midland	144	262
Biloxi-Gulfport-Pascagoula	113	260
Shreveport-Texarkana	362	240
Jackson, MS	269	240
Lafayette, LA	185	235
Amarillo	157	232
Wheeling-Steubenville	119	224
Baton Rouge	226	217
Tyler-Longview	133	212
Abilene-Sweetwater	86	204
Lubbock	106	197
Pittsburgh	793	190
Great Falls	41	190
Greenwood-Greenville	61	182
Twin Falls	21	179
Toledo	256	175
Cleveland	884	174
Cincinnati	469	172
Laurel-Hattiesburg	59	172
Wichita Falls-Lawton	101	171
Lima	25	168
Columbus-Tupelo	102	163
Victoria	17	163
Macon	103	158
Butte	27	158
New Orleans	385	157
Waco-Temple	138	152
Houston	826	149
Dallas-Ft. Worth	927	148
San Angelo	27	148
Montgomery-Selma	120	147
Tallahassee-Thomasville	105	146
Boise	83	142
Bakersfield	97	136
Idaho Falls-Pocatello	57	135
Jonesboro	33	134

# TABLE VII (Continued)

1988-89 Arbitron ADI Market Name Pl	ayers	60-86	LQ
Gainesville	42		134
Dayton	233		133
Wichita-Hutchinson	196		131
Louisville	259		129
Albany, GA	68		128
Columbus, OH	303		126
Little Rock	215		126
Wilkes Barre-Scranton	216		125
Memphis	281		125
Richmond	204		124
Alexandria, LA	43		120
Atlanta	581		119
Missoula	31		119
Mobile-Pensacola	187		119
Charlottesville	17		119
Boston	884		118
Lafayette, IN	20		117
Norfolk-Portsmouth-Newport News-Hampton	265		117
Roanoke-Lynchburg	155		116
Johnstown-Altoona	119		115
Ardmore-Ada	30		115
Fresno-Visalia	196		112
Cheyenne-Scottsbluff-Sterling	21		112
Birmingham	207		111
Chicago	1282		110
Peoria	80		110
San Antonio	248		106
Columbus, GA	77		106
Corpus Christi	77	,	106
Binghamton	60		105
Meridian	26		104
Philadelphia	1007		103
Detroit	650		102
Tulsa	163		102
Los Angeles	1758		101
Harrisonburg	14		101
Anniston	17		101
Sioux Falls-Mitchell	80		100

\*Source: Rooney, 1987

already boasting NFL franchises. To the prospective investor or owner, only earning potential of a particular city seemed to matter. Prospective fans felt a loyalty to their traditional NFL team and sensed a less than reputable ownership style. To continue, no individual league has attempted to locate teams using an interest based "model." Population must play a stellar role in site selection, but using this analysis, 47 potential sites have been selected (Table VIII). Once again, population figures were based on a much larger geographic scale than the previous traditional methods; using the ADI and relying less on the standard metropolitan statistical areas.

During a personal interview with Joe Bailey, Vice
President and Marketing Director for the World League of
American Football (WLAF), it was stated that only financial
matters were considered for their prospective locations.

"The willingness of a city to pursue us, stadium size, and
cash incentives via pre-paid season tickets were the only
criteria for team location" (Interview, March 3, 1991).

Granted the WLAF is an NFL owned and operated organization its goals are only to be profitable, not to alleviate the
problems facing pseudo professional college football.

As the results from the statistically based location technique are reviewed, one can see many questionable ADI's. The abundance of Ohio ADI's are a direct relation between extremely high player production and relatively large population basis, but the importance of the Ohio football

