Professional Team Sports in Las Vegas: What the Research Says
Executive Summary

Stakeholders and commentators have long debated the merits and appropriateness of Las Vegas as a host city for a professional sports franchise. These debates have engaged each of the four major U.S. sports, including, perhaps most prominently, the National Football League (NFL), which continues to express concerns about gambling and Las Vegas. This report examines the empirical evidence that confirms or refutes these concerns. Fortunately, many common (and understandable) questions have recently been addressed in the rapidly-emerging scientific literature on gambling impacts. Taken together, the analyses in this report constitute the first comprehensive, objective, and (where possible) scientifically-based assessment of the oft-articulated issues that arise in this context.

These kinds of concerns fall under multiple academic categories, and because of this, we have assembled a multi-disciplinary team with approximately 100 years of collective experience in examining these very kinds of gambling-related and Las Vegas-related issues. This team has been retained by the University of Nevada, Las Vegas for ongoing analyses and advising, and this report is part of that engagement. This report has been subjected to a peer review (including experts both inside and outside of academe), overseen by an editor of an academic journal with relevant expertise in this field. In the interests of accessibility, and to provide a comprehensive evaluation of the issues, we have organized the major questions and answers into the following academic categories:

Business: The sports gambling business is the industry that most concerns stakeholders in the NFL and other leagues. This report starts by summarizing the current state of this industry – both legal and illegal – providing a thorough review of this massive, global marketplace.

Law and Regulation: Integrity tends to be the most prominent issue for those concerned about locating a professional sports team in Las Vegas. After all, the city boasts a sizable legal sports gambling market, and the fear is that this activity could lead to game/match fixing and related issues. This report examines each of these potential threats to the integrity of professional sports, and then analyzes the approaches that Nevada, the federal government, and the gaming industry deploy to address these threats. We conclude (as do many other analysts) that due to the rigor of Nevada’s regulatory practices, in many ways the state’s approach would actually provide sports leagues with their best opportunity to protect themselves when it comes to the all-important issue of integrity. Given current estimates that 80% of global sports wagers take place in illegal, unregulated, or under-regulated markets, professional sports leagues would benefit from a shift that moves more of these wagers into legal, regulated, and more frequently checked settings.

Economics: The tools of economists are uniquely capable of assessing costs, risks, and benefits, and this report provides a ground-breaking and thorough economic evaluation of commonly perceived risks associated with locating a team in Las Vegas. Overall, the available evidence suggests that a team’s (re-)location to the city is likely to have no effect on the
prevalence of game fixing. While the convenience of access to place legal sports wagers in Las Vegas provides some small changes in incentives, most game-fixing-related wagers are likely to continue to happen in the underground economy. There is little incentive for criminals to use Las Vegas sports books to place wagers, as Nevada has a strong regulatory and enforcement structure in place, characterized by commitments to compliance by bookmakers, transparent accounting processes, robust minimum internal controls, and what economists would call “high prices” (including risk of detection) relative to remote or illegal wagering. While the research team was satisfied that the current system is adequate to achieve these positive outcomes, we identified several areas where institutions could be improved for even greater security.

**Psychology and Public Health:** To psychologists and public health experts, perhaps the major concern about gambling has to do with its pathology – now termed “disordered gambling” in the *Diagnostic and Statistical Manual*. Based upon an evaluation of new research on how populations adapt to gambling “exposure,” and of new research on athletes and gambling, we find that more gambling exposure does not necessarily lead to more gambling problems in the ways that were previously thought. Of course, “exposure” is widespread in the U.S. today, as 48 of the 50 states have legalized gambling. This research suggests, at the very least, that the relationship between exposure (for instance, among players and team employees residing in Las Vegas) and gambling disorders is hardly linear. Furthermore, Las Vegas currently has expert, experienced problem gambling resources, and as such, a coalitional approach to prevention and education should yield positive outcomes. While disordered gambling remains a very legitimate and devastating concern to those who suffer, we find no reason to believe it should be a disqualifying or unique concern for the city as it pertains to possible team (re-)location, should certain best practices be embraced.

**Sociology:** For many observers, a prime concern about a Las Vegas team has to do with a perceived lack of community. Though defining “community” can be difficult (and contentious), we find that the city does indeed suffer from significant problems in areas such as population transience, water scarcity, and the predominance of gated communities, among other issues. However, these problems do not appear to be significantly different from those faced in cities to which Las Vegas is often compared – specifically, other major metropolises in the American South and West that currently have professional sports teams. For instance, as Los Angeles receives (re-) consideration as an NFL city, it appears that Las Vegas shares many similar strengths, weaknesses, and dynamics.

**Criminology:** Finally, many stakeholders have expressed concern that there is simply more criminological trouble in Las Vegas, due to the city’s famous offerings. For instance, it has been assumed that casinos contribute to higher crime rates (and hence, that having a team in Las Vegas would lead to crime problems, simply because it contains many casinos). As a strong literature has emerged in this area, however, this belief has gone unsupported. In fact, it seems that casinos have crime impacts that are similar to other entities that draw large crowds – like stadiums. At a more general level, FBI Uniform Crime Rate statistics would rank Las Vegas
among the safer communities in the NFL were it to join that particular league. Of course, professional athletes have committed high-profile crimes – but it is also clear that these can and do happen anywhere. Finally, the Las Vegas Metropolitan Police Department (LVMPD), occasionally in collaboration with university-based researchers, has become an exporter of intellectual capital, as police departments around the world seek LVMPD’s counsel based upon the city’s policing of major and complex events. As with gaming operations and regulation, it is not the case that Las Vegas is necessarily any “smarter” or “better” than other jurisdictions when it comes to policing – it is just that the city has learned from frequent experience with more (and often more complex) policing challenges than most other locales. As a result, we conclude that Las Vegas may, once again, actually provide useful insight into how best to avoid the very kinds of problems the city is often assumed to generate.

Finally, this report makes several recommendations that would be advisable should a team move to Las Vegas, including recommendations for collaborative relationships between a potential team, for collaborative relationships between a league and its community partners, for regulatory enhancements to Nevada’s already-strong approach, and for compliance and employee training plans for the team itself.
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Introduction

Stakeholders and commentators have long debated the merits and appropriateness of Las Vegas as a host city for a professional sports franchise. Each of the four major U.S. sports leagues, as well as Major League Soccer, has at various points engaged in these debates. The National Football League (NFL), for its part, has long resisted affiliations with gambling or Las Vegas. This report focuses on the concerns that professional leagues have about placing a team in Las Vegas, paying particular attention to the issues that have arisen with the NFL. Fortunately, a rapidly-emerging scientific literature on gambling impacts makes these questions more answerable than they have been in recent history. Taken together, the analyses in this report are comprehensive, objective, and (where possible) scientifically-based assessments of several oft-articulated questions.

To help illuminate the key issues, this report studies several important questions that are commonly asked when considering whether a league might place a team in Las Vegas. These questions typically fall into two major sub-categories: those pertaining to the impacts of gambling (especially sports gambling), and those pertaining to the off-field distractions available in Las Vegas to players, team representatives, spectators, and the media. Professional sports leagues have very valuable brands to protect, of course, and hence concerns about image and impacts are entirely appropriate.¹

The impact of legalized gambling on the NFL has long dominated the conversation on Las Vegas as an appropriate host city, and as a result we dedicate special attention to NFL-related issues here. To these ends, this report will seek to answer two main questions:

1) Will the presence of legal sports wagering (and gambling more generally) in Nevada lead to integrity issues for a professional league should a team (re-)locate in Las Vegas?

2) Will operating in Las Vegas lead to unique policing, disciplinary, and/or brand protection issues for a professional league like the NFL?

Question one engages the various implications of legal (and illegal) sports wagering, legal (and illegal) gambling more generally, and the capacities of existing gaming regulatory and operational structures tasked with monitoring these issues. This is largely a legal and economic field of study, and as such this report will examine the extant business, legal, regulatory, and economic scholarship in these areas.

Question two engages the various non-gambling impacts of operating a team in Las Vegas, including potential adverse effects associated with players, team representatives, fans, and the media – presumably in a manner different from similar adverse effects in other

¹ An analysis of the business of supporting a professional sports team (including analyses of Las Vegas’ population, TV market size, etc.) is outside of the scope of this report, which focuses primarily on gambling-related issues.
geographic regions. This requires evaluation from several academic disciplines, including sociology and criminology, and as such this report will draw upon these areas of scholarship.

We note that while several studies in this field have addressed certain facets of these concerns, to our knowledge no report has comprehensively addressed all of them. As such, the study authors and contributors, who collectively have approximately 100 years of experience in examining these issues, will synthesize parts of the existing knowledge in this area, to develop relevant conclusions and recommendations.

The research team conducted this study in several iterative stages. First, the team undertook a comprehensive review of the relevant literature on each of these topics. Next, the team identified and examined oft-articulated concerns that have been associated with gambling and Las Vegas, and then analyzed the published evidence on these topics. In the final section of this report, the team develops conclusions based upon these analyses and outlines a series of recommendations. In order to provide a rigorous and replicable study, we have attempted to minimize our use of sources that are not publicly documented. While some topics necessitated direct correspondence by members of the research team with external sources, this data collection was limited and is identified within this report.

The body of this report has five sections, each of which summarize and analyze important considerations from diverse academic perspectives.

The first four sections provide analyses of the oft-articulated gambling-related questions that are asked about Las Vegas. This starts with an overview of the sports wagering business, in order to provide important background information on what is typically considered the biggest risk to teams and leagues that might operate in the city. This is followed by a legal and regulatory evaluation of these risks – specifically, the risks associated with integrity and sports wagering, and the steps taken in Las Vegas (and elsewhere) to address these risks. Next, we provide an economic analysis that takes these kinds of gambling-related risks into consideration. This type of economic evaluation is particularly crucial, as it is based upon the marginal impact methodologies of this scientific field. In the last part of this gambling-related section, we explore the now-well-researched psychological area of problem gambling, using the literature to better understand whether these problems may arise due to Las Vegas’s ubiquitous gambling offerings.

