2011

The Outsourcing of Football Stadium Foodservice Operations by National Collegiate Athletic Association Division I Athletic Programs

Craig M. Crow
West Virginia University

The Outsourcing of Football Stadium Foodservice Operations by National Collegiate Athletic Association Division I Athletic Programs

Craig M. Crow

Dissertation submitted to the
College of Human Resources and Education
at West Virginia University
in partial fulfillment of the requirements
for the degree of

Doctor of Education
in
Educational Leadership Studies

Approved by:

Ernest Goeres, Ph.D., Chair
Reagan Curtis, Ph.D.
Dallas Branch, Ph.D.
Gonzalo Bravo, Ph.D.
Paul Chapman, Ph.D.

Morgantown, WV
2011

Keywords: Outsourcing; higher education administration; intercollegiate athletics; foodservice; concessions; facility management; National Collegiate Athletic Association; NCAA

ABSTRACT

The Outsourcing of Football Stadium Foodservice
Operations by NCAA Division I Athletic Programs

Craig M. Crow

The purpose of this study was to explore the current state of the outsourcing of foodservice operations by National Collegiate Athletic Association (NCAA) Division I athletic programs, particularly at their home football stadiums, in order to assist decision makers. Potential participants for this study were athletic administrators responsible for the oversight of football stadium foodservice operations at each NCAA member institution sponsoring the sport of football at the Division I level during the 2010-11 academic year as either an active or provisional member, as well as those institutions that had just added the sport of football but played a Division I schedule in 2010-11. Thus, the total population size for the study was 244. The number of responses usable for at least one of the analyses totaled 111 (45.5%).

A majority (89.3%) of respondents reported that their institution had control to decide whether to self-operate or outsource foodservice operations at their institution‘s home football stadium. Of those Division I institutions with control over their football stadium foodservice operations, a greater percentage (59.8%) of responding institutions outsourced all or part of football stadium foodservice operations than self-operated (40.2%), which was slightly higher than past figures found in the literature. Football Bowl Subdivision (FBS) institutions, particularly those from the Bowl Championship Series (BCS) conferences showed a preference toward outsourcing. Among responding institutions nationally recognized foodservice firms, particularly Sodexo, were clearly the most popular in terms of number of contracts.

Replicating the work of Li and Burden (2002), benefit statements on outsourcing foodservice operations were combined into four different benefit inventories; however, no statistically significant differences ($p < .05$) were found between FBS and Football Championship Subdivision (FCS) institutions regarding agreement with the benefit inventories. When examining the relationship between foodservice operation method and inventories designed to measure satisfaction with various operations considerations, a significant difference ($p < .05$) was found in only one inventory, *Human Resource Considerations*. Finally, a backward stepwise logistic regression model revealed that only one of eight predictor variables, the *Improvement in Administrative Efficiency* benefit inventory, was found to be a significant predictor of whether an FBS athletic program outsourced its football stadium foodservice operations.

ACKNOWLEDGEMENTS

Many people have helped me with my doctoral studies. Regardless of the extent of the contribution, I would like to give a sincere thanks to each of the following people.

First and foremost, I need to thank my committee chair, Dr. Ernest Goeres. He exhibited endless patience and understanding during my time in the program, particularly during those periods when my focus shifted away from my doctoral studies. To put it simply, I would not have finished if not for Dr. Goeres. Perhaps more than other professor, I try to model my professional demeanor and interactions with my students after the example provided by Dr. Goeres.

I would also like to thank the other members of my committee: Dr. Reagan Curtis, Dr. Dallas Branch, Dr. Gonzalo Bravo, and Dr. Paul Chapman. Dr. Curtis in particular spent lots of time and effort assisting me with the methodology and analysis sections of this study. To say that he was patient with me would be an understatement. I am grateful for the speed in which he always answered questions and reviewed drafts, including reviewing my draft during his summer travels so that I could schedule a July 2011 defense date. The willingness of Dr. Curtis to stick with me as I worked on this project is much appreciated. Dr. Branch has been a part of this committee since the beginning, and has offered encouragement and advice every step of the way. Dr. Bravo and Dr. Chapman both offered valuable insight and expertise from their respective fields throughout the process.

Besides my committee, I must thank my family and friends for their support and encouragement, in particular my parents, Robert and Ruth Ann Crow, as well as my brother Brian, sister Christy, nephews Ralphie and Sam, niece Hannah, and brother-in-law Adrian.

The next group of individuals helped in many ways – either at WVU, East Stroudsburg University, or West Liberty University. Whether bosses who provided resources such as time and funds to work on my dissertation, professors who helped along the way, or friends and co-workers providing advice, information, time, or support – each contributed in some way (in alphabetical order): Brad Cox, Michael Dean, Steve Dittmore, Paul Downey, Richard Hartnett, Heinz Field Turf Crew, Dan Hursh, Brandon McClung, Larissa Mitchell, Paula Parker Fordyce, Jennifer Phillips, Frank Pullo, Kenny Schank, Nick Sterkel, Chad Wall, Jaci Webb-Dempsey, Loren Wenzel, Carrie White, and Rob Wilson.

Last but not least, I would like to thank the over 100 NCAA Division I athletic administrators who took time out of their busy schedule to participate in this study. The study would not have been possible without their cooperation.

Table of Contents

List of Tables

Chapter I:

Introduction of the Study

Institutions of higher education in the United States are continually confronted with financial decisions that will impact their short-term viability and perhaps, long-term survival. With many states facing budget shortfalls due to the poor economic climate, public colleges and universities are continuing to see a decline in appropriated funds. Public higher education institutions in many states have reached agreements to forfeit some state funding in return for greater operating autonomy (Kelderman, 2009). As aid from states has diminished, public colleges and universities have become more reliant on tuition revenue, while also becoming more entrepreneurial in their revenue generation methods. Cuts in state funding for private institutions, typically in the form of aid for state residents to attend in-state private institutions, have already occurred in some states and are under discussion in others (Eckstein, 2009). Further, the endowments of both public and private institutions have witnessed sharp declines due to the recent economic downturn. According to a survey by the National Association of College and University Business Officers (NACUBO) in conjunction with TIAA-CREF Asset Management, higher education endowments‘ investment returns fell 23% from July 2008 to November 2008 (NACUBO, 2009b).

In order to maintain an affordable, or at least competitive, tuition rate, both public and private higher education institutions must be proactive in their strategic planning, particularly as it pertains to institutional finances. The main focus of this process is identifying areas for revenue growth and expense reduction. A recent study by Fulks (2010) showed that intercollegiate athletics, particularly National Collegiate Athletic Association (NCAA) Division I programs, is one campus unit that has become a financial burden for the general fund of many

major U.S. institutions of higher education. Given the public perception of big-time college athletics as a lucrative enterprise, how is it possible that many of these athletic programs have become financial liabilities to their institution?

Current Financial State of NCAA Division I Athletic Programs

Based on media reports of the revenue generated by NCAA Division I institutions, it would seem that these organizational units would be very profitable. Despite the widely reported examples of record breaking multimedia contracts, sponsorship deals, and bowl game payouts, as well as packed stadiums and arenas, the perception of Division I athletic programs as profitable organizational subunits is far from the reality.

The reality is that Division I athletic programs, based solely on revenue generated independently through the operation of their athletic departments, are largely unprofitable. In fiscal year 2009, only 14 of 120 Division I Football Bowl Championship Subdivision (FBS) athletic programs reported positive net generated revenues, down from 25 just a few years earlier (Fulks, 2008; Fulks, 2010). During the same year, not a single member institution of the Division I Football Championship Subdivision (FCS) reported positive net generated revenues (Fulks, 2010).

Division I athletic programs are relying on institutional support in the form of direct allocations, student fees, and indirect support (e.g., covering utility and maintenance costs) to compensate for inadequate revenue generation from the operation of the athletic program. In fiscal year 2009, an average of 20% of total FBS athletic program revenue came from some form of institutional support (Fulks, 2010). FCS athletic programs exhibited even greater dependence on their institutions in fiscal year 2009. On average, 72% of FCS revenue came from institutional support (Fulks, 2010). Given the financial challenges facing colleges and

universities in funding their core operations of teaching, research, and service, it would seem prudent to reduce the institutional subsidization of athletic programs to allow for reallocation of those financial resources to core educational functions.

In addition to their reliance on institutional subsidization, another constant criticism of Division I athletic programs is their perceived inability to contain costs. In the wake of the deteriorating economic conditions of the first decade of the new century and the global financial collapse of 2008, many Division I athletic departments have taken substantive steps to control costs. Citing a survey by the Division I-A Athletic Directors Association, *USA Today* reported ~~–t~~hat about two dozen schools of 80 responding to the survey have cut athletics staff in the past five years and about one in six schools had cut at least one sport" (Wieberg, 2009, para. 9). Wieberg (2009) also reported that some conferences are unilaterally taking cost reduction measures such as limiting travel squad sizes, reducing the length of certain playing seasons, and meeting more often by teleconference for administrative meetings of institutional representatives rather than traveling to meeting sites. Even long time arch rivals Ohio State University and the University of Michigan reached a budgetary truce of sorts, agreeing to eliminate printed media guides, a move which will result in an annual savings of at least $250,000 (Ohio State University, 2009). Based on the evidence, it appears that Division I athletic programs are beginning to take cost containment more seriously.

Given the unprofitable nature of many Division I athletic programs, institutions must increasingly commit to requiring that their athletic programs adopt an integrated approach of entrepreneurial revenue generation and cost containment as part of a comprehensive strategic plan. Hums and MacLean (2009) argued that sport organizations, a classification attributed to

intercollegiate athletic programs by many, ―with a clear business strategy [have] the greatest potential of enhancing the manager‘s entrepreneurial role" (p. 48).

Strategic Planning

Kotler and Murphy (1981) suggested that institutions of higher education need to be engaged in strategic planning. They defined strategic planning ―as the process of developing and maintaining a strategic fit between the organization and its changing marketing opportunities" (p. 471). Although popularized by corporate America, strategic planning has also been embraced, albeit sometimes begrudgingly, by institutions of higher education. Strategic planning is critical for colleges and universities regardless of economic climate, but certainly during periods of economic crisis. Strategic planning can provide guidance to an institution during difficult economic periods, and maybe even assist in identifying unique opportunities (Fain, 2008; Kotler & Murphy, 1981).

Strategies ―require consideration of both external and internal factors facing the firm" (David, 2001, p. 11). To that end, Kotler and Murphy (1981) identified the first two steps of the strategic planning process as an analysis of the institution‘s environment (i.e., identification of external opportunities and threats) and a review of the institution‘s strengths and weaknesses, particularly regarding major resources (i.e., people, money, facilities). These steps assist in the formation of goals and the strategies to be undertaken to achieve the set goals.

Kotler and Murphy (1981) suggested that strategic planning is not just to be done at the top levels of an institution of higher education, but instead ―should be completed at each major institutional level" (p. 472). While it may be argued that intercollegiate athletics is not a part of the core mission of an institution of higher education, it is nevertheless an influential and highly visible organizational unit for those institutions participating in NCAA Division I athletics.

Some have referred to intercollegiate athletics, particularly football and men's basketball, as "the front porch of the university" (Suggs, 2003, para. 4), a vehicle through which the public is introduced to, or learns more about, an institution. In addition, athletic programs at the Division I level "compete for a segment of the entertainment market" (Kriemadis, 1997, p. 238), further increasing the incentive for strategic planning.

Athletic administrators must be prepared to deal with the environment, both external and internal, to which their organizations are subjected (Kriemadis, 1997). External factors such as increasing pressure from the public, media, advocacy groups, and government officials, combined with the current economic climate, are forcing institutions to become more serious about reducing subsidization of athletic programs from the institution's general fund. Additionally, internal factors such as staffing and budgetary concerns, pressure from faculty, and an institution's ability to manage a function or provide a service at a high level play a role in the strategic planning regarding intercollegiate athletics. Consideration of these external and internal factors suggests that one strategic option for Division I athletic programs to potentially address revenue shortfalls and contain costs is to outsource one or more functions or services.

Bounds and Lamb (1998) defined outsourcing as "taking work away from internal resources and giving it to 'outsiders,' other companies that specialize in the work" (p. 27-28). The outsourcing of one or more function, particularly those functions that are deemed non-essential, is common in both traditional business and higher education. As subunits of higher education institutions, collegiate athletic programs have also engaged in outsourcing in the past.

Many Division I athletic programs have identified foodservice operations as a function to outsource. Given the increased emphasis Division I athletic programs should place on increasing revenue and containing costs as part of their strategic planning, combined with the perceived

trend toward outsourcing foodservice operations as a way to accomplish this goal, it is important that information about current practice in the outsourcing of foodservice operations be made available to these institutions. While the revenue category –concessions/programs/novelties" only accounted for, on average, 3% of the total generated revenue for an FBS institution in fiscal year 2009 (Fulks, 2010), foodservice operations is part of the overall entertainment experience of attending a collegiate football game, resulting in the management of this function having potentially significant implications. For example, foodservice at an athletic event could potentially impact a fan's image of the institution, its athletic program, the facility, or even the decision of whether or not to attend a game in the future – all of which directly or indirectly impact other revenue sources (Brown, Sutton, & Duff, 1993; Wakefield & Sloan, 1995). Further, although the percentage of total revenue derived from foodservice operations may be small, it still constitutes a large sum of money considering the median total generated revenue amount for FBS programs in fiscal year 2009 was approximately $32 million, with nearly a quarter of FBS institutions generating approximately $80 million or more during the same year (Fulks, 2010).

Purpose of the Study

The purpose of this study was to explore the current state of the outsourcing of foodservice operations by Division I athletic programs, particularly at their home football stadiums, in order to assist decision makers.

Research Questions

The following research questions provided the focus for this study:

1. What are the characteristics of Division I institutions that (a) outsourced foodservice operations or (b) self-operated foodservice operations at their home football stadium?

2. Does a significant difference exist in perceived benefits of outsourcing foodservice operations between athletic administrators at FBS and FCS institutions?
3. Does a significant difference exist between institutions in their satisfaction regarding foodservice operations at their home football stadium?
    a. Outsourced v. Self-operated (All subdivisions)
    b. Outsourced v. Self-operated (Separated by subdivisions)
4. What is the best predictor of whether an institution outsourced the foodservice operations at its home football stadium?

Significance of the Study

Phipps and Merisotis (2005) contended that ―one relatively unexplored method for potentially reducing costs is through what is commonly referred to as the _outsourcing‘ of various higher education functions and services" (p. 1). According to Howard and Crompton (2004), ―the indisputable reality of modern collegiate sports is that its day-to-day governance is shaped largely by financial considerations of cost containment and income generation" (p. 18). In fact, 40.86% of senior-level sports industry executives identified revenue generation as the most challenging aspect of being athletic director of a major Division I athletic program (Turnkey Sports Poll, 2009). Division I athletic programs have the potential to incrementally increase revenue from food and beverage sales, while at the same time potentially lowering costs, through outsourcing foodservice operations. Therefore, it is important to conduct a study examining the current outsourcing of the foodservice function by Division I athletic programs as more institutions consider outsourcing as part of their strategic plan.

The efforts of Division I athletic programs to make their facilities more commercially viable, especially those used for football and men‘s basketball, makes a study of this nature

timely and significant. To the dismay of many critics, Division I athletic programs often seek to replicate the professional sport business model when it comes to their football and men's basketball programs. Sixty-nine new professional (i.e., Major League Baseball [MLB], National Basketball Association [NBA], National Football League [NFL], National Hockey League [NHL]) facilities, 32 stadiums and 37 arenas, opened in North America between 1987 and 2003 (Howard & Crompton, 2004). With this building boom came the expectation of improved foodservice at the stadium or arena. As a result, the potential for these services to be outsourced to specialty firms grew. College athletic administrators recognized the increased revenue generating capacities of the more commercially viable professional facilities and followed suit on their campuses. To that end, many institutions have renovated existing athletic facilities or constructed new athletic facilities due to the perceived commercial obsolescence of the previous facilities. Though Howard and Crompton (2004) pointed out that colleges and universities have been more likely to construct new multipurpose arenas, while settling for only renovating the football stadium due to the enormous cost and limited use of such a facility, the last several years have witnessed the construction of new football stadiums by several FBS institutions, including the University of Minnesota, University of Akron, and University of Central Florida.

Regardless of whether collegiate facilities are being renovated or newly constructed, a common purpose for such projects at Division I institutions is to make the facility more commercially viable through the addition of premium seating areas and/or increased seating capacity, as well as an increase in the number and quality of points-of-sale for food and beverage. More dedicated facility space for foodservice operations translates into a greater potential for revenue generation, but also increases the need for greater management expertise.

Outsourcing could be a solution to providing the needed management expertise for the foodservice function.

Based on the large number of Division I athletic programs already outsourcing at least one area of their operations, it is likely that further outsourcing options will be explored in the future. Therefore, this study has implications for a number of constituencies involved in decisions related to outsourcing, such as athletic directors, athletic business managers, foodservice managers, facility managers, college and university foodservice directors, the NCAA, conference offices, and firms partnering with collegiate athletic programs to perform outsourced functions. Information generated by the study can also be used to provide benchmarks for comparison among peers and competitors. In addition, the study will offer insight about the outsourcing preferences of FBS institutions as compared to their FCS counterparts. Finally, and most importantly, this study will contribute to a clearer understanding of the issues pertaining to the outsourcing of foodservice operations than previously available – information which can be used by the various impacted constituencies in the strategic planning process.

Assumptions

This research was conducted under the following assumptions:

- Each respondent would possess enough knowledge of the foodservice operations at their institution‘s home football stadium to answer each of the items knowledgeably.
- The football stadium is the most important athletic facility for NCAA Division I athletic programs in terms of generating revenue from foodservice operations.

Limitations

Not all Division I athletic programs‘ teams play at institutionally owned facilities. Notable programs including the University of Pittsburgh, University of South Florida, University of Miami, University of Southern California, and University of California at Los Angeles have lease agreements with off-campus stadiums owned by outside parties to host the institution‘s home football games. Institutions that rent a facility for their games receive varying shares of the revenue generated by concessions (Steinbach, 2000). For example, the University of South Florida, which plays its home football games at Raymond James Stadium, does not receive any of the revenue generated by food and beverage sales at their home games (Helgeson, 2007). Others, such as the University of Arkansas Razorbacks, split home football games between sites. The Razorbacks play the majority of their home football games on campus in Fayetteville, but also play annually in Little Rock. Also, some rivalry games, such as the annual matchup between the University of Florida and the University of Georgia, are played at a neutral site (i.e., Jacksonville, FL) instead of alternating between the institution‘s campuses. However, the vast majority of Division I football programs play most, if not all, home games at a single institutionally owned facility.

Another limitation for this study was the fact that oversight of foodservice operations, whether that be supervising an in-house foodservice unit or serving as liaison to an outsourced contractor, is not assigned consistently across organizational structures of Division I athletic programs. While oversight typically falls to an athletic administrator in the areas of business operations, facility management, or event management, a disparity exists in the seniority and functional duties of the individual administrator with oversight of foodservice operations. For the purposes of this study, oversight of foodservice operations included the following:

- oversight (as opposed to direct management duties) of an in-house concessions unit;
- serving as athletic department liaison to an institutional dining services unit that manages athletic foodservice;
- serving as athletic department liaison to an outsourced concessionaire; or
- serving as athletic department liaison for matters such as foodservice to an off-campus facility not owned by the institution where the institution plays its home football games.

Finally, this study was limited by the many different possible foodservice arrangements available to institutions at their home football stadiums. For example, an institution that indicated it outsourced one part of its football stadium foodservice operations was classified as outsourcing, even if the remainder of their foodservice operation was actually self-operated. Further, for the several institutions that indicated a booster group had a role in foodservice management the booster group was treated as an arm of the athletic program as opposed to an independent organization.

Definition of Terms

For the purpose of achieving a clearer understanding of this study, the following terms must be defined:

Bowl Championship Series (BCS): ~~–~~An arrangement of five bowl games that are managed by the 11 [FBS] conferences and the University of Notre Dame together with the local bowl committees" (Bowl Championship Series, n.d.). The winner of the following conferences automatically earns an invitation to a BCS bowl game: Atlantic Coast Conference, Big East Conference, Big Ten Conference, Big 12 Conference, Pac-10 Conference, and Southeastern Conference. These six conferences are regarded as the premier college football conferences.

Control: Control was defined as the institution (athletics or any other college or university department) having authority (e.g., institution self-operates foodservice or selects outsourced foodservice contractor) over the foodservice operations at the stadium where the institution primarily plays its home football games.

Division I: One of three membership classifications in the NCAA governance structure. Division I is regarded as the highest level of competition.

Foodservice: "The business operation that prepares, delivers and sells food and beverage items to patrons" (Farmer, Mulrooney, & Ammon, 1996, p. 191). According to Farmer et al., "the term concessions and food service are synonymous, often being used interchangeably" (p. 193). The term can be found presented as both *foodservice* and *food service* in the literature. The term will be presented as one word, foodservice, for this study. In addition, the term *concessions* will be used interchangeably with the term foodservice in this study.

Football Bowl Subdivision (FBS): Revised title of the NCAA classification formerly known as Division I-A.

Football Championship Subdivision (FCS): Revised title of the NCAA classification formerly known as Division I-AA.

National Collegiate Athletic Association (NCAA): Voluntary association that is the largest and most powerful governing body in intercollegiate athletics.

Outsource: "Taking work away from internal resources and giving it to 'outsiders,' other companies that specialize in the work" (Bounds & Lamb, 1998, p. 27-28). Outsourcing is sometime referred to as *contracting out*.

Per caps: ~~–~~Per capita sales are the primary standard that a concessionaire uses to analyze an event. ~~_~~Per caps,' or the average purchase per person per one visit, are the common measure of concession sales. Per capita sales are determined by dividing the actual turnstile attendance into the gross (total receipts less sales tax) concession sales. This number indicates the average expenditure per customer." (Bigelow, 2004, p. 420)

Premium seating: Seating options at a sports facility that often come with access to amenities and higher quality food and beverage not available to general ticket holders attending the same event. Examples of premium seating include club seating and luxury suites.

Self-operation: The organization ~~–~~controlling the entire food service [*sic*] operation, from procurement of supplies and employees to supervisory control, scheduling and the resultant profit or loss" (Farmer et al., 1996, p. 191). Self-operation is sometimes referred to as operating *in-house*.

Summary

Institutions of higher education in the United States are regularly confronted with difficult financial decisions, but perhaps more so in recent years. Colleges and universities are requiring that their various organizational units, including intercollegiate athletics, engage in strategic planning to identify areas for revenue growth and expense reduction. The outsourcing of one or more functions has been identified as a strategy that has the potential to achieve both aims. Intercollegiate athletic programs, particularly those at the Division I level, frequently engage in outsourcing. Foodservice is one function that is frequently outsourced by Division I athletic programs.

Chapter II:

Review of Literature

The review of literature will begin with a general overview of outsourcing, with special emphasis placed on its applicability to higher education administration. Next, outsourcing in intercollegiate athletics will be covered, paying particular attention to the decision whether or not to outsource foodservice operations. Finally, issues and trends related to foodservice operations in major intercollegiate and professional sport will be addressed.

Outsourcing

Bounds and Lamb (1998) defined outsourcing as "taking work away from internal resources and giving it to 'outsiders,' other companies that specialize in the work" (p. 27-28). Handfield (2006) characterized outsourcing as "a strategy by which an organization contracts out major functions to specialized and efficient service providers, who become valued business partners" (para. 5). Outsourcing is the opposite of self-operation, or the handling of a task internally by an organization. According to David (2001), outsourcing represents a shift away from the "historical pursuit" (p. 166) of firms in some U.S. industries to seek ownership of suppliers, a strategy known as backward integration.

Greaver (1999) argued that the activities involved in outsourcing are "recurring" (What is outsourcing? section, para. 1) activities whose external transfer is outlined in contractual form. According to Greaver, it is the fact that truly outsourced activities are recurring, thereby distinguishing contractually outsourcing an activity from the hiring of a consultant. Greaver also stated that outsourcing involves a transfer of the "factors of production" (What is outsourcing? section, para. 1) and decision making rights along with the activity.

Organizations may choose to outsource any of a variety of functions that were formerly handled internally. Functions frequently outsourced by traditional business entities include accounting, payroll processing, marketing, research and development, and manufacturing (Bounds & Lamb, 1998, p. 28). Corbett (2004) stated that outsourcing has become such a common business practice that ―many of America‘s largest and most successful companies are also the world‘s top providers of outsourcing services" (p. 3).

According to Handfield (2006), reasons traditional businesses outsource are to reduce and control operating costs, improve host company focus, gain access to world-class capabilities, free internal resources for other purposes, and share risks with a partner company. It was also suggested that if ―a function is time-consuming to manage or is out of control" or ―insufficient resources are available internally," (Handfield, 2006, Why do companies outsource section, para. 1) a firm may look to outsource. Organizations that may otherwise be able to perform a specific function or service, but are unable to do so due to time constraints, may choose to outsource.

While there are a variety of positive reasons a firm may choose to outsource part of its operations, there are also potential complications. Corbett (2004) identified what he called ―barriers" (p. 17) to outsourcing. These barriers include loss of control, loss of flexibility, negative customer reaction, employee resistance, and the assumption that an activity is too critical to be outsourced. Thus, outsourcing efforts must be carefully planned.

Outsourcing in Higher Education

Outsourcing has influenced the strategies employed by many organizations, including institutions of higher education. The terms outsourcing and privatization are commonly used interchangeably when discussing the contracting out of an activity by public colleges and universities. However, some scholars have drawn a distinction between the two terms.

According to Priest, St. John, and Dykstra Boon (2006), privatization is ―the process of transforming low-tuition institutions that are largely dependent on state funding to provide mass enrollment opportunities at low prices into institutions dependent on tuition revenues and other types of earned income as central sources of operating revenue" (p. 2). Priest et al. classified outsourcing as a ―special form of privatization" (p. 2). The assertion by Priest et al. that outsourcing is a form of privatization echoes an earlier claim by Phipps and Merisotis (2005) that ―outsourcing is a form of privatization that generally refers to a higher education institution's decision to contract with an external organization to provide a traditional campus function or service" (p. 1).

Outsourcing is quite common in higher education. According to Gose (2005), ―the [outsourcing] trend [in higher education] is being fueled by cutbacks in federal and state support for colleges, by a growing consensus that colleges should focus on teaching and research, and by corporations that see an attractive market opportunity on the nation's 3,500 college campuses" (para. 1). According to one 2002 study ―over 90 percent of institutions outsource at least one service on campus, and almost 80 percent outsource two or more services" (NACUBO, 2002). In fact, outsourcing has become such an integral part of colleges' business strategy that there are firms that specialize in coordinating all of an institution's outsourced services (Fain, 2005).

Many benefits of outsourcing for institutions of higher education have been identified. As quoted in Menditto & Dight (2007), Pifer contended that ―the benefits of outsourcing include experience, an outside perspective, strong knowledge of best practices, and little burden on staff" (Getting the job done section, para. 1). Whitmore (as cited in Gose, 2005) found that cost savings and revenue generation were the most popular reasons for outsourcing in higher education. *American School & University's 7th Privatization/Contract Services Survey* (as cited

in Agron, 2001), conducted in 2001, found that higher-education institutions most often chose outsourcing for better equipment (41.3%) and time-savings (34.9%). Improved service quality is another frequently cited reason for outsourcing by higher education institutions. It is apparent that there are a variety of benefits to be gained by colleges and universities from outsourcing. However, the importance placed on a specific benefit appears to be circumstantial.

Despite its apparent benefits, outsourcing does have its drawbacks for institutions of higher education. Frequently cited outsourcing concerns include corporate intrusion or corporatization, loss of institutional identity or uniqueness, decreased institutional loyalty (E. Goeres, personal communication, 2009) and loss of control. Other drawbacks cited include a loss of potential revenue to be gained through self-operation (Whitmore, as cited in Gose, 2005) and a negative impact on the already low wages earned by auxiliary service employees (Gose, 2005). Pifer (as cited in Menditto & Dight, 2007) contended that institutional learning from self-operation can serve as a valid reason to not outsource a function or service. Finally, if a contracted service provider were to cease operations, the college or university would still be expected to perform the function or provide the service that was previously outsourced.

Privacy issues must also be considered when deciding to outsource. As more higher education institutions explore or decide to outsource functions that involve access to student records, Family Educational Rights and Privacy Act (FERPA) regulations must be considered. Recognizing the increased need for access to student records by contracted firms, the United States Department of Education revised existing regulations in 2008 to accommodate contractors, volunteers, and other third parties, allowing personally identifiable information to be disclosed to them provided certain conditions are met (NACUBO, 2009a).

Colleges and universities have a variety of business functions and auxiliary services to consider for outsourcing. In a National Association of College Auxiliary Services published guide entitled *Outsourcing and Privatization of Campus Services*, the organization listed over 100 different campus operations that can be outsourced (Davies, 2005). Activities commonly outsourced by institutions of higher education include, but are not limited to, bookstore operations, foodservice, custodial duties, printing, graphic design, laundry, security, parking operations, website design and operations, student housing, alumni relations, financial management, computer services, grounds maintenance, transportation (busing), event management, loan administration (Hignite, 2006), and email administration (Carnevale, 2008).

As is to be expected with so many outsourcing options available to an institution, some functions are outsourced more frequently than others. A survey of 112 attendees at the 2002 NACUBO conference revealed that foodservices and bookstore management were the two most outsourced campus functions, with 61% and 52% respectively outsourcing those functions (–UNICCO Releases," 2002). A survey conducted of 325 colleges and universities several years after the NACUBO survey found that of the responding institutions, 87% outsourced foodservices and 81% outsourced bookstore operations (Whitmore, as cited in Gose, 2005). However, complete data on outsourcing in higher education is not available because there are dozens of functions being outsourced, and no association compiles data for all functions (Gose, 2005).

A quick review of the list of the functions and services that are commonly outsourced by institutions of higher education reveals that outsourcing is utilized to meet non-academic needs. However, some observers (Kirp, 2002; Phipps & Merisotis, 2005) argue that even instruction, the central function of higher education, is being outsourced through the employment of part-

time and contract faculty. The view that hiring part-time faculty constitutes outsourcing is not universally held. In a survey conducted by Norris and Olsen (as cited in Phipps & Merisotis, 2005) many respondents indicated that the hiring of part-time faculty was not outsourcing because "the institution does not contract with an external organization, standards of work are not determined by a contractor, and the individual faculty members are under the direct supervision of the department chair" (p. 6).

Despite the many campus functions that have been outsourced successfully by a number of institutions, there are some functions that are better handled internally. Some more notable functions where outsourcing has not worked financially for at least one party to the contract include health services and alumni relations (Gose, 2005).