TABLE VIII
CHOICE SITES OVER 600,000 POPULATION

1989 ADI Market Name	POP89	% US POP	FOOTBALL SUPPORT INDEX	FOOTBALL INTEREST INDEX	PER CAPITA PLAYER PRODUCTION	PRO VIEW	COLL VIEW	SPORT PURCHASE INDEX
Shreveport-Texarkana	1111777	0.45%	1169.2	631	240	66	85	91
Memphis	1659440	0.67%	1164.4	421	125	66	105	91
Youngstown	724411	0.29%	1155.4	957	297	174	189	98
Toledo	1082411	0.44%	1152.8	639	175	86	203	100
Dayton	1295748	0.53%	1148.9	532	133	116	150	103
Norfolk-Portsmouth	1666149	0.68%	1130.2	407	117	77	96	102
Louisville	1478941	0.60%	1057.4	429	129	84	87	101
Fresno-Visalia	1289169	0.52%	1037.8	483	112	98	161	95
Wilkes Barre-Scranton	1273592	0.52%	927.6	437	125	89	98	93
Jackson, MS	828529	0.34%	903.1	654	240	91	83	90
Little Rock	1258493	0.51%	901.9	430	126	64	114	95
Richmond	1215236	0.49%	897.2	443	124	97	98	99
Harrisburg-York	1478204	0.60%	889.4	361	80	99	102	101
Birmingham	1372868	0.56%	814.6	356	111	70	64	92
Flint-Saginaw-Bay Cty	1210464	0.49%	786.8	390	93	84	120	100
Charleston-Huntington	1308231	0.53%	782.8	_ 359	85	113	76	96
Mobile-Pensacola	1156832	0.47%	777	403	119	59	106	100
Jacksonville	1244805	0.51%	761.4	367	96	78	97	99
Albuquerque	1320044	0.54%	745.8	339	78	107	76	96
West Palm Beach	1198013	0.49%	716.8	359	52	140	115	106
Wichita-Hutchinson	1105515	0.45%	713.1	387	131	72	53	100
Spokane	860553	0.35%	697	486	99	152	136	106
Tulsa	1175618	0.48%	687.7	351	102	57	90	101
Grand Rapids-Kalamazoo	1700197	0.69%	668.7	236	58	38	82	103
Omaha	931388	0.38%	620.9	400	95	88	122	102
Albany-Schenectady-Troy	1289768	0.52%	612.6	285	65	79	76	102
Montgomery-Selma	603338	0.25%	512.8	510	147	104	112	90
Palm Springs	987972	0.40%	508.8	309	44	105	116	102
Chattanooga	790502	0.32%	471.7	358	92	87	87	95
Davenport-Rock IS	790101	0.32%	470.1	357	81	83	112	102
Portland-Poland Springs	920625	0.37%	455.7	297	40	107	110	104

TABLE VIII (CONTINUED)

1989 ADI Market Name	POP89	% US POP	FOOTBALL SUPPORT INDEX	FOOTBALL INTEREST INDEX	PER CAPITA PLAYER PRODUCTION	PRO VIEW	COLL VIEW	SPORT PURCHASE INDEX
Huntsville-Decatur-Florence	803333	0.33%	455.2	340	87	82	84	97
Las Vegas	673467	0.27%	429.9	383	76	97	134	109
Rochester, NY	945487	0.38%	422.3	268	46	95	81	103
Bristol-Kingspt	761123	0.31%	404.7	319	77	74	91	93
Charleston, SC	648866	0.26%	389.3	360	86	72	116	99
Salinas-Monterey	622571	0.25%	386	372	87	107	91	102
El Paso	760 <u>3</u> 95	0.31%	381.5	301	91	57	62	91
Savannah	661690	0.27%	379.4	344	94	67	89	95
Springfield, MA	651450	0.26%	373.5	344	86	98	74	97
Ft. Wayne	632246	0.26%	369.9	351	68	88	127	103
Paducah-Cp Girardeau	840658	0.34%	344.7	246	54	53	85	94
Evansville	696644	0.28%	330.9	285	73	58	81	100
Augusta	644217	0.26%	311.4	290	64	74	88	91
Springfield, MO	790756	0.32%	299.2	227	31	59	106	96
Burlington-Plattsburgh	717740	0.29%	279.9	234	39	49	107	106
Mcallen-Brownsville:lrgv	739095	0.30%	203.3	165	25	26	89	74

region cannot be stressed enough.

One can also observe that the Southern United States would offer numerous potential sites. Using formulated results, traditional football cities emerge as top candidates. Jackson, Mississippi, could be described as the football capital of the South, having an ADI population of slightly over 800,000 and the player production rating being nearly 2.5 times the national average. Only Shreveport-Texarkana can boast player production indices equal to Jackson's, but the population is nearly 300,000 larger. Youngstown and Dayton, Ohio, are the only two northern ADI's that have extremely high ratings with respect to every individual variable. Montgomery-Selma, Alabama, is the only Southern ADI which ranks very high in all areas.

When comparing all sites generated by the formula, few Triple A baseball ADI's are represented; only five being present in the top 28 formula generated locations (Toledo, Wilkes Barre, Louisville, Albuquerque, and Omaha). If NFL teams were to follow the direct statistical analysis offered here and select the best 28 sites quantitatively, they would possibly still select only population driven ADI's.

Definitive football ADI's must be further analyzed, and decisions must be made using qualitative analysis.

#### CHAPTER V

#### POSSIBLE FRANCHISE LOCATIONS

Memphis, Orlando, Jacksonville, and Sacramento have been mentioned as possible NFL expansion locations. The league still seems to stress only population as the key geographic variable. Not a difficult methodology to understand if the profit potential is acceptable. However, to attempt location analysis for a prospective minor league many other factors must be observed.

As Table VIII portrays, high football conscience ADI's have been quantitatively selected. Many could reason that existing NFL areas would be adequate places to locate teams. Only taking population under consideration, New York's ADI with a population of over 18,000,000 could potentially accommodate 10-12 more teams. Quantitatively this does make sense, however, to be a minor league potential ADI it was reasoned that the prospective area be smaller in population and rich in football culture or tradition.

With the option of minor league football and the possible redirection of the collegiate game, the surplus of quality players will expand. The football fan should support high quality minor league football. The NFL could potentially access untapped football hungry markets.

Ideally, 28 locations should be selected as farm system teams (Figure 12).

