

DECLINING ATTENDANCE TRENDS IN COLLEGIATE
AND PROFESSIONAL SPORTS

by

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A THESIS


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PROFESSIONAL SPORTS**

Approved: 

Professor Paul Swangard

This work is an attempt to better analyze the recent declines in attendance across many sports, specifically focusing on collegiate and professional football. Data in areas including, but not limited to, attendance, consumer spending, sports wagering, student behavior, and HDTV adoption, was gathered and analyzed to find patterns and trends. Results of the data suggest the economy, ticket prices, HDTV adoption, and fan behavioral changes as being the primary culprits of declining attendance in football. Along with examining the factors behind recent attendance trends, this thesis also gives a historical background on the problem and provides potential solutions for the future.

There has been a growing interest in attendance trends over the past few years at both the collegiate and professional level. Declining attendance can have significant financial implications for professional franchises and college athletic departments. This research gives a comprehensive overview of the problem and is meant to be a call to action for new innovation and ideas in the field.

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I. Introduction

The popularity of sports both domestically and globally has never been higher. In 2015 the sports market worldwide is estimated to be worth \$145 billion with the North American market generating over a third of all revenue (Statista, 2015). Over 130 million spectators attended a professional NFL, NBA, MLB, NHL, or MLS game in 2013 alone. Add in another 82 million spectators from college football and basketball, and you are left with a shockingly large number (NCAA, 2015).

Sports are the most popular form of entertainment in our world and are a centerpiece of our culture. In 2014, DirecTV agreed to pay the NFL \$12 billion over the next eight years just to have the rights to broadcast games seventeen days out of the year. Athletes have become larger than life celebrities, making astronomical amounts of money from contracts and endorsements while also being asked to serve as role models for younger generations. Professional franchises are selling for billions of dollars and college athletic departments are growing every year, some with annual budgets exceeding \$100 million.

For both participants and fans alike, sports can be a way of life. Beyond the visual entertainment they provide, they offer a connection to a community unlike anything else. Americans are divided on political, environmental, and social issues now more than ever, and yet sports have the power to bring all these people together. It may seem like an unusual concept, until you see that 26.5 million US viewers tuned in for the 2014 World Cup game between the United States and Germany alone, a large

portion of them gathered together, wearing red, white, and blue, cheering for a common cause. Can anything else bring a number of people that large together in this day and age? Sports may just be games, but the emotional and financial stakes associated with them are not. In his book *The Elusive Fan*, author Irving Rein says,

Players and teams, large and small, become the central focus of families, places, and nations as they intersect all cultures. In an industry of this size and scope, connecting to and sustaining a devoted fan base is both an opportunity and a major challenge (Rein, 2006).

Based on the previous numbers and statistics it may seem as though sports are invincible, immune from regular problems that could otherwise hamper their soaring popularity. However, there is a problem in sports and it is a problem that could fundamentally change the professional and collegiate sports landscape if not properly addressed. While the overall popularity of sports is currently not a concern, the way they are being viewed is. Football is the most popular sport in America, and yet in 2014, college football home attendance dropped to its lowest average in 14 years and NFL attendance was still significantly lower than its peak in 2007.

Why are NFL teams struggling with home attendance when 2015's Super Bowl XLIX became the most watched broadcast in US TV history, drawing a record 114.4 million viewers? Why have college football attendance numbers decreased when the 2015 national championship turned in the highest ratings in the history of ESPN and cable TV? Clearly there is a massive fan base interested in the sport, so why are teams on both the collegiate and professional levels struggling to keep their stadiums full?

II. Thesis Overview

This thesis aims to provide a comprehensive overview examining the primary factors behind the recent decline in sports attendance, while also exploring the implications it could have on the industry if these trends continue. Furthermore, this paper will critique what is currently being done to combat the problem, offer recommendations on how to help solve the problem, and ultimately investigate how this particular issue could show a much bigger picture of how sports consumer behavior as a whole is changing in today's society.

A variety of sports will be referenced intermittingly throughout this thesis as a way to compare and contrast different problems or successes teams are having with fan attendance. Fans across the four major sports in America, consisting of football, basketball, baseball and hockey, often share similar demographic and psychographic profiles. If one sport isn't experiencing the same attendance problems as the others, it is important to discover what is being done differently and to look at how those strategies can possibly be emulated across all sports. However the large majority of this paper will focus on attendance problems in football, both collegiate and professional.

Why Football?

2015 marked the 31st consecutive year that the NFL was ranked the most popular sport in America by the Harris Poll. 35% percent of all adults surveyed listed the NFL as their favorite sport. Combined with the 11% of adults who listed college

football as their favorite sport, just under 50% of sports fans consider football as their choice of sport to watch. The next closest sport? Major League Baseball at 14%. Nearly one out of every two fans list football as their favorite sport, and yet football is struggling to bring fans to games, as shown in the figures below.

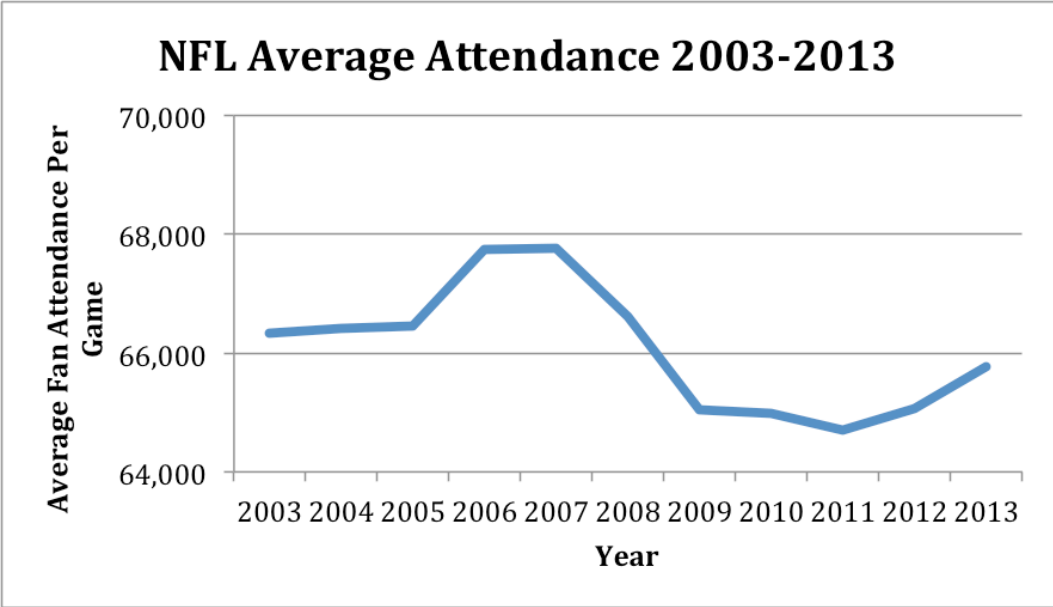


Figure 1. Average NFL attendance per game from 2003-2013

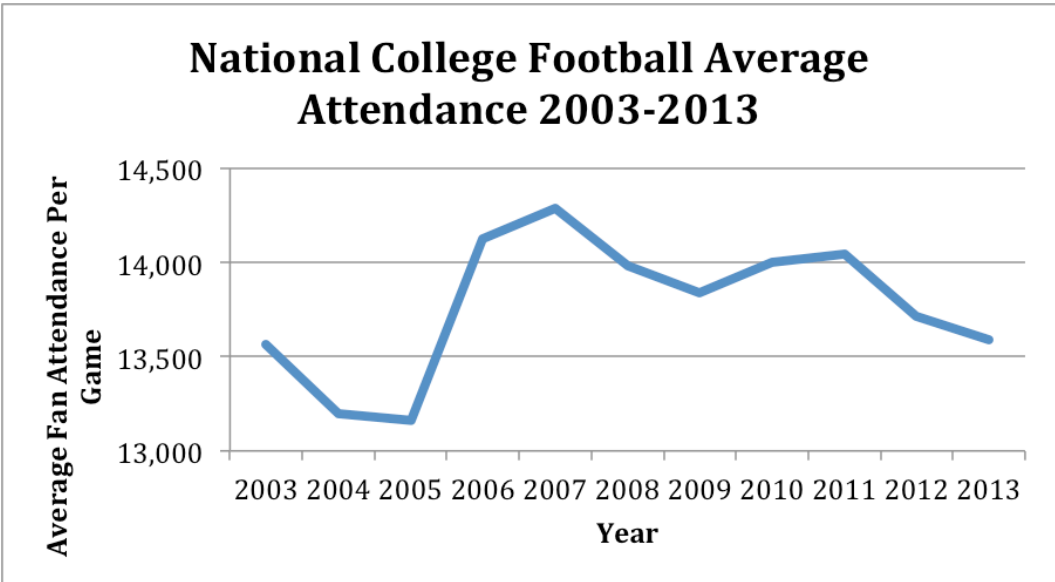


Figure 2: Average NCAA football attendance per game from 2003-2013

Another factor that should be working in football's favor is the number of games in a season. NFL teams have eight regular season home games every year and college teams have between six and seven. The small number of games places significantly more importance on each one compared to a sport like baseball where MLB teams have 81 home games. This is especially true in college football when one or two losses can eliminate a team from having a chance to play for a championship. Not only is the importance of each game significantly higher in football compared to other sports, it is also much more manageable for a fan to attend six to eight games a year, the majority of which are during Sunday afternoons, than it is for a fan to attend 81 baseball games spread out over multiple days of the week.

To recap, football is the most popular sport in America by a significant margin. It also has the fewest number of regular season games in a season of the four major sports and the stakes are higher per game than any other major sport. Yet even with all these factors setting football up for success in attracting fans to games, the sport is seeing some of the most worrisome attendance trends. Football is referenced the most often in this thesis because if it cannot succeed given the aforementioned information, what does it say about the prospects of sports with significantly smaller fan bases and significantly more games to fill seats? On the other hand, if another sport is not experiencing the same negative trends in attendance that are plaguing football, what does it say about the business model of professional and collegiate football in the United States? By using football as the "baseline" and intermittingly comparing and

contrasting other sports throughout the thesis, one is able to better understand what specific factors are contributing to the decline in attendance across sports as a whole.

People Taking Notice

The decline in attendance, specifically in college football, has not gone unnoticed. In 2012, Larry Scott, commissioner of the Pac-12, implemented dedicated ticketing professionals to ensure the best methods of attracting fans were being shared across the conference. Teams like the Indiana Hoosiers have added fireworks, better cell-phone reception, flat-screen televisions in concourses, and other amenities for fans. Even the Southeastern Conference (SEC), which regularly produces college football champions and has some of the most dedicated fans in the country, has had to take action after seeing four straight seasons of attendance decline. Chaired by Mississippi State athletic director Scott Stricklin, the conference created a specific working group to analyze and improve fan experience. College and professional football teams alike have recognized the declines in attendance as being a significant problem going forward if not addressed properly.

Are all sports struggling?

Not all sports are struggling with attendance equally. In fact, some have been doing quite well as of late. College football and MLB have seen the most notable attendance declines over the past seven to eight years. The NFL experienced a sharp decline from 2006 to 2011, turning in the sport's lowest attendance numbers since 2001.

The NFL has since increased slightly, albeit still with less people attending than in years past. The NBA saw an overall decline in attendance from 2006 to 2013, but early reports indicate that the 2014-15 season attendance may actually be higher than 2006. The NHL has shown the most recent consistent growth, with attendance increasing year over year since 2009. Surprisingly, the three sports listed as the most popular in America (NFL, NCAA college football, and MLB) are also the three sports experiencing the most problems with attendance.

III. Research Methodology

The research and sources for this thesis consisted of a mix of online articles, journals, books, surveys, and historical databases. Data from the NCAA, Bureau of Labor Statistics, UNLV Center for Gaming Research, NACMA and other sources was collected, analyzed, and transformed into tables and graphs, which are shown throughout the paper and in the appendices. Most all of the data runs from 2003-2013 in order to show a significant time period while also ensuring all the numbers are valid as some of the databases I used still do not have 2014 figures finalized.

When conducting the research, I focused on using Nate Silver's methodology from his book *The Signal and the Noise* as shown in the following figure. Silver is renowned for making accurate predictions and forecasts in multiple fields of work, which he largely credits to thinking like a "fox" rather than a "hedgehog."

How Foxes Think	How Hedgehogs Think
Multidisciplinary: Incorporate ideas from different disciplines and regardless of their origin on the political spectrum.	Specialized: Often have spent the bulk of their careers on one or two great problems. May view the opinions of “outsiders” skeptically.
Adaptable: Find a new approach—or pursue multiple approaches at the same time—if they aren’t sure the original one is working.	Stalwart: Stick to the same “all-in” approach—new data is used to refine the original model.
Self-critical: Sometimes willing (if rarely happy) to acknowledge mistakes in their predictions and accept the blame for them.	Stubborn: Mistakes are blamed on bad luck or on idiosyncratic circumstances—a good model had a bad day.
Tolerant of complexity: See the universe as complicated, perhaps to the point of many fundamental problems being irresolvable or inherently unpredictable.	Order-seeking: Expect that the world will be found to abide by relatively simple governing relationships once the signal is identified through the noise.
Cautious: Express their predictions in probabilistic terms and qualify their opinions.	Confident: Rarely hedge their predictions and are reluctant to change them.
Empirical: Rely more on observation than theory.	Ideological: Expect that solutions to many day-to-day problems are manifestations of some grander theory or struggle.
Foxes are better forecasters.	Hedgehogs are weaker forecasters.

Figure 3: Forecasting methodology from Nate Silver’s *The Signal and the Noise*

When examining the attendance problem and looking for potential causes and solutions, I focused on taking a multidisciplinary approach by looking at data from both sports and fields that could relate to sports behavior. Many of the factors causing the decline of attendance have been discussed in other articles; however they are often based on theories rather than empirical data. Throughout the paper I put many of these theories to test by including data from a variety of sources to back the assumptions up. However, not every section of the thesis can include quantifiable data, which is why I continue to follow Silver’s methodology by taking a cautious approach to these sections. The issue of declining attendance is extremely complex with limitless factors that could be working for or against it, leading me to focus on a few of the most important ones. Some of the problems discussed throughout the paper may very well be unpredictable or unsolvable and it is important to recognize the overall complexity of the issue at hand.

IV. What is a Sports Fan?

It may seem like a relatively simple question, but opinions vary widely on the correct answer. On a basic level a fan can be considered, “a person who has a strong interest in or admiration for a particular person or thing” (Google Dictionary, 2015). The term “fan” originates from “fanatic,” which means “marked by excessive enthusiasm and often intense uncritical devotion” (Merriam-Webster, 2015). The definition still holds true when applied to sports, but with different nuances and variations.