The outsourcing trend in higher education is unlikely to slow anytime soon. According to Whitmore's research (as cited in Gose, 2005), 51% of respondents indicated *definitely yes* and 37% indicated *probably yes* to an item asking if their institution will continue to use outsourcing and search for additional areas for outsourcing. It should be noted that this trend is counter to the climate just a few years earlier during better economic times, when *American School & University's 7th Privatization/Contract Services Survey* found that "the percentage of colleges and universities that outsource five or more services shrunk to 34 percent [in 2001] from 44 percent in 1999" (Agron, 2001, para. 4).

As Greaver (1999) suggested in his explanation of outsourcing, the contractual relationship between the outsourcing organization and the service provider is a fundamental element of the concept of outsourcing. According to Davies (2005), the contractual agreement between a higher education institution and the contracted company depends on many variables, including whether an institution is public or private and the type of service being outsourced.

The contracts can be short-term (e.g., one year) or long-term (e.g., 10 years), but Davies reported that both parties to the agreement normally favor longer contracts with options to renew. "Typically colleges opt for longer contracts because they offer more-favorable percentages. Vendors often like longer contracts too because they want the certainty of an extended commitment before they invest in equipment or renovation at the campus site." (Davies, 2005, para. 24).

Outsourcing in Intercollegiate Athletics

As noted earlier, the fear of corporate intrusion into higher education is a concern when deciding to outsource a campus function or service. It is perhaps fitting that the campus unit that has already become too commercialized in the eyes of many critics—the athletic department—also has functions and services with potential for outsourcing. Not surprisingly, Division I athletic programs have been willing to explore the outsourcing of a variety of functions and services.

While many functional areas of the college athletic department can be outsourced, the outsourcing of marketing activities has received the most attention from media and scholars alike. This attention is warranted for several reasons. First, the outsourcing of the marketing function, or just a subset of marketing activities, is quite prevalent in major college athletics. According to a study by Li and Burden (2002), 61.4% of the responding Division I FBS and FCS (then known as I-A and I-AA, respectively) institutions outsourced part or all of their athletic marketing operations. Irwin, Sutton, and McCarthy (2008) reported that "at least half of all major American collegiate athletic programs have outsourced a large portion of their sponsorship sales responsibilities to prominent agencies" (p. 174). Even some Ivy League members such as the University of Pennsylvania have outsourced their athletic marketing (Moyse, 2008).

Secondly, athletic marketing and multimedia partnerships often result in guaranteed revenue for the outsourcing institution. Some institutions have received rather significant guarantees for their rights. For example, in 2005 the University of Kentucky (UK) signed a deal with Host Communications worth $80 million in rights fees over 10 years, allowing Host to handle all of UK's multimedia rights, except for the signage in Rupp Arena (Johnson, 2005). In 2009, Ohio State University finalized an agreement with IMG College for a guaranteed $110 million over 10 years for the Buckeyes' marketing rights and some media rights (Smith, 2009). According to Zullo (2005), general managers of outsourced Division I athletic department marketing accounts named radio broadcast of games and permanent signage at athletic facilities as the best selling inventory items for sale. Zullo also reported that the respondents identified football and men's basketball as the sports that were of most interest to corporate sponsors or partners.

Marketing functions and services are not the only athletic department areas that can be outsourced though. Hall, Marciani, Cooper, and Phillips (2010) found that outsourcing was used by more than 60% of Division I collegiate programs when hiring security, fire, and medical personnel for football game day operations. The internet boom of the late 1990s led to many well-known athletic programs outsourcing the day-to-day operations of their department's website (Suggs, 2000). The trend has continued throughout the next decade, with firms such as CSTV.com managing a network of approximately 215 official college athletic websites (CSTV Networks, Inc., 2007). Other common areas for athletic department outsourcing include, but are not limited to, facility management (Steinbach, 2004), event management, athletic training, ticket management, licensing, merchandising, and foodservices. Even functional areas such as ticket sales (Lombardo & Smith, 2009) and some recruiting services (Tysiac, 2009), which have

traditionally been managed internally, are being outsourced by some Division I athletic programs.

Further illustrating the prevalence of outsourcing in intercollegiate athletics, even the National Collegiate Athletic Association (NCAA), the athletic governing body of the Division I institutions, engages in outsourcing. The Association's drug testing program has been outsourced to The National Center for Drug Free Sport since 1999 (Copeland, 2002). The Initial-Eligibility Clearinghouse, founded in 1993 to determine a student-athlete's eligibility upon enrollment, was outsourced to American College Testing (ACT), Inc. for more than a decade before being brought in-house in 2007 (Hosick, 2007). One critic (Maese, 2009) of the NCAA's enforcement policies suggested the organization should outsource that function to increase objectivity in investigations of alleged rule violations.

Self-Operating Foodservice Operations

Sport organizations such as college athletic programs have two basic options when it comes to the management of the foodservice function: they can do it themselves (i.e., self-operate) or they can outsource (i.e., contract out) all or part of their food and beverage operations to an outside organization (Ammon, Southall, & Blair, 2004; Bigelow, 2004). In a university setting, the foodservice at athletic facilities may technically be handled in-house, but not by the athletic department. This occurs when the institution's internal general foodservice department (or some other institutional department) also manages concessions at the athletic facilities (Higgons, 2006). Motsinger, Turner, and Evans (1997) suggested a third option, one in which concessions are managed by volunteer groups such as booster clubs; however, this situation is highly uncommon in professional and major collegiate sport, particularly for the sports of football and men's basketball. One notable example is the National W Club at the University of

Wisconsin, which has been the official concessionaire of Badger athletics since 1962 (National W Club, n.d.). While they may not ultimately be responsible for oversight, volunteer groups are commonly found among the staff operating stands on event days. Graham and Ward (2006) suggested that facility managers should consider a number of factors when deciding whether to operate in-house or outsource foodservice, including the ~~a~~available labor pool, level of staff skills, staff training requirements, labor laws, financial resources, capital equipment, and the manager's time and ability to effectively oversee such an operation" (p. 141).

The literature presents many supporting points for in-house management of foodservice operations. Perhaps the most cited reason for keeping foodservice operations in-house is control (Bigelow, 2004; Deckard, 1993; Farmer et al., 1996; Graham & Ward, 2006; Hilkemeyer, 1993; Waddell, 1994). The in-house operation has complete control over inventory, staffing, scheduling, product offerings, pricing, and customer service. However, this control comes with a cost. Bigelow (2004) estimated that foodservice issues can take up to 40% of a manager's day at a facility that self-operates this function.

Another frequently cited reason to operate foodservice in-house is the fact that revenue generated does not have to be shared with a contracted concessionaire, hopefully increasing profitability in the process (Bigelow, 2004; Farmer et al., 1996; Graham & Ward, 2006; Waddell, 1994; Bletner, as cited in Waddell, 1994). Likewise, if management decides to deemphasize foodservice as a revenue source, and offer it merely for the convenience of spectators, ~~t~~there may be no minimum acceptable profit level" (Bigelow, 2004, p. 423).

Other reasons cited in the literature for operating in-house include the ability to respond quickly and flexibly—especially to the needs of local events (Bigelow, 2004; Graham & Ward, 2006; Bletner, as cited in Waddell, 1994), a prior bad experience with a contracted foodservice

provider (Bigelow, 2004), the potential for sponsorship revenue (Hilkemeyer, 1993) and in-kind donations (Deckard, 1993) derived from contracts with suppliers, and the fact that if a facility creates enough volume it may be able to operate as efficiently as an outside contractor (Bigelow, 2004). Convenience also should not be overlooked as a deciding factor, as some facilities favor in-house operation to save the organization the trouble of having to accept bids from concessionaires, or worse yet, replace a poorly performing or dishonest firm that has driven away customers (Ammon et al., 2004; Farmer et al., 1996; Bletner, as cited in Waddell, 1994). Dewes (as cited in Waddell, 1994) listed less realistic reasons, at least as viewed from the present day, that foodservice was kept in-house by some colleges —so that the booster club can be directly involved with the athletic department…. and the other is to give wayward former athletes something to go into" (para. 10).

There are of course disadvantages to operating concessions in-house. With complete control, comes complete responsibility (Farmer et al., 1996; Graham & Ward, 2006). Unlike with a regional or national concessionaire, the foodservice manager at the self-operating facility may not be very experienced or have a network to rely upon (Farmer et al., 1996). If the lead manager for the foodservice function where to leave, the organization would likely have to recruit externally or promote an underqualified employee from within, unlike a regional or national concessionaire that can relocate a manager from another facility if necessary (Bigelow, 2004, p. 426). Thus, even if an athletic department decides to operate foodservice in-house, it still must hire a competent manager for this function (Bigelow, as cited in Lee, 2001). Finally, if the facility is publicly owned and operated, a concessions manager should expect bureaucratic policies, and sometimes even political pressures, to influence decision making (Farmer et al., 1996; Graham & Ward, 2006).

Outsourcing Foodservice Operations

If an athletic program decides to not operate foodservices internally, it may choose to outsource all or part of the function to an external firm. In a university setting, it is not unheard of for the contract for the institution's general foodservice management to also extend to the management of concessions at the institution's athletic facilities (Higgons, 2006; Bigelow, as cited in Lee, 2001; Steinbach, 2000). The most common arrangement is what Bigelow (2004) referred to as a commission agreement, in which the contracted foodservice provider "pay[s] the venue operator a percentage of the concessionaire's gross receipts. The concessionaire supplies and pays all costs for payroll, product, and operating supplies; and the concessionaire retains all profits after the above costs are deducted" (p. 428). Commissions paid by concessionaires to professional sport organizations have been estimated to be in the 35% to 50% range (Regan & Bernthal, 2009; Steinbach, 2000; Grinstead, as cited in Steinbach, 2008a). Many benefits have been identified for the outsourcing of foodservice operations. Some of the benefits of outsourcing all or part of the foodservice function include the following:

- guaranteed revenue (Steinbach, 2000);
- concessionaire's expertise and proven systems (Ammon et al., 2004; Bigelow, 2004; Farmer et al., 1996; Graham & Ward, 2006; Steinbach, 2000; Dewes, as cited in Waddell, 1994);
- assistance with foodservice area location and layout planning (Steinbach, 2000; Waddell, 1994; Williams, 2001);
- stronger purchasing and inventory practices (Ammon et al., 2004; Bigelow, 2004; Farmer et al., 1996; Steinbach, 2000; Giourgas, as cited in Waddell, 1994);
- better equipment (Ammon et al., 2004; Farmer et al., 1996);

- additional capital investment (Bigelow, 2004; Farmer et al., 1996; Graham & Ward, 2006; Steinbach, 2000; Drewes, as cited in Waddell, 1994; Giourgas, as cited in Waddell, 1994);
- transfer of risk of liability, particularly if alcohol is sold (Ammon et al., 2004; Farmer et al., 1996; Graham & Ward, 2006);
- more points of sale (Baker, as cited in Steinbach, 2000; Drewes, as cited in Waddell, 1994);
- flexibility in menu offerings (Motsinger et al., 1997; Steinbach, 2000);
- better management succession (Steinbach, 2000);
- less political interference (Farmer et al., 1996; Waddell, 1994);
- increased profitability (Waddell, 1994; Sinos, as cited in Waddell, 1994);
- stronger staffing and scheduling (Bigelow, 2004; Farmer et al., 1996; Graham & Ward, 2006);
- improved cash handling (Bigelow, 2004);
- better adherence to sanitation policies (Bigelow, 2004; Farmer et al., 1996; Graham & Ward, 2006);
- freedom for the organization (e.g., athletic department) to focus on primary organizational goals (Waddell, 1994); and
- contracted firm has a singular focus on foodservice (Sinos, as cited in Waddell, 1994).

Slightly different than the commission agreement, Bigelow (2004) also identified the *management fee agreement* as a possible form of contract between a sport organization and a foodservice provider. Such an agreement dictates that the sport organization pay the concessionaire a management fee, which is ~~t~~typically stated as a percentage of gross receipts and

a profit incentive, which is likely to be stated as a percentage of net profits" (Bigelow, 2004, p. 428). As for expenses and any remaining profit, "the concessionaire supplies all personnel, product, and operating supplies; and the facility operator reimburses the concessionaire for those costs. The facility retains all profits after the above costs are deducted" (Bigelow, 2004, p. 428). Bigelow (2004) contended that the management fee "develops a partnership of mutual interest" (p. 429) lacking in the commission agreement.

One reason cited in favor of in-house operation is to save the organization the trouble of having to replace a poorly performing or dishonest firm that has driven away customers (Ammon et al., 2004; Farmer et al., 1996; Bletner, as cited in Waddell, 1994). If for no other reason than to prevent entering into a contractual relationship with a dishonest firm should the decision be made to outsource foodservice operations, the selection process should be carefully conducted. In order to select the best foodservice company to partner with, Graham and Ward (2006) advised first using a request for qualifications (RFQ) from all interested contractors, followed by a request for proposal (RFP) from contractors that are chosen to continue with the bid process. Graham and Ward continued on to distinguish between the two:

> The purpose of the RFQ is to pre-qualify firms by ascertaining they have the experience, financial ability, knowledge, etc. to provide the nature, level of service, and quality of product desired and identified by the facility. RFPs are then sent to only those firms that have been deemed qualified. (p. 141)

Steinbach (2000) detailed the rest of the process:

> Companies interested in the project then submit bids, which typically include the amount of capital the company is willing to invest up front and the percentage of ongoing

> concessions sales the company is willing to return to the [organization accepting bids]. The provider of the most attractive package gets the contract. (para. 7)

Bigelow (2004) advised that those unfamiliar with the process should hire an external consultant to assist with the entire selection process, not just the RFP stage. Outside expert assistance in the selection process may be necessary for good reason, as the literature revealed a number of factors to consider when selecting a foodservice provider to partner with, including the contractor‘s financial stability and demands (e.g., percentage split) (Neeley, as cited in Farmer et al., 1996), reputation (Neeley, as cited in Farmer et al., 1996), references (Wickner, as cited in Durham, 2006), partnership abilities (Bigelow, 2004), management team strength (Rutherford, as cited in Durham, 2006) and right of approval demands (Bigelow, 2004; Graham & Ward, 2006). The preceding points support Bigelow‘s (2004) assertion that the decision on whether or not to outsource cannot be looked at only quantitatively, but should instead also consider qualitative factors. For example, so that bidding foodservice contractors could fully understand the scope of the foodservice operations out for bid at its institution, the University of Notre Dame invited representatives from each company to a home football game to get an idea of the Notre Dame football game experience (Muret, 2010). It should be noted that such a practice is not exclusive to Notre Dame.

Contractual considerations beyond revenue sharing and fee arrangements must also be examined when choosing between proposals. As for contract length, Farmer et al. (1996) stated that a typical foodservice contract with a sport facility is usually ―5 to 10 years in length” (p. 192). Another interesting dilemma facing higher education institutions and concessions companies is whether to strike a deal for one, some, or all of an institution‘s athletic facilities (Steinbach, 2000). As noted earlier, in higher education contracts are not always specific to

athletic facilities, as it has been a trend in the past for the internal department or outsourced service provider responsible for general campus dining facilities to also manage the foodservice at the institution‘s sport facilities (Higgons, 2006; Bigelow, as cited in Lee, 2001; Steinbach, 2000).

Several observers in the early 1990s (Deckard, 1993; Waddell, 1994) noted that there was a trend toward outsourcing foodservice operations among college athletic departments. This opinion was echoed by others (Lee, 2001; Muret, 2009; Steinbach, 2000) in subsequent years who suggested that intercollegiate athletic programs were a growth area for nationally recognized foodservice firms. While certainly not disagreeing with the sentiment that major intercollegiate athletic programs represented a growth area for private concessionaires, Bigelow (2004) still contended that ―the majority of … collegiate venues either operate concessions in-house or use a local concessionaire" (p. 425). In 2001, Bigelow (as cited in Lee) stated that the number of institutions outsourcing athletic facility foodservice management would continue to grow, but that ―institutions with smaller [athletic] departments, will remain self-operated in order to keep all concessions revenue in-house" (para. 15). Similarly, Deckard (1993) suggested that some university athletic programs did not generate enough concessions revenue to justify interest from a national concessionaire.

While predictions of an increase in the number of college athletic departments outsourcing foodservice operations were common, reports have varied on the number of institutions actually engaging in the practice. A 1999 study put the figure slightly above 50% for Division I institutions (*Revenues from Sports Venues College Edition,* as cited in Steinbach, 2000). In 2001 concessions industry experts estimated that only 30% of the college concessions market was outsourced (Lee, 2001). Both figures are in stark contrast to professional sport,

where 88% of major league (i.e., Major League Baseball [MLB], National Basketball Association [NBA], National Football League [NFL], National Hockey League [NHL]) facilities open or under construction in April 2008 had contracts with independent companies to operate their general concessions (~~"K~~ey Concessionaires," 2008). Steinbach (2008a) reported that only three of the 32 NFL franchises self-operate foodservices. In their study on concession cash distribution methods at indoor sporting facilities in the United States, Byrd and Turner (1993) found that 39% of responding indoor facilities with seating capacities between 5,001-15,000 outsourced foodservice operations to a national concessionaire, compared to 35% of indoor facilities with seating capacities of 15,001-30,000.

An institution need not contract with only one company to provide foodservice at athletic events. Based on the terms of the contractual agreement, it is possible that an institution could have different foodservice providers for different parts of the same athletic facility (i.e., general seating areas, premium seating areas) (Steinbach, 2000). Texas Tech University is such an example, outsourcing the management of football stadium general seating concessions to Ovations Food Service and premium seating foodservice to ClubCorp (Cook, 2010). However, this arrangement however does not appear to be common in intercollegiate athletics. Steinbach (2008a), writing about professional sport franchises, noted that ~~"n~~o more than two general concessionaires typically hold contracts with the same sports franchise" (para. 8). In such a situation the general concessionaire usually possesses the most operating influence (Grinstead, as cited in Steinbach, 2008a).

Subletting is also become an increasingly common practice among facilities and concessionaires. DePaola (as cited in Steinbach, 2008a) likened this process to that of a mall food court, but in this case the contracted concessionaire sublets one or more spaces to third-

party providers in exchange for a prearranged fee or percentage. Motsinger et al. (1997) contended that this strategy is beneficial for all involved parties.

It is important to note that Division I athletic programs do not always have control of foodservice operations at some or all of their home athletic contests. The unit operating concessions at athletic events does not always report directly to the athletic department. In some cases, regardless of whether foodservice is operating in-house or outsourced, the unit may report to another institutional department such as business or auxiliary services (Higgons, 2006).

Further, many prominent Division I programs football and men‘s basketball teams play in facilities owned by an entity other than the institution. Some notable football examples include the University of Miami, University of Pittsburgh, University of California at Los Angeles (UCLA), and the University of South Florida. Notable men‘s basketball examples include Georgetown University, University of Kentucky, and Seton Hall University. Further complicating matters is that some institutions split their men‘s basketball home games between an institutionally-owned facility and a facility owned by an entity other than the university. The University of Connecticut, Villanova University, and St. Johns University are notable examples of institutions that play multiple home men‘s basketball games in different facilities. While less common, some institutions such as the University of Arkansas Razorbacks, split home football games between sites. The Razorbacks play the majority of their home football games on campus in Fayetteville, but also play annually in Little Rock. Also, some rivalry games, such as the annual matchup between the University of Florida and the University of Georgia, are played at a neutral site (i.e., Jacksonville, FL) instead of alternating between the institution‘s campuses. It is common in these instances for the athletic program to have little to no control over foodservice operations or revenue-sharing (Steinbach, 2000).

Motsinger et al. (1997) compared the concession operations in three different types of North Carolina sport venues. The researchers selected five coliseums (i.e., arenas), five auto race tracks, and five minor league baseball stadiums for their study. Of the arenas in the study, three served as full-time homes to men‘s college basketball programs, while the other two hosted only the occasional regular season and tournament game. Motsinger et al. found that only two of the participating facilities, both arenas, in the study outsourced their foodservice operations, while ~~“a~~ll minor league baseball stadiums and all auto race tracks employed in-house concession operations.” (Motsinger et al., 1997, p. 49).

Brown, Daughtrey, and Sawyer (2001) examined ~~“th~~e applicability of the Goldstein, Kempner, and Rush model in determining the choice between private and public management of concession operations of public sport venues” (p. 332-333). According to the authors, ~~“th~~e model was designed as a ten-step process used to determine if public or private management should be utilized in the management of an educational facility or service” (p. 334). The researchers ~~“d~~etermined that the Goldstein model can be used to determine the choice between private and public management of concession operations of public sport venues” (p. 342).

What options exist should an institution decide to outsource the foodservice operations at its athletic facilities? The major concessionaires in the professional sport market include ARAMARK, Levy Restaurants, Centerplate, Delaware North Sportservice, and Ovations. Both Deckard (1994) and Ammon et al. (2004) noted that the foodservice industry has become much more consolidated, primarily through mergers. Several of these firms have formed partnerships with college athletic programs to provide similar services. In 2010, collegiate sports multimedia rights holder Learfield Sports and concessionaire Levy Restaurants formed a joint venture to pursue food contracts at college sports facilities. Levy had previously focused on professional

facilities, but the partnership with Learfield Sports opened up the college market (–Learfield, Levy team up," 2010).

Just as it does with contracts for professional sport teams, the number of institutions contracted by each private concessionaire varies. For example, as of September 2008, Centerplate had agreements with seven college stadiums and five college arenas (–Stepping to the Plate," 2008). Around the year 2000 Sodexho Marriott (now Sodexo) had 40 college and university clients (Lee, 2001; Steinbach, 2000) and ARAMARK had approximately 25 major collegiate accounts (Lee, 2001). While the aforementioned firms are nationally known, Waddell (1994) stated college athletic programs do not necessarily have to go with a national concessionaire, stating that a regional concessionaire may be appropriate given the comparatively smaller scope of the college assignment. Waddell's statement nearly matches Bigelow's (2004) later assertion that –smaller accounts should consider either self-operation or contracts with a smaller regional firm" (p. 423).

Financial Considerations

Concessions are an important part of the financial viability of a sport facility (Ammon et al., 2004; Bigelow, 2004; Fried, 2005; Mulrooney & Styles, 2005). However, the importance of concessions revenue varies from organization to organization (Bigelow, 2004). In college athletics it has been suggested that strained athletic department budgets have resulted in a greater emphasis on concessions as a revenue source (Cohen, 1991). Although Cohen's statement is two decades old, it still holds true today. Around the same time as Cohen's statement, Bigelow (as cited in Ferguson, 1990) commented that –it's amazing to me really how slow it has been for the college market to realize that there is some strong profit to be had in the concession area" (p. 66).

Graham and Ward (2006) contended that "the better opportunities for increasing total revenue [at a sport facility] are from ancillary services [(i.e., food and beverage, merchandise, parking)], particularly those that are creative and new to the facility." (p. 139). Darren Rovell, sports business reporter for cable network CNBC, annually awards his "Minor League Concession Item of the Year" to the minor league baseball team with the most innovative new food item (Rovell, 2009b). The 2009 winner was the West Michigan Whitecaps' Fifth Third Burger, a "4,800-calorie gutbuster with 1.6 pounds of beef, salsa, melted cheese, chili and Fritos" (Rovell, para. 2). These organizations hope that ticket and concession sales will increase as a result of their publicity garnering food offerings. Even those sport organizations without a truly innovative offering are putting more effort into marketing their foodservice offerings so that the fan is aware of all the options prior to arriving at the facility (Fried, 2005). Many facilities also have theatrically-designed foodservice areas so fans can watch their food being prepared in hopes of increasing sales (Fried, 2005; Bigelow, as cited in Herrick, 2002; Steinbach, 2007a). Finally, sales can be increased by offering concession items for sale in collectible packaging, such as event-specific souvenir cups (Muret, 1999b; Romano, 1993).

Facility managers have a distinct built-in advantage when it comes to foodservice sales—a captive audience (Byrd & Turner, 1993; "Cash in," 1986; Wakefield & Sloan, 1995). Further, fans have been accustomed to paying higher prices for food and beverage at entertainment events (Higgons, 2006). Despite the high markup, Bigelow (2004) reported that most concessions operations actually "operate on razor-thin margins" (p. 421). Steinbach (2008a) suggested that most fans do not recognize this fact when complaining about food prices at sporting events.

According to Hilkemeyer (1993), organizations need to capitalize on the captive fan by not permitting outside food and beverage to be brought into the facility. Further, these captive

fans spend hours at stadiums and arenas due to non-game-related attractions at the facility, often arriving right from work for evening games (Bynum, 2002; Graham & Ward, 2006; King, 2007). Fans expect to have the opportunity to purchase food and beverages at sporting events (Graham & Ward, 2006; Mulrooney & Styles, 2005). In fact, it is possible for fans to eat pregame, during the game, and postgame in some sport facilities (Cohen, 2005).

Bigelow (2004) identified product cost, along with payroll, as the two major controllable foodservice costs. Fried (2005) agreed, stating that "the concession manager spends a significant amount of time on … inventory management (ordering, pricing, tracking, and disposing of supplies and products)" (p. 230). In order to reduce inventory costs, Murawski (1991) suggested that concession managers should develop relationships with suppliers and seek multiple bids on products and supplies.

Holtzman (2001b) advocated distinguishing between food and beverage when calculating cost of goods sold. Further, he stated that some facilities take it a step further, separating beverages into different categories (e.g., fountain soda, bottled soda and juice, bottled water, beer, wine, liquor, hot chocolate, tea) to provide a more detailed financial analysis. For example, should a facility sell fountain soda, bottled soda, or both? Holtzman stated that "the general profit margin on fountain soda is sharply higher than bottled nonalcoholic beverages like soft drinks and juice" (para. 11). However, some fans prefer bottled drinks over fountain drinks, leading to the availability of both at many sporting events. In fact, as it pertains to alcoholic beverages, customers prefer bottled beer to draft beer due to perceived cleanliness, quality, and trust issues (Blavat, as cited in Durham, 2006).

In order to properly analyze the foodservice sales at an event, a common standard had to be developed. Per capita sales, or "per caps," are commonly used to assess the foodservice revenue generated at an event. Bigelow (2004) described per caps as follows:

> Per capita sales are the primary standard that a concessionaire uses to analyze an event. "Per caps," or the average purchase per person per one visit, are the common measure of concession sales. Per capita sales are determined by dividing the actual turnstile attendance into the gross (total receipts less sales tax) concession sales. This number indicates the average expenditure per customer…. Accurate per caps allow a facility manager and a concessionaire to measure the concessionaire's performance against industry standards and against their own past performance. (p. 420)

Bigelow (2004) reported that the average per cap for a college football game (at which beer was not sold) was $1.50 to $3.50. Another figure puts the per cap range for a college football game at $1.50 to $8.00 (Bigelow, as cited in Graham & Ward, 2006). Concessions revenue for an event can be projected ahead of time by multiplying the expected per capita sales by the estimated attendance of the event (Bigelow, 2004). Fried (2005) suggested that per caps be monitored immediately after an event to allow for proper analysis of product offerings and pricing. While per caps are the industry standard, others (Sergi, as cited in Steinbach, 2009b) have suggested that transactions per fan is the best measure for sport organizations focusing on increasing revenue through experience enhancement.

Historically, accounting issues have made it difficult to compare the revenues and expenses of collegiate athletic departments. The concessions section of the income statement is a good example of this, as there is little consistency among how institutions report this revenue (Sandy & Sloane, as cited in The Congress of the United States, 2009; Litan, Orszag, & Orszag,

2003). Litan, Orszag, and Orszag (2003) stated that ―some schools attribute items such as concession sales at events to athletic programs, while others attribute such sales to the food services budget of the general university" (p. 23). In their study of 17 institutions' accounting practices, it was revealed that ―about half the respondents indicated that all concessions sales were counted as revenue for the athletic department, and the other half indicated that at least part of such sales were not attributed to the athletic department" (Litan et al., 2003, p. 22).

According to Fulks (2010), the revenue category ―concessions/programs/novelties" accounted for, on average, 3% of the total generated revenue for an FBS institution in fiscal year 2009. The fiscal year percentage of total generated revenue averages for the concessions/programs/novelties category for FCS institutions was only 1% (Fulks, 2010). Some prominent athletic administrators criticized the 2008 version of the same report, claiming that it under-attributed revenue from sources such as foodservice and merchandise sales to athletic programs, resulting in lower athletic department-generated revenue figures (Kelderman, 2008). However, even calculating conservatively based on the 3% figure, revenue from the category ―concessions/programs/novelties" can be very significant for those FBS athletic programs generating tens of millions of dollars annually.

Of course, the amount of concessions revenue can vary greatly from institution to institution, even among FBS members. Fulks (2010) reports that the median value for the category ―concessions/programs/novelties" for FBS institutions in fiscal year 2009 was $866,000. It is important to note that this figure is not exclusive to revenue generated at football games but instead includes all athletic department ―concessions/programs/novelties" revenues. To illustrate the differences between institutions, Louisiana State University (LSU) reportedly

had concessions revenue of more than $700,000 for just one home football game versus the University of Florida during the 2007 season (Griffin, 2008).

Service Considerations

When budgeting for foodservice, concession managers must weigh the tradeoff between financial and service considerations. According to Herrick (2002), providing "superior customer service is one of the highest of priorities when a new facility is being designed or renovated, and the food and beverage/concessionaire operations is one of the more visible ways that this is accomplished" (para. 1). Bigelow (2004) believed that "a conflict may arise when a facility manager wants a higher level of customer service than the concessionaire's budget allows" (p. 422). Fried (2005) contended that a facility must decide if the primary focus of its foodservice efforts is "revenue generation or service" (p. 289). Friedland (2007) suggested that some athletic departments only expect to break even on concessions sales, opting to offer food and beverage as a service rather than a revenue source. Getting fans through the line quickly is very important, as volume is a key determinant in the financial success of a foodservice operation (Bigelow, as cited in Bynum, 2002; Holtzman, 2001a). Cohen (2005) compared the dilemma between speed and service to the difference between McDonald's "Millions Served" and Burger King's "Have It Your Way" slogans. Line speed was such a concern to some students at the University of Alabama that a resolution was introduced at an October 2010 meeting of the institution's Student Government Association to create drink-only lines at home football games (Cannon, 2010). Some sport organizations, such as the NBA's Washington Wizards, have gone so far as creating concessions express lines for season ticket holders (darrenrovell, 2011).