Shreveport-Texarkana has been selected as the prime choice for a minor league team. Player production is nearly 2.5 times the national average, and the population is ranked 20th. Areas such as Youngstown, Jackson, Spokane, Omaha and Montgomery share this common attribute of relatively small populations but having large player production or viewing indices. Palm Springs also can be aligned in this group, but only viewing is above average with player production of just 44 (Appendix A). The cultural difference of Palm Springs compared to the other areas in the grouping would make Palm Springs' selection somewhat questionable. Other selections have populations of 1,000,000+ and have at least one variable scoring above average.

The Shreveport-Texarkana market would compete directly with Louisiana State University, Arkansas, and the Dallas area teams. The location would be a wise choice, however, given the historical importance of football in the area. The Independence Bowl in Shreveport has proven to be a successful, smaller scale draw, also hosting NFL preseason ventures in years past. Memphis would compete directly with the University of Mississippi, but Memphis too has credible experience with NFL preseason games, not to mention the 60,000+ seat Liberty Bowl.

Youngstown, Toledo, and Dayton comprise the Ohio contingency. Historically, Ohio has been able to support

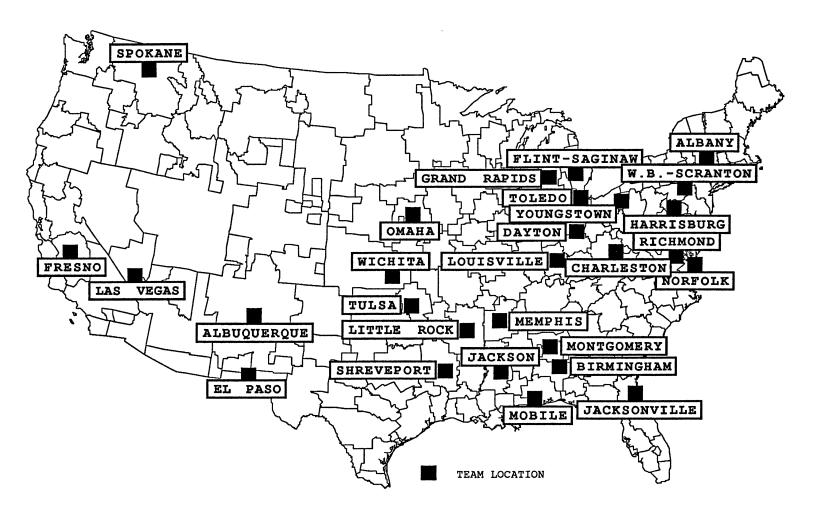


Figure 12. Proposed Minor League Teams

numerous professional teams, and any of these three locations might be a wise choice. Toledo and Dayton are both choices that are within one hundred miles of one or more super college or NFL locations. However, the rivalry potential would be a virtual gold mine with respect to home attendance. NFL cities such as Cleveland, Cincinnati, Pittsburgh and Detroit could have vested interests in these prospective locations. If improved academic standards for athletes are to be implemented, Ohio State would still remain in the super collegiate league. One would think that a traditional college power that averages over 85,000+ per home game would not suffer.

ADI's with FSI's between 900-1130 are Little Rock, Jackson, Wilkes-Barre Scranton, Fresno, Louisville, and Norfolk. Little Rock, Arkansas, would be an obvious choice with its 50,000+ seat War Memorial Stadium. Traditionally, the University of Arkansas considers Little Rock as its second home, playing a number of regular season games there. The Memphis franchise would also offer a natural rivalry. Jackson, Mississippi, could also be a wise location choice. The rivalry with the entire contingency of Southern teams could initiate great profits in Jackson. Both Mississippi and Mississippi State have used the Jackson facility for "neutral" site games proving a base does exist for adequate crowds. Wilkes Barre-Scranton has been home to numerous minor league teams (Figure 1), and in 1990 had a Triple A baseball franchise and an existing Minor League Football

System team.

Fresno, California, has long been a proven football The NCAA 1-AA football championship game has made this area. area seem to be "prime football country" to the rest of the nation. Customarily cities in mid-central California have tried to keep up with their neighbor urban counterparts, and the existing MLFS team there has been the most profitable franchise to date. Louisville, Kentucky, offers tremendous market potential. As Figure 4 shows, the nearest competition would be in the Ohio market. Consequently, Louisville has been home to one of the more stable Triple A baseball franchises: the Louisville Redbirds. With the recent emergence of the University of Louisville's football prominence, it might not prove to be a top ten choice. Norfolk, Virginia, offers a unique area having no real football history. However, the FSI (Table VIII) could justify Norfolks' location alone. Once again the potential rivalry with Eastern and Southern teams will be very lucrative, specifically Richmond, Virginia.

Ten potential locations fall between the 700-900 FSI range. Though the quantitative model suggests West Palm Beach and Palm Springs as potential sites, their marginal football interest, transient population, and upper class reputation eliminate them from consideration. Both ADI's must be further studied to quantify the cultural differences of these affluent or upper class areas (Higley, 1991). Richmond, Virginia, is a reliable choice considering the

abundant eastern population and limited market competition against the University of Virginia (a traditionally marginal football school). Harrisburg-York, Pennsylvania, is a traditional choice having been the location for numerous professional teams, including a 1990 MLFS franchise.