In the final analytical section, we turn our attention to broader sociological and criminological issues that are introduced in these conversations, including those pertaining to an alleged lack of community in Las Vegas, and then we delve into the growing literature on crime and community impacts – focusing specifically on ostensibly unique community characteristics that may or may not be present in Las Vegas.

Because this type of comprehensive study has not been completed before, this report will provide valuable information for all who are interested in the potential location of a professional sports team in Las Vegas. It is our hope this report sheds light where there has long been concern and innuendo, introducing a research-based, academic perspective to these important debates.
The Sports Wagering Industry: Business Considerations

Most of the popular and private concerns about having a professional sports team in Las Vegas pertain to the sports wagering industry that exists legally in Nevada (and Delaware to a limited extent) and illegally beyond Nevada’s borders. In this section, we summarize and analyze the current state of this business to provide a contextual overview of the industry.

Gambling is a popular activity across the United States and around the world. Today, gambling has become a normative activity, with most Americans reporting to have gambled in some form over the past year. Casino-style gaming is available in 39 states, serviced through land-based, riverboat, and Native American venues, and including lottery gaming, only two states (Hawaii and Utah) have no forms of legal gambling whatsoever. This is quite a different environment from the market as recently as 30 years ago, when only Nevada and Atlantic City offered commercial casino gambling in the United States.

Participation rates in the U.S. are not unlike those seen around the world. According to recent gambling prevalence studies, conducted in diverse and global jurisdictions, roughly 60-80% of the population has gambled, in some form, over the past year. Studies that have examined athlete-specific populations have found similar participation levels in gambling, but unsurprisingly higher rates of sports wagering. In a 2007 study of over 20,000 NCAA athletes, male athletes’ participation in gambling in the previous year was estimated at 62.4%, with 35% reporting having wagered on sports specifically.

As a source of comparison, Great Britain is a market that is of particular interest, as the NFL has held games in London (games that can be wagered upon legally there), prompting serious discussions about locating a franchise in that city someday. It is also a market with widespread access to legal sports wagering through physical locations and online sites. In this

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jurisdiction, the participation rate in sports wagering is roughly 9%, with a substantial bias toward men (16%) as compared to women (2%). For comparison, one peer-reviewed study on the U.S. yielded much higher past-year sports wagering rates of 20%, and two studies found New York sports wagering participation rates of 13.7% and 9% despite the fact that the activity is illegal there.

Overall, the available evidence strongly suggests sports wagering levels are higher in illegal U.S. markets than in legal U.S. markets. In Nevada, a study that occurred at a time between the two New York studies found that only 5% of regular casino-goers (those frequenting a casino once a month or more) reported making sports wagers or racing wagers. Even this relatively low rate is likely to be inflated: the sports-only figure (i.e., without including racing-only players) in the general populace (i.e., not just among those who frequent casinos) would of course be significantly lower than this 5% figure. Regardless of the precise figures, it is clear that the regulated, legal U.S. markets (Nevada and Delaware) do not service the vast majority of the sports betting public; by and large, Americans are betting on sports illegally.

While these findings are not definitive, they do suggest that legalization of sports wagering does not necessarily lead to increased demand for sports wagering – and that in fact, legalization may even depress demand. For the sports gambler, the reason may be economic, as enhancements in perceived security and morality could be offset by increases in price (to reflect the cost of taxation and the regulatory burdens of a legal market). Worldwide, the International Centre for Sport Security (ICSS) estimated the sports wagering market at €16 billion in 2011, attributing €10.5 billion in revenue to the legal market and €5.5 to the illegal market. However, ICSS noted that the wagering figures are differently aligned, and the value of wagers placed in the illegal market is much higher than the legal market:

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10 The sports wagering player percentage should therefore be less than this 5% figure.
“The total GGR of the sports betting market (excluding horse racing, greyhound racing, motor-boats and keirin) can be estimated at €16 billion in 2011: the legal market makes up a little less than two thirds (€10.5 billion), and the illegal market a little more than one third (€5.5 billion) of the market. However, if one is to reason in terms of bets (which is very difficult to do since GGRs of illegal bets are not accurately determined), the estimated volume of the global market (legal and illegal) of sporting bets is somewhere between €200 and €500 billion, more than 80% being illegal bets. The difference between GGR and bets comes from return rates to bettors, which are very high in the illegal market (sometimes more than 99%).”

Regardless of methodology, it is clear that both the illegal and legal sports wagering markets are massive and global, and that the dynamics of legalized sports wagering can be surprising (and even counter-intuitive). In the next section, we take a closer look at legal sports wagering – specifically, the market that exists in Nevada.

1.1 Legal Sports Wagering in Nevada

Because leagues may be concerned about the impacts of legal sports wagering in Nevada should a team (re-)locate there, this market is of particular interest to stakeholders. In 2014, the 190 sports wagering locations across the state generated $227 million in gaming revenue on approximately $3.9 billion in wagers. Besides sports books in physical casino locations, several licensed companies provide mobile sports wagering services in Nevada. To use these app-based wagering devices on a phone, tablet, or other mobile device, players must register at a sports book location with photo identification and a social security number.

The Nevada-based sports wagering industry has grown in recent years, both in terms of total gaming win (Figure 1), and in share of total state gaming revenue (Figure 2). From 1989 to 2014, wagering on football expanded from $19 million to $113 million, an average annual growth rate of 7.4%. Even in inflation-adjusted terms, the market for football sports wagering has roughly tripled in that time, from approximately $36 million to $113 million (in adjusted 2014 dollars).


While sports wagering has become an increasingly large component of gaming revenue, particularly through post-recession growth, it is still small overall. From 2000 to 2014, sports wagering grew from 1.29% to 2.06% percent of state gaming revenue.

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When considering overall gambling revenues in the state, sports wagering represents a small percentage (and typically, an even smaller slice of profits). As such, it is arguably not in the interest of a casino operator to risk its regulatory reputation (and even its gaming license itself) for such a small economic benefit, given the substantial value of a coveted Nevada gaming license.

**Sports Integrity and Sports Wagering Integrity: Regulatory and Legal Considerations**

1.2 Introduction

A major concern that stakeholders have about locating a sports team in Las Vegas pertains to its legal sports wagering activity – and in turn, a major concern stakeholders have about legal sports wagering is integrity. In this section, we evaluate these integrity concerns based upon analyses of the existing literature, the existing state of knowledge, and the existing state of expertise in maintaining integrity.

Both the sports industry and the gaming industry rely on the integrity of that industry’s games. If the integrity of a sports game or the integrity of a gambling game is compromised, the result is virtually identical: customers are likely to lose interest in the activity. Simply put, the enjoyment from watching a sports competition or wagering on that sports competition is derived from a belief that the outcome is based solely on the merits of the athletes’ performance. One Las Vegas bookmaker noted this parallelism when commenting upon improved relations between

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sports books and leagues: "We do our best to protect the games' integrity, and that's why our relationship with the leagues has been better over the last 10 years or so. We both realized we want the same thing – we want these games to be true and fair. The integrity of these games is their product, as well as ours."\(^{15}\)

In this most important of sections (at least from the perspective of common concerns about a team locating in Las Vegas), we describe the legal bookmaking process, the popularity and interconnections between sports and wagering, the concepts of integrity in both sports and sports wagering, the methods used to ensure integrity, the current challenges to both sports and sports wagering integrity, and how regulation of these activities can coexist or complement each other in the same region.

1.3 Understanding Sports Wagering on NFL Games

The three predominant systems of gambling on sporting events are (1) pari-mutuel wagering,\(^{16}\) (2) house banked, and (3) exchange wagering.\(^{17}\) While many types of wagers exist, common types of wagers on American football are (1) point-spread wagering (2) money line


\(^{16}\) The name, “pari-mutuel,” roughly translates from the French as “to wager among ourselves.” All bets of a particular type are grouped together in a pool and then a specified percentage is deducted for taxes and the house take. The payoffs are then determined by the number of winning bets and the remaining pool is shared among the winners. This system of betting is sometimes called “pool sharing.” Because the pool remains open even after one places a bet, the payouts are not determined until the pool is closed, for example, when a horse race begins. This differs from the so-called “fixed odds” bet where the potential payout is known at the time the bet is made. The invention that made pari-mutuel betting more fluid and popular was named a totalisator. Initially conceived in the 19th century in Europe, a totalisator is a specialized, mechanical calculating machine that can calculate the odds and approximate payouts for certain types of bets to bettors as the betting pool grows. Spread betting and money line wagers, in contrast, are fixed odds.

\(^{17}\) A betting exchange works similar to a stock exchange or a currency exchange, but where the commodity being traded is a bet, rather than a stock or currency. The concept was first brought to the public by the British company called Flutter in May 2000, followed closely by UK-based Betfair in June 2000. As with other types of exchanges, betting exchanges thrive on liquidity and players focus on exchanges where they are confident that their bet can be paired up with a matching counterbet. Betting exchanges offer the opportunity for players to lay outcomes, which is to bet that a particular participant in an event will lose. In other words, a player can post a wager and stake on a sporting event and other players can choose to match it. The former is known as a back (or accept) and the latter is a lay (or offer). This is virtually identical to the way that a stock exchange operates as a forum for buyers and sellers of stocks. There is always a choice of what odds to accept. If a player wants better odds than are available, he or she can place an order for a better price. The bet exchange sites keep track of the lays, backs and orders in the order they are matched. Betting exchanges can also allow bettors to sell their wagers "in-running." In other words, a player can sell a bet, provided there is a willing buyer, at any time from the acceptance of the wager until the conclusion of the contest that was the subject of the wager. The customers in the exchange, and not the exchange itself, are responsible for creating the liquidity in the pools. Therefore, the betting exchange is never at a risk of loss. It simply charges a commission on winning wagers. These commissions are often lower than in traditional bookmaking. This is because (a) the commission rate does not need to reflect the risk of loss and (b) the ability to trade bets in running creates a much greater turn-over on which to base commissions.
wagering.\textsuperscript{18} (3) parlay wagers\textsuperscript{19} (4) proposition bets,\textsuperscript{20} (5) spot bets or in-game betting,\textsuperscript{21} and (6) exchange wagering. Of these, single game point-spread wagering is the most popular form of wagering on NFL games. With point-spread wagering, the bettor is not generally playing against the house like in most casino games (such as blackjack, roulette, or craps). Instead, a sports book is able to make money on point-spread wagering by acting as a middleman or broker for bettors on opposite sides of a proposition, and then charging a commission for this service. As an example, a sports book may offer two equally attractive betting options in an attempt to ensure that patrons bet equal amounts of money on both sides of the wager.