For instance, author Daniel Wann, defines sports fandom as being comprised of sports fans and sports consumers (Wann, 1997). Dr. Richard Spinrad defines fanship as someone whose life is consumed by a sport even when the person is not actually doing anything sports-related (Spinrad, 1981). Finally, author Gary Crawford considers being a fan as an identity, not just a label or category (Crawford, 2004). This identity can be further broken down into two concepts: sport fandom identification and team identification. For the purposes of this paper, these two terms are critical to understand as they relate directly to sports attendance, which will be discussed in more detail in later sections.

Team identification has been defined as the extent that a fan feels psychologically connected to a team, sport, or individual athlete (Wann, 1997, 2002, 2006; Wann & Branscombe, 1993; Murrell & Dietz, 1992). Team identification is a result of psychological, environmental, and team-related factors. Sport fandom

identification is a person's self-perception as a sports fan (Wann, 2002). The distinction between the two is notable because although sport fandom identification and team identification are correlated, "it is also likely that there are many individuals possessing a high level of fan identification (i.e., they are self-perceived sport fans) who do not strongly identify with a particular team or player" (Wann, 2002, p. 104). Fans who demonstrate high team identification are much more likely to be a sports consumer, not just a fan.

According to Wann, "sports fans have an interest in and follow a sport, team, or individual athlete," while sports consumers take this a step further by watching or listening to mediated sports or attending a game in person. Furthermore, sports consumers can be subdivided into two smaller groups: direct and indirect sports consumers. Direct sports consumption is when an individual attends a game, whereas indirect sports consumption is when an individual watches or listens to a sporting event through a form of mass media, such as radio, television, or the Internet (Kenyon, 1969; McPherson, 1975).

According to researchers, team identification may be the most important psychological factor impacting direct sport consumption, with studies consistently showing a positive relationship between the degree of team identification and game attendance (Murell & Dietz, 1992; Wakefield, 1995; Wann & Branscombe, 1993; Wann, 1999). Furthermore, within this paper the term "team identification" will often also be used in conjunction with the term "team loyalty." Team loyalty has essentially

the same definition and almost always correlates directly with team identification. To illustrate this, Lee provides an example comparing two NFL franchises, the Jacksonville Jaguars and Cleveland Browns. In 2010, Jacksonville Jaguars fans scored the highest in NFL fandom, but near the bottom of the league in team identification and loyalty. The Jaguars were also near the bottom of the league in terms of ticket sales. However, the Cleveland Browns fans were near the top in both team identification and team loyalty, but significantly lower in overall NFL fandom. Cleveland did substantially better in ticket sales than Jacksonville, even though they had a losing record for the season and three less wins than Jacksonville.

The following chart provides a summary of this section and should help to clearly illustrate the differences in levels of sports fandom. It is important to note that team identification and team loyalty are the two primary psychological indicators of a fan demonstrating direct sports consumption and attending a game.

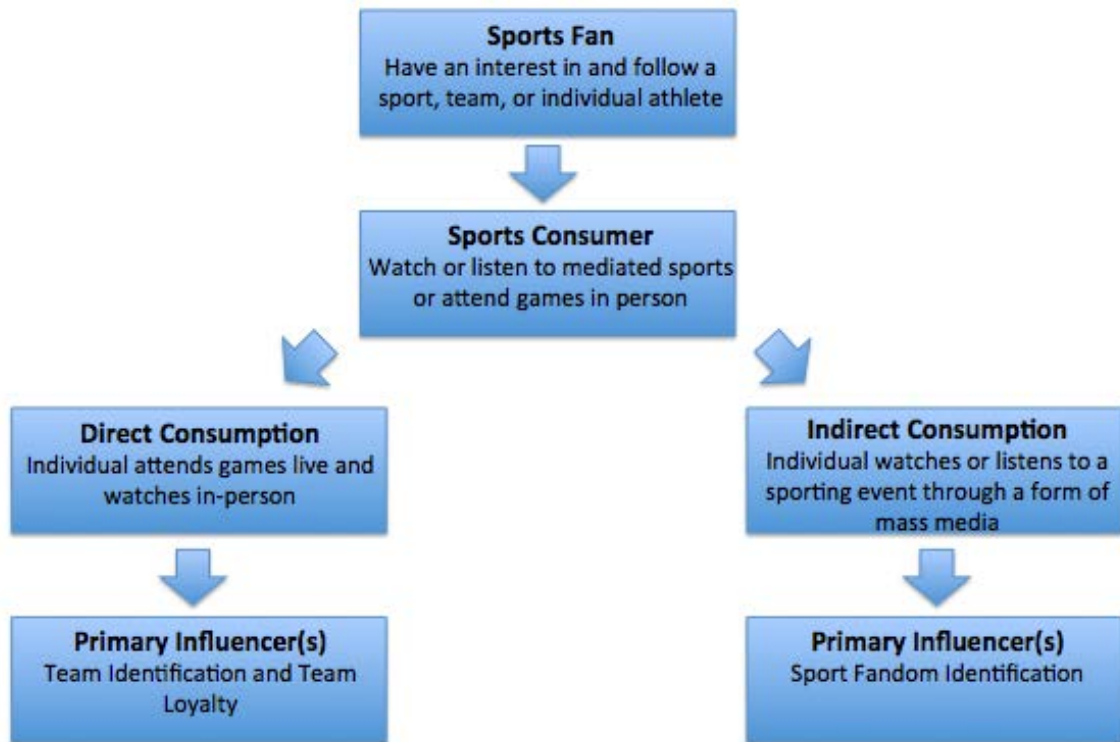


Figure 4: Key differences in types of sports fans

V. The Importance of Attendance

Strong attendance at live sporting events is key for the success of leagues, teams, sponsors, and players. The power of an energized crowd at a sporting event creates an atmosphere unmatched by any other form of entertainment. In 2013, Arrowhead Stadium, home of the Kansas City Chiefs, reached a record decibel level of 142.2 in the first quarter. To give comparison, that number is louder than a jet airplane flying 100 feet overhead and equal to that of a standard aircraft carrier deck. Coaches, players, and team executives all praised the fans' phenomenal enthusiasm and energy; while fans commented saying they felt involved in the game and part of a collaborative experience.

Home team players and coaches loved it because it gave them an advantage on the field. Team executives loved it because it was a sellout game, providing direct revenue and incentives for sponsors to become involved. Fans loved it because it gave them an atmosphere that couldn't be matched watching the game from anywhere else. Everyone loved it because it showed how powerful of an emotional experience sports can provide when at their best, and reinforced what can make going to a game so special.

To summarize, strong attendance is important for a number of reasons. It provides an experience that cannot be simulated from a couch at home, which in turn leads to more fans wanting to return for future games, it often gives home teams an

advantage on the field, and it delivers one of—if not *the*—key revenue streams to teams.

The Financial Importance of Strong Attendance

Ticket sales are vital to teams generating revenue at both the collegiate and professional level. Even with the increase in broadcast revenue over the years, tickets and ticket related fees make up a large portion of teams' budgets. The chart below illustrates the various channels of revenue for the University of Oregon.

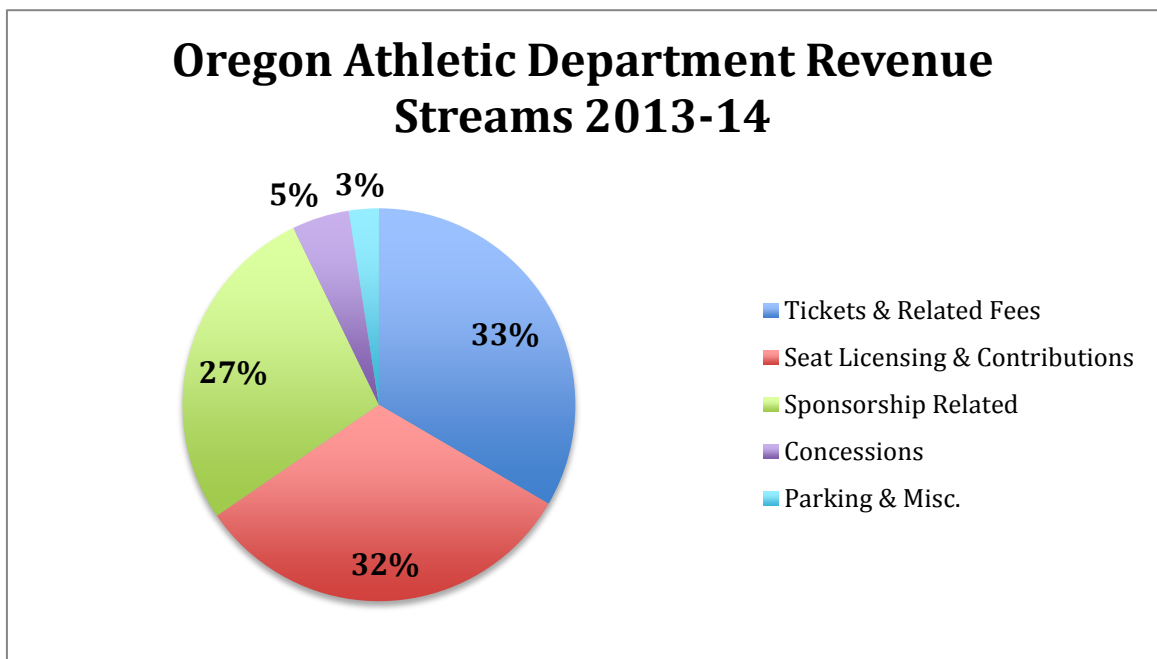


Figure 5: Primary revenue streams for UO athletic department 2013-14

In the 2013-14 year, tickets and ticket related fees accounted for roughly one-third of the University of Oregon's entire athletic revenue. This is not uncommon for major colleges and even professional teams, as shown below when looking at the entire Big Ten Conference.

Ticket Sales as Percentage of Total Revenues		
(Big Ten Conference Athletic Programs 2010)		
<u>School</u>	<u>Ticket Sales</u>	<u>% of Total Revenues</u>
Penn State University	\$41,836,815	39%
University of Michigan	\$41,715,138	39%
Ohio State University	\$39,515,387	32%
University of Wisconsin	\$25,732,357	27%
Michigan State University	\$23,504,865	28%
University of Iowa	\$21,815,895	25%
University of Minnesota	\$21,514,964	27%
University of Illinois	\$17,861,359	24%
Purdue University	\$16,587,166	27%
Indiana University	\$13,346,437	19%

Figures obtained from Howard and Crompton 2014

Table 1: Big Ten Conference ticket sales as percentage of total revenues

The next chart shows the primary sources of revenue for all sports teams in the United States.

<u>Private Sector Sources</u>	<u>Public Sources</u>	<u>Sports Enterprise Sources</u>
Investment capital	General ("hard") taxes	Tickets, concessions
Corporate sponsorships	Selective ("soft") taxes	PSLs
Donations	Grants, subsidies	Naming rights
	Tax abatements	Premium seating
		Licensed merchandise
		Media rights fees

Figures obtained from Howard and Crompton 2014

Table 2: Sources of revenue for professional and collegiate sports organizations

When looking at the categories of revenue above, the importance of ticket sales becomes even more apparent. Ticket sales have a direct impact on the revenue received

from concessions, premium seating, in-stadium merchandise sales, and personal seat licenses (PSLs).

PSL refers to the fee associated with buying a season ticket at a sporting venue. When a season ticket holder purchases a PSL, they only have the rights to that particular seat for the season. They still must purchase a ticket for each individual game. PSLs make up a huge portion of revenue for teams and are important because they are a way to guarantee revenue for the coming year. Teams work to pre-sell these season tickets and retain as many season ticket holders as possible from year to year as a way to maintain financial security.

In 2009, the Dallas Cowboys built a new \$1.2 billion stadium in Arlington, Texas, which included 320 luxury seats and over 16,000 club seats, sold as PSLs (Howard and Crompton, 2014). The Cowboys were able to sell 90% of the premium seat inventory before their first game of the season. The estimated total revenue generated by the Cowboys from the sale of their premium seating inventory alone exceeded \$106 million (Howard and Crompton, 2014).

Ticket sales are driven by attendance and as shown above, it is vital for teams on both the collegiate and professional level to generate large amounts of revenue from tickets given their current business models. Which begs the question, are these business models reliable for the future given the recent trends in attendance? Teams need to find alternative sources of revenue, some of which will be discussed in later sections.

Student Attendance

Unlike professional sports, collegiate football games have two different types of attendance to observe, general fan attendance and student attendance. The sharp decline in the latter is what is most worrisome for many. Bernie Mullin, whose company operates ticket sales at more than twenty colleges, recently said, “You’re dealing with an aging fan base on one end and then you’ve got Millennials on the other end who would rather participate than spectate” (Sports Business Daily, 2014).

In 2013, No. 5 Oregon traveled to Tucson to play Arizona in what was considered a very attractive matchup. Only 3,773 students showed up to the game in a student section made for 9,000. Throughout the season only 47.6% of the students who had tickets ended up showing (Rovell, 2014). This problem isn’t limited to Arizona either. It’s becoming an issue for programs all around the country. Darren Rovell of ESPN says, “But even more alarming: In analyzing the demographics of the college football crowd, athletic directors and marketers alike have been most baffled by the student population” (Rovell, 2014).

Why is the attendance of students so important? Because students today are the season ticket-holders of tomorrow, at least in theory. Surveys conducted at universities found the average season-ticket holder is 50-plus years old (Sports Business Journal, 2014). These surveys show that schools are having trouble reaching a very large segment of their fan base for purchasing tickets. Athletic departments rely immensely on the revenue generated from season-ticket holders. As mentioned earlier, Oregon for

example, brought in \$30,976,000 from tickets and ticket related fees in 2014 (Howard and Crompton, 2014). This equates to roughly one-third of Oregon's total budget for the year. Oregon can't afford to have the next generation of young adults stop attending games. Observing the trends of student ticket holders can give a sign of what the future holds for live sporting attendance in general.

Why Are Students Not Attending?

University of Oregon graduate student Andrew Guerra recently worked alongside the UO athletic department and a larger organization called NACMA (National Association of Collegiate Marketing Administrators) to conduct a nation-wide survey of college students. The goal of the survey was to provide better insight into the problem of getting students to show up for games. A total of 65 schools and 23,308 students responded to the survey, giving a substantial sample size. A full documentation of statistics from the survey can be found in the appendices, but some of the key insights are as follows:

Rate how much influence the following have on your decision to attend a home game at your university.