Birmingham, Alabama, is presently home of the Birmingham Fire of the WLAF. This location, being the only "choice twenty-eight" one to be a WLAF location, is a natural selection having much football tradition and proven crowd size potential.

Flint, Michigan, and Charleston, West Virginia, offer mediocre but acceptable results. Michigan is one of the more populous states with proven football attendance potential. When we consider the loyalty of the University of West Virginia fans regardless of team record, the Charleston selection seems plausible. However, both metropolitan areas are somewhat smaller than those in this 700-900 group. Albuquerque, New Mexico, and Wichita-Hutchinson, Kansas, offer much the same problem, a problem not in respect to actual population or FSI number, but the large area of land each ADI accesses. Out of the 28 choice locations, these two ADI's would have the highest expense in marketing their product meaning travel time and advertising worries would be a hindrance when considering potential location. Population growth potential might also be taken into consideration.

Mobile-Pensacola and Jacksonville, Florida, are two natural choices with proven crowd potential. Jacksonville

has been considered as one of the contenders for NFL expansion, and has one of the finer football facilities, the Gator Bowl. Jacksonville, however, is a market too large to be excluded. Mobile has also been the host of some historic Southeast Conference matchups. Critics would argue that Mobile and Montgomery or Birmingham would compete for the same market, however, Mobile being a coastal city relies heavily on Bayside Interstate 10 for economic health and has been thought of as being part of its own distinct region (Florida-Alabama-Mississippi Coast).

Those remaining locations are ranked in the 500-700 FSI category. Spokane, Washington, might be a questionable site considering actual market size, but lack of market competition and interest shown by player production in nearby Idaho and Oregon make it a choice that will work. Tulsa, Oklahoma, has proven professional crowd potential because of their USFL experience. Close proximity to Little Rock might provide for a lucrative rivalry, not to mention the cultural interest in football throughout Oklahoma.

Omaha, Nebraska, could potentially be one of the more successful franchises. Proven football interest by their Lincoln neighbors is a positive factor. The Triple A baseball affiliate has also proven to be a very steady draw and source of community pride. Albany-Schenectady-Troy, New York, offers a very large fan base. Rooney has also stressed the importance of New York State as a potential target (Rooney, 1987). Historically, this area of New York has

welcomed minor league football.

#### Other Possible Locations

Of the remaining nineteen ADI's, two must be chosen as replacement sites (Palm Springs/West Palm Beach). It could be reasoned that Las Vegas Nevada, would be a very reliable franchise location. Given its small population (but one of the fastest growing), Las Vegas offers a nonpermanent residency much higher and constant than West Palm Beach or Palm Springs. Legalized gambling could provide the needed professional atmosphere, and the extra population to fill the stadium. The citizens of Las Vegas have adopted a technically professional basketball team (UNLV) and a truly professional football franchise should also do well.

Finally, El Paso, Texas, was selected over Rochester,
New York, based primarily on player production. El Paso has
recent proven crowd potential: The Sun Bowl, now called the
John Hancock Bowl, has proven success for over fifty years in
a relatively small market. Juarez, Mexico, technically does
enlarge the fan support base, but foreign support should not
be used for making any definitive conclusions.

#### CHAPTER VI

#### CONCLUSION

Many could argue that the United States is well served by its professional football system. College football has found a niche servicing geographic areas that have no professional football. Experts cannot deny that steps must be taken to solve college football's woes, therefore, the minor league football avenue must be evaluated. Market segmentation (ADI analysis) studies are only one new application of sport geographic research. However, until now no attempt has been made to locate a minor league for football.

In 1987, A. Smythe outlined a method for locating professional soccer franchises in America (supplemented with ADI information). As previously mentioned, he used player production indices to denote high interest areas. Coupled with existing soccer teams (college and high school) he argued that the United States was truly underserved. Could America possibly need more football? Obviously college football has a very prominent place in our culture, even though the redirection of college football is coming, at least to a relative degree. Relative meaning that freelance television packages and pay for play athletes may soon to be

under the direction of the NCAA.

This thesis was based on the assumption that college footballs' ills will be cured. Society will return college football back to its proper place using true student athletes. Profit sharing or a super league has been offered as one alternative to slow down this unethical sport.

However, if the Ivy league approach (or limited scholarships, practice time, and truly enforced academic standards) were to be adopted nationwide a super league would not be necessary.

Where does a marginally academic athlete fit into college football's re-direction? Nowhere!! A time for minor league football is extremely overdue. Major league baseball has done an adequate job of providing playing opportunities for the vast surplus of baseball players. The National Football League must also instigate a farm system.

Baseball has had over 500 minor league teams at one time. Of course, the modern farm system has cut this vast number to nearly 170, but we can still see where the problem remains concerning football.