The commission charged on every bet made is the \textit{vigorish}, \textit{vig}, or \textit{juice}. If the total amount wagered on each side (e.g., on each team) is the same, the book will make a profit from the commission. If bettors wager more money on the winning side, the sports book may incur a loss in paying off the winning wagers. The sports book uses a betting \textit{line} to minimize the risk of

\begin{itemize}
  \item \textsuperscript{18}A fixed odds bet is simply any wager where your odds are fixed and not subject to change once you make the wager. \textit{Money Line} bets are common fixed odds wagers on a game that don’t use point spreads. If you bet a game on the money line, you will pay more to win the same amount if you bet on the favorite as opposed to the underdog. For example, a money line wager on the 2015 MLB All-Star Game may look like the following:

  American League +107
  @ National League -116

  The “minus” (-) before the number for the National League indicates that it is the favorite. The “plus” (+) before the number for the American League indicates that it is the underdog. The National League odds are -116, meaning a $11.60 bet would win $10, for a return of $21.60. The American League odds are +107, meaning a $10 bet would win $10.70, for a return of $20.70.

  \item \textsuperscript{19}Parlay wagers are a group of individual wagers, often on single game outcomes against the point spread where the player must win all the individual wagers to win the bet. An example of the payouts are:

  Two Team Parlay: 13 to 5 (bet $100 to win $260)
  Three Team Parlay: 6 to 1 (bet $100 to win $600)
  Four Team Parlay: 10 to 1 (bet $100 to win $1,000)
  Five Team Parlay: 20 to 1 (bet $100 to win $2,000)
  Six Team Parlay: 40 to 1 (bet $100 to win $4,000)
  Seven Team Parlay: 75 to 1 (bet $100 to win $7,500)
  Eight Team Parlay: 100 to 1 (bet $100 to win $10,000)

  If you lose any of the individual wagers, however, you lose the parlay wager. For example, if you correctly pick seven of the eight games in an eight-team parlay, you lose your bet. On the other hand, the payoff is significantly higher if you win an eight-team parlay than eight individual bets.

  \item \textsuperscript{20}Proposition or “prop” bets are wagers on the outcome of events that occur within a game or season that are unrelated to game outcome. For example, you can bet on whether a quarterback will throw for more or less than 200 yards or which team will score the first goal.

  \item \textsuperscript{21}In game wagering is the ability to place wagers, typically through electronic means, during the progress of a game and often on each individual play. For example, in American football, you may be able to wager on whether the next play will be a run or a pass.
\end{itemize}
incurring such a loss. This method of handicapping makes the underdog in the sporting contest as attractive to bet on as the favorite. In point-spread betting, the sports book assigns a certain number of points – called the point-spread, the line, the number, the price, or simply the spread – to the underdog for purposes of deciding the bet. A wager on the favorite wins only if the favorite wins the game by more than the point-spread (i.e., they cover the spread).22 A bet on the underdog wins if either the underdog wins the game outright or if the favorite wins by less than the spread. If the favorite wins by exactly the spread amount, the game is a tie for betting purposes, and the sports book returns the wagers that the bettors made at that spread. The favorite is said to be laying points; the underdog is getting points. When making a bet with a point-spread, the bettor typically pays 11 to win 10 – which is how the sports book can create revenue without having better knowledge of outcomes than the betting public. 23

1.3.1 Mathematics of Point-Spread Betting

When making a point-spread bet, the bettor must pay $11 to win $10 (or some multiple of these amounts).24 If he wins the wager, he receives $21: the $11 he wagered plus the $10 he won. If he loses, he loses the entire $11.25 The formula below calculates the expected value and house edge, assuming a 50% chance of picking the correct team with a point-spread bet. The expected value of a $110 bet assuming a 50% chance of success is:

\[ EV = (+100)(.5) + (-$110)(.5) = -$5.00 \]

This -$5.00 expectation on a $110 wager equates to a house advantage of 0.04545, or about 4.55%.27 By way of example, if a patron were to make a wager of equal amounts, say $110, on each of the two teams, his total wager amount would be $220.28 Assuming no tie, he would win one bet and lose one bet. He would receive $210 back for the winning wager ($110 from the wager plus $100 he won) for a net loss of $10 – which means he is guaranteed to lose $10 or 4.55% of the $220 put at risk.29

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23 Strictly speaking, for the standard point-spread type wager the sportsbook may aim for equal amounts bet on each side, but for a money-line wager the casino desires a certain ratio of money bet on each side.

24 Sportsbooks typically do not require bets to be made in multiples of $11 (or $5.50), but doing so makes payoffs easier and experienced players do so. If the bet amount is not a multiple of $11, the payoff is typically rounded down. For example, the payoff on a winning $50 bet will be $45 instead of the 10:11 payoff of $45.45.

25 Hannum, supra note 22.

26 Ibid.

27 Ibid.

28 Ibid.

29 Ibid.
The 4.55% house advantage is the main source of sports book profits. The sports book can employ different strategies. Most common is simply to balance the *action*, the total amount wagered on both teams so that the expected return is equal to the house advantage. When more money is being wagered on one team, the sports book may change or *move* the line to encourage bettors to wager on the other team and balance its book. Balancing the sides is why the line may move up or down from its original spread amount up until game time. If the line changes, it has no effect on bets that bettors have already placed. Once a patron makes a bet at a certain point-spread, the bet is *locked into* that spread even if the line subsequently changes.\(^{30}\) Other sports books may favor unbalanced books if the discrepancy matches historic biases in the sports book’s favor. For example, if bettors irrationally favor heavy underdogs, the sports book may allow more action or money on the heavy underdogs because over time it will maintain a greater advantage than the 4.55% house advantage with a balanced book.

Several entities are typically involved in sports wagering. The sports book described above sets the point spreads and accepts wagers on the games. The sports book may rely on professional sports information services that set opening lines, provide current odds information from various legal and illegal sports books, and provide game results and statistics.

Bettors can be roughly segregated into professional and casual bettors. The latter are often sports fans or sports betting fans who view betting as recreational, often consistent with fan loyalty for a particular team or for the enjoyment associated with betting. On the other hand, professional bettors are looking for a return on their bets, which are considered investments.\(^{31}\) To do this, they need to deploy strategies sufficient to not only beat the other bettors but also to overcome the bookmaker’s commission.

Professional bettors can use various methods to achieve their desired economic results. Some professional bettors will use computer modeling and analytical techniques to determine when the betting odds or lines are inconsistent with expected results.\(^{32}\) This happens frequently with point-spread betting because the sports book is setting the line based on the anticipated equal wagering on both teams as opposed to the expected result.\(^{33}\) These models may use massive amounts of publicly available data to assist in predicting results. Others are involved in arbitrage. They look to exploit differences in odds or lines between bookmakers or between betting platforms such as bookmakers that offer point-spread betting and betting exchanges.\(^{34}\)

\(^{30}\) This is different than pari-mutuel wagering where the wagering pool remains open even after one places a bet and the payouts are not determined until the pool is closed and the event ends.


\(^{32}\) Ibid.

\(^{33}\) Ibid.

\(^{34}\) Ibid.
Finally, some professional bettors may seek and use non-public insider information regarding a sporting event to gain an advantage – for example, the extent of a player’s injury or the coach’s decision on starting line-ups can be valuable information in predicting an outcome. Regardless of the method, professional bettors may prefer to use bookmakers that offer the lowest commissions (or put another way, those that offer the lowest price). As will be discussed in future sections, bookmakers in unregulated or under-regulated jurisdictions may have advantages because they may have lower (or non-existent) taxes and fewer (or non-existent) regulatory expenses.

1.4 Understanding Sports Integrity

At a meeting held with the 2015 Super Bowl, NFL Commissioner Roger Goodell responded to a now-famous incident regarding equipment manipulation allegations (specifically, deflation of footballs) to gain an advantage in a playoff game. The Commissioner’s response was unequivocal and laudable: “I am not going to do anything to compromise the integrity of the league.” Sports leagues’ understandable concern about sports integrity has its roots in both ethics and economics. Like any other competition, for sports to be an honest test of skill and ability, it must abide by certain ethical standards. In this section, we provide a detailed look at these standards, their origins, and their implications.

Sports integrity is “respect for the core value of fair and open competition in the game or event in question.” These would include expectations that participants abide by rules designed to assure that the athletes or teams do not have unfair advantages and perform to the best of their abilities. Cheating, gamesmanship, and corruption are the antithesis of fair and open competition. As two ethics professors framed it: “A more ethical approach to athletics is sportsmanship. Under a sportsmanship model, healthy competition is seen as a means of cultivating personal honor, virtue, and character. It contributes to a community of respect and trust between

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35 This last category of professional bettors, i.e., the ones who seek to obtain inside information and profit from it, are the ones most commonly cited as presenting a danger to a game’s integrity. In its simplest terms, a “bad guy” can pay money (bribes) to a trainer, coach, or player, in exchange for material inside information, or even pay money to affect the outcome of a game or its components. The first two categories, i.e., professional gamblers who use statistical analyses to inform a betting decision, and those who use arbitrage, are analogous to stock traders, who also use statistical analyses to inform a buy-sell decision and arbitrage to take advantage of spreads in the markets. These types of professional gamblers are much less reliant on “inside information” and therefore may be of less concern to sports leagues and franchises.


competitors and in society. The goal in sportsmanship is not simply to win, but to pursue victory with honor by giving one's best effort.”

In contemplating these issues, former Commissioner of the NFL Paul Tagliabue invoked these values and linked them with sports gambling:

Sports gambling threatens the character of team sports. Our games embody our very finest traditions and values. They stand for clean, healthy competition. They stand for teamwork. And they stand for success through preparation and honest effort. With legalized sports gambling, our games instead will come to represent the fast buck, the quick fix, the desire to get something for nothing. The spread of legalized sports gambling would change forever—and for the worse—what our games stand for and the way they are perceived.