Scale 1-5



Figure 6: Various influences on students' decisions to attend home sports event

Would any of the following motivate you to attend a home game that you were otherwise not planning on attending? (Check all that apply)

Answer	%
Free T-shirt	71%
Free food/concession	71%
Seat upgrades at the next event	43%
Loyalty points for cool prizes	41%
Sponsored post-game party	38%
Meet and greet with team/coaches	37%
Live Music or DJ	29%
Interactive mobile experiences	13%
None of the above	7%
Other? (Please specify)	7%

Figure 7: Motivating factors for students to attend home sporting event

Do you agree with the following statements about campus sporting events?		
Question	Yes	No
"It's more comfortable at home"	67.3%	32.7%
"The traffic is a huge hassle"	49.2%	50.8%
"I want to watch other/multiple games on TV"	33.2%	66.8%
"The games are boring"	22.4%	77.6%
"I feel like I don't actually watch the game when I go"	22.1%	77.9%
"The experience I get with a TV/second screen is better"	19.8%	80.2%

Figure 8: Students' agreement with statements about campus sports events

What part of attending home games do you enjoy the LEAST? Check up to 2	
Answer	%
Costs (tickets, concessions, parking)	36%
Waiting in lines	33%
Traveling to/from the game	33%
Limited WIFI or cell connectivity	26%
The student section itself	14%
Other (please specify)	13%
Not having a TV/second screen	9%

Figure 9: Students' least favorite parts about attending home sports events

According to the survey, two of the biggest influences on students attending a home game are game time and price of students tickets. As discussed later in the section about television's impact on game times, this is a way sports leagues are actually hurting attendance by prioritizing schedules that work for television. It is interesting to see that even students who presumably live very close to the stadium factor this into their decision, and shows that television times have indeed influenced fans' decisions on whether or not to attend a game. Price of student tickets was also listed as being an important factor and as the part students enjoy least about attending home games, even though student tickets are highly subsidized.

The survey also shows inconsistency in students' answers. For instance, giveaway items were listed as being the third to last influence on students' decisions to attend a home game. Yet, when students were asked what would motivate them to attend a home game that they were not planning on attending, giveaway items were listed as the top two answers.

Students also reinforced the notion that attendance may be down largely due to the experience of watching the game on television. Nearly three-quarters of students agreed with the statement that it's more comfortable to watch the game at home. A fourth of them also listed the games as being boring, which is often the case due to the difference in talent between top-tier college teams and lesser talented teams, especially

when compared to the NFL where every team is on a more equal level of talent. This is illustrated below by the following graph from *The State Press* showing the winning margin in college football compared to professional football.

Margin of Victory from 2000–2013

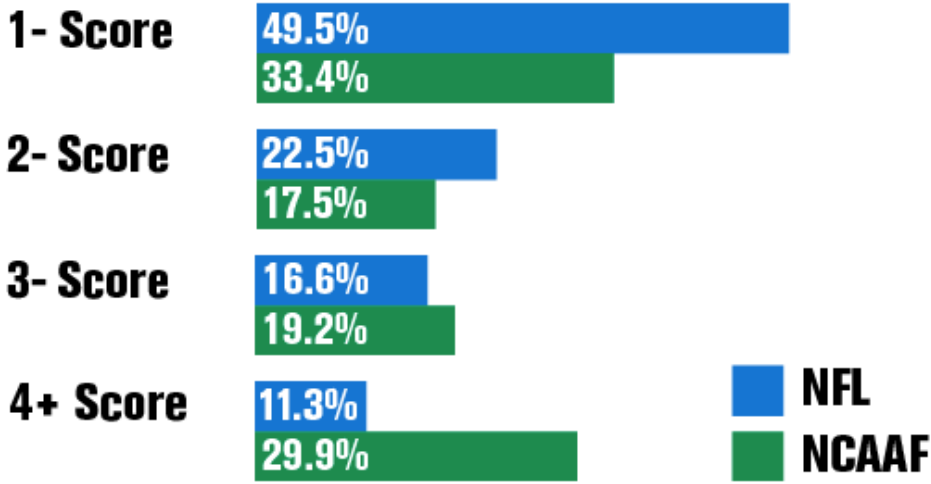


Figure 10: Average winning margin in NFL versus NCAAF from 2000-2013

If games continue to be boring to both students and the general fan base, athletic departments may have to look at scheduling tougher opponents for out of conference games as a way to keep games more competitive, and subsequently, keep fans interested in attending and staying at games.

VI. The False Impression of Attendance Numbers

In 2011, author Maury Brown of *Forbes SportsMoney* produced a detailed article examining how attendance is actually being calculated and how the reported numbers can be severely misleading. The following information is a summary of the findings of the study.

In the early 1990s a move was made to count tickets sold, rather than turnstile clicks, as the number recorded in the box scores. With ticket resale becoming increasingly popular, teams started putting more emphasis on corporate sales and blocks of premium seating. Teams began to care less about how many people actually attended the game and more about sales as a whole, due to the cost certainty given. Brown contends that the problem this creates, among others, is misleading information produced about the actual popularity of the sport. Brown continues to point out, “The published figures only truly show how willing consumers, which includes large and small businesses, were willing to purchase tickets, not how many actually attended the live sporting event” (Brown, 2011).

Publishing high attendance figures is extremely important for teams and carries significant financial implications, which largely explains the switch to count the number tickets sold as opposed to turnstile clicks. Policies implemented by leagues, at both the professional and collegiate level, require teams to have high attendance numbers or face consequences. Furthermore, reporting high attendance numbers can increase the perceived popularity of a sport and increase the amount obtained in sponsorship deals.

NFL's Blackout Policy

In the early 1970s, the NFL implemented a rule stating that if a game was not sold out 72 hours prior to kickoff, the game would not be shown, or “blacked out,” in local TV markets within a 75-mile radius. At the time the policy was instituted, teams relied primarily on ticket sales to generate revenue, and alternative viewing options for games were much more limited. With revenue from television deals becoming significantly more important over the years, teams could not afford to have their games consistently blacked out in local markets. This led to teams looking for a way to give the impression the stadium was sold out, hence the change in how attendance numbers were calculated.

In 2014, the Federal Communications Commission (FCC) came out against the blackout rules and eliminated FCC reinforcement of the league's blackout policy. Subsequently, the NFL recently decided that the 2015 NFL season will be run without the policy. This response was largely due to television deals being at an all-time high and stadiums increasingly relying on public funding for construction costs. Teams need to keep games on local television as way to generate revenue and avoid angering local fans. It is difficult to convince the public to agree to stadium funding if they aren't able to watch their own team play.

However, this may not be the last we see of the NFL's blackout policy. The 2015 season will be important for teams to analyze whether the lack of a blackout threat significantly alters ticket sales in certain markets. During the 2014 playoffs, businesses

had to step up and purchase large amounts of unsold Green Bay Packers tickets as a way to avoid the game from being blacked out. Would this have happened without the blackout policy in place? The policy certainly encourages teams to report artificial attendance numbers, but at the same time it is also likely helping teams sell tickets.

NCAA Football and Bylaw 20.9.9.3

The motivations for inflating paid attendance figures varies largely based on the size of the university and prestige associated with the program. For example, in 2014, the University of Michigan distributed nearly 17,000 free tickets for their final game against Maryland as a way to continue their streak of games with attendance over 100,000 fans. Not only was this a poor indicator of the actual popularity of the team, even with the 17,000 tickets given out for free the program still saw the sparsest crowd since 1995. For smaller schools, the need to alter paid attendance numbers is not so much about prestige as it is about survival.

According to NCAA Football Bowl Subdivision rules (Bylaw 20.9.9.3), “Once every two years, the institution shall average at least 15,000 in actual or paid attendance for all home football games” (NCAA, 2015). Failure to meet this rule disqualifies a team from being recognized as an NCAA Division I football program. For many college athletic programs this is an important recognition and can have an influence on a university’s reputation as a whole.

The validity of the rule itself can be debated, but there is no doubt it plays a significant role in smaller schools inflating attendance numbers. The bylaw even gives schools the option to report paid attendance numbers rather than actual attendance. Small schools like Central Michigan University use the option to report paid attendance to their full advantage. In 2013, 5,500 season tickets were bought by International Management Group (IMG), a global sports and media company. Many of these tickets never entered the stadium, but Central Michigan was able to keep their status as an NCAA Division I program alive.

Do Artificially Generated Attendance Numbers Really Matter?

A team is still generating the same ticket revenue regardless of if fans show up or not, but the number of fans actually in seats has an important impact on factors such as fan experience, money spent in the stadium, and sponsorship opportunities. A team may be able to claim they sold out a game based on what the numbers say, but businesses buying tickets simply for the sake of avoiding a blackout is not the same as actual fans showing up in the seats. Teams are missing out on crucial revenue from fans spending money at the game on areas such as parking, concessions, and merchandise.

While harder to quantify, in-stadium sponsorship and fans' willingness to continue attending games can also be affected negatively by low in-stadium attendance. Again, teams can claim a sell-out crowd on paper, but if a sponsor attends a game in person and notices empty seats throughout the stadium they may reconsider the value being provided with in-stadium sponsorship. Likewise, this can also have a negative

effect on sponsorship from a national level if the sport is discovered as being less popular than advertised.

The point of illustrating how and why artificial attendance numbers are generated is not to say that these practices have a positive or negative effect on overall ticket sales. The goal is to show the why teams feel the need to exaggerate the numbers and how published numbers can be drastically misleading when looking at the performance of a team from both a financial and popularity standpoint. Any ticket sold, regardless of the price or if the purchaser attends the game, is considered paid attendance. It can be difficult to discern if published attendance figures reflect paid attendance or actual attendance numbers, making it important to look at these figures skeptically with the realization that they are often significantly higher than the number of fans who actually attended the game.

Previous examples of the University of Michigan and Green Bay Packers show that paid attendance numbers are not always a strong reflection of how well a team is performing in getting fans to pay and show up for a game. More and more instances such as these are appearing across all sports and further illustrate that many fans are not showing up for games like in years past.

VII. Sports Viewing Through the Years

On April 11, 1921, the first voice broadcast of a live sporting event occurred when a boxing match at Pittsburgh's Motor Square Garden was broadcast by Westinghouse station KDKA. Four months later the same station gave the first radio broadcast of a Major League Baseball game between the Pittsburgh Pirates and Philadelphia Phillies. Radio broadcasts gave fans an entirely new way to experience the action live if they could not make it to a game. The broadcasts also widened fan bases of teams, as previously unexposed consumers were able to follow games with relative ease.

Eighteen years later, the United States' first televised sporting event was broadcast by NBC on May 17, 1939. However, American sporting events were still limited to regional viewing until NBC broadcast the first live sporting event able to be seen coast-to-coast, a college football game between Duke University and the University of Pittsburgh on September 29, 1951. College football games quickly became a centerpiece of television on major networks and expanded even further when a judge ruled against the NCAA's restriction of broadcasts as a violation of antitrust rules in 1982.

The Worldwide Leader in Sports

7:00 PM on September 7, 1979 marked arguable the largest shift in sports viewing with the debut of television network ESPN. Faced with unemployment after

being fired from his job as Communication Director for the New England Whalers, Bill Rasmussen revolutionized the consumption of sports with America's first 24-hours sports network (ESPN Founder). Only a year earlier the concept of a network dedicated entirely to sports was dismissed as being both an unattainable and foolish endeavor. Not even media giants such as ABC, CBS, or NBC had seriously considered implementing the idea. There is controversy surrounding who initially formulated the concept of ESPN, as highlighted in a recent *Deadspin* report in which a man named Bob Beyus claims the Rasmussens "conned" him. Regardless, Bill Rasmussen and his son Scott implemented the idea and are credited for the founding of the network.

The Rasmussens first planned to focus entirely on the Connecticut region, a hotbed of sports action that included the University of Connecticut, the World Hockey Association's Whalers, and the AA Bristol Red Sox. However, the father-son duo quickly came to the realization that it would cost nearly the same to distribute their content nationally using satellites. They wasted no time in securing funding from Getty Oil Company, struck a deal with NCAA czar Walter Byers, and convinced Anheuser-Busch to sign the largest contract ever seen in cable TV history. This marked the beginning of what would eventually become, according to *Forbes*, the world's most valuable media outlet. How did ESPN reach this level of success? The network capitalized on America's obsession with sports and continuously expanded to provide the most extensive coverage possible, always seeking top reporters and adopting the latest technology.

ESPN further distinguished itself in the early 1990s by hiring many of the highest regarded reporters in each of their respective sports. The network quickly became “the place to be” for professional sports reporters leading to an increase in quality of content produced. During this time the company also saw considerable growth due to the implementation of services such as ESPN Radio in 1992, and secondary channel ESPN2 in 1993. Over the years the network expanded even further by launching ESPNNews in 1996, ESPN Classic in 1997, and ESPNU in 2005, a channel dedicated exclusively to collegiate sports. ESPN even began producing a critically acclaimed documentary series in 2009 called *30 for 30*, which focuses on major sports stories and events that occurred over the previous thirty years of the network being on the air.

ESPN has also been at the forefront of technological innovations, helping to make the digital viewing and consumption of sports significantly more engaging for fans. Although first used by CBS, the Skycam, a computer controlled, cable-suspended camera system, was not adopted for widespread use until ESPN began implementing the technology for broadcasts. The camera gave viewers at home considerably better viewing angles and is now used on a regular basis for sporting events. In 2002, the network became one of the first media brands to launch a broadband network called ESPN360. Now titled WatchESPN, consumers are able to watch streaming simulcasts of all major ESPN channels on their computer, laptop, or mobile device. The service is only available to subscribers of participating cable, IPTV, and satellite television

providers, but has dramatically increased the ability for fans to watch live games on the go.

A considerable amount of time has been spent discussing ESPN, and for good reason. The network started the biggest revolution in sports viewing and gave fans another way to fill their sports appetite without attending games in person. ESPN is now worth over \$50 billion, with the average cable or satellite subscriber paying \$6.04 of their monthly bill for ESPN. The next most expensive channel? TNT at \$1.48, which also has a large amount of sports coverage (WSJ, 2014). In fact, sports related channels make up 6 of the top 10 most expensive channels on cable. This is largely due to them being “DVR proof” with sports viewers watching sports live 96% of the time (ESPN, 2014).