Beyond simply meeting the hunger and thirst needs of those in attendance, foodservice has come to be viewed as a key component of an organization's customer service and image

management efforts (Fried, 2005; Graham & Ward, 2006; Holtzman, 2001a; Motsinger et al., 1997). In discussing their event planning model, *The Event Pyramid*, Brown, Sutton, and Duff (1993) identified poor concessions service as one area that can disenfranchise patrons, regardless of the quality of the event. This viewpoint is likely to continue in the future, as Greenwell, Fink, and Pastore (2002) reported that based on their study of fans at a minor league hockey game, younger fans had a less favorable opinion of facility service personnel (including foodservice workers) than older fans. One explanation offered by the authors was that younger fans have higher expectations of service personnel because they have grown up attending events at "newer facilities with a bevy of amenities and conveniences" (p. 240). From a practical standpoint, perhaps Murawski (2001) summed the importance of foodservice customer service quality best with his comment about the high degree of interaction between foodservice workers and fans:

> Other than contact through the ticket office, fans have more direct contact with the concessions staff and game program sellers than possibly any other part of the athletic department. Through these game-day transactions, fans develop an impression about the athletic department as a whole. (para. 4)

Even when foodservice is outsourced, poor service still reflects back on the sport organization. For example, the athletic director at Western Kentucky University penned an open letter to fans in 2010 apologizing for service issues caused not by the institution, but by its stadium concessionaire Centerplate (Western Kentucky University, 2010). Perhaps due to the perception that existing foodservice providers could not offer the level of service likely to be expected at their new stadiums, the New York Yankees and Dallas Cowboys (along with partner Goldman Sachs) formed Legends Hospitality in 2008 to manage foodservice operations at their stadiums (Rovell, 2008).

Foodservice quality has historically centered on quick and efficient service (Motsinger et al., 1997), as well as taste, freshness, and warmth (Wakefield & Sloan, 1995). For example the practice of hawking is so popular at sporting events because it "generates substantial sales as many patrons will utilize this convenience to purchase food and beverage, rather than miss any of the event action" (Farmer et al., 1996, p. 196). Commonly associated with general seating areas, the hawking of more upscale items can be found in the premium seating areas of some sport facilities (Lansing, as cited in Herrick, 2002). Hilkemeyer (1993) suggested that promoting the convenience, quality, value, and social aspects of a facility's foodservice operation can help offset fan frustration over not being permitted to bring food or beverage into the facility. However, efforts to provide quick and efficient service should not interfere with a spectator's ability to enjoy the event. Rothschild (2006) provided the example of an overzealous concessions hawker blocking sightlines and distracting fans. Higgons (2006) suggested timing concessions lines, as well as the use of surveys, secret shoppers, management walkabouts, and taste tests to measure service levels.

Wakefield and Sloan (1995) examined the effect of spectator perception of foodservice, along with other select stadium factors, on the decision to stay at a current game and attend future Southeastern Conference (SEC) football games. They included foodservice as a factor in their *sportscape* model, proposed to illustrate those facility factors that influence a fan's desire to stay at or return to a particular sport facility. The study implied that "food service quality affects spectators' desire to stay at the stadium" (p. 165). Further, the study found that "spectators were significantly ($p < .001$) less likely to agree that stadium food prices were reasonable than they were to agree that they liked the stadium food" (p. 165), leading the researchers to suggest that foodservice managers might want to reevaluate pricing strategies in order to increase sales.

Kelley and Turley (2001) examined the importance of service attributes used by sports fans when evaluating the quality of their experiences at a sporting event. The sample for the study was drawn from fans attending college basketball games "of a university from a major athletic conference in the southeast" (Kelley & Turley, 2001, p. 161). Based on mean importance values, Kelley and Turley concluded that "concession workers, food, and location… are less important [as compared to other factors such as game outcome, seat location, facility cleanliness] for sports fans in the evaluation of the level of service quality associated with their entertainment experience" (p. 163). However, the researchers suggested that the arena's limited concessions offering may have played a role in the low rating. Other findings of note from Kelley and Turley's study include the conclusion that male fans felt that concession-related issues were more important than their female peers and that fans attending one or two games a season found concessions to be more important than fans attending more than five games a season.

Lambrecht, Kaefer, and Ramenofsky (2009) examined the controllable sportscape factors at a PGA TOUR event. Foodservice was one of the factors the researchers included in their analysis. Lambrecht and his colleagues reported that concessions did not have a large impact on spectator satisfaction among their study's respondents.

Technological Considerations

Enhanced technology in and around foodservice areas can improve service, but also increase cost. Concessionaires are continually faced with decisions on whether or not to add new technology. Ferguson (1990) reported that most concessions operators had adopted some form of the electronic or computerized cash register by 1990 due to increased menu offerings and the poor mental math skills of many workers who grew up with calculators. However, an executive

with the National Association of Collegiate Concessionaires (NACC) offered a more recent observation regarding college athletics, estimating to Friedland (2007) that "fewer than 10 percent of colleges and universities have [computerized point of sale systems] for their concessions programs" (Low vs. high-tech systems section, para. 2). Ferguson contended that technology—cash registers in this case—was beneficial in that it reduced mistakes, and consequently cash shortages by about 1%.

According to Rutherford (as cited in Durham, 2006), "the ballpark has traditionally been a cash-only environment" (What is the future section, para. 4). However, the acceptance of electronic payment methods (i.e., credit, debit, smart cards) is now common (Caruso, 1998). More advanced payment methods such as contactless credit cards (Blavat, as cited in Durham, 2006) and PDA or cell phone payment methods (Bigelow, as cited in Durham 2006) are likely to be implemented more frequently in the future. At the college level, some institutions allow students to use money from the account stored on their student identification card to pay for concessions at some or all of the institution's sport facilities.

Other technological advances, such as change dispensers (Holtzman, 2001a) have also helped improve both line speed and cash handling. Technology such as self-ordering kiosks (Rutherford, as cited in Durham, 2006) and the ability to order from your seat (Blavat, as cited in Durham, 2006; Bailey, as cited in Pape, 2006) may also become commonplace in the near future. Although not necessarily a recent innovation, the addition of television sets showing closed circuit broadcasts of the event behind and around foodservice areas allowed fans to not miss a key play while waiting in line (Ammon et al., 2004; Caruso, 1998; Cohen, 2005; Graham & Ward, 2006; "How to make," 1984). Digital menu boards also offer facilities an improved way

to update menus and prices, display nutritional information, and advertise foodservice offerings (Steinbach, 2011).

Perhaps the most encouraging technological advancement for sport managers is the advancement of technology that allows managers to track stadium ingress and egress, foodservice and merchandise sales, and parking all in real-time. The New York Jets hired a firm to create such a technology upon moving into their new stadium in 2010. Because of the ability to track real-time information, the Jets have been able to better track inventory and offer incentives to help increase foodservice revenue (Cacciola, 2010).

Despite its advantages, some facility managers, foodservice workers, and fans may actually be opposed to the rapid introduction of technology to foodservice operations (Cohen, 1995; Friedland, 2007). Cost, infrastructure limitations, and training considerations are viewed as deterrents by facility managers when it comes to introducing new technology (Cohen; Friedland). As addressed by Caruso (1998), outdoor stadiums that only host a few events per year (e.g., college football stadiums) were likely to be late adopters of this type of technology due to the ability to justify such an expense for so few events. As for fans, not all of them are comfortable with modern technology (Cohen). Taken together, these factors have played a role in the limited, as opposed to widespread, use of items such as smart cards, self-service kiosks, and other innovative ordering and payment methods.

Byrd and Turner (1993) investigated the ~~re~~lationship between seating capacity of sporting facilities and the selected method of cash handling and customer change distribution employed by that facility" (i.e., cash boxes-tills, cash registers, and/or computerized concession terminals) (p. 15). The study suggested that ~~th~~e selected method of cash distribution was not influenced by the seating capacity of the arena. Further, concessions managers of large facilities

were experiencing certain problems that could be alleviated by the use of computerized concession terminals" (p. 15). It was interesting to note that Byrd and Turner found that 57% of responding managers from indoor sporting facilities in the United States with seating capacities ranging from 5,000 to 30,000 still used cash boxes-tills as of 1993. Perhaps not surprisingly, Byrd and Turner also discovered that "as the seating capacity of the facilities increased, the number of menu items displayed at the concession stands also increased (p. 19). Further, the researchers noted that "whether the facility management used in-house or external contractual concession operation procedures did not affect the method of cash handling employed" (p. 19).

Human Resource Considerations

Fried (2005) stated that "the concession manager spends a significant amount of time on human resource-related issues (hiring, training, scheduling, and terminating employees)" (p. 230). In regards to staffing, most concession stands are staffed by inexperienced, young, or inexpensive labor (Fried, 2005; Motsinger et al., 1997). Foodservice managers are confronted with high rates of employee turnover, absenteeism, and poor service quality, making staffing a key concern (Motsinger et al., 1997).

However, the turnover is not limited only to the event day staff. Motsinger et al. (1997) found that that the full-time position of concession manager also had a high turnover rate. In his article profiling the stadium foodservice operations at LSU, Marse (2007) reported that it was not uncommon for managers "to work 21-26 consecutive days during the season" (para. 22). For those foodservice managers that aren't dissuaded by such long hours and are interested in professional development, NACC professional organization exists to offer "a forum for members to share new ideas and concepts, enabling personal growth to create efficient and profitable operations" (National Association of Collegiate Concessionaires, 2011, para. 1).

A popular way to limit payroll costs is to contract with nonprofit groups, who in turn provide volunteers, to operate some or all of a facility‘s foodservice areas. Such an arrangement can also aid in the institution‘s social responsibility efforts (Weiner, 2009). Nonprofit groups are especially useful for college football stadiums due to the fact that a large workforce is needed for only six to seven game days every year (Murawski, in ―Cash in,‖ 1986; Murawski, in ―Maximizing Revenue,‖ 1987). For example, it takes approximately 1,500 volunteers to work football game day concessions at LSU‘s Tiger Stadium (Marse, 2007). Of the facilities they examined, Motsinger et al. (1997) found that only the facilities with larger seating capacities, including several college arenas, used volunteer concession workers. Nonprofit groups handling foodservice duties typically receive a percentage of sales in return for their efforts (Farmer et al., 1996; Friedland, 2007). Cash shortages can be minimized by reducing commission payments paid to the working nonprofit groups by the amount of the shortage, thus creating an incentive to be careful and not steal (Friendland; Weiner, 2009).

Commissions paid to volunteer groups vary by institution. For example, at Syracuse University football games, non-profit groups can earn 13.5% - 15.5% of their stands concession sales (less taxes and discrepancies) (Carrier Dome Concessions, n.d.). Georgia Tech and its concessionaire Sodexo, which allows non-profit groups to earn 8% of their net concessions sales, have also built in additional performance incentives and disincentives to motive volunteers (Georgia Institute of Technology, n.d.). LSU reportedly paid volunteer groups a 12% commission during a recent football season (Miller, 2010). The University of North Texas (UNT), whose Fouts Field is considerably smaller than the stadiums at Syracuse, Georgia Tech, and LSU, reportedly pays volunteer groups of 20 to 25 volunteers $650 per game for that facility‘s final season in 2010 (EagleTalkNet, 2010).

Of course, because these nonprofit groups are generally comprised of volunteers, motivation can be an issue for a foodservice manager. Evans (1981, 1983) suggested that as a motivational tool concessions workers should be made aware of the revenue generated during their shifts. Lavigne (2010) reported that the use of untrained volunteers as concession workers has resulted in avoidable sanitation violations at some sport facilities. Weiner (2009) stated that some institutions ~~–c~~harge [nonprofit volunteer] groups for not cleaning the stands and not bringing enough volunteers" (p. 3) in an effort to prevent such issues on game day.

It should be noted that a facility's foodservice staff may be a combination of paid employees and volunteers representing nonprofit groups (~~–M~~aximizing Revenue," 1987). For example, at Miller Park, home of MLB's Milwaukee Brewers, half of the concession stands on a typical game night are operated by volunteers for nonprofit groups (Steinbach, 2006b), requiring the motivation and management of two distinct worker groups. However, despite the social responsibility benefits derived from announcing that a certain nonprofit is working a particular event, sport organizations may want to proceed with caution in alerting spectators to who is working behind the concessions counter. Kim and Trail (2009) suggested that spectators may have different service quality expectations at the concessions stand depending on the knowledge of whether the fan is being served by a volunteer or a paid concessions worker, perhaps influencing the fan's purchasing behavior and perception of the organization's image.

Motsinger et al. (1997) compared the food and beverage concession operations in three different types of North Carolina sport venues. The researchers selected five coliseums (i.e., arenas), five auto race tracks, and five minor league baseball stadiums for their study. Of the arenas in the study, three served as full-time homes to men's college basketball programs, while the other two hosted the occasional regular season and tournament game. The researchers found

that ―all coliseums and 20% of the auto race tracks used volunteers in their concession operations. No minor league baseball stadiums [in the study] used volunteers in their concession operations" (Motsinger et al., 1997, p. 49).

Bigelow (2004) contended that ―a well qualified in-house concessions manager can operate just as efficiently as a large corporation" (p. 426). However, his quote begs the question ―What skills are necessary to be a successful foodservice manager?" An individual operating an in-house concessions operation should be knowledgeable about marketing, financial management, purchasing, inventory management, legal aspects, insurance, and personnel issues (Ammon et al., 2004; Farmer et al., 1996; Mulrooney & Styles, 2005). However, even given the dynamic nature of the position, Bigelow (2004) warned that the ―in-house operator must find other duties for the manager or risk stagnation if he or she stays in the job too long" (p. 426).

Foodservice Area Construction and Design Considerations

Williams (2001) suggested that no area of the facility was overhauled more as a result of the sport facility design advances of the 1990s than foodservice. According to Graham and Ward (2006), ―the proper placement of concession stands requires careful planning." (p. 142). Fried (2005) suggested that foodservice areas ―need to be built with money in mind" (p. 98). Factors such as foot traffic patterns and space utilization have received increased attention as compared to years past (Motsinger et al., 1997). The intent of this strategic approach, according to Bigelow (2004), is ―to significantly increase the per capita spending of patrons during the sporting event" (p. 416).

According to Williams (2001), ―concession design and construction can account for 10 percent to 15 percent of a [sport facility's construction] budget" (p. 24). One expert (Bigelow, as cited in Steinbach, 2007a) advised that sports facilities be designed to consist of quadrants, ―with

each offering roughly the same food options in the interest of fan convenience" (para. 11). Familiarity with a sport facility, particularly the location of specific foodservice areas, can increase spending patterns (Collett, as cited in Waddell, 1997). Thus, foodservice areas must be placed in "prime locations with high direct visibility" (Caruso, 1998, para. 2). Most new sport facilities are designed with what Bigelow (as cited in Durham, 2006) referred to as "mini-destinations within a venue" (What are the trends section, para. 2).

To assist in the proper design and location of foodservice areas and other related considerations, agreements with foodservice providers are being struck during the planning stages of a facility's initial design or renovation planning so that concessionaires can lend their expertise to the design process (Lamkin, as cited in Waddell, 1994; Williams, 2001) and equipment to be purchased (Deckard, 1993). For example, according to Steinbach (2000), concessionaire Sodexho Marriott (now Sodexo) "lent its expertise to the design of new concessions areas, right down to the configuration of plumbing and electricity" (para. 4) during the 1990s renovation of the football stadium at the University of Texas. As a result of the renovation, "square footage devoted to concessions quadrupled… [and] points of sale doubled" (para. 4).

Taking a cue from their professional sport peers, college athletic departments have followed suit in adding premium seating to their football stadiums. According to Bynum (2002), "13 of the 25 largest college football stadiums in the country… either added or significantly updated luxury-seating areas" (para. 15) between 1995 and 2002. It is not uncommon for sport organizations to offer food and beverage allowances to entice premium seat holders to sign up or renew their contract (Bigelow, as cited in Durham, 2006). While premium seating provides an additional revenue stream via upscale foodservice offerings, its existence also presents design

hurdles as it pertains to foodservice areas (Graham & Ward, 2006). One expert (Bigelow, 2004) suggests that the per person food and beverage sales in premium seating areas reaches as high as $20 to $35. Wait-service and higher-end concessions have also been found to improve spending on foodservice in premium seating areas (Bigelow, 2004). It has also been suggested that revenue from premium seating can be used to help construct more amenities, such as foodservice areas and restrooms, in general seating areas (Steinbach, 2005).

When designing and locating foodservice areas, there are several standards that should be kept in mind, particularly regarding the number of points of sale available to fans in attendance at an event. First, there should be at least one point of sale for every 75 spectators (Williams, 2001). It should be noted that Williams (2001) did not specify whether his suggested point of sale ratio include only fixed (i.e., permanent) points of sale. Caruso (1998) was more specific in his point of sale requirements, explaining that the standard for fixed concession point of sales at newer facilities in 1998 was one point of sale for every 175-225 spectators. Farmer et al. (1996) reported that ~~–e~~ach patron [should be] able to reach the nearest [concession] stand within 40 to 60 seconds of leaving his or her seat" (p. 192). Cameron (2001) asserted that the number of foodservice purchase opportunities will likely vary depending on the part of the facility. For example, Cameron suggested that there should be one point of sale per 150 patrons on club levels, one point of sale per 175 patrons on the lower level, and one point of sale per 200 patrons on the upper level. The desire to improve crowd flow, speed order processing, and maximize revenue are the typical driving forces behind the addition of points of sale (Fried, 2005; Williams, 2001). Bigelow (as cited in Muret, 2004) suggested that ~~–a~~dding points of sale can increase revenue 15 to 40 percent, depending on the extent of the existing food operation" (p. 17).

Concourse width must also be considered in the design phase (~~"H~~How to make," 1984). Generally it is advised that concourses have one foot of width for every row of seats in the seating area (Cameron, 2001). Long lines in foodservice areas are particularly troublesome at college football stadiums, as the typically older college stadiums were designed with narrower concourses (Ferguson, 1990). Decisions regarding the type of line style must also be made. The two general options available are the turnstile (i.e., single-entry point, progress through line single file) and belly-up (i.e., fans form multiple lines, jockeying for position in whichever line they believe will move the fastest) approaches (~~"C~~ash in," 1986; Motsinger et al., 1997).

Portable foodservice units (e.g., specialty carts, kiosks, tables, full-service trailers) are one way that sport facilities, particularly older ones, can add points of purchase without building fixed stands (~~"C~~ash in," 1986; Caruso, 1998; Motsinger et al., 1997). Caruso (1998) argued that portable units are favorable to fixed stands in terms of fixed labor costs per dollar of sales revenue. Motsinger et al. (1997) found that portable foodservice units were used extensively by the facilities in their study. This is interesting to note, given that that foodservice carts and kiosks were not widely introduced in stadiums and arenas until the mid-1970s (Caruso, 1998). The growth in the use of portable units can be attributed to the production of carts and kiosks with improved construction, technology, sanitation, and appearance (Caruso, 1998).

Caruso (as cited in Cohen, 1991) contended that portables give the facility ~~"a~~ [favorable] marketplace feel" (p. 64). While increasing points of purchase, portable units can result in slower moving foot traffic in the facility's concourses. Architect John Pastier (as cited in Bynum, 2002) argued that this is intentional: "Teams want to slow down traffic…. If you go straight to your seat, you might not stop and part with your money. But if you're standing, you might think, 'I'm not going anywhere, I might as well go buy that.'"(para. 30). However, portable

units are valuable in that they allow spectators to purchase food and beverage closer to their seat (Caruso, 1998). In 1998, Caruso reported that "recent studies estimate[d] that one in every four ballpark and arena customers are now served through mobile cart and kiosk outlets versus one in ten persons [in 1991]" (para. 9).

Variety of Foodservice Offerings

Patrons attending sporting events, professional or college, have more food and beverage choices than ever before. According to Spanberg (1999), many major college athletic departments have taken "a cue from the big leagues… [by] increasing menu choices…" (para. 16). The variety of foodservice offerings at a facility now extend well beyond the standard assortment of hot dogs, popcorn, beer, and soda (Ammon et al., 2004; Bynum, 2002; Goldfine & Sawyer, 2009; Motsinger et al., 1997). Goldfine and Sawyer (2009) noted that "odds are if you can find it at a restaurant, you can find it at a stadium or arena" (p. 102). Factors such as the desire to increase revenue through foodservice sales (Goldfine & Sawyer, 2009) and the changing tastes of fans (Ammon et al., 2004; Bynum, 2002; Fried, 2005; Wakefield & Sloan, 1995) have been cited as reasons for the increased variety found at sport facilities. Bigelow (2004) also credited better ventilated foodservice stands in newer stadiums and arenas for the increase in variety. Other observers (Goldfine & Sawyer, 2009) remarked that "many of the newer sport venues have food courts that would rival those of the most upscale shopping malls" (p. 102). Despite the plethora of food items available at most major sport facilities, Steinbach (2008a) stated that "most industry experts agree that hot dogs, peanuts and other ballpark staples still account for two-thirds or more of a facility's total concessions revenues" (para. 10). Also, due to infrastructure issues many older facilities still only offer basic food and beverage offerings (Graham & Ward, 2006).

Brand name concessions are not new to sporting facilities. One needs look no further than the mention of the brand Cracker Jack in the century-old song ―Take Me Out to the Ballgame" for proof (Steinbach, 2008a). However, concessionaires now offer fans more brand name products, as opposed to generic or private label brands, than ever before (Ammon et al., 2004; Caruso, 1993; Cohen 1991; Graham & Ward, 2006; Herrick, 2002; Motsinger et al., 1997; Mulrooney & Styles, 2005; Waddell, 1997). Farmer et al. (1996) argued that by carrying branded items, concessionaires can remove doubt about the quality of the product from the consumer's mind. Higgons (2006) took this sentiment a step further, implying that branded products can positively influence spectator opinion of concession operations and even the facility itself.

Branded food offerings at sport facilities can take the form of specific branded products (e.g., Oscar Mayer hot dogs) or franchisor branded stands (e.g., McDonald's, Subway, Chic-fil-A). Such a situation ―typically involves subcontracts between the concessionaire and the brand provider" (Steinbach, 2000, para. 24). As a result, according to Steinbach (2008a),―concessions contracts have assumed greater complexity, and flexibility, as the purveyors of local and national food brands seek to carve their own slice out of the profitability pie" (para. 2). For example, facilities that have branded products or stands typically provide exclusive rights for the brand's product category at the facility (Cohen, 1991). Also, concessions companies contracted with multiple sport facilities often have exclusive agreements with a brand for all of the facilities the company manages (Steinbach, 2008a). DePaola (as cited in Steinbach, 2008a) contended that such partnerships with national brands help concessionaires when it comes time to promote their bid to the facility's owner. Bigelow (1993) argued that an RFP process, similar to the process used when selecting a facility's general concessionaire, be used when contracting with a

franchisor seeking to operate in your facility. Areas that should be addressed in the contract include franchise, royalty, and advertising fees (Bigelow, 1993). Grinstead (as cited in Steinbach, 2008a), suggested that some newer facilities built with a space designed for a restaurant might exclude that space from the contract with the facility's primary foodservice operator to make such negotiations less complicated for the sport organization or facility.

In addition to providing traditional concessions items, more facilities have begun to offer items that are local or regional favorites for sale (Ammon et al., 2004; Caruso, 1993; Fried, 2005; Graham & Ward, 2006; Bigelow, as cited in Herrick, 2002; Santulli, as cited in Herrick, 2002; Motsinger et al., 1997; Steinbach, 2007a). Regional favorites may be a specific type of food or even a specific brand that is associated with an area. A common practice when offering a regional favorite is to partner with a local favorite to make their product available or to operate a stand (Santulli, as cited in Herrick, 2002). At Penn State's Bryce Jordan Center the ice cream sold is not exactly a regional favorite, but instead a campus favorite—the University's renowned Berkey Creamery ice cream (Ray, 1995; B. Ziegler, personal communication, June 29, 2011). Graham and Ward (2006) contended that ~~h~~having these items available tends to enhance the guest's overall event experience" (p. 140). However, according to Bigelow (as cited in Steinbach, 2008a), not all concessions items that are marketed as regional are truly regional, as illustrated by national concessionaires that ~~d~~develop proprietary brands for specific [facility] contracts, so whatever they call their pizza in Miami is not the same as they call it in Los Angeles. [But] It's still the same pizza" (para. 10).

Other food categories that have appeared at sport facility concession stands over the last two decades include ethnic (Bynum, 2002; Cameron, 2005; Regan & Bernthal, 2009; Steinbach, 2007a), organic (Steinbach, 2007a), vegetarian (Bynum, 2002; Regan & Bernthal, 2009), gluten

free (darrenrovell, 2010), and health-conscious (Fried, 2005; Mulrooney & Styles, 2005, p. 153; Steinbach, 2007a). According to Reichert (in Steinbach, 2007a), these type of "offerings may not make you a lot of money, but they will appeal to a very specific segment' of the ticket-buying public" (Steinbach, 2007a, para. 3). Some sport organizations have banned food items such as peanuts for a particular seating section, game, or even an entire season due to allergic sensitivities of some fans (Steinbach, 2007b). The University of Michigan is an example of one institution that has brought health consciousness to stadium concessions by virtue of their efforts to educate fans about healthier food options available to them at the concessions stand (2010 Michigan Stadium Information, n.d.).

Instead of focusing on new food and beverage offerings, some organizations have adopted other strategies to increase revenue through foodservice. Spurred by the success encountered by the Los Angeles Dodgers in 2007, many MLB franchises have copied the Dodgers' strategy by introducing some form of an all-you-can-eat ticket during the last several seasons (Steinbach, 2007a; Steinbach, 2008a; Steinbach, 2010). Other promotions that have been tried at sport facilities include dollar menus and combo meals (Fried, 2005; Bigelow, as cited in Herrick, 2002; Muret, 1999b; Steinbach, 2009a), concessions promotions for children (Rovell, 2009a), value-added ticketing (Steinbach 2010), and pre-purchased concessions (e.g., for $20 receive a ticket and a voucher for a hot dog and soda at the event). Similar to American fast food restaurants, concession portion sizes have also increased in recent years in an attempt to create a sense of value (Wickner, as cited in Durham, 2006). An innovative foodservice promotion from the collegiate ranks occurred at Penn State in the 1990s, when that institution offered an early-bird special discount on a meal combo at the Bryce Jordan Center basketball arena (Muret, 1999a).

While offering a variety of food and beverage offerings is an established trend, one hopes that strategic decisions are made regarding the offerings. According to Brown (as cited in Herrick, 2002), "facilities must expend the time and other resources to understand the food and beverage needs of their customers" (What can venues section, para. 4). Motsinger et al. (1997) stated that "understanding the demographics of the customer base for particular events is very crucial in providing the right products and service to maximize profitability" (p. 44). Fried (2005) illustrated this point, using the example of a ballpark in New York needing to offer a large variety because of that city's diverse demographics. Consequently, menus should be updated every year, maybe with as much as a 20% to 25% being replaced (McLean, as cited in Cameron, 2005). Wickner (as cited in Durham, 2006) opined that foodservice managers should alter menus depending on the event being held at the facility (e.g., sporting event or concert) due to the audience differences. Bigelow (1993) suggested surveying spectators to assist in determining which products and brands to carry. Some sport organizations are going a step further than just surveying spectators, instead actually soliciting recipes from fans (Hill, 2011) and having concession idea submission contests for fans (Uebelherr, 2011).

Given the variety of food and beverage options available at most sport facilities, it begs the question of whether or not such variety is available to all patrons at an event, or just a select few with premium seating. According to Graham and Ward (2006), "a public assembly facility's food and beverage operation may range from the traditional concession stand and basic catering to fine dining and banquet facilities" (p. 140). Cohen (2005) suggested that the line of demarcation has been created, with higher-end food and beverage sold exclusively in premium seating areas and concession standards sold in the general seating areas. Steinbach (2007a) disagreed with Cohen, citing examples of higher-end food and beverage items offered in the

general seating areas of some facilities. Another observer, King (2007), marveled at the diverse menu accessibility at AT&T Park, home of MLB's San Francisco Giants, upon visiting the facility. He reported that "an estimated 90% of the menu items sold in the ballpark are available to virtually any fan, regardless of how much their ticket cost or where they are seated" (p. 18).

Regular and Alcoholic Beverages

Along with the need for food at the sport facility comes the need for beverages. Fried (2005) referred to the "constant need for liquid refreshments such as beer, soda, and water" (p. 197) at sporting events. Regan and Bernthal (2009) contended that fans now have a wider selection of alcoholic beverages to them at sporting events. Just as brand name offerings and product category exclusivity are common with food items, facilities also reach exclusive deals with beverage brands as well, commonly referred to as "pouring rights" (Goldfine & Sawyer, 2009). As for higher education, its institutions have long been involved in deals with beverage brands such as Coca-Cola and Pepsi for pouring exclusivity on campus in dining halls, students unions, and vending areas (Van Der Wulf, 2009).

The decision of whether or not to sell alcohol at sporting events is a difficult one for an athletic administrator. According to Graham and Ward (2006), "...it is usually expected alcohol will not be sold at high school or collegiate events, although more and more universities are selling alcohol" (p. 140). Athletic administrators, particularly those at Division I institutions, face the ethical dilemma of choosing between the revenue produced by alcohol sales and the negative consequences that come along with its sale. It has been noted on several occasions that "beer and alcohol account for the highest percentage of concession profits" (Farmer et al., 1996, p. 191; Mulrooney & Styles, 2005, p. 151). Bigelow (2004) reported that "beer sales often account for 35 to 55% of a concessionaire's sales, depending on the event" (p. 419). One minor

league baseball executive (Joyce, as cited in St. George Franchise, 2010), lamenting the recent folding of his franchise due partially to strict local beer license regulations, stated that ~~b~~beer concessions comprise about 33 percent of total revenue stream for minor league baseball operations" (para. 5). Fortunately for the undecided intercollegiate athletic administrator, more often than not, direction on alcohol sales will already be provided in the form of existing institutional or conference policies (Bigelow, 2004; Deckard, 1993).

So just how many collegiate athletic programs sell alcohol at their sporting events? The numbers are far from clear. A 2003 NCAA survey of Division I-A (i.e., FBS) programs found that only 20 of 77 responding institutions allowed alcoholic beverages to be sold at their athletic events (Steinbach, 2006a). A 2005 *USA Today* report indicated that ~~o~~f the 119 schools in the NCAA's major football-playing Division I-A found that nearly half (54) allow the sale of alcohol -- through public concessions, in private suites or both -- at one or more playing venues" (Wieberg, 2005, para. 5). When addressing college football specifically, it was reported in 2009 that alcohol is offered for sale at ~~t~~least 18 major-college football stadiums" (Whiteside, 2009, para. 3). However, as Waddell (1997) suggested, just because alcohol is offered for sale at one event by an organization, it should not automatically be assumed that alcohol is sold at all events hosted by the organization. Bigelow (2004) suggested institutions allowing alcohol sales at athletic events usually ~~a~~ttract a large alumni and community following…. [and] are business oriented and interested in maximizing their revenues" (p. 420).