As academics have long noted, moral critics often claim that gambling influences the general public’s values and priorities. In essence, this claim holds that people may interact with others differently in a community with gambling as opposed to a community without gambling. Gambling’s emphasis on luck and wealth may negatively affect these community interactions. As a result, undesirable attributes in the community at large may emerge; residents may determine that they are better off being lucky than working hard, for instance, and that wealth is the most desirable outcome. Underlying some negative attitudes toward gambling is the fear of any activities that are hedonistic, and the idea that pleasure for pleasure’s sake is wrong or deviant.

Similar sentiments are found in religions that take a deontological or absolutist approach to gambling. For example, the "Social Principles" reflect stated positions of the United Methodist Church on gambling. It reads:

Gambling is a menace to society, deadly to the best interests of moral, social, economic, and spiritual life, and destructive of good government. As an act of

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faith and love, Christians should abstain from gambling and should strive to minister to those victimized by the practice.\textsuperscript{43}

Some academics have noted that historic moral objections have been particularly harsh when addressing those who gamble excessively or problematically, as these individuals are seen as posing unique risks to communities.\textsuperscript{44} Historically, moral leaders in the U.S. have “outed” these transgressors. One such sermonizer asks, “Who are the men now given so fiercely to this mania in our city? Listen, and I will tell you” – and then proceeds to do just that.\textsuperscript{45} Over the years, however, U.S. society’s approach to those who gamble (and especially those who gamble excessively) has certainly become more sympathetic and research-based.\textsuperscript{46}

Similarly, it would seem that sports leagues’ moral resistance to gambling overall has relaxed, as evidenced by the liberalization of rules regarding sports sponsorships,\textsuperscript{47} or the predominance of gambling venues near sports venues (including those in and around London’s Wembley Stadium, where sports betting is legal and where the NFL has held regular season games).

Of course, sports leagues’ concerns are not only grounded in morality. After all, a breakdown of sports integrity can have devastating economic impact on sports leagues. For instance, in 2014 the NFL’s collective market cap in 2014 was estimated to be $46 billion with annual revenues of about $10 billion.\textsuperscript{48} According to Commissioner Goodell, the league has annual revenue aspirations of $25 billion by 2027.\textsuperscript{49}

If the public perceives that a particular sport offers games or events whose integrity is compromised, the public would likely lose interest in that sport or sports league.\textsuperscript{50} Other adverse


\textsuperscript{45} See, e.g., Holp, P. E. (1887). The golden age and other sermons. Sioux Falls, SD: Dakota Bell.


\textsuperscript{48} Chemi, E. (2014, September 12). If the NFL were a real business. Retrieved from http://www.bloomberg.com/bw/articles/2014-09-12/if-the-nfl-were-a-real-business/

\textsuperscript{49} Ibid.

\textsuperscript{50} Rebeggiani, L. & Rebeggiani, F. (2013). Which factors favor betting related cheating in sports? Some insights from political economy. In M. R. Haberfield & D. Sheehan (Eds.), Match-fixing in international sports, existing process, law enforcement and preventative strategies (pp. 160). Switzerland: Springer.
economic impacts might include loss of sponsorships, broadcasting, and merchandising.\(^{51}\) Conversely, as interest increases so do commercial success, private economic investments, and the prospects for public funding of major capital investments, like stadiums.\(^{52}\) Given these realities, concerns about integrity are economically justified.

Three major types of issues can disrupt on-field integrity, and hence threaten the entire enterprise: illegal performance enhancement, sabotage, and game-fixing.\(^{53}\) The most publicized method of illegal performance enhancement across sports is doping. Doping involves the use of prohibited substances like stimulants, steroids, hormones and narcotics, or prohibited methods such as oxygen enhancement.\(^{54}\) Non-drug related performance enhancement often concerns the use of illegally altered equipment, such as deflated footballs or corked baseball bats.\(^{55}\)

In a case of sabotage, a team or athlete undertakes actions to reduce the performance of the opposing team or athlete in a way that is inconsistent with the rules of the game.\(^{56}\) It can include illegally assaulting competitors, goading, flopping, equipment alteration, and other similar actions.\(^{57}\)

The issues that are most often raised with Las Vegas, however, pertain to game-fixing – intentionally losing or playing to a pre-determined result by unethically manipulating the results.\(^{58}\) Game-fixing is not always related to fixing games to win sports wagers. Non-betting-related game-fixing is as great a problem in many sports as betting-related game-fixing.\(^{59}\) Competitors can engage in game-fixing to gain a competitive advantage either in the tournament

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51 Ibid.
52 Ibid.
56 Preston, supra note 53.
57 Ibid.
59 Ibid.
or league, or for external purposes related to sports betting. Of known incidents of game-fixing in soccer between 2000 and 2010, 42.11% were not betting-related.

An example of a non-betting reason to game-fix is tanking a contest to avoid having to face a stronger opponent later in a tournament or a playoff. Besides manipulation to affect the selection of next opponent, non-betting related game-fixing may concern how some sports leagues handle promotion or relegation of teams to higher or lower divisions based on their records. In European soccer, teams may maintain league status, be promoted to higher leagues or relegated to lower leagues based on final season standings. One study showed this was an incentive for team owners to fix certain matches to affect the league’s final standings. Game-fixing to retain rank and wages also was present in sumo wrestling, where wrestlers needed a certain number of victories to maintain or increase their status. In other sports, the draft order for amateur athletes is determined, in part, by the reverse order of teams’ win/loss record. In chess, game-fixing in chess tournaments can even be consistent with the rules.

On the other hand, game-fixing for betting purposes typically has two components: fraud and bribery. The corrupt influencer typically bribes an athlete, coach, or referee to manipulate the game results, and then uses the pre-determined results to defraud either the bookmaker or the bettors on that game. The two methods of game-fixing most applicable to American sports are intentionally losing a contest and point shaving. The former is more common in individual

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sports, where a single player’s performance determines a win or loss. Organized crime control of
the International Boxing Club resulted in widespread match-fixing in boxing during the late
1950s. Boxing even developed its own terminology for intentionally losing by a feigned
knockout: *taking a dive.*

In contrast, point shaving has greater application to wagering on football and other team
sports. Rather than attempting to lose the game, the team, athlete, or another person is trying to
manipulate the score to gain advantage in a sports wager. As one commentator noted: “The
incentive for corruption derives directly from the asymmetric incentives of players, who care
about winning the game, and gamblers, who care about whether a team beats (or covers) the
spread.”

Shaving points in football, with over two dozen athletes actively participating on the field
at the same time, is often more difficult than it is in other team sports, but it is not impossible.
Except for a few key positions (such as a kicker or quarterback), many players have little direct
opportunity to control a final result. For example, if an offensive lineman intentionally plays
poorly, a coach may replace him in the game, or another lineman may assist him in blocking his
opponent. Often, the person with the greatest opportunity to affect the game, the quarterback, is
the highest-paid player on the team – and hence, has lesser financial incentive.

Point shaving principally benefits two groups: (1) bribe or benefit takers such as athletes,
coaches, trainers, and referees who agree to influence a game’s outcome; and (2) corrupt
influencers who arrange or know of the fix and can manipulate or cheat gambling markets.
The corrupt influencer can be either bettors who bet undetected into liquid gambling markets
or

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69 While intentionally losing a contest often involves ties to gambling, this is not always the case. Game-fixing can occur where the competition structure gives a team or athlete incentives to lose to achieve a greater benefit. As an example, a study of the sumo wrestling industry in 2000 showed that wrestlers threw certain matches in tournaments to allow competitors to gain enough victories to sustain their rankings and resulting higher wages.


72 Ibid.


75 Rebeggiani, *supra* note 50.
unregulated bookmakers who know of the fix and manipulate the betting markets (by adjusting the points spread) to encourage wagering on the losing side of each wager.

Vehicles of game-fixing can be either positive or negative. Corrupt influencers may use bribes, such as offering money, gifts, or sex. Alternative motivations could be opportunities for career advancement, such as more playing time or transfers to other teams, as positive reinforcement. Negative reinforcements can be blackmail (e.g., to avoid public disclosure of career ending facts) or physical threats to the person or his family.

Game-fixing and point shaving have two direct financial victims. The first are the gamblers who are unaware of the fix and bet the losing side of the game – the gambler who bets the losing side of a wager has no chance to win that particular wager. The second are legitimate sports books that accept wagers on a fixed game or match. They face the prospect of an unbalanced pool because of the addition of wagers placed by corrupt influencers. In this case, every dollar that they accepted from the persons with knowledge of the fix is a dollar lost. In some cases, however, the sports book will adjust odds or lines to encourage wagers on the presumptive losing wager to balance the money coming from the corrupt influencers. When this occurs, the sports book faces the prospect of being on the losing side of both bets.

More recently, the issue of *spot fixing* has arisen. Technology allows sports books to offer *in-game* or *in-running* wagering. This permits a gambler to bet on every play in a game, such as the following: “will the next play be a run or a pass,” “will it result in a turnover,” or “will it result in a score?” *Spot fixing* can be used to fix in-game wagers. For example, a quarterback on the first play from scrimmage may intentionally throw an incomplete pass. A recent match-fixing case of Pakistani cricket involved athletes intentionally bowling “no-balls.”

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77 Cheloukhine, *supra* note 73.

78 For example, suppose New England is a 10-point favorite over Cleveland. A corrupt influencer has convinced a player on New England to assure that the Patriots wins by fewer than 10 points. The corrupt influencer will then bet heavily on Cleveland. If this moves the line, the sports book makes New England an 8-point favorite to encourage wagering on New England to balance the book. If New England were to win by 9 points, the book will lose wagers placed by the corrupt influencer and all the bets placed on New England at 8 points.

American professional sports have not encountered the level of game-fixing problems related to sports wagering as many other sports, particularly soccer and cricket, which have experienced significant scandals over the past few years. \textsuperscript{80} In the past 50 years, not a single documented case of a player fixing games for betting purposes exists in any of the four major American professional sports. There was, of course, a major scandal involving point shaving by NBA referee Tim Donaghy.