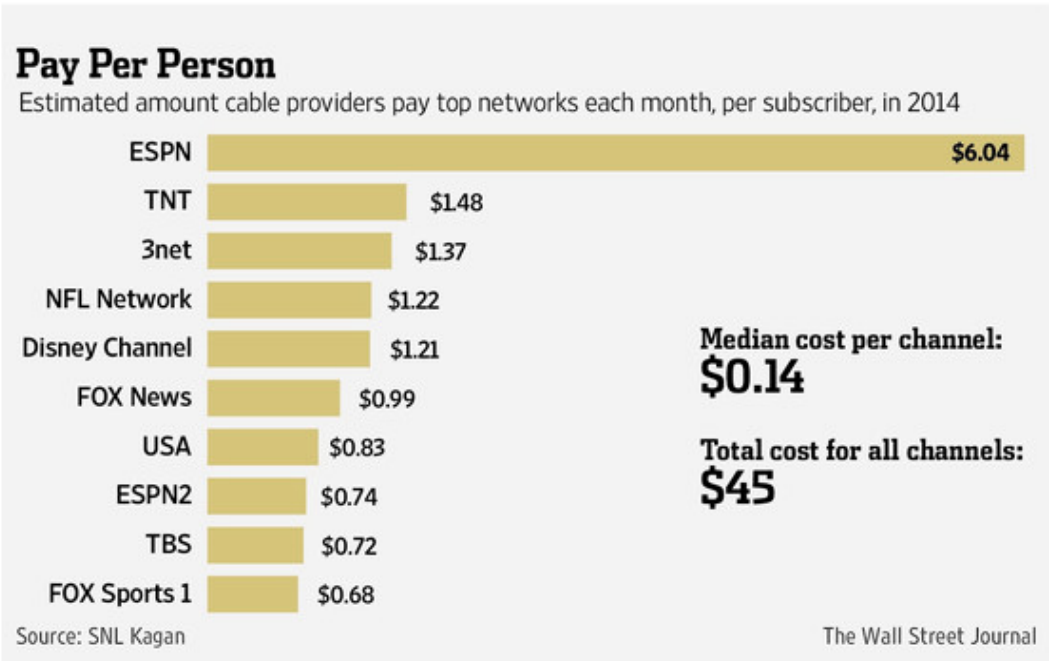


Figure 11: Cost of top cable channels in 2014

Television Coverage Today

Television coverage for sports has continued to evolve over the years. One example is the introduction of NFL Sunday Ticket. Sunday Ticket allows viewers to purchase a season ticket package for a few hundred dollars and have access to every NFL game that isn't being played on local networks such as CBS, Fox, and NBC. Likewise, MLB, NBA, and NHL all have adopted similar packages. With Sunday Ticket, viewers even have the option to watch a specific channel showing all the games playing at once or another channel that automatically switches to any game with a team about to score. This has given viewers the ability to bypass commercial breaks, with action always taking place on the screen. Compare this to going to an NFL game where fans are forced to watch media timeouts after nearly every possession, creating annoying breaks in the action.

Sports teams and leagues have worked so hard to make the TV viewing experience better for fans, they have inadvertently created a huge deterrent for people to attend games in person. In 1998, an ESPN sports poll revealed that 54% of fans would rather be at a game than watch it at home. When the same poll was taken again in 2011, only 29% of fans wanted to be at the game, a significant drop. Leagues have also created a barrier for many fans to attend games by prioritizing game times that work for television rather than for attendees.

For example, in 2014 Oregon played Arizona on a Thursday night at 7:00pm PST. A large portion of Oregon football ticket holders live in Portland, meaning they

had to drive down to Eugene Thursday evening after work, watch the game, and then drive back up to Portland the same night. This meant fans were getting home long after midnight with work Friday morning. Because of this, the school ended up giving out a large number of free tickets due to the unwillingness of many people to make this trek. These scheduling conflicts are not at all uncommon on the west coast, and are a significant deterrent for many fans to attend games.

Not only have more channels and games become widely available for fans, the quality of the broadcasts also improved significantly with the introduction of HDTV.

HDTV

In 2009 a mandatory switch from analog over-the-air to digital transmission took place in America. The price of high-definition televisions declined rapidly following this switch, making HDTV's much more accessible to the average American. In 2012, it was found that roughly 68% of households in the United States had at least one HDTV. The 68% is from the Annual Consumer Electronics Association (CEA) Ownership and Market Potential Study,

Where penetration is calculated using self-reported numbers from a quantitative study that was administered via telephone interview to a random national sample of 2,028 U.S. adults between January 26 and January 30, 2012. The margin of sampling error at 95% confidence for aggregate results is +/- 2.2%. In this survey, weights were applied to cases based on gender, age, race and geographic region. As a result, this data can be generalized to the entire U.S. adult population (CEA, 2012).

A study conducted by the Leichtman Research Group in 2013 found that this adoption trend continued to increase, with an estimated 75% of households in the United States

having at least one HDTV set, up from 23% just five years ago. In the time 52% of homes adopted an HDTV, football at both the collegiate and professional levels saw viewership rise, but attendance falter. 67% of respondents in the NACMA survey listed their number one reason for not attending games as being more comfortable watching the game at home with friends on an HDTV, showing correlation between HDTV adoption and negative attendance trends. HDTV's have made the home viewing experience significantly more immersive and entertaining, in many cases providing a better alternative than going to a game in person. The chart below illustrates the rapid growth of HDTV adoption in the US.

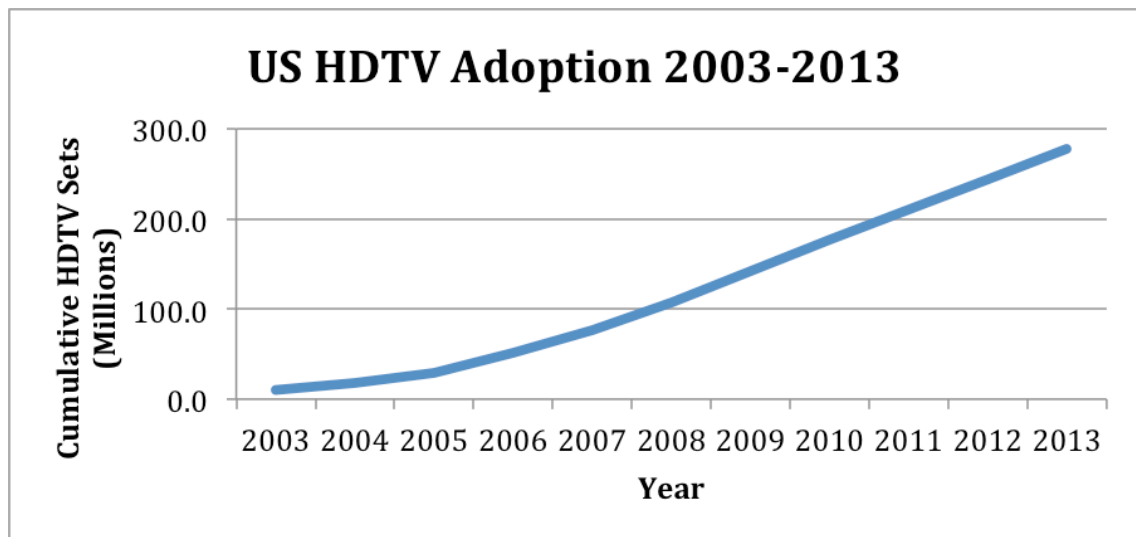


Figure 12: United States HDTV adoption from 2003-2013

VIII. Consumer Behavior Changing

Second Screen

The widespread adoption of smart phones and tablets has led to a significant change in the attention spans of consumers around the world. Research agency TNS conducted a survey of 55,000 people in 2014 to gain insight into the prevalence of a behavior called “screen-stacking.” This behavior refers to the use of a smartphone, laptop or tablet while simultaneously watching TV. According the survey, 56% of Americans responded saying they partake in screen-stacking on a regular basis. This number is expected to increase and will likely soon match that of countries like Japan, where 79% of respondents reported using some other device while watching TV.

Respondents listed social and communication, news and entertainment, and shopping as their primary activities, with the average US consumer spending nearly five hours per day online across multiple devices. Screen-stacking is most prevalent in the evening and according the TNS, the average consumer now only gives about 41% of their full attention when watching TV.

Sports viewers in particular partake in screen-stacking on a regular basis, engaging in activities ranging from following their fantasy sports teams to checking scores and player statistics. In many cases this has helped fans to become more engaged and interested across all sports, increasing their sports fandom, albeit often with less attention being paid to what is happening in the game. The Fantasy Sports Trade

Association's research found that nearly 79% of fantasy football participants go online, on average, five or more times during a game to check scores, stats, and other related sports news. Keep in mind this study was also conducted in 2011, with fantasy sports participation increasing significantly since then, as discussed later.

A typical football consumer can now watch a game on Sunday afternoon while simultaneously checking their fantasy football team's score and browsing Twitter to see what is happening around the league. For the more sports consumer, they may also be placing gambling bets on increasingly popular sports book websites while looking up stats of a specific player. The options are endless with the introduction of second screen viewing and the implications are both positive and potentially negative for sports leagues.

On one hand, the second screen gives leagues and teams the opportunity to connect with fans in ways previously unimagined. Teams are able to engage with fans over social media during games, providing highlights, insight, and promotions. Likewise, the NFL wants people playing fantasy football as a way to increase overall sports fandom and increase revenue for website providers, one of which is NFL.com. More time spent online checking on fantasy teams equals more time spent on a website, which allows the site to charge more for advertising (Toren, 2010).

On the other hand, the increase in use of screen-stacking shows a decrease in consumer attention spans. This decrease in attention span combined with the average

football game lasting over three hours, leads to many consumers having yet another reason why it is beneficial for them to stay home. At an NFL game, the amount of time the ball is actually in play is a mere eleven minutes. There are certainly other aspects of going to a game that are exciting, but in general, asking consumers with a low attention spans to sit in a stadium for over three hours, for eleven minutes of action, is a recipe for problems.

Teams have worked to combat this problem by installing WiFi and other communications equipment to give fans the ability to use their phones while inside stadiums. This has helped to an extent, but there needs to be more done to keep the seats filled and persuade fans to leave their homes.

Fantasy Sports

Earlier the claim was made that the NFL wants people playing fantasy football as a way to increase overall fan interest in the sport. This is true for the most part, however there have been unintended consequences which could play an important role in fan attendance declining in future years.

Put someone's money or reputation on the line and they are much more likely to tune into a Thursday night game between two mediocre teams. This is part of what makes fantasy sports a double-edged sword. More people may be tuning in to games, but is it for the right reason? Is it in the NFL's best interest to have more people tuning

into games if they are watching them not out of being an avid fan of the team or sport, but instead because they have a fantasy football game to be decided? In short, yes. Having more viewers is always a good thing. However, a viewer does not always demonstrate important qualities such as team identification or team loyalty. With younger generations growing up playing fantasy sports, it is feasible that we will see an increase in viewers but a decrease in people considering themselves avid fans of one particular team.

In 2011, an extensive statistical study was conducted by LSU graduate student Jeremy Lee to find the relationship between fantasy football participation and fandom of a particular sport. Lee defines fandom as being gauged through sports media consumption, which can be measured by the amount of hours spent each week watch games for a particular sport (Lee, 2011). The research indicated that unsurprisingly, higher level of involvement in fantasy sports led to more time being spent watching games each week. For example, people who had a high level of fantasy football participation watched seven to nine hours of games each week, compared to those with low participation who watched four to six hours.

In 2006, a study was conducted research showing that 29% of people who play fantasy sports would prefer to see their fantasy team win rather than their favorite team. Lee conducted a similar study for his research and found that by 2011, this number had increased to 41.4%. Lee concludes that fantasy sports lead people to make sports more individualistic in nature, putting an increasing emphasis on players rather than an actual

team. This is should be worrisome for teams, especially considering fantasy sports participation has increased since 2011 with over 41 million people now playing in North America alone. The increase in fantasy sports participants since 2003 is shown in the following chart.



Figure 13: Fantasy sports participation in North America from 2003-2014

When the majority of sports fans begin to care more about their fantasy team rather than real team it can have serious implications on those fans' willingness to come to games where they can only watch two teams face off. Lee says, "Someone who prefers a win by their fantasy team has lower team identification, team loyalty, and sports fandom than those who prefer a win by their favorite team" (Lee, 2011). As stated earlier, team identification is a major factor in sports consumption, and while fantasy participants will often say their team identification is not lowered, the data suggests it may be lowering without them recognizing it.

IX. The Economy, Consumer Spending, and Cost of Attendance

Late 2008 marked what some have referred to as the worst financial crisis in global history (CNN Money). The impact was felt all around the country and is believed to be one of the primary culprits for declines in sporting attendance. After examining consumer spending reports from 2003 to 2013, there does certainly seem to be a correlation with the recession and declining attendance. 2007 was a year of record attendance levels in many sports, including professional and college football. Neither of these sports have managed to recover to 2007 attendance levels. This data, alongside total consumer expenditure and entertainment expenditure are shown on the following charts.