As alluded to earlier, alcohol sales can make up a substantial portion of concessions sales. It was estimated that the University of Southern California's decision to ban alcohol sales during home football games would result in a revenue decline of $1.8 million during the first season of the ban (Steinbach, 2006a). Upon allowing alcohol to be sold for the first time for University of

Memphis football games at the city-run Liberty Bowl for the 2009 football season opener between Memphis and the University of Mississippi, it was revealed that beer sales for the game totaled $114,576 – a figure which pleased city officials who intended on using the increased revenue to help pay for recent renovations to the Liberty Bowl (Whiteside, 2009). Interestingly, Whiteside (2009) also reported that the University of Memphis was opposed to the city's decision to sell alcohol at the Liberty Bowl for Tiger games. Given the potential for increased revenue, it is inconceivable that college athletic programs will adopt the alcohol-related promotion introduced by the Preakness Stakes, part of horseracing's Visa Triple Crown, in 2010. Rovell (2010) reported that spectators situated on the track's infield could purchase an unlimited refill beer mug for just $20.

Further complicating the alcohol issue is the ability of alcohol policies to create a perceived class system among those in attendance at sporting events. According to Bigelow (2004), "many colleges do not allow beer to be sold to the general public, but do have private clubs, alumni rooms, and athletic booster rooms where beer and liquor are readily available" (p. 420). Steinbach (2006a) indicated that of the 54 schools in the 2005 *USA Today* study that allow the sale of alcohol at sporting events, "27 make alcohol available to the general public, while another 27 serve only to individuals with access to premium seats or club rooms" (para. 6). For example, in an ironic decision, the University of Colorado (CU) decided in 2007 to stop selling beer to the general public during men's and women's basketball games at its Coors Event Center, which was named after the famed Coors brewing family upon their multimillion dollar gift to the center in 1990 (Woelk, 2007). However, the alcohol ban at the Coors Event Center was only for the general public. Woelk (2007) indicated that private groups (i.e., those in luxury seating)

would still have access to alcohol in the arena. CU had implemented a ban on alcohol sales to the general public at its football stadium, Folsom Field, in the mid-1990s (Woelk).

Recognizing that policies forbidding alcohol sales in general seating areas while permitting it in premium seating areas created a class division among fans, the state of Minnesota legislature decided that the University of Minnesota must choose between selling alcohol to all fans or none at its athletic events (Belden, 2009). The University of Minnesota, which opened a new on-campus football stadium in 2009, ultimately decided to go completely dry at its athletic events. However, according to Belden (2009), University of Minnesota officials feared losing $1 million in refunds to fans who had bought premium seats under the assumption that the sections would permit alcohol as the University originally advertised.

As highlighted by the different decisions reached regarding alcohol sales by the city-run Liberty Bowl and the university-run Coors Events Center, the status of the owning entity of the facility can be a key factor in the decision. Steinbach (2006a) reported that of the 54 schools in the 2005 *USA Today* study that sell alcohol at one or more playing venues –34 sell alcohol only in on-campus facilities, 12 sell only in off-campus facilities, and eight sell in both" (para. 6).

Athletic departments seek to satisfy the alcoholic cravings of their fans in a variety of ways without actually selling alcohol in the facility. However, according to Bigelow (2004), colleges take different approaches depending on the type of fan in question. Some institutions allow suite holders to bring in their own alcohol, further dividing fan classes. At some college stadiums, all fans, including those in the general seating areas, have the option of taking a _pass-out' to return to the parking lot during half-time, where alcohol leftover from the pregame tailgate can be consumed before returning to the stadium for the second half. Few FBS institutions, even those with designated tailgating areas, keep tailgating areas alcohol free

(Wieberg, 2005). All of these activities; however, result in the institution forfeiting a potentially major source of revenue.

Sanitation and Sustainability

Given the large amount of food and beverage produced and consumed at sporting events, facility cleanliness has always been an issue. The sanitation regulations concessions operations are expected to follow are often complex (Sherman, 1998). Outdoor stadiums, which the vast majority of Division I football programs use for home games, are particularly susceptible to issues related to air quality, rodents, insects, and temperature (Day, as cited in Sherman, 1998). Additionally, as sport organizations and institutions of higher education seek to limit their negative impact on the environment, these organizations have begun to implement sustainability measures into their operations, particularly foodservice. Sanitation and sustainability measures can be costly initially, but may actually result in cost savings in the long-term.

ESPN's *Outside the Lines*, in an effort to assess concession stand sanitation, ―reviewed health department inspection reports for food and beverage outlets at all 107 North American arenas and stadiums that were home to MLB, NFL, NHL and NBA teams in 2009" (Lavigne, 2010, para. 3). For the purposes of this dissertation, it should be noted that many of these facilities play host to college teams and/or collegiate athletic events such as conference tournaments. The study found that ―at 30 of the venues (28 percent), more than half of the concession stands or restaurants had been cited for at least one ―critical" or "major" health violation" (Lavigne, 2010, para. 3). Examples of critical or major violations from the study included unsafe food temperature, cross-contamination of cooked and raw foods, employee hygiene, substandard equipment, and rodent or insect infestation. However, the study went on to note that ―the hasn't been a documented mass outbreak of foodborne illness at a professional

sports stadium" (Complaints from all corners section, para. 1) and "local inspection rules and procedures make it difficult to equally compare venues" (Varying inspection rules section, para. 1).

Whether outsourced or self-operated, college athletic foodservice areas fall under standard governmental sanitation regulations, but could also be subjected to inspection from the college or university's own health and safety department if one exists (Sherman, 1998). The challenge can be arduous for most outdoor college football stadiums as compared to indoor facilities given environmental factors and infrequent usage. Spurred by the *Outside the Lines* report, Weaver (2010) examined the recent sanitation record of the Donald W. Reynolds Razorback Stadium at the University of Arkansas and found that the "four permitted food establishments within the stadium have remained sanitary" (para. 3) in recent years.

In an effort to save money and be more socially responsible, many concessions operations are seeking to minimize their negative impact on the environment. Velazquez (2009) identified a series of steps used at the University of Notre Dame, including their athletic concessions unit, to be more green, including:

- reducing and recycling packaging;
- reducing and recycling food waste;
- educating staff;
- using environmentally friendly cleaning products; and
- working with vendors.

Professional sport facilities appear to be leading the way in implementing sustainability measures. Pedone (2006) reported that in 2005 McAfee Coliseum, home of MLB's Oakland A's and the NFL's Oakland Raiders, began using compostable cups in place of plastic cups. To

offset the increased cost resulting from purchasing compostable cups, sponsors were found for the cups (Pedone, 2006). It is now commonplace to find recycling bins for plastic cups and bottles at both professional and collegiate sport facilities.

College athletic programs have been quick to catch up in their green efforts. For example, both the University of Colorado at Boulder and University of California at Davis have adopted zero-waste programs for their home football stadiums (Biemiller, 2008). Both stadiums have outsourced concessionaires (Biemiller, 2007; Biemiller, 2008).

Summary

Much has been written about the practical management of foodservice operations by sport organizations. In addition, the outsourcing of this function has been covered in a general sense, although primarily from a practical vantage point. Details have been provided on how sport organizations seek to better serve fans at concessions stands, ranging from improving line speed to offering branded food and beverage for purchase. However, it must be noted that the focus of most of the existing literature is on how professional, as opposed to collegiate, sport organizations manage the foodservice function.

While similarities certainly exist between the operations of professional sport organizations and some Division I athletic departments, the distinctions between the two, combined with the dearth of college-specific literature, make a study focusing on collegiate sport organizations important. Further, great budgetary and operational differences exist between institutions in Division I, making a study focusing just on Division I institutions prudent and timely. Given the amount of practical-based literature on foodservice management that has appeared in publications such as *Athletic Business*, *Facility Manager, and Street & Smith's SportsBusiness Journal*, as well as facility management textbooks, the time appears ripe for a

scholarly examination of the outsourcing of foodservice operations by collegiate athletic departments. Scholars Ming Li and Willie Burden have already done so for another functional area in collegiate athletics (i.e., marketing), thus it is only appropriate to follow suite for foodservice operations. Information gleaned from this study will help collegiate athletic administrators and other related stakeholders make more informed decisions regarding foodservice operations.

Chapter III:

Methodology

The study, which was descriptive and exploratory in nature, was designed to explore the current state of the outsourcing of foodservice operations by National Collegiate Athletic Association (NCAA) Division I athletic programs in an effort to assist decision makers. According to Gay and Airasian (2003), a descriptive study "determines and describes the way things are" (p. 277). Slack and Parent (2006) stated that "the goal [of exploratory research] is to discover as much as possible about the general topic and then develop propositions or hypotheses that can be examined at a later date" (p. 19).

Participants

Potential participants for this study were athletic administrators responsible for the oversight of the foodservice function at each of the respective 237 (120 FBS and 117 FCS) NCAA member institutions sponsoring the sport of football at the Division I level during the 2010-11 academic year. Also, invitations to participate were extended to the seven NCAA members that were either provisional FCS members (i.e., Bryant University, University of North Dakota, Presbyterian College, and University of South Dakota) or had just added the sport of football but played a Division I schedule in 2010-11 (i.e., Georgia Southern University and Lamar University). Thus, the total population size for the study was 244. Primary research was conducted to obtain the name and email address of the athletic administrator at each institution responsible for oversight of football stadium foodservice operations. For the purposes of this study, the athletic administrator at each institution responsible for the oversight of football stadium foodservice operations performed one of the following responsibilities:

- oversight (as opposed to direct management duties) of an in-house concessions unit;

- serving as athletic department liaison to an institutional dining services unit that manages athletic foodservice;
- serving as athletic department liaison to an outsourced concessionaire; or
- serving as athletic department liaison for matters such as foodservice to an off-campus facility not owned by the institution where the institution plays its home football games

A 50% rate of return (n = 122) was considered ideal, with a 20% rate of return (n = 48) being the minimum acceptable response rate. The actual overall response rate was 49.2% (n = 120). However, after removing those cases that were completely unusable, the number of responses usable for at least one of the analyses totaled 111 (45.5%). A list of NCAA member institutions participating in the sport of football in some capacity at the Division I level during the 2010-11 academic year appears in Appendix A.

Instrument

An 84 item structured, self-administered questionnaire (Appendix B) was developed to collect information provided by the athletic administrators regarding foodservice operations at their institution‘s home football stadium. The instrument was developed based on a review of existing literature on the topic of foodservice operations at sport facilities. One section of the instrument consisted of a benefit inventory adapted from the work of Li and Burden (2002), with the remainder developed by the researcher. Permission to adapt Li and Burden‘s instrument was granted by the publisher of their article, Fitness Information Technology.

An expert panel review of the instrument was conducted in November 2010 to assess content validity. The panel of experts tested the instrument using the same online survey administration provider, FormSite.com, as participants in the actual study. Panel members were

experts in the areas of athletic facility foodservices, intercollegiate athletic program finance, or both. The expert panel felt that while the instrument was topic-appropriate and comprehensive, it was also too lengthy. The instrument was modified to reflect the panel's suggestions, primarily shortening the instrument without impacting content validity. Upon making adjustments to the instrument, it was reasonable to assume that the survey items were presented in a manner that was both comprehendible and clear in intent.

The first section of the instrument, containing 28 structured items, focused on collecting demographic information about the institutions employing the participants. These items corresponded with Research Question One.

The second section of the instrument consisted of a benefit inventory adapted from the work of Li and Burden (2002). The 14 items in this section corresponded with Research Question Two. Instead of focusing on the outsourcing of the marketing function by NCAA Division I athletic programs as Li and Burden did, this study adapted their instrument to focus on the outsourcing of foodservice operations. Participants were asked to indicate their level of agreement or disagreement with statements about outsourcing foodservice operations. Five-point Likert items, ranging from *strongly disagree* (1) to *strongly agree* (5) were used in Section II. The statements were grouped into four categories: *Improvement in Administrative Efficiency* (four items), *Utilization of External Expertise* (two items), *Enhancement of Foodservice Operations* (four items), and *Financial Advantages* (four items). However, to limit confusion statement category titles were not visible to participants completing the instrument. Using Cronbach's α, Li and Burden found three of the four indexes to be internally consistent, with the *Utilization of External Expertise* inventory being the lone exception. As in Li and Burden's study, Cronbach's α was used to test for internal consistency of the indexes in the study at hand.

Three of the four indexes were found to be internally consistent, with the *Enhancement of Foodservice Operations* inventory (α = .683) being the lone exception, falling just below the acceptable level mark of .700.

The third section of the instrument contained 39 items and focused on collecting information about satisfaction with foodservice operations at the institution's home football stadium. These items corresponded with Research Question Three. Each item in this section was a 5-point Likert scale item with choices ranging from *very dissatisfied* (1) to *very satisfied* (5). The statements were grouped into four categories: *Financial Considerations* (13 items), *Service Quality Considerations* (16 items), *Human Resource Considerations* (5 items), and *Sanitation and Sustainability Considerations* (5 items). However, to limit confusion statement category titles were not visible to participants completing the instrument. Cronbach's α was used to test for internal consistency of the indexes, revealing an acceptable level of internal consistency for each inventory.

The final section of the instrument contained three items. The first question in Section IV asked participants to indicate their level of agreement or disagreement with the statement "[f]oodservice operations at the stadium where [your] institution plays its home football games impacts the image of [your] athletic department." Options ranged from *strongly disagree* (1) to *strongly agree* (5). While asked near the end of the instrument, this item corresponded with Research Question One. The second question was an open-ended item asking participants to make any comments or observations relating to the content of the survey. The final item of Section IV was an entry point for the participant's email address if they wished to receive a copy of the completed study.

Research Design

The study consisted of a survey-questionnaire design to assess the current state of outsourcing of the foodservice operations function by Division I athletic programs. Survey design has been identified as a popular and useful research design in education (Gay & Airasian, 2003), sport management (Slack & Parent, 2006), and business (Zikmund, 2003). Zikmund (2003) stated that ―surveys provide quick, inexpensive, efficient, and accurate means of assessing information about the population" (p. 175). Despite its advantages, survey research still presents the opportunity for random sampling and nonsampling error to occur. As for the specific type of survey that was used in this study (i.e., self-administered internet survey), Zikmund (2003) identified speed and cost effectiveness, visual appeal and interactivity, accurate real-time data capture, respondent anonymity, and personalized and flexible questioning as some of its strengths. Potential weaknesses of the internet survey method include the possibility for participants with minimal computer skills, inexperience navigating internet questionnaires, and concerns over the security of the information they input (Zikmund, 2003).

Procedure

Human subjects approval to conduct the research was requested and obtained from the Institutional Review Board for the Protection of Human Subjects at West Virginia University. Subsequent to receiving human subjects approval, study participant names and contact information were obtained through a search of each athletic program's official website, a phone call, or electronic mailing (Appendix C) to the athletic department of the institution. Once participants were identified, correspondence was sent throughout February 2011. First, an introductory electronic mailing (Appendix D) was sent to the athletic administrator with responsibility for foodservice operations oversight at each Division I institution to alert them to

the forthcoming electronic transmission of the survey instrument at a later date. The introductory electronic mailing introduced the researcher, outlined the purpose of the study, and the stated the importance of the study. Several days later an additional electronic mailing (Appendix E) was sent to the email address of the athletic administrator alerting them to the availability of the survey.

The questionnaire was administered through the website FormSite.com. Upon clicking the link to the survey instrument, participants accessed the main cover letter on institutional letterhead (Appendix F), which consisted of an explanation of the purpose of the study, request for voluntary participation, and assurance of participant anonymity.

A 50% rate of return was considered ideal, with a 20% rate of return being the minimum acceptable response rate. In an effort to increase response rate participants were offered the opportunity to receive a report of the findings upon completion of the study. A follow-up electronic mailing (Appendix G), respectfully urging participation and containing a link to the survey instrument, was sent to participants who had not responded to the survey after one week of receipt. Also, some participants were contacted after submitting the survey to be asked to offer clarification on their responses (Appendix H). The number of responses usable for at least one of the analyses totaled 111 (45.5%).

The cutoff date for instrument return was February 23, 2011, with final data analysis beginning immediately thereafter. Data was entered into Microsoft Excel and IBM SPSS software upon return. For approximately 15 cases publicly available information omitted by the participant about the participant‘s institution had to be input by the researcher in order to make the case usable for one or more research questions. Examples of the publicly available information that was input for these cases include athletic budget size for public institutions,

conference affiliation, stadium seating capacity, and decade of stadium opening. A written report outlining the study's findings was completed by August 2011. Participants that requested a copy of the finished study were notified of its availability in August 2011 (Appendix I). Unfortunately, this was two months later than participants were originally told due to the extra time required to complete the dissertation.

Data Analysis

Descriptive and inferential statistics were used to examine the data in this study. The collected data was analyzed using Microsoft Excel and IBM SPSS software. Survey data was summarized in both narrative and table form. Question text for each item on the instrument can be found in Appendix B. Data analysis for each research question was conducted as follows:

R1: What are the characteristics of Division I institutions that (a) outsourced foodservice operations or (b) self-operated foodservice operations at their home football stadium?

Data produced by responses to the structured items comprising Section I of the questionnaire was analyzed using descriptive statistics. In particular, frequency, percentage, mean, standard deviation, and cross tabulation tables were used to describe the characteristics of Division I institutions that (a) outsourced foodservice operations or (b) self-operated foodservice operations at their home football stadiums.

R2: Does a significant difference exist in perceived benefits of outsourcing foodservice operations between athletic administrators at FBS and FCS institutions?

The second part of the instrument, an inventory adapted from the work of Li and Burden (2002) to measure the perceived benefits of outsourcing foodservice operations, utilized both descriptive (i.e., mean, standard deviation) and inferential statistics (i.e., independent *t*-tests, ANOVA). Data across the benefit inventories (e.g., *Financial Advantages*) was combined into

subscales. Cronbach's α was used to assess the internal consistency of each subscale, allowing the benefit inventories to serve as dependent variables. A series of independent *t*-tests was conducted to determine if a significant difference existed between FBS and FCS institutions. One-way ANOVA was utilized to determine if a significant difference existed between FBS institutions belonging to BCS conferences, FBS institutions not belonging to BCS conferences, and FCS institutions.

R3: Does a significant difference exist between institutions in their satisfaction regarding foodservice operations at their home football stadium?

a. Outsourced v. Self-operated (All subdivisions)

b. Outsourced v. Self-operated (Separated by subdivisions)

Both descriptive (i.e., mean, standard deviation) and inferential statistics (i.e., independent *t*-tests, Kruskal-Wallis) were used to analyze data produced by Section III, which was designed to determine if a significant difference existed between institutions in their satisfaction regarding foodservice operations at their home football stadium. Data across the subitems (i.e., *Financial Considerations*, *Service Quality Considerations*, *Human Resource Considerations*, *Sanitation and Sustainability Considerations*) was combined into subscales referred to as *satisfaction inventories*. Cronbach's α was used to assess the internal consistency of each satisfaction inventory, allowing the inventories to serve as dependent variables. A series of independent *t*-tests and the Kruskal-Wallis test were conducted using foodservice management arrangement (i.e., outsourced or self-operated) and NCAA subdivision classification (i.e., FBS, FCS) as independent variables.

R4: What is the best predictor of whether an institution outsourced the foodservice operations at its home football stadium?

Data resulting from Section IV of the instrument was analyzed using binary backward step-wise logistic regression to predict an outcome of whether or not an institution outsources foodservice operations at its home football stadium, which is a categorical variable. Backward step-wise logistic regression was selected because it is less susceptible to suppressor effects. Predictor variables included stadium age, stadium seating capacity, athletic department budget size, whether or not the athletic department outsources at least one other function, as well as the four benefit inventories from Research Question Two (i.e., *Improvement in Administrative Efficiency*, *Utilization of External Expertise*, *Enhancement of Foodservice Operations*, and *Financial Advantages*).

The predictor variable of Stadium Age was narrowed to two levels: stadiums opening prior to 1970 and stadiums opening in 1970 or later. While the standard useful economic life of a major league sports facility is approximately 30 years (Siegfried & Zimbalist, 2000), the year 1970 was used because of the tendency of colleges and universities to renovate existing football stadiums rather than build new stadiums. Athletic department budget size was also narrowed to two levels: those athletic programs with athletic budgets for 2010-11 less than $50 million and those with budgets of $50 million or greater. The predictor variable stadium seating capacity, also narrowed to two levels, was split into levels of stadiums with a seating capacity under 50,000 and stadiums with seating capacities of 50,000 and greater. The final predictor variable, whether or not the athletic department outsourced something besides foodservice was either *yes* or *no*.

Due to a number of factors, the logistic regression analysis could only be conducted for FBS institutions. Even using a very simple model with predictor variables such as budget size and stadium capacity narrowed to two levels, few if any FCS institutions were represented in the higher predictor variable levels (i.e., athletic budget over $50 million or stadium capacity over 50,000). Further, many FCS institutions that outsourced the foodservice operations at their home football stadium indicated that the management of football stadium foodservice was part of a contract with the foodservice provider that also included non-athletics areas. Consequently, the decision to outsource football stadium foodservice operations may have not been a key factor in signing the agreement with the foodservice contractor. While FBS institutions reporting a similar contractual agreement were also excluded from the analysis, they were not large enough in number to be prohibitive. Cases in which the institution reported no control over football stadium foodservice operations and those with missing data related to one or more of the predictor variables (including several private institutions that did not disclose athletic budget amount) were also excluded. In all, the regression analysis included 40 FBS institutions.

Chapter IV:

Findings

Introduction

The purpose of this study was to explore the current state of the outsourcing of foodservice operations by National Collegiate Athletic Association (NCAA) Division I athletic programs, particularly at their home football stadiums in order to assist decision makers. This chapter presents a detailed account of the results of this study. Each section of the chapter corresponds to one of the four research questions. A summary of Chapter IV concludes the chapter. The following research questions provided the focus for this study:

1. What are the characteristics of Division I institutions that (a) outsourced foodservice operations or (b) self-operated foodservice operations at their home football stadium?
2. Does a significant difference exist in perceived benefits of outsourcing foodservice operations between athletic administrators at FBS and FCS institutions?
3. Does a significant difference exist between institutions in their satisfaction regarding foodservice operations at their home football stadium?
    a. Outsourced v. Self-operated (All subdivisions)
    b. Outsourced v. Self-operated (Separated by subdivisions)
4. What is the best predictor of whether an institution outsourced the foodservice operations at its home football stadium?

Survey Responses

An electronic mailing, consisting of a cover letter and link to the survey instrument, was sent to each NCAA member institution sponsoring the sport of football at the Division I level for the 2010-11 academic year. The electronic mailing was sent specifically to the athletic

administrator responsible for the oversight of foodservice operations at each of the respective institutions. For the purposes of this study, this was the athletic administrator at each institution responsible for one of the following duties:

- oversight (as opposed to direct management duties) of an in-house concessions unit;
- serving as athletic department liaison to an institutional dining services unit that manages athletic foodservice;
- serving as athletic department liaison to an outsourced concessionaire; or
- serving as athletic department liaison for matters such as foodservice to an off-campus facility not owned by the institution where the institution plays its home football games.

Of the 244 surveys sent electronically, 120 were returned at least partially completed for a return rate of 49.2%. However, after removing those cases that were not usable, the number of responses usable for at least one of the analyses totaled 111 (45.5%).

Research Question One

Research Question One asked "What are the characteristics of Division I institutions that (a) outsource foodservice operations or (b) self-operate foodservice operations at their home football stadiums?" Participants were asked to answer a series of items detailing information about their institution, its athletic program and athletic foodservice operations, and their own position.

Foodservice control. Table 1 reports the data distribution regarding whether the participant's institution has control over the foodservice operations at the facility where their institution primarily plays its home football games. Control was defined as the institution (athletics or any other college or university department) having authority (e.g., institution self-

operates foodservice or selects outsourced foodservice contractor) over the foodservice operations at the stadium where the institution primarily plays its home football games. Institutions that outsourced the entire general concessions of the football stadium, part of premium seating foodservice, or premium seating foodservice in its entirety were counted as ―outsourcing" even if part of their operations were self-operated. Of the 103 usable responses for Research Question One, 92 (89.3%) respondents reported that their institution has control over football stadium foodservice operations, while 11 (10.7%) reported that their institution did not have control over foodservice operations. Table 2 displays the foodservice method frequency count for those institutions with control of football stadium foodservice operations. Of the 92 responding institutions with control, 55 (59.8%) outsourced all or part of football stadium foodservice operations while 37 (40.2%) self-operated all parts of football stadium foodservice operations.

For the purposes of the remaining items in Research Question One, the responses of the 11 participants from those institutions with no control over football stadium foodservice operations were omitted for all items except those dealing with foodservice control (Table 1), stadium ownership (Table 3), and alcohol (Tables 24, 25, and 26) because the institution has no control over either self-operating football stadium foodservice operations or selecting an outsourced contractor.

Table 1

Foodservice Control

Foodservice Control	n	%
Yes	92	89.3
No	11	10.7
Total	103	100.0

Table 2

Foodservice Method of Institutions with Control of Football Stadium Foodservice Operations

Foodservice Method	n	%
Outsourced All or Part	55	59.8
Self-Operated in Entirety	37	40.2
Total	92	100.0

Stadium ownership. Participants were asked to identify the ownership arrangement of the stadium where their institution's football program primarily played its home games. Ninety-nine (96.1%) participants indicated that either the institution or the government body (e.g., state) of which the institution is an agency owned the institution's football stadium. Only four (3.9%) responding institutions indicated that their institution leased the stadium from an outside party such as a professional sports team or local stadium authority. Table 3 reports these findings.

Table 3

Stadium Ownership

Stadium Ownership	n	%
Institution	85	82.5
Government body (e.g., state) of which institution is an agency	14	13.6
Institution leases stadium from outside party	4	3.9
Total	103	100.0

Institution type. The distribution of responding institutions according to institution type (i.e., public, private) is reported in Table 4. A total of 92 participants responded to the survey question regarding public or private status. Of these, 70 (76.1%) respondents reported working at a public institution, while 22 (23.9%) reported working at a private institution. When comparing based on football stadium foodservice operations, 10 (45.5%) private and 45 (64.3%) public responding institutions outsourced at least part of their football stadium foodservice operations, while 12 (54.5%) private and 25 (35.7%) public responding institutions self-operated their football stadium foodservice operations.

Table 4

Institution Type

	Outsourced		Self-Operated		Total	
Institution Type	n	%	n	%	n	%
Private	10	10.9	12	13.0	22	23.9
Public	45	48.9	25	27.2	70	76.1
Total	55	59.8	37	40.2	92	100.0

NCAA classification. A total of 92 participants responded to the survey question regarding NCAA classification (Table 5). Of the 92 responses, 31 (33.7%) respondents reported working at a Football Bowl Subdivision (FBS) institution in a BCS automatic bid conference (i.e., ACC, Big East, Big Ten, Big 12, Pac-10, SEC, or University of Notre Dame), 18 (19.6%) respondents reported working at a Football Bowl Subdivision (FBS) institution in a non-BCS automatic bid conference (i.e., Conference USA, Mid-American, Mountain West, Sun Belt, WAC, or FBS independent other than Notre Dame), and 43 (46.7%) reported working at a Football Championship Subdivision institution.

Pertaining to football stadium foodservice operations, 23 (74.2%) FBS/BCS, 12 (66.7%) FBS/non-BCS, and 20 (46.5%) FCS responding institutions outsourced at least part of their football stadium foodservice operations, while 8 (25.8%) FBS/BCS, 6 (33.3%) FBS/non-BCS, and 23 (53.5%) FCS responding institutions self-operated their football stadium foodservice operations.

Table 5

NCAA Classification

	Outsourced		Self-Operated		Total	
NCAA Classification	n	%	n	%	n	%
FBS/BCS	23	25.0	8	8.7	31	33.7
FBS/non-BCS	12	13.0	6	6.5	18	19.6
FCS	20	21.7	23	25.0	43	46.7
Total	55	59.7	37	40.2	92	100.0

Note. Percentages do not sum to 100 due to rounding.

Athletic department budget for 2010-11. Table 6 reports the data distribution of the 2010-11 academic year athletic department budget amount of responding institutions. The majority of respondents reported budgets of $30 million or less. In fact, 56 (60.8%) of responding institutions planned to spend $30 million or less on intercollegiate athletics in the 2010-11 academic year. This number was split evenly between those that outsourced all or part of football stadium foodservice operations (n = 28) and those that self-operated (n = 28). Also, 20 of 22 (90.9%) responding institutions with an athletic budget for 2010-11 between $31 million and $80 million outsourced all or part of football stadium foodservice operations.

Age of football stadium. Table 7 reports the data distribution of the decade during which the primary home football stadiums of responding institutions opened. Of those stadiums opening prior to 1940, 22 (71.0%) outsourced all or part of football stadium foodservice operations as compared to only 9 (29.0%) that self-operated. The foodservice operation method for stadiums opening from 1960 to the present was nearly identical, with 27 (50.9%) outsourcing all or part and 26 (49.1%) self-operating.

Table 6

Athletic Department Budget for 2010-11

	Outsourced		Self-Operated		Total	
2010-11 Budget Size	n	%	n	%	n	%
$0 - $10 million	6	6.5	15	16.3	21	22.8
$11 - $20 million	18	19.6	10	10.9	28	30.4
$21 - $30 million	4	4.3	3	3.3	7	7.6
$31 - $40 million	2	2.2	0	0.0	2	2.2
$41 - $50 million	5	5.4	2	2.2	7	7.6
$51 - $60 million	6	6.5	0	0.0	6	6.5
$61 - $70 million	3	3.3	0	0.0	3	3.3
$71 - $80 million	4	4.3	0	0.0	4	4.3
$81 - $90 million	0	0.0	4	4.3	4	4.3
$91 - $100 million	1	1.1	0	0.0	1	1.1
> $100 million	3	3.3	1	1.1	4	4.3
Private / Undisclosed	3	3.3	2	2.2	5	5.4
Total	55	59.8	37	40.3	92	99.8

Note. Percentages do not sum to 100 due to rounding.

Table 7

Decade of Football Stadium Opening

	Outsourced		Self-Operated		Total	
Decade of Opening	n	%	n	%	n	%
Prior to 1920s	3	3.3	1	1.1	4	4.3
1920s	10	10.9	3	3.3	13	14.1
1930s	9	9.8	5	5.4	14	15.2
1940s	5	5.4	1	1.1	6	6.5
1950s	1	1.1	1	1.1	2	2.2
1960s	9	9.8	6	6.5	15	16.3
1970s	5	5.4	6	6.5	11	12.0
1980s	5	5.4	5	5.4	10	10.9
1990s	4	4.3	4	4.3	8	8.7
2000 to present	4	4.3	5	5.4	9	9.8
Total	55	59.7	37	40.1	92	100.0

Note. Percentages do not sum to 100 due to rounding.