1.5 Understanding Wagering Integrity

Not unlike the concern that sports leagues have regarding the integrity of games, the gaming industry and the state government have similar concerns regarding the integrity of the gaming transactions. The public policy of Nevada states:

“The continued growth and success of gaming is dependent upon public confidence and trust that licensed gaming and the manufacture, sale and distribution of gaming devices and associated equipment are conducted honestly and competitively . . . and that gaming is free from criminal and corruptive elements.” \textsuperscript{81} [Bolded emphasis added]

Nevada, like other state governments, has a self-interested policy to assure the integrity of legal gambling. The overwhelming public goal in Nevada is to use the casino industry as an economic engine. Its casinos/resorts employ 327,000 workers, or 28% of the state’s labor force. These workers are paid $11 billion a year in wages. Nevada hotel-casinos account for more than $1.4 billion or about 46% of state General Fund tax revenues. \textsuperscript{82} The hotel-casino companies have invested over $60 billion in Nevada. While just 2.1% of Nevada’s $11 billion gross gaming revenue came from sports wagering in 2014, it is still an important part of the Las Vegas casino experience, especially on significant sports weekends, such as a major fight, March Madness, or the Super Bowl. In sum, the government has a vested interest in protecting its economic partnership in the gaming industry, and works to do so.

Sports wagering integrity has the same economic underpinning as sports integrity. Regulation is the vehicle for the industry to gain and maintain credibility to continue an industry that has access to capital, helps fund government, and creates jobs. \textsuperscript{83} Its existence in many places is tenuous. The government responds to external challenges by providing a mechanism to assure


\textsuperscript{81} Nevada Revised Statutes (NRS) 463.0129.


\textsuperscript{83} Another goal that often accompanies the protection of the industry is the protection of the state’s principal interest in tax revenues. This is accomplished by stringent accounting, auditing, and reporting requirements.
the national government, the voting public, actual and potential patrons, and the financial community that the industry is honest and free of criminals. This mechanism involves licensing, detection, and strict discipline of casino operators who tarnish the perception of honesty and freedom from criminal elements. Consistent with the government’s interest, most casino operators realize public trust is more easily achieved if provided by the government through regulation. Convincing stakeholders that the industry is honest and free of criminals through self-regulation may be difficult. Therefore, most operators willingly subject themselves to losses of freedom, increased regulatory risk, and increased operating expenses as the cost of maintaining the desired public perception. The government achieves the desired results by creating a rigorous licensing process, costly accounting and reporting systems, and disciplinary procedures that could result in severe fines or license revocation.

Five major tenets of wagering integrity are:

1) The games are honest,
2) The games are fair,
3) Patrons are secure in their deposits and winnings,
4) The government resolves any disputes fairly and according to law, and
5) All revenues are properly accounted for and taxes are paid.84

Honesty has a slightly different context between casino gaming and sports wagers. With sports wagers, the casino/sports book and the state regulators do not control the integrity of the underlying game that determines a winning or losing wager, but the casino is fiscally responsible for paying every winning wager.85 If a licensed sports book has any reason to believe that a game is corrupt, it can cease taking wagers on that game. For example, many regulated European sports betting operations refuse to accept wagers on certain minor division soccer leagues. Honesty still has some meaning because the casino/sports book must be honest in paying the full amount of the wager, according to the published rules and regulations. Any efforts to help assure the integrity of the sport are consistent with the economic best interests of both the state and the casino operator, since both can be victims – the sports book directly, and the state indirectly through lower tax revenues.


85 Theoretically, a casino could be the corrupt influencer in a point shaving situation. A book could be the perpetrator if it made the line more favorable than any competitor to encourage wagering on the underdog knowing that the favorite was going to make the margin of victory under its published line. Many reasons mitigate against this situation. First, the licensed sportsbook undergoes a major background investigation. Any propensity for cheating likely would be uncovered. Second, any substantial deviation from the competitive line among the 160 sports books in Nevada would be easily detected. Third, the sportsbooks are only a small percentage of the overall casino revenues and the likelihood that a casino would jeopardize its license in such scheme is very small. Fourth, the audit and review of the casino records by the state or outside audits, especially in corporate-owned casinos that face an additional level of regulation at the federal level, could flag such indiscretions.
The fairness of the game is the second principle of wagering integrity. Fairness means that not only are the odds of winning reasonable, but the same wagers and odds are available to all potential patrons. In Nevada, competition among the 160 licensed sports books keeps the house advantage to a competitive level. Moreover, Nevada law requires that all wagering propositions be posted and made available to the public.

Another factor that influences the wagering integrity, but not sports integrity, is betting on the basis of insider information. The UK Gambling Commission has a useful definition of insider information as:

“Information relating to the participation in, the likely or actual performance in or outcome of an event or in-play activity within an event, which is known by an individual as a result of their role in connection with that event and which is not in the public domain.”

In contrast to insider information, public domain information “has been published, is on public record or is accessible by an interested member of the public.” Effective prevention of insider trading requires coordination between the sports leagues and the betting operators. Besides prohibiting players, coaches, staff, and referees from wagering, leagues should have rules prohibiting misuse of insider information including “release of information for reward or gain, including careless or reckless release of information, for example via social media.” Leagues can have educational programs surrounding the rules concerning wagering and wagering information. As is done by the NFL, leagues should require public disclosure of key information such as player injuries and game status. Operators can assist by enforcing the leagues’ rules regarding player, coach, or referee wagering, filing suspicious activity reports with the leagues for suspected violations of its rules, and having their own policies regarding their employees’ use of insider information.

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86 Cabot, supra note 84.
87 Nevada Gaming Commission Regulation 22.060(7).
89 Ibid.
90 Improving the Integrity of Sports Betting, supra note 9.
91 The Gambling Commission’s Misuse of Inside Information, supra note 59.
92 Ibid.
93 Ibid.
A third principle of wagering integrity is that patrons are secure in their winnings and deposits.\textsuperscript{94} For example, in Nevada, this issue is addressed by regulations requiring the sports books to have reserves equal to all patron deposits, contingent wagers that have not been determined, and unpaid winning wagers.\textsuperscript{95}

A fourth principle is that a transparent process exists to resolve patron disputes fairly. As will be discussed, Nevada has a defined and transparent system for handling all patron disputes. The fifth and final principle is assuring that the sports book accounts for all revenue and pays its gross revenue tax.\textsuperscript{96} This includes assuring that:

- No cheating occurs in the processing of the wagers, such as past posting (writing a wager after the outcome of the event is known),
- Employees cannot void tickets after the outcome of the event is known,
- Employees do not overpay tickets,
- Employees do not write tickets with incorrect odds to the advantage or disadvantage of the patron, and
- Employees do not commit similar actions inconsistent with the internal controls, regulations, or the law.

To meet the basic tenets of wagering integrity, Nevada has developed an elaborate system of regulatory controls that we discuss later in this report. Many of those controls relate directly to sports wagering. The extent of the regulation is illustrated by a State Gaming Control Act that is 155 pages long, gaming regulations encompassing 270 pages, and the 300 pages of Minimum Internal Controls which detail casino/sports book procedures. The process also is labor intensive. The Gaming Control Board (Board) has the first line responsibility for maintaining the integrity of wagering in Nevada. The Board employs over 400 persons, with mostly field positions including enforcement (119), investigations (95), and audit (91).

1.6 Factors that Contribute to Game- or Match-Fixing

To determine whether sports betting in Nevada poses a threat or a possible benefit to the NFL’s pursuit of sports integrity, analyzing the factors that may contribute to sports corruption is necessary. Professors Ian Preston and Stefan Szymanski created a model to predict match-fixing while looking at soccer, baseball, and cricket.\textsuperscript{97} They found that the likelihood of corruption increases in relation to any of the following factors that have application to professional football:

1) Venality of bookmakers

\textsuperscript{94} Cabot, \textit{supra} note 84.

\textsuperscript{95} Nevada Gaming Commission Regulation 22.040(1).

\textsuperscript{96} Cabot, \textit{supra} note 84.

\textsuperscript{97} Preston, \textit{supra} note 53.
2) Venality of the players or others that can influence game outcome
3) Large underground betting market
4) Low detection rates
5) Enforcement of integrity rules by sports organizations

In the subsequent subsections, each of these factors is discussed in detail.

1.6.1 Venality of Bookmakers

In Nevada, those who work in licensed race books and sports pools must satisfy the state’s extensive regulatory scrutiny in their operations. Outside of Nevada, criminal organizations control virtually all of the United States bookmaking industry. Passage of the Professional and Amateur Sports Protection Act (PASPA) federal legislation in 1991 appears to have created a situation that enables criminals to dominate the majority of the sports betting market. U.S. Senator Dennis DeConcini (D-Arizona) introduced PASPA on February 22, 1991. According to the Senate Judiciary Committee Report, the “bill serves an important public purpose, to stop the spread of state-sponsored sports gambling.” Through PASPA, Congress asserted various problems with legal sports wagering. The first concern addressed was the potential impact on youth. According to U.S. Senator Bill Bradley (D-New Jersey), a former NBA star, “Legalized sports betting would teach young people how to gamble.” Senator Bradley believed that children attracted to sports would soon associate sports with gambling, rather than with personal achievement or sportsmanship.

Senator Bradley and others also were concerned that the proliferation of legal sports wagering might harm both the integrity of sports through game-fixing and the fans’ perception of that integrity. For example, a player might miss an easy opportunity to score at the end of a game. Even if this did not affect the game’s outcome, it could affect who won certain wagers because of the point-spread. Fans might then question whether the player was rigging the game, instead of taking into account fatigue or other legitimate factors. No scientific basis exists for claiming that legal sports wagering increases game-fixing. Nevertheless, Senator Bradley deemed legal state-sponsored sports wagering to be the most objectionable form of sports wagering because it created the perception that the government approved of wagering on

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98 Ibid.
102 Ibid.
sporting events. As Senator Bradley stated, sports wagering puts the “imprimatur of the state on this activity.”