This thesis is basically applied geography. By using a quantitative technique, more than forty possible sites have been generated. Arbritary guidelines were chosen concerning base population needs and qualitative stipulations. I believe that this work goes a step further, using actual interest indices like television viewing patterns. The use of the ADI's will continue to grow in importance concerning market segmentation. Geography and marketing professionals

must realize that an obvious marriage needs to occur concerning sport.

I believe that further work must be done to supplement the definition of a good football area. To identify West Palm Beach and Palm Springs as culturally questionable sites must be further examined. One could saturate the Southeast with many minor league teams, but the 28 (NFL owned) sites chosen seem to reflect a national scope (Figure 12). The possibility exists for a league comprised of four or more divisions (Table IX). Further research might suggest possible geographic divisions.

Certain disadvantages had to be taken into consideration while doing this research. Personally, the great love of college football has been difficult to keep in perspective. However, it is felt that a prescriptive analysis must be undertaken to offer alternatives to stop the corruption. Further analysis of metropolitan areas could supplement these site choices, and actual NFL feedback is necessary.

Advantages gained by using these results are potentially great. The NFL, the public, the universities, and the players would all benefit first hand. Geography, specifically sport geography, must continue to offer prescriptive techniques.

TABLE IX
POSSIBLE GEOGRAPHICAL CONFERENCE ALIGNMENTS

	Western	Southern
•	Spokane Fresno Las Vegas Albuquerque El Paso Wichita Tulsa	Shreveport Little Rock Memphis Jackson Mobile Montgomery Birmingham
	Mid-Western	<u>Eastern</u>
	Flint-Saginaw Grand Rapids Toledo Youngstown Dayton Omaha Louisville	Albany W.BScranton Harrisburg Richmond Charleston Norfolk Jacksonville

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## APPENDIX

# UNITED STATES FOOTBALL PROFILE INTEREST INDICES

#### COMPLETE ADI FOOTBALL PROFILE

1988-89 Arbitron ADI Market Name	POE89	4 US POP	PBI	FII	PLAYER PROD.	PRO VIEW	COLL VIEW
Abilene-Sweetwater	311,335	0 134	299 92	578	204	82	88
Albany, GA	393,056	0.16%	292.83	447	128	97	94
Albany-Schenectady-Troy	1,289,768	0.52%	612 64	285	65	79	76
Albuquerque	1,320,044	0.54	745.82	339	78	107	76
Alexandria, LA	265,010	0.11	196.99	446	120	105	101
Alpena	41,745	0.02	23 1	332	88	35	121
Amarillo	498,573	0 20%	501 07	603	232	59	80
Anniston	124,833	0.05%	71 15	342	101	76	64
Ardmore-Ada	192,053	0 08%	121 31	379	115	63	86
Atlanta	3,601,415	1.46%	2406.95	401	119	78	85
Augusta	644,217	0 26%	311 37	290	64	74	88
Austin, TX	957,084	0.39%	529 59	332	94	67	77
Bakersfield	526,859	0 21%	442.56	504	136	88	144
Baltimore	2,525,060	1 03%	1182.57	281	51	97	82
Bangor	316,828	0 13%	156.83	297	65	65	102
Baton Rouge	768,833	0.31%	793.18	619	217	52	133
Beaumont-Port Arthur	450,864	0 18%	795.77	1059	401	82	175
Bend	73,794	0.03%	41 45	337	30	132	145
Billings-Hardin	239,951	0 10%	114 78	287	74	78	61
Biloxi-Gulfport-Pascagoula	320,610	0 13%	343.59	643	260	64	59
Binghamton	421,998	0.174	285.55	406	105	82	114
Birmingham	1,372,868	0 56%	814 57	356	111	70	64
Bluefield-Beckley-Oak Hill	402,224	0 16%	172.96	258	59	79	61
Boise	430,130	0.174	329.77	460	142	106	70
Boston	5,545,209	2 25%	4186.63	453	118	117	100
Bowling Green	120,391	0 05%	40.93	204	55	53	41
Bristol-Kingspt-Johnsn Cty.tri Cty	761,123	0 31%	404 66	319	77	74	91
Buffalo	1,650,043	0 67%	1210 03	440	75	189	101
Burlington-Plattaburgh	717,740	0 29%	279 92	234	39	49	107
Butte	125,802	0.05%	66.26	316	158	0	0
Casper-Riverton	117,585	0.05%	74.08	378	94	158	32
Cedar Rapids-Waterloo-Dubuque	840,043	0 34%	543.23	388	79	57	173
Charleston, SC	648,866	0 26%	389 32	360	86	72	116
Charleston-Huntington	1,308,231	0.53%	782.76	359	85	113	76
Charlotte	1,917,586	0.78%	1169 73	366	73	51	169
Charlottesville	105,514	0.04%	41.85	238	119	0	0
Chattanooga	790,502	0.32	471.67	358	92	87	87
Cheyenne-Scottsbluff-Sterling	138,272	0.06%	134 12	582	112	237	121
Chicago	8,573,425	3.48%	5829 93	408	110	93	95
Chico-Redding	402,879	0.16%	270.6	403	88	135	92