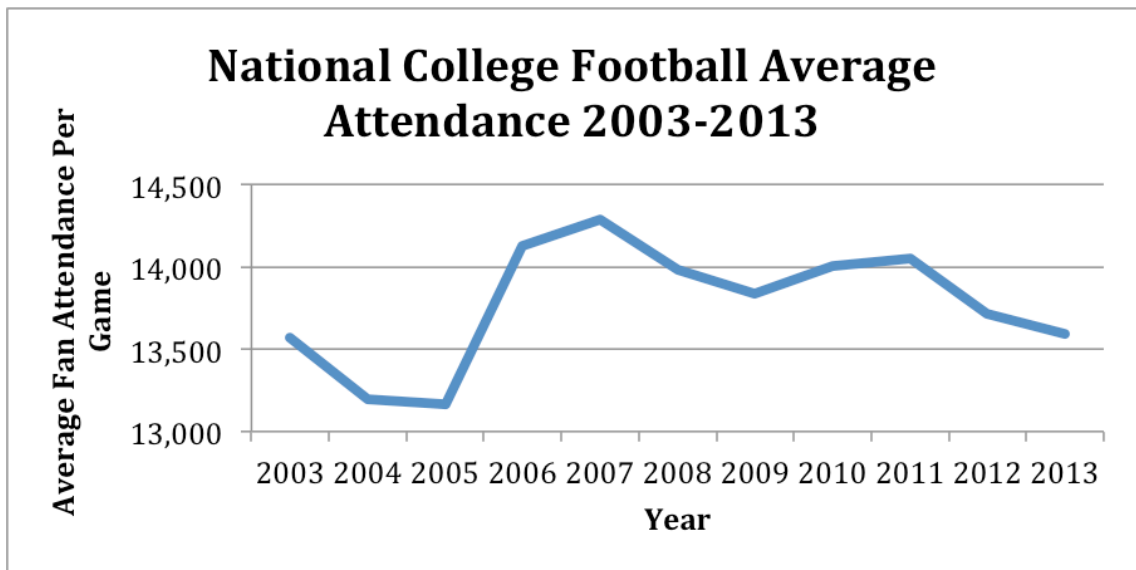


Figure 14: NCAAF average attendance from 2003-2013

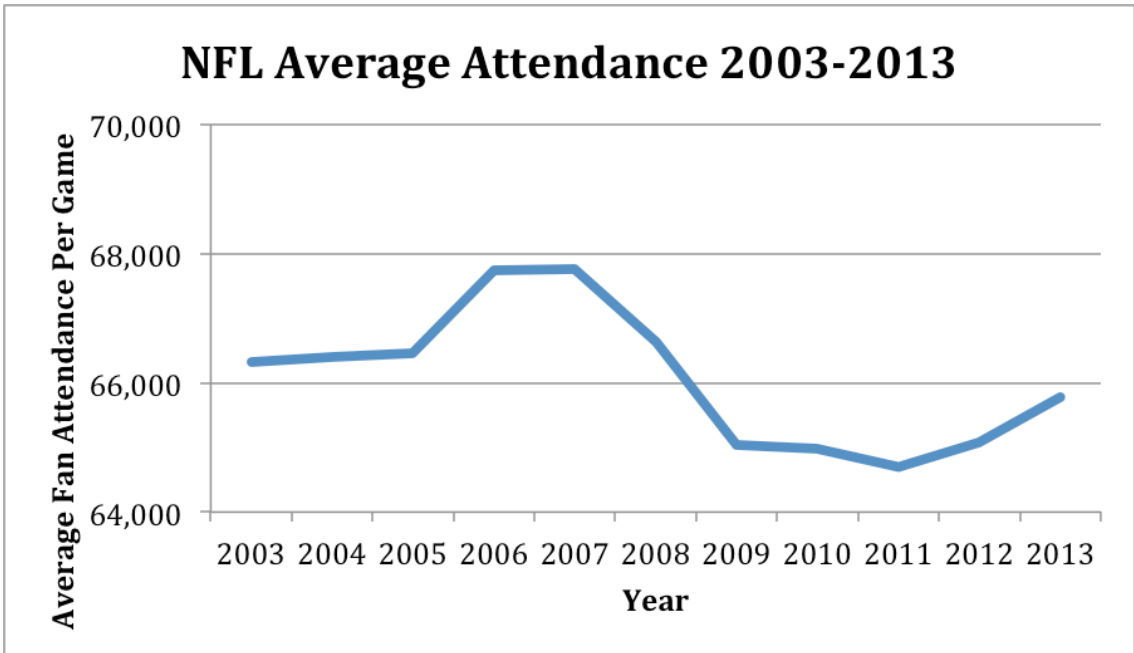


Figure 15: NFL average attendance from 2003-2013

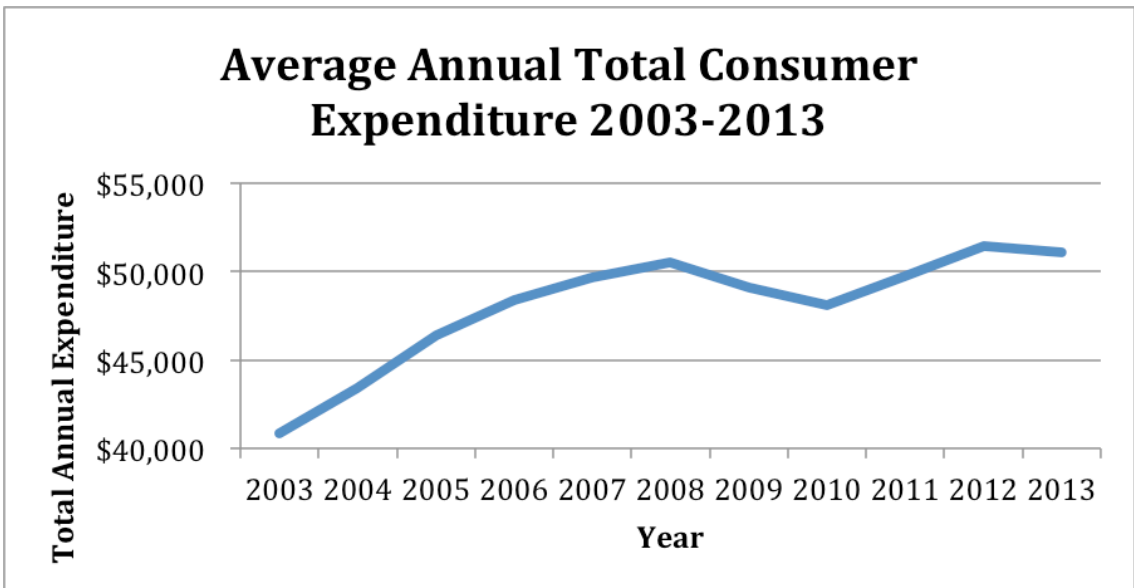


Figure 16: Average annual total consumer expenditure from 2003-2013

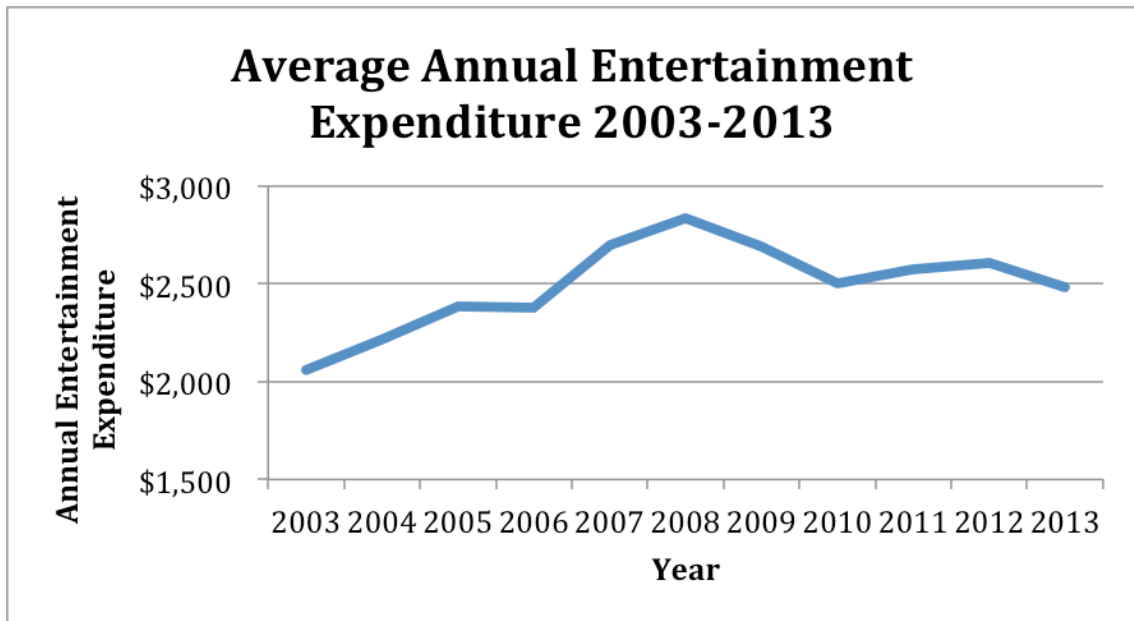


Figure 17: Average annual consumer entertainment expenditure from 2003-2013

By compiling data from consumer spending reports from the Bureau of Labor Statistics (BLS), I was able to chart both total consumer expenditure and consumer entertainment expenditure from 2003-2013. Total consumer expenditure did recover fairly well from the 2008 recession, reaching an all-time high in 2012 and an overall increase of \$10,283 from 2003 to 2013. However, entertainment expenditure has not fared as well. Consumers in 2013 were only spending \$422 more on entertainment than in 2003. This is significantly less than what was being spent in 2007. In general, Americans have not shown the willingness to invest large amounts of money into entertainment opportunities as of late. This may not be a problem if ticket prices had followed the spending patterns of consumers, but as can be seen in the next section, ticket prices have steadily increased since 2003.

Price

Unsurprisingly, price is often listed as the main deterrent for fans to attend games on a more regular basis. Even students, who receive highly subsidized tickets, listed the cost of attending a game as the part they least enjoy, above factors such as waiting in line, traveling to and from the game, and limited Wi-Fi or cell connectivity (NACMA). So what exactly does it cost for the average fan to attend a game?

Each year a publication titled *Team Market Report* documents the various costs associated with attending different sporting events. The report lists average ticket price and average premium ticket price, along with the average cost of a beer, soft drink, hot dog, parking, game program, and team hat. From this data, the report then forms a number called the Fan Cost Index (FCI). According to the report, the FCI is meant to show the average cost of attending a game for a family of four. The FCI comprises the prices of four (4) average-price tickets, two (2) cheapest draft beers, four (4) cheapest soft drinks, four (4) regular-size hot dogs, parking for one (1) car, two (2) game programs and two (2) least-expensive, adult-size adjustable caps. The report documents every team across the four major professional sports, and then averages the numbers out to form a league average. A sample of the report is included in the appendices.

By compiling the data gathered from 2003 to 2013, I was able to find the increase in average ticket prices and FCI across the NFL, NBA, MLB, and NHL. Unfortunately, yearly NCAA football figures are not documented by a reliable source, but I was able to find data pertaining to the cost of purchasing a season ticket for

Oregon football from 2003-2013. As mentioned earlier, this cost is referred to as a personal seat license (PSL), and is associated only with purchasing the rights to the seat for the season. Season ticket holders then must purchase individual tickets for each game they attend, typically costing \$75-\$110 per game. This is a standard practice across sports and is in no way exclusive to Oregon. Below is a summary table of the increase in ticket prices compared to total consumer expenditure and entertainment expenditure.

2003-2013 Ticket Price vs Consumer Spending Comparison				
(Based on Averages)				
	2003	2013	\$ Increase	% Change
Total Consumer Expenditure	\$40,817	\$51,100	\$10,283	25%
Entertainment Consumer Expenditure	\$2,060	\$2,482	\$422	20%
Oregon Personal Seat License (PSL)	\$225	\$465	\$240	107%
Average NFL Ticket	\$53	\$82	\$29	55%
NFL Fan Cost Index	\$302	\$460	\$158	52%
Average NBA Ticket	\$45	\$53	\$8	18%
NBA Fan Cost Index	\$261	\$327	\$66	25%
Average MLB Ticket	\$19	\$28	\$9	47%
MLB Fan Cost Index	\$149	\$212	\$63	42%
Average NHL Ticket	\$44	\$62	\$18	41%
NHL Fan Cost Index	\$254	\$359	\$105	41%
NFL, NBA, MLB, NHL Average Ticket	\$40	\$56	\$16	40%
NFL, NBA, MLB, NHL Average FCI	\$242	\$340	\$98	41%

Figures obtained from Team Marketing Report, Bureau of Labor Statistics, and Oregon Athletic Department

Table 3: Ticket prices versus consumer spending from 2003-2013

As shown above, total consumer expenditure and entertainment expenditure only increased by 25% and 20%, respectively, from 2003 to 2013. A season ticket for

Oregon football? 107%. Oregon has not seen the same attendance problems many colleges around the country are suffering from, but this is likely due to the relatively small stadium size and incredible success the program has sustained in the past few years. An increase of \$240 for a season ticket when the average entertainment expenditure for consumers has only increased by \$422 for an entire year could lead to problems in the future if Oregon can't maintain the high level of performance fans have come to expect.

The cheapest FCI across all sports is baseball at \$212, which is not cheap. This \$212 is for a family of four to spend *one day* at an average MLB game. Also keep in mind there are 81 home games in a regular season of baseball, making this number even more ridiculous if a family tries to see even 10% of games in a season. Obviously a family isn't going to buy a baseball cap at every game, and they may be able to cut down on food and drinks, but even with these amenities taken out the number is still unbelievably high. Going to an NFL game is even more expensive, with the average FCI coming in at \$460. How can you ask a family to spend \$460 on a single football game when the average consumer entertainment expenditure for an entire year is \$2,482? It is also worth noting that the two sports that have seen the most positive recent trends in attendance, NHL and NBA, are the two sports with the lowest increases in both average ticket and FCI.

Price isn't the only factor influencing fans behaviors towards attending games, but it certainly is an important one. Teams in all sports need to keep prices affordable

for fans by finding new revenue streams, some of which will be discussed later. The current business model of relying on tickets and ticket associated fees for upwards of one-third of all revenue may be both impractical and unsustainable going forward. By limiting the ability of dedicated fans to attend games because of unreasonable ticket prices, teams are only disconnecting themselves from their fan base and hurting themselves for the future.

X. Positive Attendance Trends: Hockey

Of the four major sports in America, hockey receives significantly less television and media exposure than the rest. In fact, of the four major sports, hockey is the only league that doesn't have live games aired on ESPN. If you followed solely ESPN, the self-proclaimed "Worldwide Leader in Sports," you probably wouldn't even realize hockey is still considered one of the four major sports in North America. While ESPN's executives claim they cover hockey, any regular viewer knows the coverage is often nothing more than scores ticking across SportsCenter's bottom line with an occasional highlight or discussion. Patrick Burns of *Deadspin* found that even when the 2012-13 NHL lockout took place, an event that impacted sports fans and local economies in almost every major US city, ESPN dedicated under two minutes of SportsCenter coverage to hockey for the entire first week (Burns, 2013). The report below was created by Burns in 2013 detailing a week of 11pm SportsCenter coverage, and further illustrates how little the sport is shown.

TIME DEVOTED TO INDIVIDUAL SPORTS	
NFL:	142 minutes (38.4%) (last week: 30.2%)
MLB:	89.75 (24.2%) (last week: 20.2%)
College football:	55.25 (14.9%) (last week: 24.2%)
SportsCenter staples (things like the "Top 10," "Encore," "What 2 Watch 4," etc.):	37.5 (10.1%) (last week: 12.8%)
College basketball:	15.5 (4.2%) (last week: 0%)
Tennis:	8.75 (2.4%) (last week: 7.4%)
Golf:	6.25 (1.7%) (last week: 4.4%)
NASCAR:	5.25 (1.4%) (last week: 0.5%)
Other sports:	4.25 (1.1%) (last week: 0.2%)
NBA:	4 (1.1%) (last week: 0%)
NHL:	1.75 (0.5%) (last week: 0%)

Figure 18: Average time devoted to individual sports during week in 2012

Fortunately for hockey, the poor coverage doesn't extend to ESPN's website, with top reporters providing content regularly. However, consumers are forced seek out stories and content specifically, rather than having it automatically displayed to them on television during an hour of SportsCenter. There are also other popular networks that air live NHL games such as NBC and USA, but neither of these can compare to the potential exposure a sport can receive on ESPN. So why isn't ESPN showing hockey and how does this relate to game attendance?