PASPA passed and now prohibits states from legalizing schemes or contests where the outcome of any professional or amateur sports event or the individual performance of any athlete in those events determines the winner. Because some states like Nevada, Delaware, Montana, and Oregon, had pre-existing, state-authorized sports wagering, Congress crafted

104 Bradley, supra note 101.


106 The heart of PASPA is codified in 28 U.S.C. §§ 3702 and reads:

It shall be unlawful for –

1) A government entity to sponsor, operate, advertise, promote, license, or authorize by law or compact, or
2) A person to sponsor, operate, advertise, or promote, pursuant to the law or compact of a governmental entity, a lottery, sweepstakes, or other betting, gambling, or wagering scheme based, directly or indirectly (through the use of geographical references or otherwise), on one or more competitive games in which amateur or professional athletes participate, or are intended to participate, or on one or more performances of such athletes in such games.

A governmental entity means any state, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Palau, any Native American tribe, any other U.S. territory, and any subdivision of these entities. Ibid. § 3701(2).

The law creates an unusual anomaly. A person violates federal law if he operates a sportsbook pursuant to state law, but not if he violates state law. Moreover, the Act is ambiguous as to whether it is unlawful for a private person to operate a sportsbook or contest that is not authorized by state law, but does not violate any state law. The most obvious example is sports fantasy leagues, which decide results based on the performance of athletes. Based on the legislative history, these activities would not appear to violate the Act.

The PASPA also prohibits any person from advertising, pursuant to state law or compact, any gambling or wagering scheme based on the outcome of any professional or amateur sports event or the individual performance of any athlete in those events.
exceptions to allow them to continue.\textsuperscript{107} The Oregon lottery conducted a game called “Sports Action,” based on the outcome of professional football games.\textsuperscript{108} Oregon terminated its sports lottery because it wanted to host NCAA regional tournaments, which league rules prohibit in states with legal sports wagering.\textsuperscript{109} Delaware offers parlay card wagering.\textsuperscript{110} Montana operates a fantasy sports game, called “Sports Action.”\textsuperscript{111} It uses athletes’ statistics in either football or automobile racing to determine winners.\textsuperscript{112}

In sum, the threat is to be found largely in the illegal industry, as it is the illegal sports betting operators who pose much greater risks with regard to the fears of Senator Bradley and others. In Nevada, the regulatory controls and common interests of protecting the integrity of the games and the licensed operators reduces those risks.

1.6.2 Venality of the Players or Others that Can Influence Game Outcome

Games can be fixed by players, coaches, referees, and surrounding staff (e.g., doctors and technicians), but also by licensed operators, clubs, and sports leagues.

\textsuperscript{107} Ibid. § 3704. Section 3704(1) provides that § 3702 does not apply to: “[A] lottery, sweepstakes, or other betting, gambling, or wagering scheme in operation in a State or other governmental entity, to the extent that the scheme was conducted by that State or other governmental entity at any time during the period beginning January 1, 1976, and ending August 31, 1990.” Ibid. As a result, Oregon, Nevada, Delaware, and Montana are exempt from the federal prohibition against state-sponsored sports wagering.


\textsuperscript{110} Delaware took the step of authorizing single-game wagering. This was quickly challenged by the National Football League. A federal appellate court decision determined that Delaware was limited to only sports wagering that existed at the time of the enactment of PASPA. As Delaware only permitted parlay card wagering on professional football, the court held that PASPA limited it to such activity. Delaware is not, however, the only challenge to PASPA.


Individual vulnerabilities include lower paid persons, persons whose salaries are not paid on time, persons with gambling problems who may fix a game to pay off accumulated gambling debts, and persons subject to extortion or threats. Poor compensation is a significant problem in some sports, particularly in certain areas. For example, soccer in Eastern Europe has faced issues, where over 40% of players do not receive salaries and half of the players fail to receive timely bonuses. Interpol identifies the most vulnerable players as those at the start of their career who are earning less than more established players. Likewise, certain player positions may be more vulnerable because they can more directly influence the course of the match.

In North America, the lowest paid athletes are, by definition, amateur athletes. A series of studies has found that there has been an increasing percentage of contact to Division I Men’s Basketball and Football players, in attempt to obtain inside information. Interestingly, the share of those players claiming to have actually provided information has declined to very low levels since 2004. This may reflect an increase in awareness of NCAA rules, a shift in the standard of ethical behavior, or a change in perceived incentives.113

Table 1: Percentage of Division I Men’s Basketball and Football Players Reporting Having Been Contacted by Outside Sources to Share Inside Information

<table>
<thead>
<tr>
<th></th>
<th>2004 Study</th>
<th>2008 Study</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division I Men’s Basketball</td>
<td>1.2%</td>
<td>3.8%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Division I Football</td>
<td>2.0%</td>
<td>3.5%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Males outside MBB1 MFB1</td>
<td>0.6%</td>
<td>1.4%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Table 2: Percentage of Division I Men’s Basketball and Football Players Claiming to have Provided Inside Information to Outside Sources

<table>
<thead>
<tr>
<th></th>
<th>2004 Study</th>
<th>2008 Study</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division I Men’s Basketball</td>
<td>1.2%</td>
<td>0.9%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Division I Football</td>
<td>2.5%</td>
<td>1.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Males outside MBB1 MFB1</td>
<td>0.8%</td>
<td>0.7%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Among non-athletes, referees are among the most vulnerable because they are among the lowest-paid participants – at least in comparison with the athletes. As one study noted in relationship to soccer, the least paid person on the pitch, and yet the person with the greatest control over the flow, and indeed outcome of the game, is the referee. The targeting of referees by illegal gambling conspirators is a long-standing feature of match fixing. In some sports, referees can influence outcomes by deciding penalties and other critical decisions. Corrupt influencers often can pay lower bribes to lower-paid referees to obtain their cooperation.

1.6.3 Large Underground Betting Market

Sports wagering is very popular around the world. Distinguishing between handle and gross gaming win is important in understanding the various estimates of sports betting. The handle refers to the total amount of all wagers placed by bettors. In contrast, gross gaming win is

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114 Misra, supra note 37.
115 Ibid.
116 Ibid.
117 Ibid.
the amount retained by the bookmakers after paying out all winning wagers. The world’s gross gaming win from all legal sports wagering was estimated to be $58 billion in 2012. The market is growing and is forecast to be about $70 billion by 2016. Legal sports wagering has grown by an average of 5.4% per year since 2001.

The unregulated sports wagering sector is significantly larger than the regulated sector. Ron Noble, the former secretary-general of Interpol, estimates the overall handle of the unregulated market to be about $1 trillion. Assuming that the illegal sports books retained 5% of all wagers, the gross gaming revenue from the unregulated market would be about $200 billion.

Sports wagering lends itself well to online platforms. About 30% of total online revenue is estimated as derived from online wagering. In real time, a person physically in the United States can access a sports book in an unregulated or under-regulated country and place a wager on the result of a sporting event taking place in a third country. Thebettor may have the option of up to 8,000 operators that offer sports bets around the world, about 80% of whom are in unregulated or under-regulated countries with low tax rates. As one article on this topic noted:

“Prior to the internet, the domestic market for American sports bettors was limited to two options: legal wagering in Nevada or illegal wagering with a neighborhood bookie. The internet has largely removed geographic constraints. The landscape now includes regulated ‘brick and mortar’ sports books like those throughout Nevada, thousands of illegal bookies operating around the country, internet sports books physically located outside the United States.”

This article continued by stating that:


119 Ibid.


123 State of Play, supra note 118.

124 Protecting the Integrity of Sport Competition, supra note 12 at 9.

125 Protecting the Integrity of Sport Competition, supra note 12 at 12.

“The technologically driven change has manifested itself in at least four discrete areas: 1) growth in the liquidity of the overall sports betting market, 2) an increase in marketplace competition resulting in decreased margins among bookmakers, 3) the emergence of in-game live betting and exponential growth in the volume of betting, and 4) a wider variety of so-called proposition or novelty bets that are not directly tied to the underlying game’s outcome.”

The exact size of the illegal sports wagering industry in the United States is unknown. No studies support the figures often quoted to be a $400 billion handle in the underground market.\(^\text{127}\) However, regardless of methodology or accuracy, the market is undeniably large. Eilers Research estimated the handle for the market at $160.3 billion, using the United Kingdom as a benchmark and then adjusting for other variables.\(^\text{129}\) In countries where sports wagering is legal, the market share averages 13.8% of all revenues from legal gambling, but is as high as 39.1% in the United Kingdom and 16% in Australia.\(^\text{130}\) If the U.S. underground market is 14% of the total legal gambling market, then its gross gaming revenue would be about $14 billion, and its handle would be about $280 billion. One commentator noted:

“Ultimately, we do not need to know the exact dollar amount that Americans wager each year...Even if it were simply $100 billion rather than $400 billion, it would still be a huge market.”\(^\text{131}\)

This large, liquid, and accessible underground market for sports wagering increases the risk of both game-fixing and other crimes. Illegal betting syndicates prefer to target games with high betting volume that tend to mask irregular betting patterns. As one commentator noted:

“The growth of online betting gambling platforms and exchanges, and the widening of traditional sports betting markets has, in parallel, increased the vulnerability of sport to the spot fix and to the spread-bet.”\(^\text{132}\)

\(^{127}\) Ibid.


\(^{132}\) Anderson, supra note 62.
Interpol identifies Asia as the epicenter of modern game-fixing. Asian criminal organizations leverage the enormous liquidity of unregulated internet sports wagering to fix matches internationally. The international criminal nature of sports corruption is evident in soccer. In February 2013, EUROPOL, the European Union’s Law Enforcement Agency, stated that a 19-month investigation revealed that an Asian crime syndicate, working with European criminal networks, had fixed more than 680 matches over three years in 15 countries, involving 425 match officials, club officials, players, and criminals under suspicion.

Ron Noble, then-Secretary General of Interpol, stated:

“In recent years, match-fixing has become a global problem...It permits organized crime the opportunity to spread worldwide its illegal and violent activities which include murder, extortion and assault and which cause tax revenue and other losses of billions of dollars every year.”