1988-89 Arbitron ADI Market Name	POP89	% US POP	FSI	FII	PLAYER PROD.	PRO VIEW	COLL VIEW
Cincinnati	2,017,161	0.82%	2007.08	597	172	142	111
Clarksburg-Weston	245,439	0.10%	132.54	324	54	130	86
Cleveland	3,755,067	1.53%	4524.86	723	174	198	177
Colorado Springs-Pueblo	628,288	0.26%	412.58	394	65	192	72
Columbia, SC	809,014	0.33%	574.4	426	94	121	117
Columbia-Jefferson City	365,411	0.15%	144.95	238	71	37	59
Columbus, GA	538,525	0.22%	381.46	425	106	84	129
Columbus, OH	1,779,023	0.72%	1841.29	621	126	131	238
Columbus-Tupelo	463,324	0.19%	462.55	599	163	82	191
Corpus Christi	537,382	0.22%	365.42	408	106	92	104
Dallas-Ft. Worth	4,628,289	1.88%	3571.5	463	148	76	91
Davenport-Rock IS-Moline:Quad City	790,101	0.32%	470.11	357	81	83	112
Dayton	1,295,748	0.53%	1148.9	532	133	116	150
Denver	2,654,970	1.08%	2460.27	556	80	328	68
Des Moines	957,830	0.39%	483.7	303	60	74	109
Detroit	4,684,792	1.90%	3084.15	395	102	67	124
Dothan	296,668	0.12%	190.86	386	. 87	62	150
Duluth-Superior	440,000	0.18%	217.07	296	44	63	145
El Centro-Yuma	226,413	0.09%	87.55	232	42	110	38
El Paso	760,395	0.31%	381.46	301	91	57	62
Elmira	227,778	0.09%	108.19	285	65	83	72
Erie	415,566	0.17%	249.34	360	75	117	93
Eugene	496,035	0.20%	308.37	373	98	73	104
Eureka	134,430	0.05%	74.38	332	88	62	94
Evansville	696,644	0.28%	330.91	285	73	58	81
Fargo	581,995	0.24%	225.04	232	70	42	50
Flagstaff	94,604	0.04%	34.06	216	31	90	64
Flint-Saginaw-Bay Cty	1,210,464	0.49%	786.8	390	93	84	120
Florence, SC	465,814	0.19%	245.33	316	62	76	116
<u>Fresno-Visalia</u>	1,289,169	0.52%	1037.78	483	112	98	161
Ft. Myers-Naples	588,224	0.24%	300.97	307	30	114	133
Ft. Smith	416,728	0.17%	245.17	353	83	50	137
Ft. Wayne	632,246	0.26%	369.86	351	68	88	127
Gainesville	231,327	0.09%	149.98	389	134	86	35
Glendive	12,057	0.00%	2.05	102	0	51	51
Grand Junction-Durango	179,129	0.07%	162.11	543	82	300	79
Grand Rapids-Kalamazoo-Battle Creek	1,700,197	0.69%	668.74	236	58	38	82
Great Falls	159,270	0.06%	147.32	555	190	90	85
Green Bay-Appleton	1,022,582	0.42%	449.94	264	51	52	110
Greensboro-Winston Salem-High Point	1,341,512	0.55%	771.37	345	97	51	100
Greenville-New Bern-Washington	619,637	0.25%	381.08	369	98	68	105
Greenville-Spartanburg-Asheville	1,673,190	0.68%	1015.07	364	99	85	81