According to ex senior vice president and director of news Vince Doria, hockey simply doesn't translate well to television. In an interview with *Deadspin*, Doria stated,

It's a sport that engenders a very passionate local following. If you're a Blackhawks fan in Chicago, you're a hardcore fan. But it doesn't translate to television, and where it really doesn't transfer much to is a national discussion, which is something that typifies what we do. Doria went on to add, baseball fans are interested in where Albert Pujols is going. NBA fans are interested in the Miami Heat. For whatever reason, and this is my unsubstantiated research on it, hockey doesn't generate that same kind of interest nationwide. You look at national talk shows. Hockey rarely is a topic. People in Boston aren't that interested with what's going on with the Blackhawks (Doria, 2012).

It is possible that by ESPN showing more coverage and airing more games, hockey would in turn gain more national attention. However, currently the sport doesn't receive significant attention on TV and the viewership ratings are substantially lower than other major sports in America. Likewise, only 5% of sports fans list hockey as their favorite sport and stars in the sport are much less well known by the average fan when compared to players in the other major sports leagues. This is where it gets interesting. The one league experiencing the best overall recent attendance growth? The NHL.

Not including the 2012-13 lockout season, the NHL has seen overall attendance grow year-over-year since 2009. NHL attendance even outpaced NBA attendance in 2014, a sport with much higher television ratings and overall popularity. 15 NHL markets averaged 100% capacity for the 2013-14 season compared to eight NBA markets able to achieve the same feat. It is worth noting that a large portion of the seasons for the NBA and NHL overlap with each other and both sports are often played in the same arenas. This standardizes factors such as transportation and location, diminishing them as being primary deterrents for fans staying at home. The average ticket price for NHL games is also higher than NBA games (\$61.62 compared to \$52.50), and the NHL is at a disadvantage in warmer climates where fans are less prevalent. The NBA did manage to post positive attendance results in 2015, but attendance for the seven years prior was disappointing and it remains to be seen if 2015 was just an anomaly. So why is hockey having such great success as of late?

For starters, the worst seats in the arena, often dubbed “nosebleed seats,” are much better for viewing hockey than comparable seats in other sports. Sitting higher up gives fans the opportunity to see plays develop before the puck gets there, something even TV cameras have trouble replicating. On average, NHL crowds are also considered to be significantly more lively than both basketball and baseball crowds due largely to more avid, local fan bases in hockey. This energy creates another experience that can’t be mimicked on television. While still enjoyable on TV, hockey games have developed the reputation for being even better when experienced in-person. Other

reasons for this include the pace of play, shorter games, and more overall action. NHL games last an average of two hours and nineteen minutes, with at least sixty minutes of that being guaranteed action. Compare those numbers to NFL games at three and a half hours and eleven minutes respectively.

The NFL and college football provide convincing examples of how high overall popularity and national exposure do not indicate a direct correlation to a high number of fans showing up to games. The NHL takes this a step further and shows that low overall popularity and exposure also don't translate to a dwindling fan attendance numbers.

To clarify, hockey is not even close to being in a better overall position than football simply because more arenas are filled on a consistent basis. The point of including hockey in the discussion is to show a sport achieving in an area football is not. It is also to introduce and explain the idea that with current business models sports are following, it may be impossible to fully succeed in both fan attendance and overall popularity. As a sport gains popularity and becomes more mainstream, it has been shown that fans tend to demonstrate more sports fandom as a whole, rather than strong team identification and team loyalty.

XI. Potential Solutions

Gambling: From Hurting to Helping Attendance

From a technical standpoint, fantasy sports and gambling are not the same. Fantasy sports are considered to be a game of skill, whereas gambling often has predetermined odds. The Fantasy Sports Trade Association (FSTA) uses this argument and points out that the top skilled fantasy players consistently win more often than gamblers. However, the line between the two is blurry and with most fantasy leagues often competing for money, it becomes even harder to find significant distinctions. The debate between the two is not important for this paper. What is important is the way in which sports gambling affects fan behavior similarly to fantasy sports, often even more extremely.

People with high levels of economic motivation often lose the values, beliefs, attitudes, and norms associated with sports fandom. If fantasy sports without money involved can make fans exhibit less team identification and loyalty, gambling takes this even further. Authors Raney and Wann even go as far as to say, “People who are primarily motivated to watch sports for economic reasons often do not qualify as sports fans at all” (Raney, 2006; Wann, 2001). Money is the ultimate motivator and when fans begin to see sports more as a potential economic gain, they subsequently lose many of the behavioral qualities making them a fan.

Unfortunately, research studies have not been done on this to the extent of fantasy sports, largely due to gambling's relatively small presence compared to fantasy sports. Due to the Professional and Amateur Sports Protection Act, online sports betting is currently only legal in the US in the states of Nevada, Delaware, Oregon and Montana. However, besides Nevada, the remaining states have not licensed it yet. So while the states have the ability to make it legal, they have yet to do so.

So why is it being brought up in this paper? Because it could very well become legalized across the entire United States in the near future, with the NBA leading the way. Given previous statements about the effects of sports gambling on fan behavior, this legalization may seem like a bleak outlook for teams. However, if implemented correctly it could provide huge new revenue streams for teams and be used to draw fans to stadiums. In the past, sports gambling has been kept out of stadiums and arenas, working against teams by distancing fans from the action. With the implementation of sports gambling, and to a lesser extent fantasy sports, into sports venues, it could provide a huge turnaround in attendance trends.

Led by NBA commissioner Adam Silver, the league has been pushing the legalization of sports betting hard since fall of 2014. Many around the NBA envision in the future that any league-wide licensing deal between the league and a sports betting company would also involve one its data providers: NBA.com, STATS, SportVU, Elias Sports Bureau, or another analytics services (Bleacher Report, 2015). With a deal like this in place, the NBA would get a take off of each wager transaction, just like a casino.

The league would also benefit financially from selling its rights to a sports betting company for promotional purposes (Bleacher Report, 2015). Sports marketing executive Joe Favorito predicts that this additional revenue stream would be surpassed only by broadcast revenue, which is in the billions already. This could give teams the ability to keep ticket prices down and keep the game more affordable for common fans.

Prominent sports betting companies have said roughly 75 percent of all bets they receive happen after a game starts. Examples of in-game bets for the NBA could be: will Player X score 10 points in the fourth quarter? Or will Team Y shoot 80% on third quarter free throws? These live bets would make sports even more DVR proof than they currently are, while also providing teams with a tool to convince fans to attend, and stay at, games. As Favorito puts it,

If you're wagering on something and you're waiting for it to happen in the fourth quarter, you're more likely to stay at the game regardless of what the score is. Then you buy more hot dogs, soda and merchandise, and not have to leave the arena. It becomes much more of a fan experience (Bleacher Report, 2015).

Using features like geotagging, teams can run exclusive promotions and contests for attendees during games through consumer's smartphones.

Fantasy sports and sports gambling have both been shown to increase sports fandom, with participants more interested in sports as a whole, especially in the outcome of games. Fans follow teams and sports they previously would have never bothered watching. The problem is that while these activities increase sports fandom, they often simultaneously decrease team identification and team loyalty among sports

consumers. However, if used correctly by teams, sports gambling has the potential to provide a huge incentive for fans to show up to games. The NBA could see sports gambling become legal as soon as 2017. The effects this has on attendance will be fascinating to watch. Will it cripple teams even further, or be a savior for the sport? I predict the later.

The table and graph below show the amount of money placed on Nevada sports books over the last eleven years. While total money played is often not recorded by the UNLV Center for Gaming Research, I was able to calculate the numbers by dividing each year's win amount by the corresponding win percentage.

Nevada Sports Book Bets Placed 2003-2014			
(Counted in Dollars)			
<u>Year</u>	<u>Win Amount</u>	<u>Win %</u>	<u>Total Money Played</u>
2003	\$122,630,000	6.58	\$1,863,677,812
2004	\$112,504,000	5.39	\$2,087,272,727
2005	\$126,176,000	5.59	\$2,257,173,524
2006	\$191,538,000	7.89	\$2,427,604,563
2007	\$168,363,000	6.49	\$2,594,191,063
2008	\$136,441,000	5.29	\$2,579,224,953
2009	\$136,380,000	5.31	\$2,568,361,582
2010	\$151,096,000	5.47	\$2,762,266,910
2011	\$140,731,000	4.89	\$2,877,934,560
2012	\$170,062,000	4.93	\$3,449,533,469
2013	\$202,838,000	5.60	\$3,622,107,143
2014	\$227,045,000	5.82	\$3,901,116,838

Table 4: Nevada sports wagering trends from 2003-2014

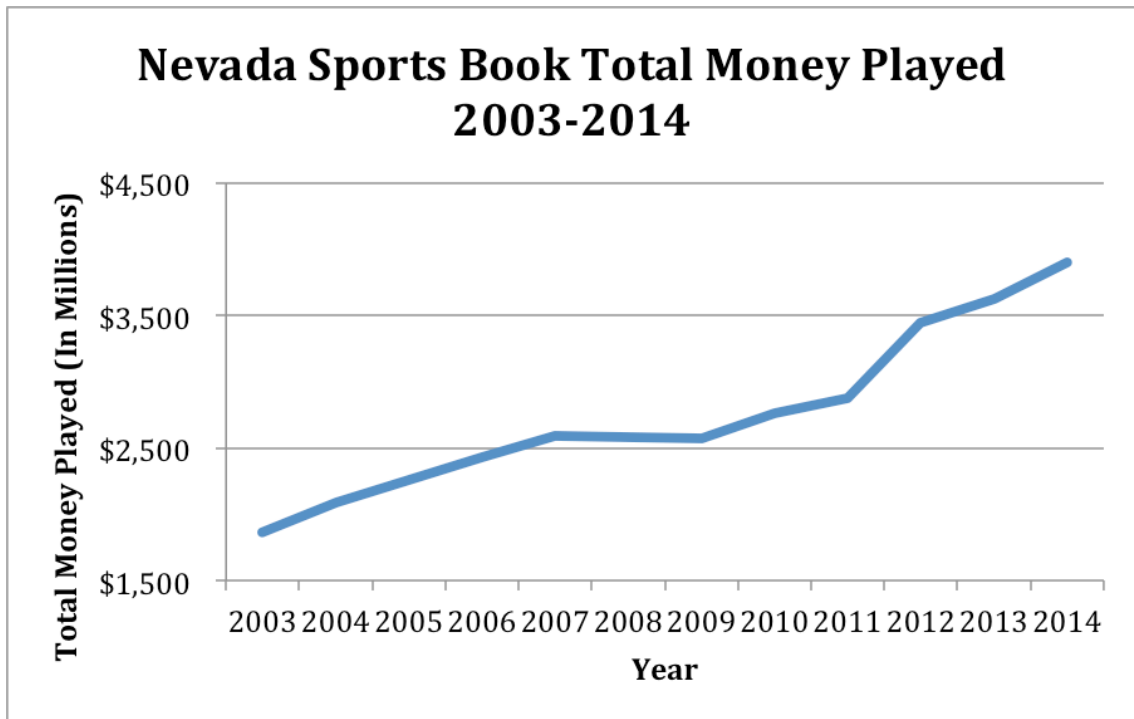


Figure 19: Total sports wagering money played in Nevada from 2003-2014

Besides of a slight dip from 2007-2009, which likely had to do with the recession, sports gambling has increased year over year since 2003. In fact, since 2003, the amount of money wagered on sports has more than doubled, totaling just under \$4 billion. If \$4 billion is being spent in one state that doesn't even have a professional sports franchise, imagine the amount of revenue that could be generated if sports gambling were to be legalized across the country. This number would likely be even higher if teams had the ability to implement live betting systems in their stadiums as discussed earlier.

Not just Nevada has a passion for sports wagering. The American Gaming Association (AGA) estimated that \$3.8 billion worth of illegal bets were placed on the

2015 Super Bowl alone, compared to the approximately \$100 million bet legally on the Super Bowl each year. Making the illegal market 38 times greater than the legal one (AGA).

The statistics above don't just show a large amount of money, they show that consumers' appetite for gambling, for better or worse, has increased at a steady rate with no signs of slowing down. If sports gambling is legalized in the near future, I see it has being the great equalizer for declining attendance on a national scale. By capitalizing on a proven consumer behavior over the last decade, teams and leagues would see their revenues and attendance numbers reach all-time highs.

To recap why sports gambling would be beneficial for teams and fans alike:

- Legalized sports gambling would provide significant additional revenue for teams, giving them the ability to keep games more affordable for fans.
- It would make sports on television even more DVR proof, in turn driving up broadcast contracts.
- Implementing sports gambling systems in stadiums would likely drive more fans to games while also keeping them in seats longer, which would lead to more food, beverage and merchandise purchases.

In the past, fantasy sports and sports gambling have been shown to affect fan behavior, and likely attendance, in negative ways. In the future, these same activities have the power to do the exact opposite. Instead of disconnecting fans from stadiums and live action like in the past, fantasy sports and sports gambling could be used by teams to engage fans and give them reasons to attend games in-person. Consumer desire for sports wagering has increased by staggering amounts in recent years, with no signs of slowing down. Fans' behaviors towards teams, players, and sports fluctuate regularly, most recently in negative way. Their behaviors towards sports wagering have shown no such downsides.

Besides the NBA, other professional sports leagues have remained adamant about keeping gambling out of sports. If the NBA can legalize it and prove that with stringent regulations it can be beneficial rather than harmful to the sport, it may become harder for other leagues to deny the benefits of doing the same.

Virtual Tickets

In 2013, Andy Dolich introduced a new idea of virtual tickets as a way to capture untapped revenue streams. Dolich is a sports executive who has more than three decades of experience in the professional sports industry, holding executive positions in the NFL, NBA, NHL and MLB. Dolich recognized the problem of sports leagues and college athletic departments running out of new revenue sources, which inspired him to look for other possibilities. While his idea would not directly improve ticket sales and attendance, it allows teams to capitalize on other forms of revenue. If the past few years

are any indicator, the traditional business model of relying on tickets as a primary source of revenue may be dying. If teams can find other ways to make money, they will have the ability to subsidize the cost of tickets and keep prices down, which in turn should increase the number of consumers who attend games. In an article with *Sports Business Journal*, Dolich explains his idea and why it makes sense. The following paragraphs are a summary of his article.