The Panthéon-Sorbonne University and the International Centre for Sport Security (ICSS) reported in 2014 that organized crime launders around 100 billion euros (£85bn) a year by laying bets on sporting events. And yet, for professional sports leagues, globalization is highly desirable. Along with the Major League Baseball and NBA, the NFL has actively sought to extend its audience outside of the United States and into regions with high penetration of sports wagering.

Most relevant to this report, the NFL has expressed interest in expanding its offerings into Europe, where sports wagering is the most popular form of gambling. In 2013, Commissioner Goodell stated that:

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“Right now, our focus is on the U.K. since the European fans can get here. We want to build on our success here, and whether it leads to a permanent franchise or not, then we can see. What happens here will dictate that.”

This is particularly interesting and valuable for understanding the position of Las Vegas in long term strategy, because the U.K. is a major (and legal) sports betting market: in the U.K., 39.1% of all legal gambling is on sports wagering. As such, when balancing the consideration of risk in locating in Nevada, leagues should acknowledge that in terms of sports betting, the existing online worldwide marketplace risk is significantly greater than what is typically at play in Nevada.

1.6.4 Low Detection Rates

U.S. law enforcement efforts to deal with illegal gambling have declined dramatically in the past fifty years. In 1960, almost 123,000 arrests were made for illegal gambling. According to the FBI, 11,951 state and federal law enforcement agencies made only 6,024 arrests for illegal gambling in 2013. Equally telling, the percentage of gambling arrests is down 37.6% since 2009. That amounts to about 2.1 arrests per 100,000 inhabitants. In some areas, like the Northeast and West, the rates are less than one arrest per 100,000 inhabitants. There, a given resident is about three times more likely to be arrested for murder than for gambling. So, as a practical matter, outside of occasional high profile arrests, the enforcement of gambling laws is exceedingly rare – and becoming even more rare – in the United States.

[139] Ibid.


[144] Ibid.


[146] In 2011, various law enforcement agencies announced charges against 10 off-shore books that accepted US players, Rodenberg, supra note 126.
Many reasons may contribute to this non-enforcement. First, federal laws and prosecutorial policies have become increasingly confusing and contradictory.\textsuperscript{147} Therefore, prosecutors may be less eager to test the laws in fear of creating bad precedents. Second, the penalties assessed against those who violate sports betting laws are often low, and rarely justify the time or expense of law enforcement. Relatedly, there is a perception among some prosecutors that the pursuit of these cases does not put a dent into the underground economy. Third, improvements in technology, such as the internet, have made it more difficult to detect and prosecute offenders.\textsuperscript{148} Attempting to apprehend and prosecute gambling operators in foreign countries is a challenge. Fourth, the public may not perceive sports gambling as a serious crime or even as a crime at all. In the United States, wagering on fantasy sports is widespread. Office pools on sporting events, such as the NCAA basketball tournament and the NFL’s Super Bowl, flourish.\textsuperscript{149} Governors and mayors have frequently marked championship games by “friendly” bets between themselves.\textsuperscript{150} Even President Obama and Canadian Prime Minister Harper publicized a wager of a case of beer on the outcome of the men’s and women’s hockey games at the 2014 Winter Olympics – online, via Twitter, no less.\textsuperscript{151} The media has contributed to the public perception that gambling on sports is an enjoyable and legal pastime. The fact that newspapers post point-spreads is just one additional indication that the public enjoys wagering on sporting events. The National Gambling Impact Study Commission in the United States claimed that because point spreads are available in almost every major U.S. newspaper, many people do not know that sports wagering is illegal.\textsuperscript{152} Since most states have laws against sports wagering, law enforcement is placed in the uncomfortable position of enforcing laws unpopular among the general public.


\textsuperscript{148} See pages 29–31 [text accompanying footnotes 123 –136].


1.6.5 Enforcement of Integrity Rules by Sports Organizations

Key aspects of sports integrity within a sports organization include specific rules that prohibit players from:

1) Betting on any contest in which they or their team are participants
2) Soliciting or facilitating anyone to bet on any contest in which they or their team are participants
3) Offering or attempting to offer any bribes to affect a contest outcome
4) Seeking or accepting a bribe to fix a contest
5) Failing to report any activities in violation of the policies regarding integrity
6) Misusing privileged or insider information
7) Failing to perform to the best of their abilities

The sports organization needs to back these provisions by a commitment to enforcement and meaningful sanctions.

1.6.5.1 National Football League

The absence of any confirmed cases demonstrates the success of the National Football League in preventing point-shaving and betting-related corruption. This success results in part from the league’s commitment to sports integrity. A good starting point is the collective bargaining agreement between the league and the players association that contains most of these commitments. It states in part:

INTEGRITY OF GAME. Player recognizes the detriment to the League and professional football that would result from impairment of public confidence in the honest and orderly conduct of NFL games or the integrity and good character of NFL players. Player therefore acknowledges his awareness that if he accepts a bribe or agrees to throw or fix an NFL game; fails to promptly report a bribe offer or an attempt to throw or fix an NFL game; bets on an NFL game; knowingly associates with gamblers or gambling activity; uses or provides other players with stimulants or other drugs for the purpose of attempting to enhance on-field performance; or is guilty of any other form of conduct reasonably judged by the League Commissioner to be detrimental to the League or professional football, the Commissioner will have the right, but only after giving Player the opportunity for a hearing at which he may be represented by counsel of his


154 Ibid.

155 Ibid.
choice, to fine Player in a reasonable amount; to suspend Player for a period certain or indefinitely; and/or to terminate this contract.

The National Football League also has an elaborate security network designed to protect it from scandal and corruption. While not transparent to the public, the network involves multiple layers of security. The top-level headquarters in its New York office has about a dozen employees, mostly decorated former law enforcement officers. As an example, a chief security officer was Pennsylvania’s state police commissioner, and its lead investigator was the assistant director of the Federal Bureau of Investigation. The previous three security directors were former FBI executives. Each NFL team has a contractor and an associate investigator that are the liaison between the teams and the leagues. The league also has representatives in Las Vegas and Honolulu, because players frequently visit these cities, which have active nightlife venues. These consultants give players practical advice on what and who to avoid in the city, with the goal of deterring scams and trouble. These consultants serve as a form of risk management to prevent, detect, and respond to player needs and incidents.

The NFL Commissioner can ban anyone from the league if that person is "guilty of conduct detrimental to the best interest of the League or professional football."  

1.7 Licensed Nevada Sports Books

Like the NFL, neither the media nor any law enforcement agency has ever accused any Nevada licensed sports book of game-fixing or point shaving. Instead, the sports books and other Nevada licensees have proved to be valuable tools for the detection of point shaving. For example, when players on the Arizona State basketball team joined with illegal gamblers in a

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157 Ibid.

158 Ibid.

159 Ibid.

160 Ibid.

161 Ibid.

162 Ibid.

163 Ibid.

164 Ibid.

point shaving scandal in 1993, the Nevada sports books were the first to alert the conference of the unusual line movement.166

Several reasons exist for why Nevada sports book operators are not corruptible. First, all sports book owners must undergo a thorough background investigation. The chances of persons with ties to organized crime or who have integrity issues being licensed have become infinitesimal. Second, Nevada books are subject to significant and strict state oversight including mandatory internal controls, recordkeeping, reporting, law enforcement oversight (including field observation and criminal intelligence, surveillance requirements), and federal anti-money laundering regulation (including cash transaction reporting and suspicious activity reporting). In addition, sports books that are part of corporate-owned casinos fall under general securities regulations. As such, these sports books are further regulated by the federal government by virtue of having issued public securities, thereby adding the requirements of Sarbanes Oxley.

Corrupt influencers will find Nevada sports books to be inhospitable to engaging in criminal activity. Unlike the illegal offshore sports books, to place large wagers on fixed games would result in the sports book collecting identifying information on the bettor. Moreover, Nevada sports books maintain records of each wager, capture video of the bettor, file reports of transactions over $10,000, file suspicious activity reports for irregular wagers, and alert the regulators (and usually the sports leagues or organizations) of suspected point shaving. If the bettor gambles in the casino, he also becomes part of that portion of the security and regulatory apparatus.

1.7.1 Nevada Sports Books and Employee Licensing

A person may not own or operate a sports book without obtaining a non-restricted gaming license. Information services require a separate license. Those activities include providing line, point spread, or odds; information, advice, or consultation considered by a licensee in establishing or setting any line, point spread, or odds; or advice, estimate, or prediction regarding the outcome of an event.167

All sports book employees must undergo a state-conducted background check and obtain a gaming work registration.168 The sports book typically has three levels of employees. The lowest level of employees is the writers, so called because they once hand wrote the wagering tickets for patrons. In the modern book, the writers accept money from the bettor and enter the requested wager at their computer terminals. The money is placed in their registers and the wagers are entered into a sports wagering system. Once entered, the terminal produces a ticket

and the writer gives the ticket to the patron for verification and proof of his wager. The sports wagering system must meet exact technical, accounting, and reporting standards adopted by the Gaming Control Board and undergo extensive testing by an independent laboratory. The manufacturer of the system must register with the gaming authorities.

The second level of employees is the supervisors, who are responsible for the performance and protection of ticket writers. As part of the licensing process, a sports book must designate one or more employees with supervisory authority. One supervisor must be on the premises of the sports book whenever wagering occurs, and report to the sports book manager. The third level is the sports book manager, whose responsibilities are to correct errors and enforce rules, policies, and procedures within that area. The sports book manager is responsible for the overall operation of the sports book including approving wagers of certain amounts, risk management (including making line movements), and compliance with laws and regulations.

An applicant for a sports book license must meet the rigorous standards for a non-restricted gaming license. The Investigation Division of the State Gaming Control Board ("Board") conducts licensing investigations. An investigative team has a senior agent and varying numbers of agents, depending upon the complexity of the investigation. The two types of agents are financial and background. Financial agents have accounting backgrounds. Background agents have law enforcement training and often are former law enforcement agents.

The prospective license holder first must complete an application. The forms elicit basic information about the applicant’s character, criminal record, business activities, financial affairs, and business associates. The forms are more than 60 pages long and often require up to 50 hours to compile and verify requested information. This application asks for complete financial statements, residences and employment for the past 20 years, police and litigation records, and names, addresses and birth dates of the applicant's extended family.