1988-89 Arbitron ADI Market Name	POP89	4 US POP	FSI	PII	PLAYER PROD	PRO VIEW	COLL VIEW
Greenwood-Greenville	247,637	0.10%	212.97	516	182	80	72
Hagerstown	117,399	0.05%	51.66	264	38	112	76
Harrisburg-York-Lancaster-Lebanon	1,478,204	0.60%	889.39	361	80	99	102
Harrisonburg	102,324	0.04%	54.74	321	101	55	64
Hartford-New Haven	2,411,073	0.98%	1326.09	330	80	77	93
Helena	48,252	0.02%	14.8	184	92	0	0
Houston	4,093,606	1.66%	3486.39	511	149	117	96
Huntsville-Decatur-Florence	803,333	0.33%	455.22	340	87	82	84
Idaho Falls-Pocatello	312,385	0.13%	228.56	439	135	97	72
Indianapolis	2,238,436	0.91%	1578.1	423	83	129	128
Jackson, MS	828,529	0.34%	903.1	654	240	91	83
Jackson, TN	164,944	0.07%	81.1	295	76	60	83
<u>Jacksonville</u>	1,244,805	0.51%	761.41	367	96	78	97
Johnstown-Altoona	761,590	0.31%	627.04	494	115	159	105
Jonesboro	182,043	0.07%	102.25	337	134	35	34
Joplin-Pittsburg	458,860	0.19%	205.72	269	58	61	92
Kansas City	1,961,042	0.80%	1121.06	343	98	96	51
Knoxville	1,134,523	0.46%	678.82	359	80	64	135
La Crosse-Eau Claire	454,426	0.18%	149.2	197	26	40	105
Lafayette, IN	125,676	0.05%	91.74	438	117	70	134
Lafayette, LA	580,289	0.24%	604.47	625	235	48	107
Lake Charles	219,386	0.09%	398.92	1091	481	74	55
Lansing	621,595	0.25%	308.73	298	59	52	128
Laredo	139,638	0.06%	23.51	101	0	64	37
Las Vegas	673,467	0.27%	429.9	383	76	97	134
Laurel-Hattiesburg	253,109	0.10%	202.91	481	172	111	26
Lexington	924,519	0.38%	440.69	286	62	71	91
Lima	109,872	0.04%	120.31	657	168	150	171
Lincoln-Hastings-Kearney	655,506	0.27%	373.64	342	86	59	111
Little Rock	1,258,493	0.51%	901.92	430	126	64	114
Los Angeles	12,904,913	5.24%	8818.36	410	101	90	118
Louisville	1,478,941	0.60%	1057.44	429	129	84	87
Lubbock	396,837	0.16%	353.85	535	197	65	76
Macon	482,182	0.20%	352.8	439	158	59	64
Madison	701,181	0.28%	373.96	320	64	37	155
Mankato	61,922	0.03%	33.13	321	83	52	103
Marquette	152,156	0.06%	68.98	272	49	32	142
Mcallen-Brownsville:lrgv	739,095	0.30%	203.25	165	25	26	89
Medford	355,941	0.14%	216.53	365	75	102	113
Memph1s	1,659,440	0.67%	1164.37	421	125	66	105
Meridian	184,895	0.08%	121.41	394	104	96	90
Miami	3,092,644	1.26%	2128.77	413	98	128	89

1988-89 Arbitron ADI Market Name	PCP89	* US POP	PSI	FII O	PLAYER PROD	PRO VIEW	COLL VIEW
Milwaukee	1,997,331	0.81%	955.39	287	42	70	133
Minneapolis-St. Paul	3,545,479	1.44*	1211.37	205	41	48	75
Minot-Bismarck-Dickinson	387,043	0.16%	122.56	190	38	- 72	42
Missoula	192,587	0.08%	151 82	473	119	134	101
Mobile-Pensacola	1,156,832	0.47%	777.01	403	119	59	106
Monroe-El Dorado	523,613	0 21%	722.59	828	331	43	123
Montgomery-Selma	603,338	0.25%	512.84	510	147	104	112
Nashville	1,883,232	0.77%	2853.1	909	85	725	14
New Orleans	1,807,044	0.73%	1520.93	505	157	85	106
New York	18,591,379	7.55%	9450 62	305	68	113	56
Norfolk-Portsmouth-Newport News-Hamptn	1,666,149	0.68%	1130.2	407	117	77	96
North Platte	48,406	0.02*	35 42	439	91	145	112
Odessa-Midland	406,398	0.17%	486.32	718	262	68	126
Oklahoma City	1,544,580	0.63%	751.7	292	86	54	66
Omaha	931,388	0 38%	620.93	400	95	88	122
Orlando-Daytona Beach-Melbourne	2,161,857	0.884	1430.43	397	80	115	122
Ottumwa-Kirksville	72,868	0.03%	24.9	205	61	30	53
Paducah-Cp Girardeau-Harrsbrg-Marion	840,658	0 34%	344.67	246	54	53	85
Palm Springs	987,972	0.40%	508 81	309	44	105	116
Panama City	212,777	0.09	132 63	374	97	94	86
Parkersburg	155,671	0.06%	57.34	221	33	94	61
Peoria	537,810	0 22%	335.23	374	110	65	. 89
Philadelphia	7,233,066	2.94%	4773 82	396	103	82	108
Phoenix	2,571,057	1.04%	1229 82	287	51	88	97
Pittsburgh	3,077,600	1.25%	3729 03	727	190	242	105
Portland, OR	2,138,898	0 87%	1176.39	330	68	89	105
Portland-Poland Springs	920,625	0.37%	455.71	297	40	107	110
Presque Isle	84,963	0.03%	25.21	178	17	31	113
Providence-New Bedford	1,490,449	0 61%	817.26	329	75	107	72
Quincy-Hannibal	310,766	0.13%	125.34	242	52	47	91
Raleigh-Durham	1,829,828	0.74%	1152.79	378	98	48	134
Rapid City	230,818	0 09%	112 72	293	77	99	40
Reno	407,793	0.17%	185.55	273	34	103	102
Richmond	1,215,236	0.490	897.25	443	124	97	98
Roanoke-Lynchburg	989,004	0.40%	621.42	377	116	63	82
Rochester, NY	945,487	0.38%	422.32	268	46	95	81
Rochester-Mason City-Austin	368,662	0.15%	194.78	317	70	48	129
Rockford	408,860	0.17%	215.33	316	69	55	123
Roswell	118,253	0.05%	27.79	141	0	, 65	76
Sacramento-Stockton	2,872,750	1.17%	1896.02	396	79	118	120
Salinas-Monterey	622,571	0.25%	385.99	372	87	107	91
Salisbury	252,649	0.10%	94.32	224	18	55	133