Football stadium seating capacity. Table 8 reports the data distribution of the seating capacity for the institution‘s home football games at the stadium where the institution primarily plays its home football games. Interestingly, the only seating capacity interval in which the

number of responding institutions self-operating football stadium foodservice operations (n = 11, 78.6%) outnumbered those that outsourced (n = 3, 21.4%) was those institutions with seating capacities under 10,000. The remaining seating capacity intervals showed a tendency, sometimes large, toward outsourcing all or part of the football stadium's foodservice operations. For example, respondents from institutions with football stadium seating capacities greater than 30,000 that outsourced (n = 32, 78.0%) far outnumbered their self-operating peers (n = 9, 22.0%).

Table 8

Football Stadium Seating Capacity

	Outsourced		Self-Operated		Total	
Seating Capacity	n	%	n	%	n	%
Under 10,000	3	3.3	11	12.0	14	15.2
10,000-19,999	13	14.1	11	12.0	24	26.1
20,000-29,999	7	7.6	6	6.5	13	14.1
30,000-39,999	7	7.6	1	1.1	8	8.7
40,000-49,999	3	3.3	0	0.0	3	3.3
50,000-59,999	7	7.6	4	4.3	11	12.0
60,000-69,999	5	5.4	0	0.0	5	5.4
70,000-79,999	3	3.3	0	0.0	3	3.3
Greater than 80,000	7	7.6	4	4.3	11	12.0
Total	55	59.8	37	40.2	92	100.1

Note. Percentages do not sum to 100 due to rounding.

Day-to-day football stadium management. Most (n = 79, 85.9%) of responding institutions reported that the institution's athletic department managed the football stadium on a day-to-day basis. Of those, 49 (62.0%) outsourced all or part of football stadium foodservice operations, with 30 (38.0%) self-operating the stadium's foodservice operations. Of the responding institutions that indicated the institution's football stadium was managed by an outside firm, all three indicated that the institution outsourced at least part of football stadium foodservice operations. The results for this item can be found in Table 9.

Table 9

Day-to-Day Football Stadium Management

	Outsourced		Self-Operated		Total	
Stadium Management	n	%	n	%	n	%
Institution's athletic department	49	53.3	30	32.6	79	85.9
Institutional department other than athletics	3	3.3	6	6.5	9	9.8
Private management firm (e.g., SMG, Global Spectrum)	3	3.3	0	0.0	3	3.3
City/county/state	0	0.0	0	0.0	0	0.0
Other	0	0.0	1	1.1	1	1.1
Total	55	59.9	37	40.2	92	100.1

Note. Percentages do not sum to 100 due to rounding.

Participant functional unit within athletic department. A total of 89 participants responded indicating which functional area best described their current position within their institution's athletic department (Table 10). The largest portion of respondents indicated that their primary functional responsibility was a combination of athletic facility and event operations (n = 37, 41.6%). Of those 37, 22 (59.5%) worked at institutions that outsourced all or part of football stadium foodservice operations as compared to 15 (40.5%) that worked at institutions that self-operated. The functional areas of business and internal affairs were second and third in terms of frequency count respectively. However, there was a much greater frequency of participants from outsourcing institutions (n = 12, 85.7%) indicating their functional area as internal affairs as compared to those from self-operating institutions (n = 2, 14.3%). Interestingly, both internal affairs and external affairs were represented in the responses, as some participants indicated their functional duties were best characterized by external affairs (n = 8, 9.0%).

Table 10

Participant Functional Unit within Athletic Department

	Outsourced		Self-Operated		Total	
Functional Unit	n	%	n	%	n	%
Business	7	7.9	8	9.0	15	16.9
Event Operations only	5	5.6	1	1.1	6	6.7
External Affairs	3	3.4	5	5.6	8	9.0
Facilities Operations only	1	1.1	1	1.1	2	2.2
Facilities & Events combination	22	24.7	15	16.9	37	41.6
Internal Affairs	12	13.5	2	2.2	14	15.7
Marketing	0	0.0	2	2.2	2	2.2
Other	3	3.4	2	2.2	5	5.6
Total	53	59.6	36	40.3	89	99.9

Note. Percentages do not sum to 100 due to rounding.

Institutional department with primary control for football stadium foodservice operations. Table 11 reports the data distribution of the institutional department with primary control for football stadium foodservice operations. Of the responding FBS institutions where the athletic department had control, 35 (89.7%) institutions decided to outsource. Only 4 (10.3%) responding FBS institutions with athletic department control over football stadium foodservice operations decided to self-operate. The largest segment among responding FCS institutions was other institutional department (i.e., outside of athletics) with a total frequency of 24. Of those 24, 11 (45.8%) institutions outsourced as compared to 13 (54.2%) that self-operated.

Athletic department functional unit with football stadium foodservice oversight. Table 12 shows the frequency distribution for athletic department functional areas with football stadium foodservice oversight. The two functional areas most cited by respondents were a combined event/facility management department (n = 21, 40.4%) and the business department (n = 15, 28.8%). The number of institutions outsourcing football stadium foodservice operations in

each of the aforementioned functional areas far outnumbered those that self-operated, particularly in the Event/Facility Combined category (Outsourced n = 18, 85.7%; Self-Operated n = 3, 14.3%).

Table 11

Institutional Department with Primary Control for Football Stadium Foodservice Operations

	Outsourced		Self-Operated		Total	
Institutional Dept.	n	%	n	%	n	%
FBS - Athletic department	35	39.3	4	4.5	39	43.8
FBS - Other institutional department	0	0.0	7	7.9	7	7.9
FBS - Other	0	0.0	1	1.1	1	1.1
FCS – Athletic department	8	9.0	9	10.1	17	19.1
FCS – Other institutional department	11	12.4	13	14.6	24	27.0
FCS - Other	0	0.0	1	1.1	1	1.1
Total	54	60.7	35	39.3	89	100.0

Institutional unit external to athletics with football stadium foodservice oversight.

Of those institutions indicating that an institutional unit besides athletics had primary oversight over football stadium foodservice operations, most (n = 20, 66.7%) said that some form of a college or university food/dining/catering department was responsible for oversight. This was particularly true for those institution that self-operated (n = 19, 95.0%). The only other category of note was the college or university business department, which had oversight at six (20.0%) responding institutions, all of which outsourced all or part of their football stadium foodservice operations. Table 13 displays the results for this item.

Table 12

Athletic Department Unit with Football Stadium Foodservice Oversight

	Outsourced		Self-Operated		Total	
Functional Unit	n	%	n	%	n	%
Business	11	21.2	4	7.7	15	28.8
Event Operations only	6	11.5	3	5.8	9	17.3
External Affairs	2	3.8	0	0.0	2	3.8
Facility Operations only	1	1.9	0	0.0	1	1.9
Event/Facility Combined	18	34.6	3	5.8	21	40.4
Internal Affairs	2	3.8	0	0.0	2	3.8
Marketing	1	1.9	1	1.9	2	3.8
Total	41	78.7	11	21.2	52	99.8

Note. Percentages do not sum to 100 due to rounding.

Table 13

Institutional Unit External to Athletics with Football Stadium Foodservice Oversight

	Outsourced		Self-Operated		Total	
Functional Unit	n	%	n	%	n	%
College or university Auxiliary Services	1	3.3	0	0.0	1	3.3
College or university business department	6	20.0	0	0.0	6	20.0
College or university facilities department	1	3.3	0	0.0	1	3.3
College or university conference/event department	0	0.0	1	3.3	1	3.3
College or university food/dining/catering department	1	3.3	19	63.3	20	66.7
College or University Dining & Residence	1	3.3	0	0.0	1	3.3
Total	10	33.2	20	66.6	30	100.0

Note. Percentages do not sum to 100 due to rounding.

Football stadium sections outsourced. Table 14 displays the frequency distribution for football stadium sections outsourced. Fifteen (27.3%) outsourced only all or part of general seating foodservice, while just two (3.6%) outsourced only all or part of their premium seating

foodservice operations. It is important to note that of the 15 respondents that outsourced only general seating foodservice, six (40.0%) reported that their institution's football stadium did not have premium seating. Thus, premium seating was not available for those institutions to outsource. The majority (n = 38, 69.1%) of respondents that outsourced contracted out both general and premium seating foodservice operations, with most of those (n = 31) contracting with the same firm for both general and premium seating foodservice operations. Only seven responding institutions indicated that they contracted with separate firms for general and premium seating foodservice.

Table 14

Stadium Sections Outsourced

Stadium Sections Outsourced	n	%
General seating only	15	27.3
Premium seating only	2	3.6
Both general and premium seating (same firm)	31	56.4
Both general and premium seating (different firms)	7	12.7
Total	55	100.0

Contracted foodservice providers. Table 15 shows the frequency distribution of foodservice contractors hired for responding institution's football stadium foodservice operations. While 55 institutions reported outsourcing at least part of their football stadium foodservice operations, the number of contracts awarded (n = 62) is slightly higher than the number of institutions because an institution could outsource its general seating to one firm and premium seating to another. In fact, seven institutions did just that. Sodexo, ARAMARK, and Centerplate were the most popular firms among the responding institutions. Sodexo had the largest number of contracts (n = 26, 41.9%) with responding institutions, including contracts to operate general seating foodservice at six responding institutions, premium seating foodservice at three responding institutions, or both at 17 responding institutions. ARAMARK (n = 10, 16.1%)

and Centerplate (n = 8, 12.9%) were second and third most popular respectively among responding institutions.

Table 15

Contracted Foodservice Providers

Foodservice Provider	General Seating Only		Premium Seating Only		Both General and Premium		Total	
	n	%	n	%	n	%	n	%
ARAMARK	2	3.2	0	0.0	8	12.9	10	16.1
Centerplate	6	9.7	0	0.0	2	3.2	8	12.9
Learfield Levy	1	1.6	0	0.0	1	1.6	2	3.2
Chartwells	0	0.0	2	3.2	0	0.0	2	3.2
Ovations	2	3.2	0	0.0	0	0.0	2	3.2
Sodexo	6	9.7	3	4.8	17	27.4	26	41.9
V/Gladieux	2	3.2	0	0.0	2	3.2	4	6.5
Other/Local	3	4.8	4	6.5	1	1.6	8	12.9
Total	22	35.4	9	14.5	31	49.9	62	99.9

Note. Percentages do not sum to 100 due to rounding.

Other contracts with the institution. Of the institutions that also have a contract with the outsourced foodservice provider for an area outside of athletics, ARAMARK and Sodexo were the most popular. ARAMARK had other non-athletics contracts at 9 institutions while Sodexo had other non-athletics contracts at 7 institutions. Frequency distributions for other contracts for each of the firms providing foodservice operations at a responding institution‘s football stadium are found in Table 16.

Non-athletic foodservice and football stadium foodservice on same contract. Fifty-four of the 55 responding outsourcing institutions responded to the item asking ―Is the management of any part of the football stadium's concessions included in a contract your institution has with an outsourced foodservice provider to manage non-athletics foodservice areas (e.g., dining halls, student union) or is the contract exclusive to athletic facilities?” As detailed in Table 17, 36 (66.7%) indicted that the contract was exclusive to athletics.

Table 16

Contracted Foodservice Providers with Other Contracts with the Institution

Foodservice Provider	n	%
ARAMARK	9	50.0
Centerplate	0	0.0
Learfield Levy	0	0.0
Chartwells	0	0.0
Ovations Food Service	0	0.0
Sodexo	7	38.9
V/Gladieux Enterprises	1	5.6
Other/Local	1	5.6
Total	18	100.1

Note. Percentages do not sum to 100 due to rounding.

Table 17

Non-Athletic Foodservice and Football Stadium Foodservice on Same Contract

Contract Coverage	n	%
Exclusive to athletics	36	66.7
Includes management of non-athletics areas	18	33.3
Total	54	100.0

Foodservice profit retention by athletic department. Data analysis of the percentage of football stadium foodservice profit retained by the institution‘s athletic department was conducted next. As indicated in Table 18, most (n = 61, 66.3%) responding athletic programs retained between 0% and 49% of home football game foodservice profit. When comparing based on foodservice operations method, 38 (69.1%) outsourcing institutions reported retaining 49% or less as compared to 23 (62.2%) of respondents who self-operated. As for athletic programs that retained all football foodservice profit, 10 outsourced and 10 self-operated.

Table 18

Foodservice Profit Retention by Athletic Department

Athletic Department Profit Retention	Outsourced		Self-Operated		Total	
	n	%	n	%	n	%
All	10	10.9	10	10.9	20	21.7
50% or Greater	7	7.6	4	4.3	11	12.0
Less than 50%	31	33.7	14	15.2	45	48.9
None	7	7.6	9	9.8	16	17.4
Total	55	59.8	37	40.2	92	100.0

Foodservice philosophy. A total of 87 participants responded to the survey question about foodservice philosophy (Table 19). The majority of respondents indicated that food and beverage is sold at home football games to provide a service to fans (n = 64, 73.6%) as opposed to generate revenue (n = 23, 26.4%). This held true regardless of whether an institution outsourced or self-operated football stadium foodservice operations, as 36 (70.6%) of those that outsourced and 28 (77.8%) of those that self-operate reported a philosophical leaning toward service over revenue as it pertained to foodservice. Table 20 breaks the foodservice philosophy item down further, breaking the results down by NCAA subdivision. Regardless of whether analyzing FBS or FCS institutions, the service philosophy was more prevalent.

Table 19

Foodservice Philosophy

Philosophy	Outsourced		Self-Operated		Total	
	n	%	n	%	n	%
Generate revenue	15	17.2	8	9.2	23	26.4
Provide a service	36	41.4	28	32.2	64	73.6
Total	51	58.6	36	41.4	87	100.0

Table 20

Foodservice Philosophy by NCAA Subdivision

	Outsourced		Self-Operated		Total	
Philosophy	n	%	n	%	n	%
FBS - Revenue	9	10.3	0	0.0	9	10.3
FBS – Service	23	26.4	13	14.9	36	41.4
FCS – Revenue	6	6.9	8	9.2	14	16.1
FCS – Service	13	14.9	15	17.2	28	32.2
Total	51	58.5	36	41.3	87	100

Note. Percentages do not sum to 100 due to rounding.

Athletic department outsourcing other than foodservice operations. A total of 91 participants responded to the survey question about outsourcing an athletic department function other than foodservice operations (Table 21). While 63.8% (n = 58) of respondents indicated that their institution's athletic department outsources at least one function other than foodservice operations, those institutions that outsource football stadium foodservice operations showed a greater tendency to outsource other functions (n = 38, 70.4%) than their peer institutions that self-operated football stadium foodservice operations (n = 20, 54,1%). Only 33 (36.3%) respondents indicated their athletic department did not outsource at least one function other than foodservice operations.

Impact of football stadium foodservice on athletic department image. Table 22 reports the data distribution of participant's level of agreement with the statement "Foodservice operations at the stadium where our institution plays its home football games impacts the image of our athletic department." A total of 85 participants responded to this item. While 94.1% (n = 80) of all respondents indicated *strongly agree* or *somewhat agree*, the only respondents to indicate some level of disagreement with the statement were from institutions that outsourced all or part of their football stadium foodservice operations (n = 2, 2.4%).

Table 21

Athletic Department Outsourcing Other Than Foodservice Operations

	Outsourced		Self-Operated		Total	
Other Outsourcing	n	%	n	%	n	%
Yes	38	41.8	20	22.0	58	63.7
No	16	17.6	17	18.7	33	36.3
Total	54	59.4	37	40.7	91	100.0

Note. Percentages do not sum to 100 due to rounding.

Table 22

Impact of Football Stadium Foodservice on Athletic Department Image

	Outsourced		Self-Operated		Total	
Impact on Image	n	%	n	%	n	%
Strongly agree	38	44.7	25	29.4	63	74.1
Somewhat agree	13	15.3	4	4.7	17	20.0
Neither agree nor disagree	1	1.2	2	2.4	3	3.5
Somewhat disagree	2	2.4	0	0.0	2	2.4
Strongly disagree	0	0.0	0	0.0	0	0.0
Total	54	63.6	31	36.5	85	100.0

Note. Percentages do not sum to 100 due to rounding.

Number of game-day foodservice workers. Sixty-seven respondents answered an item asking them on average, how many game day foodservice workers (including volunteers) are required for their institution‘s home football games (Table 23). The mean number of game-day workers for FBS institutions outsourcing all or part of their football stadium foodservice operations was 490.87 compared to 390.50 for FBS institutions that self-operated. The mean numbers of game-day workers for FCS institutions were much closer, with outsourcing institutions reporting a mean of 42.94 and self-operating institutions reporting a mean of 45.44.

Table 23

Number of Game-Day Foodservice Workers/Volunteers

	Outsourced			Self-Operated		
NCAA Classification	N	M	SD	N	M	SD
FBS	23	490.87	432.85	10	390.50	322.21
FCS	16	42.94	20.00	18	45.44	49.16

Alcohol sales. Tables 24 and 25 report participant responses to the question ―Is alcohol sold to fans attending your institution's home football games?" Response categories were expanded beyond just individual sales to also take into account premium seat holders provided with alcohol as part of their contract and premium seat holders that were permitted to bring alcohol into the stadium. In sum, 59 responding institutions indicated that alcohol was available to at least some spectators inside the stadium on football game-days, compared to 43 responding institutions with completely dry stadiums. Of the 59 stadiums where alcohol was available, alcohol was only available to fans in the general seating areas at 12 (20.3%) stadiums. There was a greater number of responding FCS institutions with dry stadiums (n = 30, 65.2%) as compared to FBS institutions (n = 13, 23.2%). Fourteen responding institutions reported allowing premium seating spectators to bring alcohol into the facility despite not having alcohol for sale. At the FBS level, a greater percentage of those with outsourced foodservices reported the availability of alcohol (n = 27, 77.1%) than those that self-operated (n = 9, 64.3%). Interestingly, in situations in which the responding institution did not have control over foodservice operations at the home football stadium, alcohol was available in some form at the football games of all 11 institutions.

Table 24

Alcohol Sales at FBS Football Stadiums

	Outsourced		Self-Operated		No Control		Total	
Alcohol Sales	n	%	n	%	n	%	n	%
Yes, in both general and premium seating areas	3	5.4	2	3.6	4	7.1	9	16.1
Yes, but only in premium seating areas	13	23.2	2	3.6	1	1.8	16	28.6
No, but provided as part of the premium seating package/contract	3	5.4	2	3.6	1	1.8	6	10.7
No, but premium seating guests are permitted to bring alcohol into the facility	8	14.3	3	5.4	1	1.8	12	21.4
None	8	14.3	5	8.9	0	0.0	13	23.2
Total	35	62.6	14	25.1	7	12.5	56	100.0

Note. Percentages do not sum to 100 due to rounding.

Table 25

Alcohol Sales at FCS Football Stadiums

	Outsource		Self-Operated		No Control		Total	
Alcohol Sales	n	%	n	%	n	%	n	%
Yes, in both general and premium seating areas	0	0.0	1	2.2	2	4.3	3	6.5
Yes, but only in premium seating areas	4	8.7	2	4.3	1	2.2	7	15.2
No, but provided as part of the premium seating package/contract	1	2.2	3	6.5	0	0.0	4	8.7
No, but premium seating guests are permitted to bring alcohol into the facility	0	0.0	1	2.2	1	2.2	2	4.3
None	14	30.4	16	34.8	0	0.0	30	65.2
Total	19	41.3	23	50.0	4	8.7	46	99.9

Note. Percentages do not sum to 100 due to rounding.

Satisfaction with alcohol management. Table 26 addresses satisfaction with alcohol management at the home football stadium. Fifty-one of the 59 responding institutions that sold or permitted alcohol in the stadium answered this question. However, 15 of those respondents

indicated the question was not applicable. It is interesting to note that each of the 15 aforementioned institutions did not sell alcohol individually, but rather included it as part of a premium seating contract or allowed premium seat spectators to bring the alcohol into the stadium. Participants were asked to rate their satisfaction with alcohol management at the football stadium on a 5-point Likert scale item with choices ranging from *very dissatisfied* (1) to *very satisfied* (5). Regardless of NCAA Classification or foodservice management method, the mean score for each group was above 4, suggesting that on average respondents were satisfied with alcohol management.

Table 26

Satisfaction with Alcohol Management

	Outsourced			Self-Operated			No Control		
NCAA Classification	N	M	SD	N	M	SD	N	M	SD
FBS	17	4.24	.903	5	4.20	.837	4	4.25	.500
FCS	2	4.50	.707	4	4.25	.500	4	4.25	.957

Per capita spending on foodservice. Fifty-one participants responded to the item requesting the per capita spending on foodservice at home football games (Table 27). An extreme outlier of $18 reported by an FCS institution that self-operated football stadium foodservice operations was omitted from the calculations. The mean per capita spending scores were similar regardless of NCAA Classification or foodservice management method. Perhaps most interesting though is that FCS institutions that self-operated had the highest mean per capita amount ($4.57). It is important to note that the figures presented in Table 27 do not distinguish between those institutions that sell alcohol at the home football stadium and those that do not.

Table 27

Per Capita Spending on Foodservice

	Outsourced			Self-Operated		
NCAA Classification	N	M	SD	N	M	SD
FBS	22	$4.09	2.25	6	$4.29	1.85
FCS	13	$3.56	2.19	10	$4.57	3.43

Research Question Two

Research Question Two asked if a significant difference existed between athletic administrators at FBS and FCS institutions regarding their agreement with perceived benefits of outsourcing foodservice operations. Data from respondents that completed each benefit item, regardless of foodservice method or control, was used for this analysis because the questions were philosophical in nature. Thus, the sample size for the analysis of Research Question Two was 103. Benefit inventories, adapted from the work of Li and Burden (2002), included *Improvement in Administrative Efficiency* (four items), *Utilization of External Expertise* (two items), *Enhancement of Foodservice Operations* (four items), and *Financial Advantages* (four items). The statements analyzed included:

Improvement in Administrative Efficiency

- More Efficient = It is more efficient to outsource foodservice operations than keep them in-house.
- Reduce Bureaucracy = Outsourcing can help reduce bureaucracy and red tape in foodservice operations.
- Reallocation of Resources = Outsourcing enables reallocation of resources to other more critical areas within the department.
- Avoid In-House Employment = Outsourcing helps avoid the administrative complexity of in-house employment.

Utilization of External Expertise

- Access to External Expertise = Outsourcing allows access to external specialized talent and expertise in foodservice operations.
- Foodservice Networking = Outsourcing allows participation in a foodservice network and synergy.

Enhancement of Foodservice Operations

- Competitive Advantage = Outsourcing can help build a sustainable competitive advantage.
- Quality Enhancement = Outsourcing helps enhance the quality of foodservice operations.
- Timeliness = Outsourcing allows for the handling of all aspects of foodservice operations in a more timely fashion.
- Opportunities for Non-Revenue Sports = Outsourcing can provide opportunities to expand foodservice efforts to non-revenue sports.

Financial Advantages

- Less Expensive than In-House = It is less expensive to outsource foodservice operations than keep them in-house.
- Greater Financial Return = Outsourcing of foodservice operations can bring in greater financial return than keeping them in-house.
- Overhead Expense Reduction = Outsourcing enables cutting down on overhead expenses.
- Capital Expense Reduction = Outsourcing can help reduce capital expenses related to foodservice operations.

Participants were asked to indicate their level of agreement or disagreement with the aforementioned statements about outsourcing foodservice operations. Five-point Likert items, ranging from *strongly disagree* (1) to *strongly agree* (5) were used. Both descriptive (i.e., mean, standard deviation) and inferential statistics (i.e., *t*-tests and ANOVA) were used to analyze responses. Data across the benefit inventories (e.g., *Financial Advantages*) was combined into subscales. Cronbach's α was used to assess the internal consistency of each benefit inventory, allowing the inventories to serve as dependent variables. A series of independent *t*-tests and one-way ANOVAs was conducted using NCAA subdivision classification (i.e., FBS/BCS, FBS/non-BCS, FCS) as the independent variable.

Table 28 shows the mean and standard deviation scores for each of the 14 items. Only three items (i.e., Avoid In-House Employment, Access to External Expertise, and Overhead Expense Reduction) had mean agreement scores of 4.00 or higher. The statement "Outsourcing of foodservice operations can bring in greater financial return than keeping them in-house" had

the lowest mean agreement score (M = 3.20). Thus, not a single statement had a mean score indicating disagreement.

Table 28

Benefit Statement Mean Scores

Benefit	N	M	SD
More Efficient	103	3.96	1.056
Reduce Bureaucracy	103	3.89	1.009
Reallocation of Resources	103	3.82	0.968
Avoid In-House Employment	103	4.17	0.879
Access to External Expertise	103	4.17	0.864
Foodservice Networking	103	3.87	0.813
Competitive Advantage	103	3.57	0.881
Quality Enhancement	103	3.65	0.860
Timeliness	103	3.75	0.813
Opportunities for Non-Revenue Sports	103	3.54	1.046
Less Expensive Than In-House	103	3.64	1.028
Greater Financial Return	103	3.20	1.042
Overhead Expense Reduction	103	4.00	0.907
Capital Expense Reduction	103	3.95	0.943

Replicating the work of Li and Burden (2002), benefit statements were combined into four different benefit inventories. Table 29 displays the descriptive statistics and internal consistency score for the benefit inventories. With regard to Cronbach's α, the *Improvement in Administrative Efficiency* (α = .826), *Utilization of External Expertise* (α = .823), and *Financial Advantages* (α = .735) benefit inventories all had acceptable levels of internal consistency. The *Enhancement of Foodservice Operations* inventory (α = .683) fell just below the acceptable level mark of .700; however, if the item regarding expanding foodservice efforts to non-revenue sports were to be removed the α level of this inventory would increase to .705. The *Utilization of External Expertise* (M = 4.02) and *Improvement in Administrative Efficiency* (M = 3.96) inventories had the highest mean agreement scores, while none of the four inventories reflected disagreement.

Table 29

Descriptive Statistics and Internal Consistency Scores of Benefit Inventories

Benefit Inventory	Mean	SD	α
Improvement in Administrative Efficiency	3.96	.794	.826
1. It is more efficient to outsource foodservice operations than keep them in-house.			
2. Outsourcing can help reduce bureaucracy and red tape in foodservice operations.			
3. Outsourcing enables reallocation of resources to other more critical areas within the department.			
4. Outsourcing helps avoid the administrative complexity of in-house employment.			
Utilization of External Expertise	4.02	.773	.823
1. Outsourcing allows access to external specialized talent and expertise in foodservice operations.			
2. Outsourcing allows participation in a foodservice network and synergy.			
Enhancement of Foodservice Operations	3.63	.647	.683
1. Outsourcing can help build a sustainable competitive advantage.			
2. Outsourcing helps enhance the quality of foodservice operations.			
3. Outsourcing allows for the handling of all aspects of foodservice operations in a more timely fashion.			
4. Outsourcing can provide opportunities to expand foodservice efforts to non-revenue sports.			
Financial Advantages	3.70	.733	.735
1. It is less expensive to outsource foodservice operations than keep them in-house.			
2. Outsourcing of foodservice operations can bring in greater financial return than keeping them in-house.			
3. Outsourcing enables cutting down on overhead expenses.			
4. Outsourcing can help reduce capital expenses related to foodservice operations.			

Independent t-tests were conducted to determine if a significant difference existed between the athletic administrators from the different NCAA Division I football subdivisions (i.e., FBS, FCS) in terms of perceived outsourcing benefits. The Shapiro-Wilk test was used to test for normality. The test revealed that only two of the eight group distributions were normal. The only two normally distributed groups were FCS institutions in the *Enhancement of Foodservice Operations* inventory, $W(46) = 0.964$, $p > .05$, and FBS institutions in the *Financial Advantages* inventory, $W(57) = 0.967$, $p > .05$. Levene's test for homogeneity of variance revealed equal variances for each of the four inventories. The scores for each inventory were as follows: *Improvement in Administrative Efficiency*, $F(1, 101) = 0.927$; *Utilization of External*

Expertise, $F(1, 101) = 0.142$; *Enhancement of Foodservice Operations*, $F(1, 101) = 1.086$; *Financial Advantages*, $F(1, 101) = 0.030$.

No significant differences were found between FBS and FCS administrators regarding agreement with the benefit inventories. On average, participants from FBS institutions showed greater agreement with *Improvement in Administrative Efficiency* (M = 4.02, SE = .100) than participants from FCS institutions (M = 3.89, SE = .124), $t(101) = .801$, $p > .05$, $r = .08$. In regards to the *Utilization of External Expertise* inventory, participants from FBS institutions on average showed greater agreement (M = 4.10, SE = .100) than participants from FCS institutions (M = 3.92, SE = .116), $t(101) = 1.128$, $p > .05$, $r = .11$. Participants from FBS institutions showed greater agreement with *Financial Advantages* (M = 3.77, SE = .091) than participants from FCS institutions (M = 3.61, SE = .115), $t(101) = 1.125$, $p > .05$, $r = .11$. The *Enhancement of Foodservice Operations* inventory was the only inventory on which participants from FCS institutions showed greater agreement (M = 3.68, SE = .085) than participants from FBS institutions (M = 3.58, SE = .093), $t(101) = -.789$, $p > .05$, $r = .08$. Descriptive statistics can be found in Table 30.

Table 30

Descriptive Statistics for Relationships between NCAA Classification and Outsourcing Benefit Inventories

	FBS (n = 57)		FCS (n = 46)	
Benefit Inventory	Mean	SD	Mean	SD
Improvement in Administrative Efficiency	4.02	.759	3.89	.839
Utilization of External Expertise	4.10	.759	3.92	.789
Enhancement of Foodservice Operations	3.58	.703	3.68	.574
Financial Advantages	3.77	.690	3.61	.781

Next, one-way ANOVA's were conducted to see if any differences existed between FBS/BCS, FBS/non-BCS, and FCS institutions. The Shapiro-Wilk test was used to test for normality. The test revealed that seven of the twelve group distributions were significantly non-normal. Those group distributions that were significantly non-normal included the FBS/BCS group, $W(33) = 0.005$, $p < .05$, and the FCS group, $W(46) = 0.007$, $p < .05$, in the *Improvement in Administrative Efficiency* inventory; the FBS/BCS group, $W(33) = 0.021$, $p < .05$, in the *Enhancement of Foodservice Operations* inventory; the FBS/BCS group, $W(33) = 0.001$, $p < .05$, and the FCS group, $W(46) = 0.005$, $p < .05$, in the *Utilization of External Expertise* inventory; and the FBS/non-BCS group, $W(24) = 0.008$, $p < .05$, and the FCS group, $W(46) = 0.026$, $p < .05$, in the *Financial Advantages* inventory. Levene's test for homogeneity of variance revealed significantly different variances in one inventory, *Improvement in Administrative Efficiency*, $F(2, 100) = 3.248$, $p < .05$.