Dolich recognized that there are tens of millions of fans devoted to American sports teams who never set foot in their favorite team's stadium. There are an estimated 83 million NFL fans, 59 million MLB fans, 41 million NBA fans, and 21 million NHL fans. This totals to over 200 million fans interested in following their favorite teams, yet only 3.2 million have season tickets.

Dolich's answer to this problem is to sell a virtual season ticket, allowing the purchaser to experience the live environment of the venue through a virtual platform. He sees the advances in technology, interactivity, video games, social gaming, mobile applications, video streaming, and virtual spectatorship, as providing the perfect opportunity for teams to capitalize on a new revenue stream. Fans could buy from a matrix of inventory as part of virtual season-ticket packages that allow them to have the fan experience even if they can't afford to go to a game in-person. Dolich gives the following example of how a Green Bay Packers game day could look for virtual season-ticket holders:

- On the computer, tablet or smartphone, weekly customized matchups for that day's game and a customized, downloadable sports stat package would be available.
- Virtual access to premium tailgate parties would be available and the opportunity to interact with top grillers.
- A member of the Packers would offer a real-time customized virtual tour through the team's offices and training facility, followed by a virtual walk over to the Packers Hall of Fame where a hall of famer acts as tour guide.
- At halftime, they could take a virtual walk around Lambeau Field and virtually tour the locker room.
- Fantasy play-by-play: Virtual season-ticket holders and a friend could broadcast the game in a virtual broadcast booth.
- Using Cisco's TelePresence live video conferencing technology, virtual season-ticket holders could chat with Packers players, coaches, and team executives before every game and at other times during the season.
- Packerville: Similar to the Farmville concept created by Zynga, fans could build their own stadiums, compete and purchase virtual goods as they build their teams.

Dolich again reiterates that there is a multibillion-dollar market of spending from fans that isn't being effectively marketed. By creating a unique service such as the ones shown above, teams and leagues would create a new revenue pool that could break the stagnating revenue trend in pro sports.

XII. Conclusion

Aspects of Dolich's idea may be a bit far-fetched, and sure there are parts that can be criticized, but if American sports leagues are going to: a) solve the attendance problem or b) find new sources of revenue, then creative ideas like these need to be looked into. Do I expect attendance to drop by the thousands in the next five years? No. The next ten years? Maybe. The next twenty years? A very real possibility.

The industry as a whole is currently playing catch up, only focusing on solving current problems with attendance rather than exploring new innovative ideas, like virtual tickets or legalized sports wagering. Luckily some prominent figures are advocating for ideas such as these, but more sports executives need to do the same to really make an impact. Listening to fans' complaints and finding a solution for those problems is great, but more effort needs to be spent looking forward. What is going to deter future generations? How can athletic departments be prepared for those problems so they don't experience more setbacks? Today's solutions likely aren't going to satisfy young adults in ten or twenty years.

Mark Cuban, self-made billionaire and owner of the Dallas Mavericks, has a philosophy for entrepreneurs about the dangers of listening to their customers. He often uses a great quote from technology luminary Alan Kay who said, "The best way to predict the future is to invent it." Cuban warns companies about putting themselves in a revolving door of trying to respond to customer requests. Brainpower that could be applied to "inventing the future" is instead being used to catch up with features. He

suggests companies listen to their customers and make them happy, but don't rely on them to create the future road map for a product or service.

Cuban's advice is largely geared towards small businesses, but it applies just the same to sports. The business minds behind collegiate and professional sports need to be more proactive rather than reactive. Going to a game needs to be a unique experience that can't be mimicked by technology at home. This paper is not meant to solve attendance problems and offer a perfect solution. It is meant to give an overview of what the problems are and be a call to action for people interested in solving the problem.

As shown throughout the thesis, there is no one factor contributing entirely to attendance problems. Some factors are fixable, such as ticket price, while others are influencing behavior shifts, such as screen-stacking, fantasy sports, and HDTV. These behavioral shifts can't be "fixed." Instead leagues and teams need to adapt to consumer trends and look for more sustainable business models for sports. The attendance problem is not an easy one to solve, nor is there one correct answer, but if leagues and teams can step outside their traditional methods to generate new, innovative ideas, I believe these recent attendance trends can be turned around and the future of American sports will be stronger than ever.

XIII. Appendices

Additional Data Gathered

National College Football Attendance 2003-2013				
<i>(For All NCAA Men's Varsity Teams)</i>				
<u>Year</u>	<u>Total Teams</u>	<u>Games</u>	<u>Total Attendance</u>	<u>Per Game Average</u>
2013	657	3,701	50,921,275	13,589
2012	644	3,569	48,958,547	13,718
2011	638	3,538	49,699,419	14,047
2010	639	3,547	49,670,895	14,004
2009	630	3,489	48,284,673	13,839
2008	628	3,493	48,839,003	13,982
2007	619	3,412	48,751,861	14,288
2006	615	3,392	47,909,313	14,124
2005	615	3,304	43,486,574	13,162
2004	612	3,266	43,105,548	13,198
2003	617	3,401	46,144,539	13,568

Figures obtained from NCAA.org

NCAA Division I-A Home Attendance 2003-2013				
<u>Year</u>	<u>Total Teams</u>	<u>Games</u>	<u>Total Attendance</u>	<u>Per Game Average</u>
2014	127	NA	NA	43,483
2013	123	782	35,340,049	45,192
2012	120	763	34,312,026	44,970
2011	120	759	34,532,624	45,498
2010	120	755	34,663,732	45,912
2009	120	757	34,477,864	45,545
2008	119	751	34,888,614	46,456
2007	119	749	34,699,322	46,328
2006	119	745	34,142,038	45,828
2005	117	670	30,570,825	45,628
2004	118	672	30,337,237	45,704
2003	117	732	32,850,270	45,447

Figures obtained from NCAA.org

2003 Consumer Spending Entertainment Alternatives

(Average includes all adult ages)

<u>Category</u>	<u>Average</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>
Food Away from Home	\$2,211	\$2,342	\$2,672	\$2,688	\$2,215
Alcohol	\$391	\$446	\$424	\$477	\$372
Non-home lodging	\$445	\$243	\$423	\$688	\$623
Home furnishings and equipment	\$1,497	\$1,571	\$1,731	\$1,801	\$1,831
Apparel and Services	\$1,640	\$1,849	\$2,091	\$1,953	\$1,562
Personal Care	\$527	\$498	\$602	\$616	\$549
Education	\$783	\$684	\$694	\$1,377	\$743

Figures obtained from the US Bureau of Labor Statistics

2012 Consumer Spending Entertainment Alternatives

(Average includes all adult ages)

<u>Category</u>	<u>Average</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>
Food Away from Home	\$2,678	\$2,833	\$3,210	\$3,210	\$2,788
Alcohol	\$451	\$564	\$501	\$452	\$493
Non-home lodging	\$649	\$304	\$483	\$907	\$949
Home furnishings and equipment	\$1,580	\$1,693	\$1,755	\$1,780	\$1,763
Apparel and Services	\$1,763	\$2,061	\$2,264	\$2,041	\$1,622
Personal Care	\$628	\$574	\$694	\$707	\$696
Education	\$1,207	\$1,021	\$1,050	\$2,426	\$1,118

Figures obtained from the US Bureau of Labor Statistics

2003 vs 2012 Consumer Spending Entertainment Alternatives % Change

(Average includes all adult ages)

<u>Category</u>	<u>Average</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>
Food Away from Home	21%	21%	20%	19%	26%
Alcohol	15%	26%	18%	-5%	33%
Non-home lodging	46%	25%	14%	32%	52%
Home furnishings and equipment	6%	8%	1%	-1%	-4%
Apparel and Services	8%	11%	8%	5%	4%
Personal Care	19%	15%	15%	15%	27%
Education	54%	49%	51%	76%	50%

Figures obtained from the US Bureau of Labor Statistics

Annual Total Consumer Expenditure 2003-2013

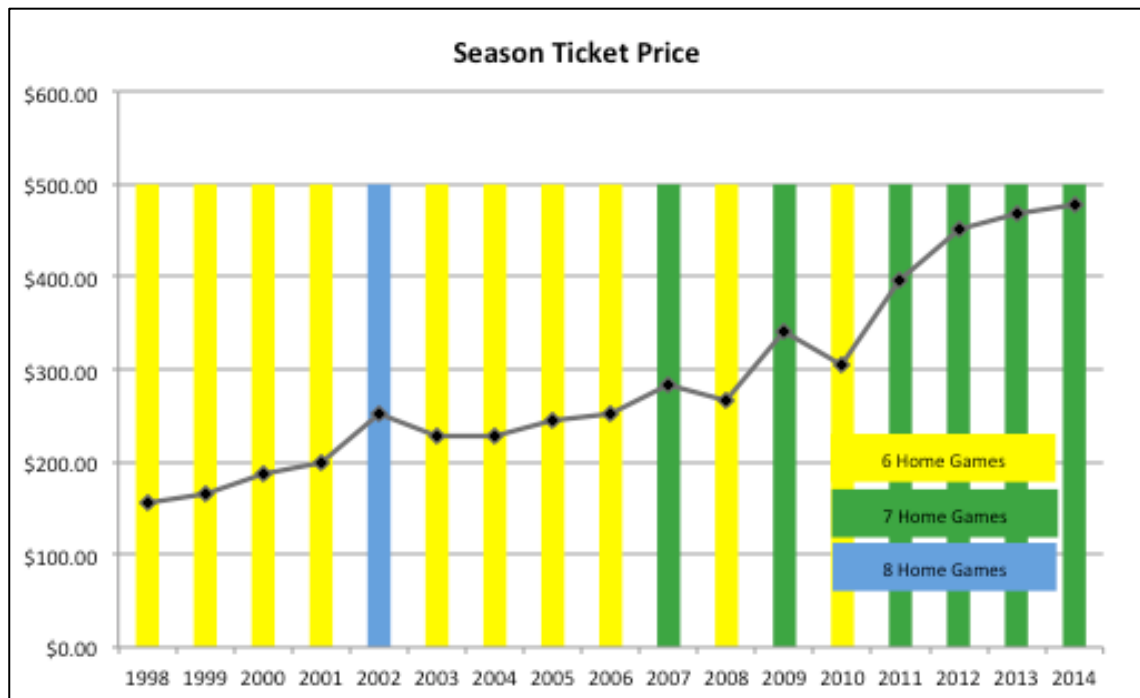
(Average includes all adult ages)

<u>Year</u>	<u>Average</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>
2003	\$40,817	\$40,525	\$47,175	\$50,101	\$44,191
2004	\$43,395	\$42,701	\$50,402	\$52,764	\$47,299
2005	\$46,409	\$45,068	\$55,190	\$55,854	\$49,592
2006	\$48,398	\$47,582	\$57,476	\$57,563	\$50,789
2007	\$49,638	\$47,510	\$58,934	\$58,331	\$53,786
2008	\$50,486	\$48,159	\$58,808	\$61,179	\$54,783
2009	\$49,067	\$46,494	\$57,301	\$58,708	\$52,463
2010	\$48,109	\$46,617	\$55,946	\$57,788	\$50,900
2011	\$49,705	\$48,097	\$57,271	\$58,050	\$53,616
2012	\$51,442	\$49,544	\$58,069	\$62,103	\$55,636
2013	\$51,100	NA	NA	NA	NA
2003-13 % Change	25.19%	NA	NA	NA	NA

Annual Entertainment Consumer Expenditure 2003-2013

(Average includes all adult ages)

<u>Year</u>	<u>Average</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>
2003	\$2,060	\$1,958	\$2,519	\$2,407	\$2,414
2004	\$2,218	\$2,122	\$2,504	\$2,711	\$2,823
2005	\$2,388	\$2,455	\$2,765	\$3,034	\$2,429
2006	\$2,376	\$2,237	\$2,966	\$2,770	\$2,666
2007	\$2,698	\$2,462	\$3,551	\$3,163	\$2,730
2008	\$2,835	\$2,766	\$3,603	\$3,297	\$3,036
2009	\$2,693	\$2,504	\$3,317	\$3,176	\$2,906
2010	\$2,504	\$2,251	\$3,058	\$3,088	\$2,683
2011	\$2,572	\$2,423	\$2,926	\$3,169	\$2,769
2012	\$2,605	\$2,382	\$3,232	\$3,051	\$2,911
2013	\$2,482	NA	NA	NA	NA
2003-13% Change	20.49%	NA	NA	NA	NA



US HDTV Adoption 2003-2013

(In Millions)

<u>Year</u>	<u>HDTVs Shipped</u>	<u>Cumulative HDTVS</u>
2013	33.5*	277.7*
2012	33.9	244.2
2011	33.7	210.3
2010	34.6	176.6
2009	34.8	142.0
2008	31.1	107.2
2007	24.9	76.1
2006	22.3	51.2
2005	10.7	28.9
2004	8.0	18.2
2003	5.5	10.2

Fantasy Sports Participation

(In Millions)

<u>Year</u>	<u>Fantasy Sports Players</u>
2003	15.2
2004	13.5
2005	12.6
2006	18
2007	19.4
2008	29.9
2009	28.4
2010	32
2011	35.9
2012	37.7
2013	39.5
2014	41.5

Sample Reports for Data Collection

CONSUMER EXPENDITURES IN 2012

Table 4. Age of reference person: Average annual expenditures and characteristics, Consumer Expenditure Survey, 2012