1988-89 Arbitron ADI Market Mame	20289	* US POP	FSI	PII	PLAYER PROD.	PRO VIEW	COLL VIEW
Salt Lake City	1,895,917	0.77%	1159.67	367	89	96	93
San Angelo	135,055	0.05%	103.09	458	148	63	99
San Antonio	1,733,173	0.70%	829.03	287	106	71	4
San Diego	2,385,053	0 974	1840.47	463	84	200	95
San Francisco	5,673,968	2 31%	4094.71	433	97	119	120
Sarasota, FL	267,835	0.114	153.11	343	0	104	239
Savannah	661,690	0.27%	379.37	344	94	67	89
Seattle-Tacoma	3,284,118	1 33%	2900.97	530	94	215	127
Shreveport-Texarkana	1,111,777	0.45%	1169.22	631	240	66	85
Sioux City	426,195	0.17%	208.84	294	66	77	85
Sioux Falls-Mitchell	591,095	0 24%	328.06	333	100	62	71
Snta Brbra-Snta Maria-Sn Luis Obispo	568,689	0.23%	413.25	436	88	102	158
South Bend-Elkhart	796,488	0 324	554.89	418	108	76	126
Spokane	860,553	0.35%	697 05	486	99	152	136
Springfield, MA	651,450	0.26%	373 5	344	86	98	74
Springfield, MO	790,756	0.32%	299.17	227	31	59	106
Springfield-Decatur-Champaign	868,138	0.35%	457.22	316	77	63	99
St. Joseph	122,551	0.05%	44.94	220	42	72	64
St. Louis	3,023,678	1.234	1622.71	322	91	68	72
Syracuse	937, 932	0.38%	508.05	325	76	78	95
Tallahassee-Thomasville	529,857	0.22	458.33	519	146	69	158
Tampa-St. Petersburg (Sarasota)	2,856,185	1.16%	1699.43	357	84	112	77
Terre Haute	441,224	0.18%	175.02	238	40	70	88
Toledo	1,082,411	0.44%	1152 77	639	175	86	203
Topeka	412,278	0.17	272.1	396	98	88	112
Traverse City-Cadillac	432,214	0 184	176.49	245	39	49	118
Tucson	787,392	0.32	427.82	326	57	86	126
Tulsa	1,175,618	0.48%	687 74	351	102	57	90
Tuscaloosa	147,168	0 06%	75.79	309	85	61	78
Twin Falls	86,698	0 04%	93.06	644	179	137	149
Tyler-Longview	464,058	0 194	499.64	646	212	155	67
Utica	374,629	0 15%	196.68	315	69	95	82
Victoria	76,865	0.034	54 45	425	163	99	0
Waco-Temple	671,995	0.274	588	525	152	89	132
Washington, DC	4,520,316	1.84*	2267.39	396	96	108	96
Watertown-Carthage	246,663	0.10%	91.27	222	27	48	120
Wausau-Rhinelander	442,200	0.18%	184.99	251	52	32	115
West Palm Beach-Ft. Pierce-Vero Beach	1,198,013	0.49%	716 81	359	52	140	115
Wheeling-Steubenville	392,463	0.16%	558.61	854	224	203	203
Wichita Falls-Lawton	436,316	0.18%	399.96	550	171	79	129
Wichita-Hutchinson	1,105,515	0.45%	713.06	387	131	72	53
Wilkes Barre-Scranton	1,273,592	0 524	927.6	437	125	89	98

1988-89 Arbitron ADI Market Name	POP89	4 US POP	<b>F</b> SI	FII	PLAYER PROD.	PRO VIEW	COLL VIEW
Wilmington	393,242	0.16%	173.68	265	56	71	82
Yakima	481,027	0.20%	329 5	411	58	162	133
Youngstown	724,411	0 29%	1155.44	957	297	174	189
Zanesville	83,483	0.03*	73.19	526	97	148	184

#### VITA

## Joseph R. Easley

## Candidate for the Degree of

## Master of Science

Thesis: A GEOGRAPHICAL ANALYSIS OF A PROPOSED MINOR LEAGUE

FOR FOOTBALL

Major Field: Geography

Biographical:

Personal Data: Born in Concord, California, June 9, 1966, the son of Leslie R. and Rhoda M. Easley.

Education: Graduated from C.E. Donart High School, Stillwater, Oklahoma, in May 1984; Received Bachelor of Science Degree in Curriculum Instruction and Educational Development from Oklahoma State University in May, 1989; completed requirements for the Master of Science Degree at Oklahoma State University in July 1991.

Professional Experience: Teaching Assistant, Department of Geography, Oklahoma State University, August, 1989, to May, 1991. Research Assistant, Department of Geography, Oklahoma State University, March, 1990, to May, 1991.

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