As with the independent *t*-tests, no significant differences were found. Even when further subdividing FBS institutions based on BCS conference status, NCAA Classification did not have a significant effect on agreement with the *Improvement in Administrative Efficiency*, $F(2, 100) = .318$, $p > .05$, $\omega^2 = -.01$; *Utilization of External Expertise*, $F(2, 100) = 1.114$, $p > .05$, $\omega^2 = .00$; *Enhancement of Foodservice Operations*, $F(2, 100) = .330$, $p > .05$, $\omega^2 = -.01$; or *Financial Advantages*, $F(2, 100) = .890$, $p > .05$, $\omega^2 = .00$, inventories. Descriptive statistics can be found in Table 31.

Table 31

Descriptive Statistics for Relationships between NCAA Classification (including BCS Conference Affiliation) and Outsourcing Benefit Inventories

	FBS/BCS (n = 33)		FBS/non-BCS (n = 24)		FCS (n = 46)	
Benefit Inventory	Mean	SD	Mean	SD	Mean	SD
Improvement in Administrative Efficiency	4.02	.906	4.02	.510	3.89	.839
Utilization of External Expertise	4.18	.779	3.98	.729	3.92	.789
Enhancement of Foodservice Operations	3.60	.768	3.56	.618	3.68	.574
Financial Advantages	3.71	.786	3.85	.536	3.61	.781

Research Question Three

Research Question Three asked if a significant difference existed between institutions in their satisfaction regarding elements of foodservice operations at their home football stadium. Participants were asked to identify how satisfied they were with each of the 39 items on a five point Likert scale. Options on the Likert scale ranged from *very dissatisfied* (1) to *very satisfied* (5). Both descriptive (i.e., mean, standard deviation) and inferential statistics (i.e., *t*-tests, Kruskal-Wallis test) were used to analyze data. Data across the subitems (e.g., *Financial Considerations*, *Human Resource Considerations*) was combined into subscales referred to as satisfaction inventories. Cronbach's α was used to assess the internal consistency of each satisfaction inventory, allowing the inventories to serve as dependent variables. A series of independent *t*-tests and the Kruskal-Wallis test were conducted using foodservice management arrangement (i.e., outsourced or self-operated) and NCAA subdivision classification (i.e., FCS, FBS) as independent variables. The Kruskal-Wallis test, the non-parametric equivalent to the one-way independent ANOVA, was selected due to the small sample size. Forty cases were

removed because of missing data related to one or more of the items or the fact that the institution had no control over football stadium foodservice operations. In total, the analysis for Research Question Three included 71 participants.

Table 32 shows the descriptive statistics for items belonging to the *Financial Considerations* inventory crosstabulated with foodservice operations method. Regardless of foodservice operations method, not a single item in the inventory had a mean satisfaction score higher than 3.72. While all mean satisfaction scores for responding institutions with outsourced foodservices were above 3.00, six items had a mean satisfaction score slightly below 3.00 for those institutions self-operating foodservices.

Table 32

Descriptive Statistics for Satisfaction with Financial Considerations

	Outsourced			Self-Operated		
Financial Considerations	N	M	SD	N	M	SD
Per capita spending in general seating areas	46	3.39	.906	25	3.12	1.130
Per capita spending in premium seating areas	46	3.46	.887	25	3.28	.936
Overall per capita (i.e., per fan) spending	46	3.33	.871	25	2.96	1.020
Profitability	46	3.48	.913	25	2.96	1.207
Pricing	46	3.43	.958	25	3.48	1.085
Sales forecasting	46	3.17	.825	25	2.80	1.000
Cost projections	46	3.28	.807	25	2.92	.759
Sales volume	46	3.33	.871	25	2.96	1.172
Budgeting	46	3.43	.860	25	3.16	.943
Inventory management	46	3.43	.886	25	2.76	1.268
Cash handling	46	3.63	.878	25	3.56	1.003
Shrinkage/shortage (e.g., theft)	46	3.54	.780	25	3.40	.764
Risk management practices (e.g., OSHA, fire extinguishers, insurance)	46	3.72	.807	25	3.48	1.005

Descriptive statistics for items belonging to the *Service Quality Considerations* inventory crosstabulated with foodservice operations method can be found in Table 33. Regardless of

football stadium foodservice method, only one satisfaction item (seating bowl vendors/hawkers for FCS institutions) had a mean satisfaction score below 3.00. Responding institutions appeared to be satisfied with the proximity of foodservice areas to both general and premium seating, as these items received a mean satisfaction score greater than 4.00 for both outsourced and self-operated foodservice operations.

Table 33

Descriptive Statistics for Satisfaction with Service Quality Considerations

	Outsourced			Self-Operated		
Service Quality	N	M	SD	N	M	SD
Customer wait time	46	3.30	1.152	25	3.04	1.172
Payment method options offered	46	3.74	.953	25	3.12	1.364
Distance of foodservice areas from general seating areas	46	4.20	.719	25	4.24	.831
Distance of foodservice areas from premium seating areas	46	4.15	.965	25	4.28	.891
Freshness of food and beverage items	46	3.76	.736	25	4.24	.879
Taste of food and beverage items	46	3.78	.696	25	3.96	.935
Brand names available for purchase	46	3.67	.762	25	3.76	1.012
Variety of food and beverage items available for purchase	46	3.67	.818	25	3.48	1.262
Location of foodservice areas in stadium	46	3.93	.827	25	4.00	1.080
Number of points of purchase	46	3.72	1.167	25	3.88	1.130
Marketing of food and beverage inside stadium (e.g., program ads, directional and promotional signage, in-game announcements)	46	3.17	.926	25	3.32	1.069
Presentation of food and beverage items	46	3.35	.822	25	3.36	1.186
Design/layout of permanent foodservice stands	46	3.28	.981	25	3.12	1.394
Design/layout of portable foodservice stands	46	3.39	1.064	25	3.20	1.155
Menu board design	46	3.43	1.025	25	3.44	1.387
Seating bowl vendors/hawkers	46	3.13	.980	25	2.84	.688

Table 34 shows the descriptive statistics for items belonging to the *Human Resource Considerations* inventory crosstabulated with foodservice operations method. While no item had a mean satisfaction score above 4.00, only two fell below 3.00. Institutions that self-operated foodservice had a mean satisfaction score of 2.68 for the item regarding motivation of foodservice staff. This ranked as the lowest mean satisfaction score for any item in any of the four satisfaction inventories.

Table 34

Descriptive Statistics for Satisfaction with Human Resource Considerations

	Outsourced			Self-Operated		
Human Resource	N	M	SD	N	M	SD
Game day foodservice staffing levels	46	3.63	.826	25	3.32	1.108
Customer service skills of foodservice staff	46	3.33	.896	25	3.12	1.166
Appearance of foodservice staff	46	3.59	.956	25	2.96	1.241
Motivation of foodservice staff	46	3.43	.860	25	2.68	1.180
Management expertise/competency of foodservice managers	46	3.96	.788	25	3.76	1.091

Descriptive statistics for the *Sanitation and Sustainability Considerations* inventory can be found in Table 35 on page 107. While all mean satisfaction scores were above 3.00, only two were 4.00 or higher. Regardless of foodservice operations method, the item asking for satisfaction with sanitation regulation compliance received a mean satisfaction score of at least 4.00.

Table 36 (see page 107) displays the descriptive statistics and internal consistency score for the satisfaction inventories. With regard to Cronbach's α, each of the inventories had an acceptable overall level of internal consistency (*Financial Considerations*, α = .909; *Service Quality Considerations*, α = .901; *Human Resources Considerations*, α = .876; *Sanitation and Sustainability Considerations*, α = .801); however, three of the four overall inventories could be

improved by removing one item from each. If the recycling efforts item was removed from the *Sanitation and Sustainability Considerations* inventory, α level would increase to .844. The overall α level of the *Human Resources Considerations* inventory could be improved by .004 if the item regarding management expertise/competency were to be removed. The overall α level for the *Service Quality Considerations* inventory could improve if the item regarding seating bowl hawkers/vendors were removed, but only slightly (i.e., .001)

When calculating the reliability analysis for each inventory broken down by foodservice method, only one inventory for outsourcing institutions, the *Financial Considerations* inventory, could be improved by removing an item. Removing the item regarding premium seating per capita spending in the *Financial Considerations* inventory would result in just a slight increase in reliability (i.e., .001). Additionally, it should be noted that the α level for each inventory for self-operating institutions could be improved by removing one or more items from each. Removing the risk management item in the *Financial Considerations* inventory would also result in just a slight increase in reliability (i.e., .004). If the recycling efforts item was removed from the *Sanitation and Sustainability Considerations* inventory for self-operating institutions, the α level would increase to .874. The α level of the *Human Resources Considerations* inventory could be improved by .019 if the item regarding management expertise/competency were to be removed. As for the *Service Quality Considerations* inventory, the item asking about satisfaction with seating bowl hawkers/vendors had a corrected item-total correlation below .300 and should therefore be dropped from the inventory (Field, 2009). Several other items from the *Service Quality Considerations* inventory for self-operating institutions could improve the α level by being removed, but only slightly (e.g., .003). In terms of central tendency, the *Sanitation and Sustainability* inventory had the highest mean satisfaction score regardless of foodservice

operations method, while the *Financial Considerations* inventory resulted in the lowest mean satisfaction score for both groups.

Independent t-tests were run for each of the inventories to see if a significant difference in satisfaction existed based on foodservice operations method groupings. The Shapiro-Wilk test for normality indicated that the distribution for each inventory, regardless of grouping (i.e., outsourced or self-operated), was normal. Levene's Test for Equality of Variances revealed a violation of the assumption of homogeneity of variance for only one inventory, *Service Quality Considerations*, $F(1, 69) = 4.997$, $p < .05$.

A significant difference was found in only one inventory, *Human Resource Considerations*. On average, participants that outsourced experienced greater satisfaction with human resource considerations (M = 3.59, SE = .103) than participants that self-operated (M = 3.17, SE = .191), $t(69) = 2.117$, $p < .05$, $r = .25$.

As mentioned in the previous paragraph, a significant difference in satisfaction between groups did not exist in the other three inventories. On average, participants that outsourced experienced greater satisfaction with financial considerations (M = 3.43, SE = .089) than participants that self-operated (M = 3.14, SE = .139), $t(69) = 1.846$, $p > .05$, $r = .22$. Institutions that outsourced (M = 3.61, SE = .082) had a nearly identical mean satisfaction score on the *Service Quality Considerations* inventory as institutions that self-operated (M = 3.58, SE = .152). As mentioned earlier, Levene's Test for Equality of Variances was significant for the *Service Quality Considerations* inventory ($p = .029$), consequently equal variances could not be assumed. The mean satisfaction scores for both groups were nearly identical as well for the *Sanitation and Sustainability Considerations* inventory (Outsourced M = 3.67, SE = .097; Self-Operated M = 3.68, SE = .143), $t(69) = -.088$, $p > .05$, $r = .09$.

Table 35

Descriptive Statistics for Satisfaction with Sanitation and Sustainability Considerations

	Outsourced			Self-Operated		
Sanitation and Sustainability	N	M	SD	N	M	SD
Compliance with sanitation regulations	46	4.00	.760	25	4.12	.833
Recycling efforts	46	3.48	.960	25	3.36	1.287
Cleanliness of foodservice areas visible to patrons	46	3.72	.807	25	3.68	1.030
Cleanliness of foodservice preparation areas	46	3.61	.856	25	3.76	.779
Equipment maintenance	46	3.52	.863	25	3.48	1.005

Table 37 shows the descriptive statistics for relationships between NCAA classification/foodservice operations method and the satisfaction inventories. The majority of mean satisfaction scores were above 3.00 but less than 3.80, with the exceptions being the mean satisfaction scores of FCS Self-Operating institutions on the *Financial Considerations* (M = 2.95) and *Human Resource Considerations* (M = 2.89) inventories.

Table 36

Descriptive Statistics for Relationships between Foodservice Method and Satisfaction Inventories

	Outsourced (n = 46)			Self-Operated (n = 25)		
Satisfaction Inventory	Mean	SD	α	Mean	SD	α
Financial Considerations	3.43	.602	.911	3.14	.694	.899
Service Quality Considerations	3.61	.554	.881	3.58	.760	.925
Human Resource Considerations	3.59*	.698	.865	3.17*	.953	.881
Sanitation and Sustainability Considerations	3.67	.656	.829	3.68	.716	.760

Note. * $p < .05$

The Kruskal-Wallis test was conducted to see if a significant difference existed in the satisfaction inventory scores when combining football stadium foodservice operation method and NCAA classification. None of the inventories were significantly affected by NCAA

Classification/Foodservice Method. NCAA classification/foodservice operations method did not have a significant effect on satisfaction with the *Financial Considerations*, $H(3) = 5.52$, $p > .05$; *Service Quality Considerations*, $H(3) = .205$, $p > .05$; *Human Resource Considerations*, $H(3) = 6.44$, $p > .05$; or *Sanitation and Sustainability Considerations*, $H(3) = .76$, $p > .05$, inventories.

Table 37

Descriptive Statistics for Relationships between NCAA Classification/Foodservice Operations Method and Satisfaction Inventories

	FBS Outsourced (n = 30)		FBS Self-Operated (n = 12)		FCS Outsourced (n = 16)		FCS Self-Operated (n = 13)	
Satisfaction Inventory	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Financial Considerations	3.47	.619	3.35	.758	3.37	.583	2.95	.597
Service Quality Considerations	3.64	.565	3.54	.829	3.55	.547	3.62	.722
Human Resource Considerations	3.57	.673	3.47	1.007	3.63	.766	2.89	.847
Sanitation and Sustainability Considerations	3.71	.627	3.77	.584	3.59	.721	3.60	.837

Research Question Four

Research Question Four addressed what is the best predictor of whether an institution outsourced the foodservice operations at its home football stadium. A backward stepwise logistic regression model was employed to determine the ability of athletic department budget, football stadium seating capacity, age of football stadium, whether or not the athletic department outsourced something besides foodservice, as well as the four benefit inventories from Research Question Two (i.e., *Improvement in Administrative Efficiency*, *Utilization of External Expertise*, *Enhancement of Foodservice Operations*, and *Financial Advantages*) to predict whether or not an institution will outsource the foodservice operations of its home football stadium. A

backward stepwise method was selected because it is less susceptible to suppressor effects (Field, 2009).

The predictor variable of Stadium Age was narrowed to two levels: stadiums opening prior to 1970 and stadiums opening in 1970 or later. While the standard useful economic life of a major league sports facility is approximately 30 years (Siegfried & Zimbalist, 2000), the year 1970 was used because of the tendency of colleges and universities to renovate existing football stadiums rather than build new stadiums. Athletic department budget size was also narrowed to two levels: those athletic programs with athletic budgets for 2010-11 less than $50 million and those with budgets of $50 million or greater. The predictor variable stadium seating capacity, also narrowed to two levels, was split into levels of stadiums with a seating capacity under 50,000 and stadiums with seating capacities of 50,000 and greater. The final categorical predictor variable, whether or not the athletic department outsourced something besides foodservice was either yes or no.

Due to a number of factors, the analysis could only be conducted for FBS institutions. Even using a very simple model with predictor variables such as budget size and stadium capacity narrowed to two levels, few if any FCS institutions were represented in the higher predictor variable levels (i.e., athletic budget over $50 million or stadium capacity over 50,000). Further, many FCS institutions that outsourced the foodservice operations at their home football stadium indicated that the management of football stadium foodservice was part of a contract with the foodservice provider that also included non-athletics areas. Consequently, the decision to outsource stadium foodservice operations may have not been a key factor in the outsourcing decision. While FBS institutions reporting a similar contractual agreement were also excluded from the analysis, they were not large enough in number to be prohibitive. Cases in which the

institution reported no control over football stadium foodservice operations and those with missing data related to one or more of the predictor variables (including several private institutions that did not disclose athletic budget amount) were also excluded. In all, the regression analysis included 40 FBS institutions. As for the assumption of linearity, the Hosmer and Lemeshow test was planned but unable to be conducted due to negative natural logs among the predictor variables, resulting in the statistical software labeling the data as missing. The variable inflation factor (VIF) and tolerance statistic were calculated to determine whether the problem of multicollinearity was avoided. The tests did not seem to indicate any multicollinearity issues. The assumption of independence was met as a result of an acceptable dispersion parameter of 1.52.

Table 38 shows the data for the final step. Predictor variables were removed from the model in the following order: *Enhancement of Foodservice Operations* inventory, Athletic Budget, Stadium Capacity, Stadium Age, *Utilization of External Expertise* inventory, Other Outsourcing, *Financial Advantages* inventory, and *Improvement in Administrative Efficiency* inventory, leaving the only significant predictor in the final step, which was the *Improvement in Administrative Efficiency* inventory.

Table 38

Main Model (Final step) Predicting Football Stadium Foodservice Outsourcing

						95% CI	
Variable	β	SE	Wald	*p*	Exp(B)	LL	UL
Constant	-4.84	2.25	4.63	.031	.01		
Improvement in Administrative Efficiency	1.44	.57	6.42	.011*	4.21	1.38	12.81

Note. * $p < .05$

Only one of the variables, the *Improvement in Administrative Efficiency* inventory was found to be significant. Consequently, it can be implied that a higher score on the *Improvement in Administrative Efficiency* inventory increases the likelihood an institution outsourced its

football stadium foodservice operations. However, this result needs to be viewed cautiously due to the small sample size and its inability to be representative of the population resulting from the aforementioned exclusionary criteria. Plus, the model was a poor overall fit of the data. Cox and Snell's R^2 was .20 and Nagelkerke's R^2 was .28. Adding the significant predictor variable, *Improvement in Administrative Efficiency*, to the model with only the constant only increased the overall percentage of correctly classified cases from 70% to 75%.

Open-Ended Responses

At the end of the instrument participants were given the opportunity to respond to an open-ended item asking if they had anything they would like to add. In all, only 16 participants answered the open-ended response item. Responses could be grouped into three general categories: opinions on foodservice operations at the participant's institution (n = 8), clarification on responses given elsewhere in the survey (n = 5), and comments about the study (n = 3). Seven respondent comments of note are summarized below based on the football stadium foodservice method and NCAA classification.

- FBS, self-operated, but by an institutional unit other than athletics
    - Respondent reported satisfaction with both day-to-day staff and volunteer groups that operate the stands on game days
- FBS, outsourced general seating, premium seating managed by an institutional unit other than athletics
    - Complaints the institution's athletic program received were usually related to wait times and line length.
- FBS, outsourced as part of contract that includes non-athletics foodservice operations on campus

    - Perception exists that foodservice provider, a leading national firm, does not offer enough exclusive attention to athletics
- FBS, outsourced general seating, premium seating outsourced to vendor of suite holder‘s choice
    - Respondent believes that per capita spending would increase if general seating foodservice provider was more creative with promotions.
- FBS, general and premium seating outsourced to the same firm
    - Respondent reports being very satisfied with institution‘s arrangement with foodservice provider, but believes there is always room for improvement in the areas of customer satisfaction and sanitary conditions. Respondent also indicates that the institution expect concessionaire to maximize revenue but at the sake of customers. Relationships and holding the contractor accountable, as well as site visits during the bid process, are all important considerations for this respondent.
    - Respondent asked why study focused on just football because respondent‘s institution earns more concessions revenue from basketball.
- FBS, both general and premium seating outsourced, but to different firms
    - Respondent indicated difficulty in answering some questions due to the fact that institution works with two different foodservice providers.

The intent of Chapter V is to summarize the study‘s findings and draw conclusions from this research. In addition, Chapter V will offer recommendations for impacted stakeholder groups and suggest future research directions for research of this kind and suggest related topics not yet thoroughly researched in the existing body of knowledge.

Chapter V:

Summary, Conclusions, and Recommendations

Summary of the Study

The purpose of this study was to explore the current state of the outsourcing of foodservice operations by National Collegiate Athletic Association (NCAA) Division I athletic programs, particularly at their home football stadiums, in order to assist decision makers. This chapter presents a detailed account of the results of this study. Each section of the chapter corresponds to one of the four research questions. The following research questions provided the focus for this study:

1. What are the characteristics of Division I institutions that (a) outsourced foodservice operations or (b) self-operated foodservice operations at their home football stadium?
2. Does a significant difference exist in perceived benefits of outsourcing foodservice operations between athletic administrators at FBS and FCS institutions?
3. Does a significant difference exist between institutions in their satisfaction regarding foodservice operations at their home football stadium?
    a. Outsourced v. Self-operated (All subdivisions)
    b. Outsourced v. Self-operated (Separated by subdivisions)
4. What is the best predictor of whether an institution outsourced the foodservice operations at its home football stadium?

The study was descriptive and exploratory in nature. The population of this study was comprised of athletic administrators responsible for the oversight of the foodservice function at each of the respective 244 NCAA member institutions sponsoring the sport of football at the Division I level during the 2010-11 academic year as either active members or provisional

members, as well as two additional institutions that had just added the sport of football in 2010 but played a Division I schedule. For the purposes of this study, potential participants were identified as the athletic administrator at each institution responsible for one of the following duties:

- oversight (as opposed to direct management duties) of an in-house concessions unit;
- serving as athletic department liaison to an institutional dining services unit that manages athletic foodservice;
- serving as athletic department liaison to an outsourced concessionaire; or
- serving as athletic department liaison for matters such as foodservice to an off-campus facility not owned by the institution where the institution plays its home football games.

An 84 item structured, self-administered questionnaire (Appendix B) was developed to assess information provided by the athletic administrators regarding foodservice operations. The instrument was developed based on a review of existing literature on the topic of foodservice operations at sport facilities. One section of the instrument consisted of a benefit inventory adapted from the work of Li and Burden (2002), with the remainder developed by the researcher.

An expert panel review of the instrument was conducted in November 2010 to assess content validity. Subsequent to the expert panel review, the survey was administered to participants in February 2011 via the online survey provider FormSite.com. A 50% rate of return (n = 122) was considered ideal, with a 20% rate of return (n = 48) being the minimum acceptable response rate. The actual overall response rate was 49.2% (n = 120). However, after removing those cases that were completely unusable, the number of responses usable for at least one of the analyses totaled 111 (45.5%). Descriptive (i.e., frequency, mean, standard deviation)

and inferential statistics (i.e., independent *t*-tests, one-way ANOVA's, Kruskal-Wallis, logistic regression) were used to examine the data in this study. A written report outlining the study's findings was completed by August 2011.

Conclusions

Research question one. Research Question One dealt with the characteristics of those institutions that outsourced football stadium foodservice operations as compared to those that self-operated the function. Of those Division I institutions with control over their football stadium foodservice operations, a greater percentage of responding institutions outsourced (59.8%) all or part of football stadium foodservice operations than self-operated (40.2%). The percentage of respondents outsourcing football stadium foodservice operations is slightly higher than past figures found in the literature which ranged from 30% (Lee, 2001) to 50% (*Revenues from Sports Venues College Edition,* as cited in Steinbach, 2000). This is in line with the prediction of some observers that either believed there was trend toward outsourcing among college athletic departments as it pertained to foodservice operations (Waddell, 1994) or that intercollegiate athletic programs were a growth area for nationally recognized foodservice firms (Lee, 2001; Muret, 2009; Steinbach, 2000).

When looking at the data based on NCAA classification, FBS institutions, particularly those from the BCS conferences showed a preference toward outsourcing football stadium foodservice operations. It has been suggested by many critics that institutions from BCS conferences emulate the business model of professional sports. Given the greater proportion of respondents from this NCAA classification to outsource concessions (i.e., 74.2%), there may be some merit to this claim because 88% of major league (i.e., MLB, NBA, NFL, NHL) facilities open or under construction in April 2008 had contracts with independent companies to operate

their general concessions ("Key Concessionaires," 2008). Their FCS counterparts were more evenly divided however, with 20 (46.5%) respondents outsourcing and 23 (53.5%) self-operating. This finding supported the assertion of Bigelow (as cited in Lee, 2001), who stated that the number of institutions outsourcing athletic facility foodservice management would continue to grow, but that "institutions with smaller [athletic] departments, will remain self-operated in order to keep all concessions revenue in-house" (para. 15).

The tendency toward outsourcing all or part of football stadium foodservice operations by FBS institutions, particularly from BCS conferences, is important to note. Because the FBS is the highest level of sponsorship for football, institutions sponsoring programs at this level allocate more resources on average to their athletic programs as compared to their FCS peers. Consequently, FBS institutions are going to generally have larger athletic budgets and stadiums with larger seating capacities. The tendency toward outsourcing is also present when examining these two variables. For example, of those responding institutions with an athletic budget for 2010-11 between $31 and $80 million dollars, 20 of 22 (90.9%) institutions outsourced all or part of football stadium foodservice operations. Regarding football stadium seating capacity, responding institutions with stadium capacities greater than 30,000 that outsourced (n = 32, 78.0%) far outnumbered their self-operating peers (n = 9, 22.0%). Interestingly, the only seating capacity interval in which the number of responding institutions self-operating football stadium foodservice operations (n = 11, 78.6%) outnumbered those that outsourced (n = 3, 21.4%) was those institutions with seating capacities under 10,000 – none of which could be FBS stadiums because NCAA Bylaw 20.9.7.3 (National Collegiate Athletic Association, 2010) states that in order to maintain FBS status an institution has to certify that it averages at minimum 15,000 in

actual or paid attendance for all home football games. This attendance total has to be reached once every two years on a rolling basis according to NCAA Bylaw 20.9.7.3.

Based on the respondents in this study, it appears that institutions with older facilities favor the outsourcing option for football stadium foodservice operations. Institutions with stadiums opening prior to 1940 seemed to show a greater tendency toward outsourcing, with71% (n = 22) outsourcing all or part of football stadium foodservice operations as compared to only 29% (n = 9) that self-operated. Although the last decade has witnessed the construction of new football stadiums by several FBS institutions, Howard and Crompton (2004) pointed out that colleges and universities have been more likely to settle for only renovating the football stadium due to the enormous cost and limited use of such a facility. As a result, institutions with older football stadiums may be looking more to external foodservice experts to lend expertise to renovations of concessions areas as detailed by Steinbach (2000) in his report on renovations at the University‘s of Texas‘s football stadium. The foodservice operation method for stadiums opening from 1960 to the present was nearly identical, with 27 (50.9%) outsourcing all or part and 26 (49.1%) self-operating.

Particularly interesting was the large difference found among public institutions, with 45 (64.3%) outsourcing football stadium foodservice operations as compared to only 25 (35.7%) that self-operated. This may be due in part to the increasing pressure on public higher education institutions to be entrepreneurial in generating revenue due to state funding cuts. Private institutions were basically split, with 10 (45.5%) respondents outsourcing and 12 (54.5%) self-operating football stadium foodservice operations.

Only 33 (36.3%) respondents indicated their athletic department did not outsource at least one function other than foodservice operations. This fits with the findings of Li and Burden

(2002), whose study reported that 61.4% of the responding Division I FBS and FCS (then known as I-A and I-AA, respectively) institutions outsourced part or all of their athletic marketing operations. That the majority of responding Division I institutions outsource at least one function is similar, although not as overwhelming, as a 2002 study on outsourcing in higher education in general, as opposed to just athletic departments, that reported that "over 90 percent of institutions outsource at least one service on campus, and almost 80 percent outsource two or more services" (NACUBO, 2002). Finally, it is not surprising that those institutions that outsource football stadium foodservice operations showed a greater tendency to outsource other functions (n = 38, 65.5%) than institutions that self-operated football stadium foodservice operations (n = 20, 34.5%).

Fried (2005) contended that a facility must decide if the primary focus of its foodservice efforts is going to be "revenue generation or service" (p. 289). The majority of respondents indicated that food and beverage is sold at home football games to provide a service to fans (n = 64, 73.6%) as opposed to generate revenue (n = 23, 26.4%). This held true regardless of whether an institution outsourced or self-operated football stadium foodservice operations, as 36 (70.6%) of those that outsourced and 28 (77.8%) of those that self-operated reported a philosophical leaning toward service over revenue as it pertained to their foodservice operations. This could be due to a number of factors. First, athletic programs likely feel an obligation to offer food and beverage for purchase because fans are often not allowed to reenter a stadium once they have left nor are they permitted to bring in outside food and beverage. Fans at major college football games are essentially a captive audience (Byrd & Turner, 1993; "Cash in," 1986; Hilkemeyer, 1993; Wakefield & Sloan, 1995). The fact that foodservice, on average, plays a minimal role in overall athletic department revenue generation may also have caused the majority of responding

institutions to favor a service philosophy over one focusing on revenue generation. After all, according to Fulks (2010), the revenue category "concessions/programs/novelties" accounted for, on average, only 3% of the total generated revenue for an FBS institution in fiscal year 2009. For FCS institutions the figure was only 1% (Fulks, 2010).

Nearly 95% (n = 80, 94.1%) of respondents indicated *strongly agree* or *somewhat agree* with the statement "Foodservice operations at the stadium where our institution plays its home football games impacts the image of our athletic department." This belief among respondents was consistent with past findings and commentary (Brown, Sutton, & Duff, 1993; Fried, 2005; Graham & Ward, 2006; Holtzman, 2001a; Motsinger et al., 1997) stating the potential impact of foodservice on organizational image. Interestingly, the only respondents (n = 2, 2.4%) to indicate some level of disagreement with the statement were from institutions that outsourced all or part of their football stadium foodservice operations.

Because the reporting line for foodservice units varies from institution to institution, the study also looked at reporting lines. In short, the unit operating concessions at football games does not always report directly to the athletic department. In some cases, regardless of whether football stadium foodservice is self-operated or outsourced, the unit may report to another institutional department such as business or auxiliary services (Higgons, 2006). Of the responding FBS institutions where the athletic department had primary control, 35 (89.7%) decided to outsource. Only four (10.3%) responding FBS institutions with athletic department control over football stadium foodservice operations self-operated, suggesting an athletic department inclination toward outsourcing foodservice operations if left to its own disposal to make the decision. Of those institutions indicating that an institutional unit besides athletics had primary oversight of football stadium foodservice operations, most (n = 20, 66.7%) said that

some form of the college or university food/dining/catering department was responsible for oversight. This was particularly true for those institutions that self-operated (n = 19, 95.0%). Regarding the functional specialization of the athletic department employee with oversight as defined at the beginning of this chapter, the largest portion of respondents indicated that their primary functional responsibility was a combination of athletic facility and event operations (n = 37, 41.6%). Of those 37, 22 worked at institutions that outsourced all or part of football stadium foodservice operations as compared to 15 that worked at institutions that self-operated.