Item	All consumer units	Under 25 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and older	65-74 years	75 years and older
Number of consumer units (in thousands)	124,416	8,159	20,112	21,598	24,624	22,770	27,154	14,993	12,161
Consumer unit characteristics:									
Income before taxes	\$65,596	\$36,639	\$58,832	\$78,169	\$81,704	\$77,507	\$44,713	\$53,521	\$33,853
Age of reference person	50.0	21.7	29.6	39.4	49.6	59.1	74.8	68.9	82.1
Average number in consumer unit:									
Persons	2.5	2.0	2.8	3.4	2.7	2.1	1.7	1.8	1.5
Children under 186	.4	1.1	1.4	.6	.2	.1	.1	(¹)
Persons 65 and older3	(¹)	(¹)	(¹)	.1	.1	1.4	1.4	1.3
Earners	1.3	1.3	1.5	1.6	1.7	1.3	.5	.6	.2
Vehicles	1.9	1.2	1.7	2.0	2.3	2.2	1.6	1.9	1.3
Percent homeowner	64	15	40	62	72	79	80	80	79
Average annual expenditures	\$51,442	\$31,411	\$49,544	\$58,069	\$62,103	\$55,636	\$40,410	\$45,968	\$33,530
Food	6,599	4,412	6,513	7,701	7,917	6,800	5,059	5,793	4,141
Food at home	3,921	2,529	3,680	4,490	4,707	4,012	3,273	3,719	2,716
Cereals and bakery products	538	355	512	632	633	527	459	490	421
Meats, poultry, fish, and eggs	852	573	755	999	1,047	887	686	804	539
Dairy products	419	251	394	497	498	433	342	385	289
Fruits and vegetables	731	456	683	808	872	733	659	723	580
Other food at home	1,380	894	1,335	1,555	1,657	1,432	1,127	1,318	887
Food away from home	2,678	1,883	2,833	3,210	3,210	2,788	1,785	2,074	1,426
Alcoholic beverages	451	354	564	501	454	493	315	407	201
Housing	16,887	10,957	17,157	19,858	19,076	17,247	13,833	15,076	12,298
Shelter	9,891	7,285	10,458	11,849	11,244	9,728	7,605	8,372	6,659
Owned dwellings	6,056	1,307	4,552	7,676	7,625	6,991	5,101	5,970	4,030
Rented dwellings	3,186	5,748	5,603	3,691	2,712	1,788	1,828	1,557	2,162
Other lodging	649	230	304	483	907	949	676	845	467
Utilities, fuels, and public services	3,648	1,879	3,130	4,077	4,304	3,892	3,340	3,595	3,025
Household operations	1,159	538	1,338	1,559	1,080	1,029	1,076	1,004	1,154
Housekeeping supplies	610	303	538	618	668	736	597	670	507
Household furnishings and equipment	1,580	952	1,693	1,755	1,780	1,763	1,215	1,436	942
Apparel and services	1,736	1,246	2,061	2,264	2,041	1,622	1,022	1,287	691
Transportation	8,998	6,410	9,724	9,991	10,644	9,519	6,538	8,214	4,468
Vehicle purchases (net outlay)	3,210	2,867	4,175	3,610	3,537	2,895	2,250	2,993	1,333
Gasoline and motor oil	2,756	1,931	2,822	3,342	3,421	2,887	1,775	2,222	1,224
Other vehicle expenses	2,490	1,322	2,238	2,532	3,046	3,046	2,041	2,414	1,579
Public and other transportation	542	291	489	506	640	691	472	585	332
Health care	3,556	1,024	2,047	2,948	3,687	4,377	5,118	5,259	4,944
Entertainment	2,605	1,257	2,382	3,232	3,051	2,911	2,020	2,413	1,532
Personal care products and services	628	360	574	694	707	696	569	652	465
Reading	109	44	72	93	118	133	142	148	136
Education	1,207	1,886	1,021	1,050	2,426	1,118	236	245	223
Tobacco products and smoking supplies	332	262	351	358	431	372	193	249	124
Miscellaneous	829	372	660	876	924	908	902	1,031	743
Cash contributions	1,913	488	1,104	1,469	2,430	2,353	2,454	2,289	2,658
Personal insurance and pensions	5,591	2,339	5,313	7,033	8,196	7,088	2,009	2,904	906
Life and other personal insurance	353	50	144	325	446	517	397	484	290
Pensions and Social Security	5,238	2,289	5,169	6,709	7,749	6,571	1,612	2,420	616

2013 NATIONAL COLLEGE FOOTBALL ATTENDANCE

(For All NCAA Men's Varsity Teams)

	Total Teams	Games or Sessions	2013 Attendance	Average	Change In Total	Change In Avg.
Home Attendance, Division I-FBS	123	782	35,340,049	45,192	1,028,023	222
FBS Neutral-Site Attendance		18	1,080,452	60,025	-90,366	4,272
FBS Bowl Game Attendance		35	1,714,617	48,989	-8,216	-235
NCAA DIVISION I-FBS TOTALS	123	*835	*38,135,118	45,671	964,883	230
Home Attendance, Division I-FCS	124	709	5,751,672	8,112	220,491	-463
FCS Neutral-Site Attendance		16	467,266	29,204	52,586	-416
FCS Championship Game		1	19,802	19,802	-1,609	-1,609
NCAA DIVISION I-FCS TOTALS	*124	*726	6,238,740	8,593	271,468	-448
NCAA DIVISION I TOTALS	247	1,561	44,373,858	28,427	1,236,351	-760
Home Attendance, NCAA Division II	162	858	2,814,697	3,281	-38,191	-157
Division II Neutral-Site Attendance		19	164,370	8,651	18,488	2,308
Division II Championship Game		1	6,543	6,543	-984	-984
NCAA DIVISION II TOTALS	*162	*878	2,985,610	3,400	-20,687	-120
Home Attendance, NCAA Division III	242	1,224	2,454,231	2,005	105,029	57
Division III Neutral-Site Attendance		3	5,708	1,903	-829	-276
Division III Championship Game		1	5,371	5,371	-656	-656
NCAA DIVISION III TOTALS	*242	*1,228	*2,465,231	2,008	103,544	56
Home Attendance, Reclassifying Teams	6	34	466,576	13,723	13,520	-3,057
<hr/>						
NATIONAL TOTALS FOR 2013	*657	*3,701	*50,291,275	13,589	1,332,728	-129
<hr/>						

* Record.

CHAMPIONSHIP TOURNAMENTS: The total attendance for the Division I FCS Tournament was 184,279 for an 8,012 average over 23 games, the Division II Tournament was 76,871 for a 3,342 average over 23 games and the Division III Tournament was 64,781 for a 2,090 average over 31 games.

Statewide

339 total locations for calendar year

Game	# of Units	Win amount	% Change	Win %	Handle	WPUD
Slot Machines	153,491	6,746,835	-0.10%	6.40%	105,419,297	120.43
Games	5,373	4,151,949	-2.73%	12.62%	32,899,754	2,117.10
Total gambling win		11,018,688	-1.14%	7.97%	138,319,051	

Slots detail

Game	# of Units	Win amount	% Change	Win %	Drop	WPUD
1 Cent	53,726	2,624,141	5.01%	10.10%	25,981,594	133.82
5 Cent	3,253	82,052	-9.77%	5.64%	1,454,823	69.11
25 Cent	8,337	338,250	-8.58%	5.87%	5,762,351	111.16
1 Dollar	8,200	492,497	-2.25%	5.47%	9,003,601	164.55
Multi-Denom	76,811	2,934,448	-2.89%	5.02%	58,455,139	104.67

Games detail

Game	# of Units	Win amount	% Change	Win %	Handle	WPUD
Twenty-one	2,726	1,066,382	-2.54%	12.01%	8,879,117	1,071.75
Baccarat	327	1,504,634	-5.93%	12.48%	12,056,362	12,606.38
Craps	380	368,485	1.44%	13.69%	2,691,636	2,656.71
Roulette	453	345,960	-0.80%	18.38%	1,882,263	2,092.35
3-Card Poker	256	145,892	-5.63%	30.80%	473,675	1,561.34
Mini-Bacc	137	89,578	-14.34%	9.12%	982,215	1,791.38
Let It Ride	89	39,272	-3.28%	24.96%	157,340	1,208.93
Pai Gow	25	15,763	3.99%	18.51%	85,159	1,727.45
Pai Gow Poker	266	106,163	-1.89%	21.93%	484,099	1,093.45
Other Games	306	158,176	5.70%	24.80%	637,806	1,416.21
Keno	85	26,478	-9.50%	25.30%	104,656	853.44
Bingo	41	6,173	13.32%	2.90%	212,862	412.50
Race Book	99	51,948	-0.80%	15.09%	344,254	1,437.61
Sports Book	183	227,045	11.75%	5.82%	3,901,117	3,399.13

Game	Win amount	% Change	Win %	Handle	% Win	% Bet
Football	113,732	40.73%	6.50%	1,749,723	50.09%	44.85%
Basketball	54,239	-8.36%	4.89%	1,109,182	23.89%	28.43%
Baseball	21,294	-26.77%	2.95%	721,831	9.38%	18.50%
Parlay Cards	21,281	5.97%	36.83%	57,782	9.37%	1.48%
Other	16,500	17.85%	6.18%	266,990	7.27%	6.84%
Poker tables	736	119,904	-3.18%	(rake only; no direct win)	446.34	

Extended Insights from NACMA Survey

Gender	
Answer	%
Male	46%
Female	54%

Academic Class	
Answer	%
Freshman	23%
Sophomore	18%
Junior	22%
Senior	23%
Graduate	10%
Doctorate	3%
Other	1%

Please rate how passionate you are about your university's athletic teams? Scale 1-10			
Min	Max	Average	SDev
0	10	7.07	2.83

Best way to communicate game information?	
Answer	%
Email	48%
Team/University Website	4%
Signs or fliers posted publicly	7%
Social Media	34%
Word of Mouth	5%
Other (Please specify other)	1%

Total Schools: 65
Total Respondents: 23,308

Do you follow your university's athletic team on any of the following social media platforms?	
Answer	%
Facebook	52%
Twitter	49%
Instagram	30%
Snapchat	5%
Vine	1%
None	27%
Other (Please specify other)	1%

In an average season, how often do you attend home games for the following sports:

Sport	Game #	%	Game #	%	Game #	%	Game #	%	None	%
Men's Basketball	1-3 Games	30.60%	4-7 Games	18.27%	8-12 Games	12.54%	13+ Games	13.55%	None	25.04%
Football	1-2 Games	19.53%	3-4 Games	16.11%	5-6 Games	12.79%	All Games	32.85%	None	18.72%
Women's Basketball	1-3 Games	27.72%	4-7 Games	6.65%	8-12 Games	2.97%	13+ Games	3.12%	None	59.54%

Rate how much influence the following have on your decision to attend a home game at your university. Scale 1-5



If you choose NOT to attend a home game, what will you most likely be doing instead during that time? Check up to 4

Answer	%
Homework/Studying/Academic priorities	73%
Hanging out with friends/family	56%
Watching the game somewhere else	46%
Working	31%
Personal errands	27%
Using the internet/computer	25%
Watching other/multiple games on TV	23%
Drinking beer/alcohol	20%
Outdoor activities	13%
Other (please specify other)	4%

If you watch a home game on TV instead of attending, where will you most likely be watching it? Check one

Answer	%
At home	61%
At a friends place	19%
At a restaurant or bar	15%
Other	2%
At a family members place	2%

Who will you most likely watch it with?

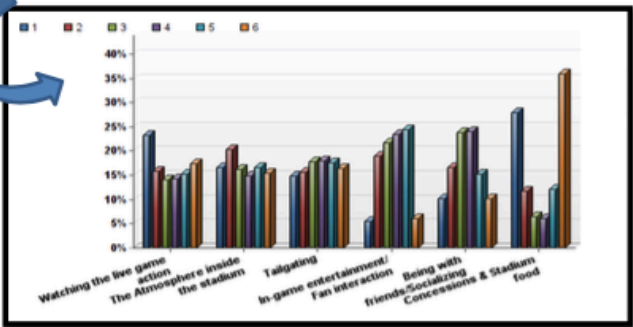
Answer	%
1-5 Friends	37%
Roommates/GF/BF	27%
Family members	13%
5+ Friends	13%
Myself only	9%
Other	1%

Would any of the following motivate you to attend a home game that you were otherwise not planning on attending? (Check all that apply)

Answer	%
Free T-shirt	71%
Free food/concession	71%
Seat upgrades at the next event	43%
Loyalty points for cool prizes	41%
Sponsored post-game party	38%
Meet and greet with team/coaches	37%
Live Music or DJ	29%
Interactive mobile experiences	13%
None of the above	7%
Other? (Please specify)	7%

What do you enjoy most about attending games at your university? Numerically rank the following choices in order 1-6, Most enjoyed

Answer	1	2	3	4	5	6
Watching the live game action	23.3%	15.8%	14.1%	14.3%	15.2%	17.3%
The Atmosphere inside the stadium	16.7%	20.3%	16.1%	14.8%	16.6%	15.5%
Tailgating	14.9%	15.6%	17.7%	17.9%	17.6%	16.3%
In-game entertainment/Fan interaction	5.5%	18.9%	21.7%	23.5%	24.4%	6.0%
Being with friends/Socializing	10.1%	16.7%	23.9%	24.0%	15.2%	10.1%
Concessions & Stadium food	27.9%	11.7%	6.5%	6.0%	12.1%	35.9%



Do you regularly leave home games before 75% of the game is complete?

Answer	%
No	76%
Yes	24%

Would any of the following motivate you to stay for the entire game? Check all that apply

Answer	%
Free T-shirt at the end of the game	73%
Sponsored post-game party	52%
Loyalty points with a chance to win cool prizes	44%
Major concession discounts if the team scores 40+ points	40%
Live Music or DJ	34%
Seat upgrades at the next event	30%
Meet and greet with the team/coaches	26%
Interactive mobile experiences	11%
Other? (Please specify)	8%

Do you agree with the following statements about campus sporting events?

Question	Yes	No
"It's more comfortable at home"	67.3%	32.7%
"The traffic is a huge hassle"	49.2%	50.8%
"I want to watch other/multiple games on TV"	33.2%	66.8%
"The games are boring"	22.4%	77.6%
"I feel like I don't actually watch the game when I go"	22.1%	77.9%
"The experience I get with a TV/second screen is better"	19.8%	80.2%

What part of attending home games do you enjoy the LEAST? Check up to 2

Answer	%
Costs (tickets, concessions, parking)	36%
Waiting in lines	33%
Traveling to/from the game	33%
Limited WIFI or cell connectivity	26%
The student section itself	14%
Other (please specify)	13%
Not having a TV/second screen	9%

How likely will this prevent your attendance? (1-Not likely, 5-Very likely)

Question	1	2	3	4	5	Mean
"It's more comfortable at home"	39.85%	22.45%	19.39%	10.59%	7.72%	2.24
"The traffic is a huge hassle"	44.12%	18.72%	18.00%	10.66%	8.50%	2.21
"The games are boring"	56.80%	13.22%	13.10%	7.24%	9.64%	2.00
"I want to watch other/multiple games on TV"	57.08%	16.12%	15.65%	7.02%	4.13%	1.85
"The experience I get with TV/second screen is better"	62.10%	17.48%	12.37%	4.78%	3.27%	1.70
"I feel like I don't actually watch the game when I go"	62.60%	17.06%	12.50%	4.60%	3.24%	1.69

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