Nationally recognized foodservice firms, particularly Sodexo, were clearly the most popular among responding institutions that outsourced football stadium foodservice operations. Sodexo, ARAMARK, and Centerplate were the most popular firms among the responding institutions. Sodexo operated either general seating (n = 6), premium seating (n = 3), or both (n = 17) at 26 (41.9%) of the responding outsourcing institutions. ARAMARK (n = 10, 16.1%) and Centerplate (n = 8, 12.9%) were second and third most popular respectively among responding institutions. The popularity of such a few firms may be due in part to the foodservice industry consolidation caused by mergers described by Deckard (1994) and Ammon et al. (2004). While national firms led in accounts among responding institutions, some responding institutions, even at the FBS level, indicated contracting with regional and local foodservice contractors. This practice was consistent with the beliefs of Waddell (1994) and Bigelow (2004) who felt that smaller accounts need not contract with a national firm.

Of the responding institutions that outsourced foodservice operations at their home football stadium, 15 (27.3%) outsourced only all or part of general seating foodservice, while only 2 (3.6%) outsourced only all or part of their premium seating foodservice operations. It is important to note that of the 15 respondents that outsourced only general seating foodservice, 6

(40.0%) reported that their institution‘s football stadium did not have premium seating. Thus, premium seating was not available to outsource for those institutions. The majority (n = 38, 69.1%) of respondents that outsourced contracted out both general and premium seating foodservice operations, with most (n = 31) contracting with the same firm for both general and premium seating foodservice operations. As indicated by Steinbach (2000), it is possible that an institution could have different foodservice providers for different parts of the same athletic facility. However, only 7 (12.7%) responding institutions indicated that they contracted with separate firms for general and premium seating foodservice. In such a situation the general concessionaire usually possesses the most operating influence (Grinstead, as cited in Steinbach, 2008a).

Approximately two-thirds of respondents that outsourced all or part of football stadium foodservice operations indicated that the contract was exclusive to athletics. Of the institutions that also had a contract with the same outsourced foodservice provider outside of athletics, ARAMARK and Sodexo were the most popular, possessing non-athletics contracts at 9 and 7 institutions respectively.

Research question two. Research Question Two asked if a significant difference existed in perceived benefits of outsourcing between athletic administrators at FBS and FCS institutions. No statistically significant differences ($p < .05$) were found between FBS and FCS institutions regarding agreement with the benefit inventories. Li and Burden (2002) also did not find any significant differences between FBS and FCS institutions when using the benefit inventories in their study on the outsourcing of athletic department marketing operations. Even when further subdividing FBS institutions based on BCS conference status (i.e., FBS/BCS, FBS/non-BCS,

FCS), NCAA classification did not have a significant effect on agreement with the benefit inventories ($p < .05$).

Replicating the work of Li and Burden (2002), benefit statements were combined into four different benefit inventories. Like Li and Burden's work, this study found 3 of 4 benefit inventories to be internally consistent with regard to Cronbach's α. However, in Li and Burden's study it was the *Utilization of External Expertise* inventory that was not internally consistent, while in the study at hand it was the *Enhancement of Foodservice Operations* inventory (α = .683) that fell just below the acceptable level.

On average, participants from FBS institutions showed greater agreement with the *Improvement in Administrative Efficiency* (M = 4.02, SE = .100), *Utilization of External Expertise* (M = 4.10, SE = .100), and *Financial Advantages* (M = 3.77, SE = .091) inventories than participants from FCS institutions (M = 3.89, SE = .124; M = 3.92, SE = .116; M = 3.61, SE = .115). The *Enhancement of Foodservice Operations* inventory was the only inventory on which participants from FCS institutions showed greater agreement (M =3.68, SE = .085) than participants from FBS institutions (M = 3.58, SE = .093). One potential explanation for the greater mean agreement with the *Enhancement of Foodservice Operations* by responding FCS institutions is the more limited athletic mission and ability to access resources of most FCS athletic departments.

Research question three. Research Question Three consisted of two parts. The first part of Research Question Three asked if a statistically significant difference existed between the satisfaction levels of institutions that outsourced football stadium foodservice operations as compared to those that self-operated. When examining the relationship between foodservice operation method and the satisfaction inventories, a significant difference ($p < .05$) was found in

only one inventory, *Human Resource Considerations*. The second part of Research Question Three also tried to determine if a statistically significant difference in regards to the satisfaction levels, but differed in that it factored in NCAA classification along with foodservice operation method. No significant differences were found when taking NCAA classification into consideration.

One potential explanation for the significant difference found in the *Human Resource Considerations* inventory when comparing on the basis of foodservice operation method may be that contracted concessionaires typically handle multiple accounts, enabling them to implement proven practices, including human resource techniques, across multiple facilities. Human resource functions such as employee selection, development, and retention may even be handled by the concessionaire‘s central office as opposed to by a manager at each institution.

Each of the four satisfaction inventories in Research Question Three had an acceptable level of internal consistency as measured by Cronbach‘s α; however, the α level for several of the inventories could be improved by removing one or more items from each. In terms of central tendency, the *Sanitation and Sustainability* inventory (Outsource M = 3.67, Self-Operate M = 3.68) had the highest mean satisfaction score regardless of foodservice operations method, while the *Financial Considerations* inventory for institutions that self-operated football stadium foodservice operations (M = 3.14) resulted in the lowest mean satisfaction score for both groups.

On average, participants whose institution outsourced football stadium foodservice operations experienced greater satisfaction with items on the *Human Resource Considerations* (M = 3.59, SE = .103), *Financial Considerations* (M = 3.43, SE = .089), *Service Quality Considerations* (M = 3.61, SE = .082) inventories. The mean satisfaction scores for both groups

were nearly identical for the *Sanitation and Sustainability Considerations* inventory (Outsourced M = 3.67, SE = .097; Self-Operated M = 3.68, SE = .143).

While the second part of Research Question Three did not reveal any statistically significant differences, there were nevertheless a few interesting findings. With the exception of the mean satisfaction scores of FCS Self-Operating institutions on the *Financial Considerations* (M = 2.95) and *Human Resource Considerations* (M = 2.89) inventories, all mean satisfaction scores were above 3.00 but less than 3.80 when analyzing the mean satisfaction scores based on NCAA classification and foodservice operations method. The Kruskal-Wallis test revealed that NCAA classification/foodservice operations method did not have a significant effect on satisfaction with any of the satisfaction inventories.

Research question four. Research Question Four asked which of eight predictor variables was the best predictor of whether an institution outsourced the foodservice operations at its home football stadium. Only one predictor variable, the *Improvement in Administrative Efficiency* benefit inventory, was found to be significant, implying that a higher score on the *Improvement in Administrative Efficiency* inventory increased the likelihood an institution outsourced its football stadium foodservice operations. However, this result needs to be viewed cautiously because of the small sample size. In particular, that the sample is not representative of the entire Division I football-playing population because the analysis could only be conducted for FBS institutions due to a number of factors. Even using a very simple model with predictor variables such as budget size and stadium capacity narrowed to two levels, few if any FCS institutions were represented in the higher predictor variable levels (i.e., athletic budget over $50 million or stadium capacity over 50,000). Further, many FCS institutions that outsourced the foodservice operations at their home football stadium indicated that the management of football

stadium foodservice was part of a contract with the foodservice provider that also included non-athletics areas. While the finding is not applicable to all of Division I, the inclusion of institutions from both BCS and non-BCS conferences in the condensed analysis lends the result a measure of credibility when discussing only FBS institutions. While benefits related to strengthening the bottom-line are often cited as reasons for outsourcing, this result suggests that recognition of benefits such as less political interference (Farmer et al., 1996; Waddell, 1994), stronger staffing and scheduling (Bigelow, 2004; Farmer et al. 1996; Graham & Ward, 2006), and freedom for the athletic department to focus on primary organizational goals (Waddell, 1994) may in fact be stronger predictors of whether or not an FBS institution will outsource its football stadium foodservice operations.

Recommendations

Recommendations for practice. Administrators charged with making the decision of whether or not to outsource foodservice operations at their institution's home football stadium should weigh the decision carefully. Contracts with concessionaires are typically multi-year and can have long lasting financial and operational consequences. As mentioned in Chapter I, the results of this research can be used to help assist practitioners in the decision making process. The following are some recommendations for practice resulting from this study:

- Concessionaires such as ARAMARK and Sodexo would be wise to undertake efforts to improve how existing and potential clients view the ability of outsourcing to make operations timelier and create a competitive advantage, as well as enhance quality and the ability to expand foodservice efforts to nonrevenue sports. This recommendation is a direct result of the *Enhancement of Foodservice Operations* inventory having the lowest overall mean score of the four outsourcing benefit inventories.

- Concessionaires marketing to FCS institutions may find it helpful to alter the message from that delivered to FBS institutions because FBS institutions expressed greater mean agreement with three of the four benefit inventories, suggesting that FCS institutions do not perceive the outsourcing of football stadium foodservice operations to be as beneficial as their FBS peers.
- Institutions that self-operate football stadium foodservice operations and are dissatisfied with the human resources component of their football stadium foodservice operations should explore outsourcing this function due to the finding in this study that those institutions that did so were significantly more satisfied with this consideration than their self-operating peers.
- When marketing their services to FBS clients, concessionaires should focus on the benefits related to the *Improvement in Administrative Efficiency* inventory (i.e., efficiency, reduced bureaucracy, avoiding in-house employment, and the ability to reallocate resources to other areas) because this was the strongest predictor of whether or not an FBS institution outsourced its football stadium foodservice operations.

Recommendations for further research. Few studies have been completed that address the management of foodservice in intercollegiate athletics. As athletic departments continue to be challenged to become less reliant on the institution for funding, information on each revenue source becomes more important. Further, as this and other studies have shown, the option to outsource a function to possibly increase revenue while at the same time cutting costs, will be available to higher education administrators. To that end, the following research possibilities exist with regard to continued study of foodservice operations in intercollegiate athletics:

- It would be useful to examine the impact of leadership style and organizational culture on outsourcing decisions in Division I athletic programs.
- Further analysis with regard to the relationship between outsourcing benefit inventories (Research Question Two) and satisfaction inventories (Research Question Three) could be conducted.
- Based on the suggestion of a participant from the study, a similar study on foodservice operations for collegiate men‘s basketball arenas could be performed.

References

2010 Michigan Stadium information. (n.d.). Retrieved from http://www.mgoblue.com/

Agron, J. (2001, September 1). Keeping it close to home: Privatization study. *American School & University*. Retrieved from http://asumag.com/mag/university_privatization_study_keeping/

Ammon, Jr., R., Southall, R.M., & Blair, D.A. (2004). *Sport facility management: Organizing events and mitigating risks*. Morgantown, WV: Fitness Information Technology.

Bowl Championship Series. (n.d.). *BCS Bowl Facts*. Retrieved from http://www.bcsfootball.org/bcsfb/facts

Belden, D. (2009, June 25). U football stadium, arenas will be alcohol-free, regents decide. *Pioneer Press*. Retrieved from http://www.twincities.com

Bigelow, C. (1993, April - June). Branded products. *Facility Manager*, *8*(4). Retrieved from http://www.iavm.org/articles/IAAMArticles.dll/Show?ID=52

Bigelow, C. (2004). Sales of foodservice and souvenir concessions. In D.R. Howard & J.L. Crompton (Eds.), *Financing Sport* (2nd ed.) (pp. 415-432). Morgantown, WV: Fitness Information Technology.

Biemiller, L. (2007, October 15). ‗Zero waste' policy takes effect for new stadium at Davis. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Biemiller, L. (2008, August 5). U. of Colorado plans to make Folsom Field a zero-waste, zero-carbon stadium. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Bounds, G.M., & Lamb, C.W., Jr. (1998). *Business*. Cincinnati, OH: South-Western College Publishing.

Brown, M.T., Daughtrey, C., & Sawyer, L.L. (2001). Application of the Goldstein Model to public sport venue management decisions. *International Journal of Sport Management, 2*(4), 330-344.

Brown, S.C., Sutton, W.A., & Duff, G. (1993). The event pyramid: An effective management strategy. *Sport Marketing Quarterly, II*(4), 29-35.

Bynum, M. (2002, July 1). Fan tactics. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Byrd, M.J., & Turner, E.T. (1993). A comparison of selected methods of concession cash distribution in indoor sporting facilities. *Sport Marketing Quarterly, 11*(4), 15-20.

Cacciola, S. (2010, December 22). Jets owner leaves no stone unturned. *The Wall Street Journal*. Retrieved from http://online.wsj.com/

Cameron, S. (2001, July 30). Traffic flow inside venue as important as outside. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Cameron, S. (2005). Peanuts and the gang. *Amusement Business*, *117*(4), 14-15. Retrieved from Business Source Premier database.

Cannon, J. (2010, October 15). Senate addresses concession stand lines. *The Crimson White*. Retrieved from http://cw.ua.edu/

Carnevale, D. (2008, January 11). Colleges get out of the e-mail business. *The Chronicle of Higher Education.* Retrieved from http://chronicle.com

Carrier Dome Concessions. (n.d.). Retrieved from http://foodservices.syr.edu/carrierdome_concessions.cfm

Caruso, W.J. (1993, April – June). Food and beverage trends. *Facility Manager*, *8*(4). Retrieved from http://www.iavm.org/articles/IAAMArticles.dll/Show?ID=40

Caruso, W.J. (1998, March - April). 21st century concessions. *Facility Manager*, *XIV*(2). Retrieved from http://www.iavm.org/articles/IAAMArticles.dll/Show?ID=786

Cash in with concessions. (1986, May). *Athletic Business, 10*(5), 76-79.

Cohen, A. (1991, May). Concessions come of age. *Athletic Business, 15*(5), 61-62, 64.

Cohen, A. (2005, September 1). Faster Food: New gadgets in the kitchen and at the checkout counter may yet hold the promise of keeping lines, and sales, moving briskly. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

The Congress of the United States, Congressional Budget Office. (2009). *Tax preferences for collegiate sports*. (COB Publication No. 3005). Retrieved from http://www.cbo.gov/

Cook, C. (2010, May 13). Texas Tech selects food service vendors for athletic venues. *Texas Tech Today.* Retrieved from http://today.ttu.edu/

Corbett, M.F. (2004). *The outsourcing revolution: Why it makes sense and how to do it right*. [Google Book version]. Retrieved from http://books.google.com/books?id=mIkS32h1JioC&pg=PA3&dq=history+of+outsourcing&lr=

Copeland, J.L. (2002, September 30). Outsourcing was a change that ended up staying the same. *The NCAA News*. Retrieved from http://www.ncaa.org

CSTV Networks, Inc. (2007). *About us*. Retrieved from http://www.cstv.com/online/

darrenrovell. (2010, May 11). ARAMARK has gluten-free items at 5 ballparks., including the grilled sirloin burger on a tapioca rice roll at Turner Field [Twitter post]. Retrieved from http://twitter.com/darrenrovell1/status/13794372962

darrenrovell. (2011, March 5). Like this idea of having a concessions express line for season ticket holders http://yfrog.com/gznqhpbj [Twitter post]. Retrieved from http://twitter.com/darrenrovell/status/44108049782276096

David, F.R. (2001). *Strategic management: Concepts and cases* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

Davies, P. (2005, January 28). Outsourcing can make sense, but proceed with caution. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Deckard, L. (1993, February 8-14). Contracting for food and drink is a matter of taste. *Amusement Business*, *105*(6), 14.

Durham, A. (2006, August/September). Tomorrow‘s food and beverages. *Facility Manager*. Retrieved from http://www.iaam.org/Facility_manager/Pages/Facility_Issues.htm

EagleTalkNet. (2010). Concessions ramping up for Fouts Field finale. Retrieved from http://eagletalk.net/

Eckstein, M. (2009, March 13). Aid to private colleges goes on states‘ chopping blocks. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Evans, J.C. (1981, August). Getting the most from your concession sales. *Athletic Purchasing & Facilities, 5*(8), 26-32.

Evans, J.C. (1983, April). How you can increase profits by hiring a concessions coordinator. *Athletic Purchasing & Facilities, 7*(4), 40-43.

Fain, P. (2005, April 22). Company coordinates colleges‘ outsourcing needs. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Fain, P. (2008, October 24). How colleges can keep strategic plans on course in a stormy economy. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Farmer, P.J., Mulrooney, A.L., & Ammon, Jr., R.A. (1996). *Sport facility planning and management*. Morgantown, WV: Fitness Information Technology, Inc.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: SAGE Publications Inc.

Fried, G. (2005). *Managing sport facilities*. Champagne, IL: Human Kinetics.

Friedland, A. (2007, June 1). College concessions: The onsite playbook. *Food Management*. Retrieved from http://food-management.com/business_feature/fm_imp_17173/

Fulks, D. (2008). *2004-06 NCAA revenues and expenses of Division I intercollegiate athletics programs report*. Retrieved from the National Collegiate Athletic Association Publications website: http://www.ncaapublications.com/

Fulks, D. (2010). *2004-09 NCAA revenues and expenses of Division I intercollegiate athletics programs report*. Retrieved from the National Collegiate Athletic Association Publications website: http://www.ncaapublications.com/

Ferguson, M. (1990, September). Ringing up concessions. *Athletic Business, 14*(9), 63-66.

Gay, L.R., & Airasian, P. (2003) *Education research: Competencies for analysis and application* (7th ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Georgia Institute of Technology. (n.d.). *NPO handbook*. Retrieved from http://www.georgiatechconcessions.com/fundraising

Goldfine, B., & Sawyer, T. (2009). Sport facility and event management. In A. Gillentine & R.B. Crow (Eds.), *Foundations of sport management* (2nd ed.) (pp. 161-185). Morgantown, WV: Fitness Information Technology.

Gose, B. (2005, January 28). The companies that colleges keep. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Graham, P. J., & Ward, R. (2006). *Public assembly facility management: Principles and practices.* Coppel, TX: IAAM.

Greaver, M.F. (1999). *Strategic outsourcing: A structured approach to outsourcing decisions and Initiatives* [Electronic resource]. New York: AMACOM. Retrieved from Books24x7 BusinessPro Collection database.

Greenwell, C.T., Fink, J.S., & Pastore, D.L. (2002). Perceptions of the service experience: Using demographic and psychographic variables to identify customer segments. *Sport Marketing Quarterly, 11*(4), 234-242.

Griffin, S. (2008, August 28). Tiger concessions big task for director Wallace. *The Daily Reveille*. Retrieved from http://www.lsureveille.com/

Hall, S., Marciani, L., Cooper, W.E., & Phillips, J. (2010). Needs, concerns, and future challenges in security management of NCAA Division I football events: An intercollegiate facility management perspective. *Journal of Venue and Event Management*, 1(2), 1-16.

Handfield, R. (2006, May 31). *A brief history of outsourcing*. Retrieved from North Carolina State University, Supply Chain Resource Cooperative Web site: http://scm.ncsu.edu/public/facts/facs060531.html

Helgeson, B. (2007, September 26). Bulls game to be a cash cow for Bucs. *The Tampa Tribune*. Retrieved from http://www.tampatrib.com/

Herrick, J. (2002, March - April). Tasty treasures. *Facility Manager*. Retrieved from http://www.iaam.org/Facility_manager/Pages/Facility_Issues.htm

Higgons, D. (2006, October/November). Keep them coming back for more. *Facility Manager*. Retrieved from http://www.iavm.org/facility_manager/pages/2006_Oct_Nov/University.htm

Hignite, K. (2006, January). Minding your loan business. *Business Officer Magazine*. Retrieved May 25, 2009, from http://www.nacubo.org/Business_Officer_Magazine/Magazine_Archives/January_2006/Minding_Your_Loan_Business.html

Hilkemeyer, F. (1993, May). Food for thought. *Athletic Business, 17*(5), 39-43.

Hill, B. (2011, February 2). A quartet of gastronomical pursuits. *Ben's Biz Blog*. Retrieved from http://bensbiz.mlblogs.com/

Holtzman, M. (2001a, April 1). Money hungry. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Holtzman, M. (2001b, December 1). Liquid cash. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Hosick, M.B. (2007, January 29). NCAA creates Eligibility Center to consolidate certifications. *The NCAA News*. Retrieved from http://www.ncaa.org

How to make your concession operation pay dividends. (1984, September). *Athletic Business, 8*(9), 40-43.

Howard, D.R., & Crompton, J.L. (2004). *Financing Sport* (2nd ed.). Morgantown, WV: Fitness Information Technology.

Hums, M.A., & MacLean, J.C. (2008). Governance and policy in sport organization (2nd ed.). Scottsdale, AZ: Holcomb Hathaway Publishers.

Irwin, R.L., Sutton, W.A., & McCarthy, L.M. (2008). *Sport promotion and sales management*. (2nd ed.) [Google Book version]. Retrieved from http://books.google.com/books?id=hQEH81Y-5RgC&pg=PP1&dq=sport+promotion+and+sales+management#PPP1,M1

Johnson, K. (2005, February 21). A marketing slam dunk? *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Kelderman, E. (2008, May 30). Athletic directors cry foul over NCAA's data. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Kelderman, E. (2009, May 1). Public colleges consider privatization as a cure for the common recession. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Kelley, S.W., & Turley, L.W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, *54*, 161-166.

Key concessionaires in sports. (2008, April 14). *Street & Smith's Sports Business Journal*. Retrieved from http://www.sportsbusinessjournal.com

Kim, M., & Trail, G.T. (2010). The effects of service provider employment status and service quality exchange on perceived organizational image and purchase intention. *Sport Management Review*, 13(3), 225-234. doi:10.1016/j.smr.2009.06.001

King, P. (2007, September 15). Out to the ballgame [Opinion]. *Foodservice Director*, p. 18.

Kirp, D.L. (2002, March 15). Higher ed inc.: Avoiding the perils of outsourcing. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Kotler, P., & Murphy, P.E. (1981). Strategic planning for higher education. *Journal of Higher Education*, *52*(5), 470-489.

Kriemadis, A. (1997). Strategic planning in higher education athletic departments. *International Journal of Educational Management*, *11*(6), 238-247.

Lambrecht, K.W., Kaefer, F., & Ramenofsky, S.D. (2009). Sportscape factors influencing spectator attendance and satisfaction at a Professional Golf Association tournament. *Sport Marketing Quarterly*, *18*(3), 165-172.

Lavigne, P. (2010). What's lurking in your stadium food? Retrieved from http://sports.espn.go.com/espn/eticket/story?page=100725/stadiumconcessions

Learfield, Levy team up on campus. (2010, August 16). *Street & Smith's SportsBusiness Journal.* Retrieved from http://www.sportsbusinessjournal.com

Lee, J. (2001, May 28). Colleges work up an appetite for pro service. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Li, M., & Burden, W. (2002). Outsourcing marketing operations by NCAA Division I athletic programs: An exploratory study. *Sport Marketing Quarterly*, *11*(4), 227-233.

Litan, R.E., Orszag, J.M., & Orszag, P.R. (2003, August). *The empirical effects of collegiate athletics: An interim report.* Retrieved from http://www.sc.edu/faculty/PDF/baseline.pdf

Lombardo, J., & Smith, M. (2009, May 25). Ga. Tech hands ticket sales to Aspire Group. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Maese, R. (2009, March 30). Why the NCAA won't police itself [Web log post]. Retrieved from http://weblogs.baltimoresun.com/sports/thetoydepartment/2009/03/todays_special_why_the_ncaa_wo_1.html

Marse, R.J. (2007, September 14). Behind the scenes: LSU concessions. Retrieved from http://www.lsusports.net/

Maximizing revenue from event concessions. (1987). *Athletic Business, 11*(8), 56-59.

Menditto, S., & Dight, K. (2007, July/August). Document this, control that. *Business Officer Magazine*. Retrieved from http://www.nacubo.org/

Miller, R. (2010, October 31). Serving the stadium. *The Advocate*. Retrieved from http://www.2theadvocate.com/

Motsinger, S.E., Turner, E. F., & Evans, J.D. (1997). A comparison of food and beverage concession operations in three different types of North Carolina sport venues. *Sport Marketing Quarterly, 6*(4), 43-52.

Moyse, B. (2008, September 23). Outsourcing Penn's image management: Athletic department strikes partnership with Nelligan. *The Daily Pennsylvanian*. Retrieved from http://thedp.com/

Murawski, T. (1991, January). Bottom-line concessions. *Athletic Business, 15*(1), 33-34, 36.

Murawski, T. (2001, December). Many thanks. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Muret, D. (1999a). Bryce Jordan upgrades concessions at Penn State. *Amusement Business*, *111*(24), 34. Retrieved from Business Source Premier database.

Muret, D. (1999b). Penn State's Baker talks motivation during NACC panel. *Amusement Business*, *111*(28), 55. Retrieved from Business Source Premier database.

Muret, D. (2004, July 19). New looks for sports venues. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Muret, D. (2009, May 25). More colleges turn to sports retail pros. *Street & Smith's SportsBusiness Journal.* Retrieved from http://www.sportsbusinessjournal.com

Muret, D. (2010, October 18). Seven firms visit as Notre Dame considers hiring concessionaire. *Street & Smith's SportsBusiness Journal.* Retrieved from http://www.sportsbusinessjournal.com

Mulrooney, A., & Styles, A. (2005). Managing the facility. In B.L. Parkhouse (Ed.), *The management of sport: Its foundation and application* (4th ed.) (pp. 137-163). New York, NY: McGraw Hill Companies, Inc.

National Association of College and University Business Officers (NACUBO). (2002, November 7). Most institutions outsource at least one service. Retrieved from http://www.nacubo.org/x802.xml?s=x40

National Association of College and University Business Officers (NACUBO). (2009a, January 16). New privacy rules address outsourcing, safety concerns. Retrieved from http://www.nacubo.org/Initiatives/News/New_Privacy_Rules_Address_Outsourcing_Safety_Concerns.html

National Association of College and University Business Officers (NACUBO). (2009b, January 27). 2008 NACUBO endowment study shows 3% loss on one-year return as of June 30, with 23% loss after June 30. Retrieved from http://www.nacubo.org/documents/research/NES2008NewsRelease.pdf

National Association of Collegiate Concessionaires. (2011). About us. Retrieved from http://www.nacc-online.com/about-NACC.php

National Collegiate Athletic Association. (2010). *2010-11 NCAA Division I manual*. Retrieved from http://www.ncaapublications.com/productdownloads/

National W Club. (n.d.). National W Club concessions. Retrieved from http://www.nationalwclub.com/interior.cfm?sect=con&id=main

Ohio State University. (2009, May 28). Ohio State, Michigan to eliminate printed media guides. Retrieved from http://www.ohiostatebuckeyes.com

Pape, P. (2006, June/July). Have a seat. *Facility Manager*. Retrieved from http://www.iaam.org/Facility_manager/Pages/Facility_Issues.htm

Pedone, K. (2006, December/January). Environmentally friendly buildings. *Facility Manager*. Retrieved from http http://www.iavm.org/facility_manager/pages/2006_Dec_Jan/Feature_2.htm

Phipps, R., & Merisotis, J. (2005, September). *Is outsourcing part of the solution to the higher education cost dilemma?: A preliminary examination*. Retrieved from Institute for Higher Education Policy website: http://www.ihep.org/assets/files/publications/m-r/Outsourcing.pdf.

Priest, D.M., St. John, E.P., Dykstra Boon, R. (2006). Privatization of business and ancillary functions. In D.M. Priest & E.P. St. John (Eds.), *Privatization and public universities* (pp. 189-202). Bloomington, IN: Indiana University Press.

Ray, S. (1995). Food service menu includes quality, service, variety. *Amusement Business*, *107*(50), 17. Retrieved from Business Source Premier database.

Regan, T.H., & Bernthal, M. (2009). Sport finance. In A. Gillentine & R.B. Crow (Eds.), *Foundations of sport management* (2nd ed.) (pp. 91-122). Morgantown, WV: Fitness Information Technology.

Romano, M. (1993, July 1). Major-league Ballparks hawking upscale munchies. *Restaurant Business, 92*(10), 24, 28.

Rovell, D. (2008, October 20). Yankees, Cowboys, Goldman Sachs form concessionaire [Web log post]. Retrieved from http://www.cnbc.com/id/27276608/Yankees_Cowboys_Goldman_Sachs_Form_Concessionaire

Rovell, D. (2009a, March 5). Hey sports fans, it's time to get fat! [Web log post]. Retrieved from http://www.cnbc.com/id/29527173/site/14081545

Rovell, D. (2009b, March 5). Is ―The Beast" the next big concession item? [Web log post]. Retrieved from http://www.cnbc.com/id/34378458/Is_The_Beast_The_Next_Big_Concession_Item

Rovell, D. (2010, May 11). Preakness uses all-you-can-drink to bring crowd back [Web log post]. Retrieved from http://www.cnbc.com/id/37086148/Preakness_Uses_All_You_Can_Drink_To_Bring_Crowd_Back

Rothschild, P. (2006, August – September). Dr. Phil and the experience economy. *Facility Manager*. Retrieved from http://www.iaam.org/Facility_manager/Pages/Facility_Issues.htm

St. George franchise ceases operation; lack of beer sales blamed. (2010, August 3). *Deseret News*. Retrieved from http://www.deseretnews.com/home/

Sherman, R.M. (1998, April). Concessions & codes. *Athletic Business*, *22*(4), 63-67.

Siegfried, J., & Zimbalist, A. (2000). The economics of sports facilities and their communities. *Journal of Economic Perspectives*, *14*(3), 95-114.

Slack, T., & Parent, M.M. (2006). *Understanding sport organizations: The application of organization theory* (2nd ed.). Champagne, Il: Human Kinetics.

Smith, M. (2009, March 30). Ohio State lands $110M deal. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Spanberg, E. (1999, June 21). Buy me some peanuts and chardonnay. *Street & Smith's SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Steinbach, P. (2000, April 1). Stands that deliver. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2004, August 1). Special operations. *Athletic Business, 28*(8), 24-28.

Steinbach, P. (2005, September 1). Honeymoon suites. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2006a, January 1). Last call? *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2006b, June 1). Of beers and volunteers. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2007a, April). Home palate. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2007b, June). Peanut-free galleries. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2008a, August). Fan fare. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2009a, May). Recession concessions. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2009b, September). One on one. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2010, March). Combo deals. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Steinbach, P. (2011, January). Digital signage helps arena managers monetize concourses. *Athletic Business*. Retrieved from http://www.athleticbusiness.com

Stepping to the plate. (2008, September 29). *Street & Smith's Sports Business Journal*. Retrieved from http://www.sportsbusinessjournal.com

Suggs, W. (2000, October 7). Web-company officials see potential in marketing college sports online. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Suggs, W. (2003, May 2). Sports as the university's 'front porch'? The public is skeptical. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com

Turnkey Sports Poll. (2009, June 15-21). *Street & Smith's SportsBusiness Journal*, *12*(9), p. 24.

Tysiac, K. (2009, February 1). Colleges turn to recruiting services. *The News & Observer*. Retrieved from http://www.newsobserver.com

Uebelherr, J. (2011, February 8). Readers remix ballpark eats. *Milwaukee Journal Sentinel*. Retrieved from http://www.jsonline.com/

UNICCO releases college and university business officer outsourcing survey results; survey finds continuing trend towards outsourcing facility services… (2002, October 28). Retrieved from http://findarticles.com/p/articles/mi_m0EIN/ is_2002_Oct_28/ai_93468969/

Van Der Wulf, M. (2009, October 15). As Coke and Pepsi do battle on campuses, colleges find a fountain of new revenue. *The Chronicle of Higher Education*, Retrieved from http://chronicle.com

Velazquez, J. (2009). Going green. *Concession Bites*. Retrieved from http://www.nacc-online.com/index.php

Waddell, R. (1994, February 14-20). Food and drink management is truly a matter of taste. *Amusement Business*, *106*(7), 16-17.

Waddell, R. (1997). Food and beverage sales staple at universities. *Amusement Business*, *109*(11), 18. Retrieved from Business Source Premier database.

Wakefield, K.L., & Sloan, H.J. (1995). The effects of team loyalty and selected stadium factors on spectator attendance. *Journal of Sport Management, 9*, 153-172.

Weaver, J. (2010, July 30). How safe is your food at Razorback Stadium? Retrieved from http://uatvonline.net/2010/07/30/how-safe-is-your-food-at-razorback-stadium/

Weiner, C. (2009, July). Using NPO‘s in Concessions. *Concession Bites*. Retrieved from http://www.nacc-online.com/index.php

Western Kentucky University. (2010, September 23). Open letter to fans from Ross Bjork - Hilltopper Pride Day on October 16. Retrieved from http://www.wkusports.com/

Whiteside, K. (2009, September 9). Beer sales at Memphis opener provide a boon to city's coffers. *USA TODAY*. Retrieved from http://www.usatoday.com

Wieberg, S. (2005, November 17). Colleges are reaching their limit on alcohol. *USA TODAY*. Retrieved from http://www.usatoday.com

Wieberg, S. (2009, May 20). Schools, conferences rush to contain costs as perks squeezed**.** *USA Today*. Retrieved from http://www.usatoday.com

Williams, P. (2001, July 30). Being part of the design key for concessionaires. *Street & Smith’s SportsBusiness Journal*. Retrieved from http://www.sportsbusinessjournal.com

Woelk, N. (2007, September 18). No more beer for the public at Coors Events Center. *Daily Camera*. Retrieved from http://dailycamera.com

Zikmund, W.G. (2003). *Business research methods* (7th ed.). Mason, OH: South-Western.

Zullo, R.H. (2005). *An examination of outsourced marketing in Division I intercollegiate athletics* (Doctoral dissertation). Retrieved from http://www.libs.uga.edu/etd/

Appendix A

NCAA Division I Football Bowl Championship Subdivision (FBS) Members for 2010-11
*Denotes membership in a BCS Automatic Qualification Conference

University of Akron
University of Alabama at Birmingham
University of Alabama, Tuscaloosa*
University of Arizona*
Arizona State University*
Arkansas State University
University of Arkansas, Fayetteville*
Auburn University*
Ball State University
Baylor University*
Boise State University
Boston College*
Bowling Green State University
Brigham Young University
University at Buffalo, the State University of New York
California State University, Fresno
University of California, Berkeley*
University of California, Los Angeles*
University of Central Florida
Central Michigan University
University of Cincinnati*
Clemson University*
University of Colorado, Boulder*
Colorado State University
University of Connecticut*
Duke University*
East Carolina University
Eastern Michigan University
University Florida*
Florida Atlantic University
Florida International University
Florida State University*
University of Georgia*
Georgia Institute of Technology*
University of Hawaii, Manoa
University of Houston
University of Idaho
University of Illinois, Champaign*
Indiana University, Bloomington*
University of Iowa*
Iowa State University*
University of Kansas*
Kansas State University*
Kent State University
University of Kentucky*
University of Louisiana at Lafayette
University of Louisiana at Monroe
Louisiana State University*
Louisiana Tech University
University of Louisville*
Marshall University
University of Maryland, College Park*
University of Memphis
University of Miami (Florida) *
Miami University (Ohio)
University of Michigan*
Michigan State University*
Middle Tennessee State University
University of Minnesota, Twin Cities*
University of Mississippi*
Mississippi State University*
University of Missouri, Columbia*
University of Nebraska, Lincoln*
University of Nevada, Las Vegas
University of Nevada
University of New Mexico
New Mexico State University
North Carolina State University*
University of North Carolina, Chapel Hill*
University of North Texas
Northern Illinois University
Northwestern University*
University of Notre Dame*
The Ohio State University*
Ohio University
University of Oklahoma*
Oklahoma State University*
University of Oregon*
Oregon State University*
Pennsylvania State University*
University of Pittsburgh*

Purdue University*
Rice University
Rutgers, State University of New Jersey, New Brunswick*
San Diego State University
San Jose State University
University of South Carolina, Columbia*
University of South Florida*
University of Southern California*
Southern Methodist University
University of Southern Mississippi
Stanford University*
Syracuse University*
Temple University
University of Tennessee, Knoxville*
Texas A&M University, College Station*
Texas Christian University
Texas Tech University*
University of Texas at Austin*
University of Texas at El Paso
University of Toledo
Troy University
Tulane University
University of Tulsa
U.S. Air Force Academy
U.S. Military Academy
U.S. Naval Academy
University of Utah
Utah State University
Vanderbilt University*
University of Virginia*
Virginia Polytechnic Institute & State University*
Wake Forest University*
University of Washington*
Washington State University*
West Virginia University*
Western Kentucky University
Western Michigan University
University of Wisconsin, Madison*
University of Wyoming

NCAA Division I Football Championship Subdivision (FCS) Members for 2010-11

Alabama A&M University
Alabama State University
University at Albany
Alcorn State University
Appalachian State University
University of Arkansas, Pine Bluff
Austin Peay State University
Bethune-Cookman University
Brown University
Bucknell University
Butler University
California Polytechnic State University
California State University, Sacramento
University of California, Davis
Campbell University
University of Central Arkansas
Central Connecticut State University
Charleston Southern University
The Citadel
Coastal Carolina University
Colgate University
Columbia University-Barnard College
Cornell University
Dartmouth College
Davidson College
University of Dayton
University of Delaware
Delaware State University
Drake University
Duquesne University
Eastern Illinois University
Eastern Kentucky University
Eastern Washington University
Elon University
Florida A&M University
Fordham University
Furman University
Gardner-Webb University
Georgetown University
Georgia Southern University
Grambling State University
Hampton University
Harvard University
College of the Holy Cross
Howard University
Idaho State University
Illinois State University
Indiana State University
Jackson State University
Jacksonville State University
Jacksonville University
James Madison University
Lafayette College
Lehigh University
Liberty University
University of Maine, Orono
Marist College
University of Massachusetts, Amherst
McNeese State University
Mississippi Valley State University
Missouri State University
Monmouth University
University of Montana
Montana State University-Bozeman
Morehead State University
Morgan State University
Murray State University
University of New Hampshire
Nicholls State University
Norfolk State University
North Carolina A&T State University
North Dakota State University
Northern Arizona University
University of Northern Colorado
University of Northern Iowa
Northwestern State University
Old Dominion University
University of Pennsylvania
Portland State University
Prairie View A&M University
Princeton University
University of Rhode Island
University of Richmond
Robert Morris University
Sacred Heart University
Sam Houston State University
Samford University
University of San Diego

Savannah State University
South Carolina State University
South Dakota State University
Southeast Missouri State University
Southeastern Louisiana University
Southern Illinois University at Carbondale
Southern University, Baton Rouge
Southern Utah University
Saint Francis University (Pennsylvania)
Stephen F. Austin State University
Stony Brook University
Tennessee State University
Tennessee Technological University
University of Tennessee at Chattanooga
University of Tennessee at Martin
Texas Southern University
Texas State University – San Marcos
Towson University
Valparaiso University
Villanova University
Virginia Military Institute
Wagner College
Weber State University
Western Carolina University
Western Illinois University
College of William and Mary
Wofford College
Yale University
Youngstown State University

Provisional FCS Members

Bryant University
North Carolina Central University
University of North Dakota
Presbyterian College
University of South Dakota

Added FCS – level football for 2010-11

Georgia State University
Lamar University

Appendix B

Foodservice Operations at NCAA Division I College Football Stadiums

Please note that this survey is to be completed by an athletic department administrator, not dining services administrators or concessionaire firm employees. Thank you.

WestVirginiaUniversity
College of Human Resources and Education

Dear Participant,

This letter is a request for you to take part in a research project to explore the current state of foodservice operations management by NCAA Division I athletic programs, particularly at their home football stadiums. This project is being conducted by Craig Crow, MS in the College of Human Resources and Education at WVU with supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education, for a Doctoral Degree in Educational Leadership. Your participation in this project is greatly appreciated and will take approximately 15 minutes to fill out the attached questionnaire.

Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. Thus, information reported by individual participants will not be identifiable in the final report. You must be 18 years of age or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgement of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding the current state of foodservice operations management by NCAA Division I athletic programs. Thank you very much for your time. Should you have any questions about this letter or the research project, please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by e-mail at ernest.goeres@mail.wvu.edu.

Thank you for your time and help with this project.

Sincerely,

Craig Crow

Office of the Dean
802 Allen Hall
PO Box 6122
Morgantown, WV 26506-6122
Phone: 304-293-5703
Fax: 304-293-7565

Section I (Heading not visible to participant)

Note to participant: The terms "foodservice," "concessions," and "food and beverage" are used interchangeably and are meant to have the same meaning in this survey.

Is your institution public or private?

- Public
- Private

What is the NCAA classification of your institution?

- Division I - Football Bowl Subdivision (FBS)
- Division I - Football Championship Subdivision (FCS)

Please indicate your institution's conference affiliation for the sport of football for the 2010-11 academic year.

Atlantic Coast Conference	Big 12 Conference	Big East Conference
Big Ten Conference	Conference USA	Independent (FBS/IA)
Mid-American Conference	Mountain West Conference	Pacific-10 Conference
Southeastern Conference	Sun Belt Conference	Western Athletic Conference

Please indicate your institution's conference affiliation for the sport of football for the 2010-11 academic year.

- ○ Big Sky Conference
- ○ Big South Conference
- ○ Colonial Athletic Association
- ○ Great West Conference
- ○ Independent (FCS/IAA)
- ○ Ivy League
- ○ Mid-Eastern Athletic Conference
- ○ Missouri Valley Conference
- ○ Northeast Conference
- ○ Ohio Valley Conference
- ○ Patriot League
- ○ Pioneer Conference
- ○ Southern Conference
- ○ Southland Conference
- ○ Southwestern Athletic Conference

What is the approximate operating budget of your institution's athletic department for the 2010-11 academic year?

During what decade was the stadium where your institution primarily plays its home football games opened?

What is the seating capacity for your institution's home football games at the stadium where your institution primarily plays?

Which of the following best describes the day-to-day management of the stadium where your institution primarily plays its home football games?

- ○ Managed by the institution‘s athletic department
- ○ Managed by an institutional department other than athletics
- ○ Managed by a private management firm (e.g., SMG, Global Spectrum)
- ○ Managed by city/county/state
- ○ Other, please specify

Which of the following best describes the ownership of the stadium where your institution‘s football program primarily plays its home games?

- ○ Institution owns the stadium
- ○ Government body (e.g., state) of which institution is an agency owns the stadium
- ○ Institution leases stadium from outside party (e.g., pro sports team, local stadium authority)
- ○ Other, please specify

Please indicate which of the following best describes your primary functional responsibility within your institution's athletic department.

- ○ Business
- ○ Event Operations
- ○ Facility Operations
- ○ Facility & Event Operations (combination)
- ○ Marketing
- ○ External Affairs
- ○ Internal Affairs
- ○ Other, please specify

Does your institution (athletics or any other college or university department) have control (i.e., institution self-operates foodservice or selects outsourced foodservice contractor) over the foodservice operations at the stadium where your institution primarily plays its home football games?

- ○ Yes
- ○ No

Which administrative unit has the most control (i.e., administrative unit self-operates foodservices or selects outsourced foodservice contractor) over the foodservice operations at the stadium where your institution primarily plays its home football games?

- ○ Athletic department
- ○ Institutional unit other than athletics
- ○ Other, please specify _____

Which internal functional area of the athletic department is most responsible for the oversight of foodservice operations at your institution's home football stadium? This could mean overseeing an in-house concessions/foodservice department or serving as the athletic department's liaison to the institution's dining services department or an outsourced contractor (e.g., Aramark, Sodexo).

- ○ Business
- ○ Event Operations
- ○ Facility Operations
- ○ Facilities & Event Operations (combined department)
- ○ Marketing
- ○ Other, please specify _____

Which functional area of the college or university is responsible for the oversight of athletic foodservice operations? This could mean overseeing an in-house concessions/foodservice department or serving as the liaison to an outsourced contractor (e.g., Aramark, Sodexo).

- College or university food/dining/catering department
- College or university business department
- College or university facilities department
- College or university conference/event department
- Other, please specify

Which internal functional unit of the athletic department is responsible for serving as primary liaison for matters such as foodservice operations to the stadium where your institution plays its home football games?

- Business
- Event Operations
- Facility Operations
- Facility & Event Operations (combined department)
- Marketing
- Institutional department other than Athletics
- Other, please specify

Note to participant: The term "premium seating" for this section refers to those seating options that come with access to hospitality areas not accessible to general ticket holders at the stadium.

Which of the following best describes the foodservice arrangement for the *general seating areas* at the stadium where your institution plays its home football games?

- ○ Athletic department self-operates
- ○ Institutional unit other than the athletic department self-operates
- ○ Outsourced
- ○ Other, please specify _____

Please indicate which company your institution has contracted with to operate *general concessions* at its home football stadium.

○ Aramark	○ Bismarck Food Service	○ Bon Appetit Management Company
○ Centerplate	○ ClubCorp	○ Chartwells
○ Delaware North / Sportservice	○ Epicurean Catering	○ Legends Hospitality
○ Learfield Levy Foodservice	○ Olympia Entertainment	○ Ovations Food Services
○ Pinnacle Caterers	○ SAVOR / SMG	○ Sodexo
○ Thompson Hospitality	○ VAB Catering	○ V/Gladieux Enterprises

- ○ Other, please specify _____

Which of the following best describes the foodservice arrangement for the *premium seating areas* at the stadium where your institution plays its home football games?

- ○ Athletic department self-operates
- ○ Institutional unit other than the athletic department self-operates
- ○ Outsourced
- ○ Stadium does not have premium seating areas
- ○ Other, please specify

Please indicate which company your institution has contracted with to operate *premium seating foodservice* at its home football stadium.

- ○ Aramark
- ○ Bismarck Food Service
- ○ Bon Appetit Management Company
- ○ Centerplate
- ○ ClubCorp
- ○ Chartwells
- ○ Delaware North / Sportservice
- ○ Epicurean Catering
- ○ Legends Hospitality
- ○ Learfield Levy Foodservice
- ○ Olympia Entertainment
- ○ Ovations Food Services
- ○ Pinnacle Caterers
- ○ SAVOR / SMG
- ○ Sodexo
- ○ Thompson Hospitality
- ○ VAB Catering
- ○ V/Gladieux Enterprises
- ○ Other, please specify

Is the management of any part of the football stadium's concessions included in a contract your institution has with an outsourced foodservice provider to manage non-athletics foodservice areas (e.g., dining halls, student union)?

- Contract is exclusive to athletics
- Stadium concessions is part of contract that includes management of non-athletics areas

Is the management of any part of the football stadium's concessions included in a contract with, or negotiated by, another outsourced service provider (e.g., facility management firm, marketing firm)?

- Yes, part of our contract with a facility management firm
- Yes, part of our contract with a marketing firm
- Yes, part of our contract with an event management firm
- No
- Other, please specify

Which of the following best describes the foodservice arrangements at other athletic facilities controlled by your institution's athletic department?

- Athletic department self-operates
- Institutional unit other than the athletic department self-operates
- Outsourced to the same firm as football stadium
- Outsourced to a different firm than the football stadium
- Other, please specify

How much was the average per capita (e.g., per fan) spending on food and beverage at home football games last season?

Excluding foodservice, does your institution's athletic department outsource any functional responsibilities (e.g., marketing, corporate sales, merchandising, facility management)?

- Yes
- No

Does the athletic department at your institution retain profits generated by foodservice sales at home football games?

- Yes, the athletic department keeps all foodservice profits generated by home football games
- The athletic department gets to keep a portion of foodservice profits (50% or greater) generated by home football games
- The athletic department gets to keep a portion of foodservice profits (Less than 50%) generated by home football games
- No, the athletic department does not keep any foodservice profits generated by home football games

Which of the following statements best describes your athletic department's foodservice philosophy at home football games?

- ―We sell food and beverage at home football games to offer a service to our fans."
- ―We sell food and beverage at home football games to generate revenue."

On average, how many game day foodservice workers (including volunteers) are required for your institution‘s home football games?

Is alcohol sold to fans attending your institution's home football games?

- Yes, in both general and premium seating areas
- Yes, but only in premium seating areas
- No, it is not sold individually, but it is provided as part of the premium seating package/contract
- No, but premium seating guests are permitted to bring alcohol into the facility
- No
- Other, please specify

Section II (Heading not visible to participant)

Please indicate your agreement or disagreement with each of the following benefit statements about outsourcing:

	Strongly agree	**Somewhat agree**	**Neither agree nor disagree**	**Somewhat disagree**	**Strongly disagree**
It is more efficient to outsource foodservice operations than keep them in-house.					
Outsourcing can help reduce bureaucracy and red tape in foodservice operations.					
Outsourcing enables reallocation of resources to other more critical areas within the department.					
Outsourcing helps avoid the administrative complexity of in-house employment.					
Outsourcing allows access to external specialized talent and expertise in foodservice operations.					
Outsourcing allows participation in a foodservice network and synergy.					
Outsourcing can help build a sustainable competitive advantage.					

Please indicate your agreement or disagreement with each of the following benefit statements about outsourcing:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Outsourcing helps enhance the quality of your foodservice operations.	○	○	○	○	○
Outsourcing allows for the handling of all aspects of your foodservice operations in a more timely fashion.	○	○	○	○	○
Outsourcing can provide opportunities to expand foodservice efforts to non-revenue sports.	○	○	○	○	○
It is less expensive to outsource foodservice operations than keep them in-house.	○	○	○	○	○
Outsourcing of foodservice operations can bring in greater financial return than keeping them-house.	○	○	○	○	○
Outsourcing enables cutting down on overhead expenses.	○	○	○	○	○
Outsourcing can help reduce capital expenses related to foodservice operations.	○	○	○	○	○

Section III (Heading not visible to participant)

How satisfied are you with the following aspects of the foodservice operations at your institution's home football stadium?

	Very satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Very dissatisfied
Per capita (i.e., per fan) spending in general seating areas	○	○	○	○	○
Per capita (i.e., per fan) spending in premium seating areas	○	○	○	○	○
Overall per capita (i.e., per fan) spending	○	○	○	○	○

Profitability	○	○	○	○	○
Pricing	○	○	○	○	○
Sales forecasting	○	○	○	○	○
Cost projections	○	○	○	○	○
Sales volume	○	○	○	○	○
Budgeting	○	○	○	○	○
Inventory management	○	○	○	○	○
Cash handling	○	○	○	○	○
Shrinkage/shortage (e.g., theft)	○	○	○	○	○
Risk management practices (e.g., OSHA, fire extinguishers, insurance)	○	○	○	○	○
Customer wait time	○	○	○	○	○
Payment method options offered	○	○	○	○	○

How satisfied are you with the following aspects of the foodservice operations at your institution's home football stadium?

	Very satisfied	**Somewhat satisfied**	**Neither satisfied nor dissatisfied**	**Somewhat dissatisfied**	**Very dissatisfied**
Distance of foodservice areas from general seating areas	○	○	○	○	○
Distance of foodservice areas from premium seating areas	○	○	○	○	○
Freshness of food and beverage items	○	○	○	○	○
Taste of food and beverage items	○	○	○	○	○
Brand names available for purchase	○	○	○	○	○

Variety of food and beverage items available for purchase	○	○	○	○	○
Location of foodservice areas in stadium	○	○	○	○	○
Number of points of purchase	○	○	○	○	○
Marketing of food and beverage inside stadium (e.g., program ads, directional and promotional signage, in-game announcements)	○	○	○	○	○
Presentation of food and beverage items	○	○	○	○	○
Design/layout of permanent foodservice stands	○	○	○	○	○

How satisfied are you with the following aspects of the foodservice operations at your institution's home football stadium?

	Very satisfied	**Somewhat satisfied**	**Neither satisfied nor dissatisfied**	**Somewhat dissatisfied**	**Very dissatisfied**
Design/layout of portable foodservice stands	○	○	○	○	○
Menu board design	○	○	○	○	○
Seating bowl vendors/hawkers	○	○	○	○	○
Game day foodservice staffing levels	○	○	○	○	○
Customer service skills of foodservice staff	○	○	○	○	○
Appearance of foodservice staff	○	○	○	○	○
Motivation of foodservice staff	○	○	○	○	○
Management expertise/competency of foodservice managers	○	○	○	○	○
Compliance with sanitation regulations	○	○	○	○	○
Recycling efforts	○	○	○	○	○

Cleanliness of foodservice areas visible to patrons	○	○	○	○	○
Cleanliness of foodservice preparation areas	○	○	○	○	○
Equipment maintenance	○	○	○	○	○

How satisfied are you with the following aspects of the foodservice operations at your institution's home football stadium?

	Very satisfied	**Somewhat satisfied**	**Neither satisfied nor dissatisfied**	**Somewhat dissatisfied**	**Very dissatisfied**	**Not applicable**
Management of alcohol sales/distribution	○	○	○	○	○	○

Section IV (Heading not visible to participant)

Foodservice operations at the stadium where our institution plays its home football games impacts the image of our athletic department.

- ○ Strongly agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Strongly disagree

Please use this space to make any comments or observations relating to the content of this survey.

If you would like to receive a copy of this report when it is finished in June of 2011 please enter your email address below.

Appendix C

Dear [Administrative Assistant Name],

My name is Craig Crow and I am a doctoral student at West Virginia University. I am working on a research project on foodservice/concessions operations at Division I football stadiums. Due to all of the differing arrangements from university to university, it can be quite difficult figuring out the administrator within each athletic department that is responsible for the oversight of foodservice operations or serving as liaison to dining services or an outsourced foodservice provider. This includes athletic administrators that have oversight of a full-time concessions manager or an athletic department-operated foodservice/concessions unit, as well as those administrators that serve as athletic department liaison to a university dining unit or outsourced foodservice provider (e.g., Aramark, Sodexo, Centerplate).

When convenient for you, could you please email me back with the name and title of the administrator from your athletic department that has the responsibility mentioned in the previous paragraph (the underlined part)? I am sending out an email survey to administrators performing the same function at all NCAA Division I institutions in an effort to shed light on this often overlooked area of athletic administration and would like to have information for your institution included in the study.

Thank you for your consideration of this request.

Sincerely,

Craig Crow
Doctoral Student
West Virginia University

Appendix D

Dear [Participant Name],

My name is Craig Crow and I am a doctoral student at West Virginia University. As a former athletic department administrator at a Division I institution myself, I understand that your time is very valuable. To that end, your assistance is requested on a research project on foodservice/concessions operations at Division I football stadiums that I hope will shed light on this often overlooked area of athletic administration.

While the purpose of this correspondence is to introduce myself, next week I will be sending an email containing a link to a survey to be completed by individuals with oversight of foodservice/concessions operations at Division I institutions sponsoring the sport of football. **This includes athletic administrators that have oversight of a full-time concessions manager or an athletic department-operated foodservice/concessions unit, as well as those administrators that serve as athletic department liaison to a university dining unit or outsourced foodservice provider (e.g., Aramark, Sodexo, Centerplate)**. **If you are not the appropriate athletic department administrator to complete this survey, it would be greatly appreciated if you could contact me at [email address] with the correct athletic administrator's name.**

Because you are in a unique position to provide insight into foodservice operations practice, I am respectfully requesting your participation in the study when the survey link is sent next week. The survey will take approximately 15 minutes to complete, but will hopefully be of interest to you due to the subject matter. **Further, you will have the opportunity to request a free copy of the study once it is completed so that you may benefit from its findings.**

This project is being conducted under the supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education, for a Doctoral Degree in Educational Leadership. Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. Thus, information reported by individual participants will not be identifiable in the final report. You must be 18 years of age or older to participate. Your participation is completely voluntary. You may skip any question that you do not with to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgment of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding the current state of foodservice operations by NCAA Division I athletic programs. Thank you very much for your time. Should you have any questions about this email or the research project, please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by email at ernest.goeres@mail.wvu.edu.

Sincerely,

Craig Crow
Doctoral Student
West Virginia University

Appendix E

Dear [Participant Name],

Last week I sent an introductory email informing you that along with all other NCAA Division I athletic administrators with oversight of foodservice/concessions operations, you would be receiving this email containing a link to a survey as part of a research project on foodservice/concessions operations at Division I football stadiums. This survey is intended for athletic administrators that have oversight of a full-time concessions manager or an athletic department-operated foodservice/concessions unit, as well as those administrators that serve as athletic department liaison to a university dining unit or outsourced foodservice provider (e.g., Aramark, Sodexo, Centerplate) regardless of stadium ownership. If you are not the appropriate athletic department administrator to complete this survey, it would be greatly appreciated if you could contact me at [email address] with the correct athletic administrator's name instead of proceeding to the survey.

You can now access the survey by clicking the following link: [Link to FormSite.com survey]

By completing the survey, you will have the opportunity to request a free copy of the study once it is completed so that you may benefit from its findings. I hope this study, when complete, will shed light on this often overlooked area of athletic administration. The survey will take approximately 15 minutes to complete, but will hopefully be of interest to you due to the subject matter.

This research project is being conducted under the supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education at West Virginia University, for a Doctoral Degree in Educational Leadership. Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. Thus, information reported by individual participants will not be identifiable in the final report. You must be 18 years or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgment of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding the current state of foodservice/concessions operations by Division I athletic programs. Thank you very much for your time. Should you have any questions about this email or the research project please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by e-mail at ernest.goeres@mail.wvu.edu.

Thank you for your consideration.

Sincerely,

Craig Crow
Doctoral Student
West Virginia University

Appendix F

WestVirginiaUniversity

College of Human Resources and Education

Dear Participant,

This letter is a request for you to take part in a research project to explore the current state of foodservice operations management by NCAA Division I athletic programs, particularly at their home football stadiums. This project is being conducted by Craig Crow, MS in the College of Human Resources and Education at WVU with supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education, for a Doctoral Degree in Educational Leadership. Your participation in this project is greatly appreciated and will take approximately 15 minutes to fill out the attached questionnaire.

Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. Thus, information reported by individual participants will not be identifiable in the final report. You must be 18 years of age or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgement of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding the current state of foodservice operations management by NCAA Division I athletic programs. Thank you very much for your time. Should you have any questions about this letter or the research project, please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by e-mail at ernest.goeres@mail.wvu.edu.

Thank you for your time and help with this project.

Sincerely,

Craig Crow

Office of the Dean

802 Allen Hall
PO Box 6122
Morgantown, WV 26506-6122

Phone: 304-293-5703
Fax: 304-293-7565

Appendix G

Dear [Participant Name],

Earlier this month I sent an email to you, along with all other NCAA Division I athletic administrators with oversight* of foodservice/concessions operations, offering the opportunity to participate in a comprehensive research study of this often overlooked area of athletic administration. I am pleased to report that to date approximately 40% of your peers have responded to this survey. If you have already completed the survey, I would like to thank you for your time. If you have not yet completed this survey, it would be greatly appreciated if you would take 15 minutes to complete the survey. **As a reminder, you will have the opportunity to request a free copy of the study once it is completed so that you may benefit from its findings. The deadline for participating in this study is 8 PM EST on Wednesday, February 23.**

**In addition to oversight of an in-house concessions unit, this could also include athletic department administrators that serve as liaison to a dining services unit, outsourced concessionaire, or off-campus facility not owned by your institution.*

You can now access the survey by clicking the following link: [Link to FormSite.com survey]

If you are not the appropriate athletic department administrator to complete this survey, it would be greatly appreciated if you could contact me at [email address] with the correct athletic administrator's name instead of proceeding to the survey.

This project is being conducted under the supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education at West Virginia University, for a Doctoral Degree in Educational Leadership. Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. You must be 18 years or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgment of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in understanding the current state of foodservice/concessions operations by Division I athletic programs. Thank you very much for your time. Should you have any questions about this email or the research project please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by e-mail at ernest.goeres@mail.wvu.edu.

Thank you for your consideration.

Sincerely,

Craig Crow
Doctoral Student
West Virginia University

Appendix H

Dear _____,

Last month you kindly participated in a research study I was conducting on the foodservice operations of Division I athletic programs, particularly at football stadiums. Thank you for your participation. I am pleased to say that I had a good response rate and that the data is currently under review. The purpose of this email is to follow-up on one or more missing pieces of data from your response. I am following up to try to ensure that your answers can be used fully in my research study. As a reminder, data will be reported in the aggregate, thus individual participants/institutions will not be identifiable in the final report.

[Insert missing item or item in need of clarification]

You can respond by simply returning this email [or provide link to survey]

As with the previous survey, this project is being conducted under the supervision of Dr. Ernest Goeres, a professor in the College of Human Resources and Education at West Virginia University, for a Doctoral Degree in Educational Leadership. Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. You must be 18 years or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. West Virginia University's Institutional Review Board acknowledgment of this project is on file.

I hope that you will participate in this research project, as it could be beneficial in the understanding of the current state of foodservice/concessions operations by Division I athletic programs. Thank you very much for your time. Should you have any questions about this email or the research project please feel free to contact Dr. Ernest Goeres at (304) 293-2088 or by email at ernest.goeres@mail.wvu.edu.

Sincerely,

Craig Crow
Doctoral Student
West Virginia University

Appendix I

Dear ____,

In February you were kind enough to take the time to participate in a research study on foodservice operations at Division I football stadiums. At that time you indicated that you would like to have a copy of the report once it was complete. You can now access the report by clicking on the following link: [Insert link to WVU ETD Document].

Some findings from the study that might be of interest to you include [followed by a bulleted list of findings from the study]:

In closing, thanks again for your willingness to participate. I hope you find the report informative. Should you have any questions feel free to contact me at craigcrow@hotmail.com

Thanks again,

Craig Crow
Doctoral Student
West Virginia University