Background agents conduct extensive interviews to evaluate the character of the applicant. Their investigation goes beyond a check of the applicant's police record. The applicant's business and personal associates, and methods of doing business also interest the agents. For example, these agents review civil court records to find the types and nature of all civil litigation involving the applicant (and check for criminal histories as well, of course).

Financial agents undertake a complete review of the applicant’s finances, including a cash flow analysis, typically for a minimum of five years. The production of financial documentation is a major part of the investigation. Typically, the applicant must provide copies of his income tax returns, savings passbooks, bank statements, canceled checks, deposit slips, check registers, escrow documents for the purchase or sale of all real estate, loan documents, telephone records, and stock certificates or account statements. The gaming regulators use these documents for many reasons. First, if the applicant provides part or all the financing for the sports book, these records show the adequacy of the applicant's resources and the suitability of his sources. Second, financial records frequently reveal the identities of the applicant's associates and his financial arrangements with those persons. The agents also scrutinize the applicant's
sources of income and records of payments. The applicant often must identify the source of bank deposits or the nature of payments reflected on canceled checks.

The agents have very broad powers. They can inspect premises, demand access to and inspect and audit books or records, and interview witnesses, all without liability to the applicant. In fact, the applicant must sign a variety of releases to indemnify the agents and allow the government agencies, banks, and other private corporations to release information about the applicant directly to the agents. More than once, the agents’ inquiries to government agencies, such as the Internal Revenue Service, resulted in the contacted agency beginning a separate investigation of the applicant. Furthermore, the agents may interview a multitude of persons, including references, business associations, and adverse parties in litigation, friends, and others, to decide the applicant's character, activities, and associations. They also screen unsolicited information from third parties who view the investigative process as an opportunity to harm the applicant maliciously.

After their investigation, the agents prepare a written summary for the Board. The summary is not available to the applicant. It contains the results of the investigation and delineates the areas of concern. The summary contains a synopsis of interviews, summaries of court and police records, and financial analysis. In some investigations, a summary can be over 200 pages long. While this marks the end of the formal investigative process, the applicant must prove his suitability in open meetings before the Board and the Commission. The Board recommends final action to the Commission. At these hearings, the applicant must be prepared to address every area of concern raised by the agents. The suitable applicants obtain licenses and the unsuitable applicants do not. This result is, of course, the whole purpose of the process.

These decisions are final, as a denied applicant lacks recourse to the Nevada courts for judicial review. There is no “day in court” for the person deemed unsuitable for involvement in Nevada gaming: Nevada law does not allow judicial review of licensing decisions, and higher courts have declined to provide it either. Further, while there is shift in the burden of proof, a licensee must continue to maintain, post licensing, their “suitability” and are subject to the same level of investigation as they are in the pre-licensing phase.

1.7.2 State Oversight of Nevada Sports Books

1.7.2.1 Minimum Internal Controls

Sports book activities are unique among casino games because they involve events that the casino does not control. Technically, the casino is gambling along with the patrons. The sports book attempts to minimize its exposure to loss by obtaining similar amounts of patron wagers on each possible outcome, so that it does not win or lose based on the outcome of the event. The sports book makes its money by charging a fee for each transaction it processes. For these reasons, the internal control environment in a sports book is unusual since the established controls are not over the actual game.
Sports book controls focus on preventing alterations to wagers after the outcome of an event is either known or influenced by things that occurred after the start of the event. For example, if a sports book accepts wagers on which team will win the Super Bowl after the event has already begun, and the favorite team's quarterback breaks his leg during the first play of the game, the chances for the underdog team to win will significantly increase, and the wagering patron would have an unfair advantage when he places his bet. To prevent this from happening, control procedures are developed to lock out wagers when an event begins. The most obvious method of accomplishing this is by using Access Controls to prevent the casino's ticketing system from processing wagers after a set time, such as the kickoff. This control, however, may not prevent an employee from voiding or canceling a losing ticket after the outcome of the event is known. As such, additional Documentation and Personnel Controls are required. Typically, the voiding of a ticket requires either the signature or access code of a supervisor. This is a Personnel Control. Voided tickets, winning payouts, and a summary of each day's racing and sporting events (including the start time) are usually forwarded to the Accounting Department that audits them as an additional Documentation Control. A sports book also has controls that relate to the synchronizing of clocks to increase the effectiveness of lock out controls. This is especially important in racing since a single event may last only a few minutes.

Internal Controls are procedures that the sports book must follow or implement to maintain the integrity of wagering and help protect and account for its assets. Internal Controls are a method of checks and balances that help ensure wagering integrity. Nevada has 18 pages of Minimum Internal Controls that specifically regulate sports book operations and many more general restrictions that apply to the overall casino operations. The three principal types of internal controls involve access, documentation, and personnel.

Access Controls are physical safeguards. These segregate responsibilities of employees and only allow employees to access places or systems relevant to their assigned responsibilities. Given modern computer sports betting management systems, much of this involves access to and limitations on the systems. Before a writer can access a betting machine to enable them to write tickets, they must sign in and the system then creates a record indicating the writer’s/cashier’s identity, the date and time, station number, and the fact that the station was opened/closed. Employees, including supervisors, who write or cash tickets, cannot access the administrative terminal or perform administrative functions.

Documentation Controls require sports book employees to make physical records of all transactions, which provide a full audit trail of every transaction. For example, “upon accepting a

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169 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 7. “The race and sports computer system either is incapable of transacting/accepting a wager subsequent to the above cutoff times or produces a report which specifically identifies such wagers.”

wager, a record of the wager is created in the race and sports computer system that contains the ticket number, the date and time and terms of the wager.”171 Also, “an original betting ticket that includes the book’s name and address is printed and given to the patron.”172 In addition to the transaction, a restricted computer system record will be created concurrently with the generation of the original betting ticket.173 The restricted record is not accessible to book employees except for inquiry-only functions. Before paying a ticket/voucher or crediting the winnings to the patron’s wagering account, the writer enters or scans the ticket/voucher number into the race and sports computer system to authorize the payment; or for wagering account wagers, when the event results are posted in the sports computer system, the computer system automatically authorizes payment of winning wagers and updates the patron’s wagering account.174 After scanning by the writer, the sports computer system brands the ticket/voucher with a paid designation, the amount of payment and the date. The race and sports computer system cannot authorize payment on a previously paid ticket/voucher, a voided ticket/voucher, a losing ticket, or an unissued ticket/voucher.175

Personnel Controls are, in essence, persons watching other persons. For example, a ticket cannot be unilaterally voided by the sports book employee who issued the ticket to the patron. Instead, internal controls require all voids to be “signed by the writer/cashier and a supervisor (who did not write the ticket) at the time of the void.”176 Employees who perform the supervisory function of approving void tickets cannot write tickets. The log of any voided tickets is sent to an independent department such as accounting or audit each day for a complete audit of void tickets (using the log and the tickets), of the proper signatures on the ticket, of a void designation on the ticket, of date and time of the void on the ticket (for not-in-computer voids), of any indications of past-post voiding, and for other appropriate regulation compliance.

1.7.2.2 Record Keeping

Documentation Control is of little value unless the records are maintained. Therefore, sports books must keep all required records for six years. Recordkeeping facilitates the audit process by the government and independent auditors, and allows for governmental investigations into the sports books’ activities.

171 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 11.
172 Ibid.
173 Ibid.
175 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 31.
176 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 12(c).
1.7.2.3 Reporting

Nevada sports books have to maintain and provide many layers of reports on their gaming activity. Gaming regulators require that the books generate reports to track all transactions so that its Audit Department may find and investigate discrepancies.\textsuperscript{177} Each book’s computer system generates end-of-day reports that an employee who is independent of the race and sports book department must perform or observe. Each such report contains the date, the sports book’s name, and the title of the report.\textsuperscript{178}

The Transaction Report lists the amount of writes, voids, payouts, vouchers issued, and vouchers redeemed, all broken down by each ticket writer.\textsuperscript{179} This report details the date and time, event/race, results/winners, and payout amounts for different wagers.\textsuperscript{180}

The Futures Report lists the total amount of wagers placed on previous days for the present day’s event, and lists the totals of the amount of wagers placed on previous days and the present day.\textsuperscript{181}

The Unpaid Report contain the details of unexpired winning tickets that have not been paid, and details of unexpired vouchers that have not been redeemed.\textsuperscript{182} The Purge Reports contain details of expired winning tickets and vouchers that have not been paid or redeemed, the payout amount, and ending balance of unredeemed vouchers.\textsuperscript{183}

The Unpaid and Voucher Summary Report lists the beginning balance of unpaid tickets/unredeemed vouchers, previously unredeemed tickets/vouchers that were paid on the present day, new unpaid tickets/unredeemed vouchers for events/races that occurred the present day, and the ending balance of unpaid tickets/unredeemed vouchers at the close of the present day.\textsuperscript{184}

The Wagering Account Report lists, by writer, each transaction and totals by transaction type, and contains a summary report listing by wagering account the amount of deposits, winnings, voided wagers, wagers, withdrawals and other adjustments.\textsuperscript{185} Totals for writes, voids, net write payouts and net win are also listed with the Wagering Account Reports.

\textsuperscript{177} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58.
\textsuperscript{178} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 57.
\textsuperscript{179} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(a).
\textsuperscript{180} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(b) and (c).
\textsuperscript{181} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(e).
\textsuperscript{182} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(f).
\textsuperscript{183} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(g).
\textsuperscript{184} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(h).
\textsuperscript{185} Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(i).
The Accrual Basis Recap Report summarizes the other reports previously mentioned, taxable revenue (including expired unredeemed vouchers that were included in payout amounts), and book revenue. Exception Information includes (1) voids, (2) changes in odds, cut-off times, results, and event data and (3) all supervisory approvals.

The sports book also reports statistics. The sports book maintains these for each month and year-to-date indicating the total amount of wagers accepted, total amount of payout on winning wagers, the net amount or taxable win by the sports book, and the win-to-write percentage for (1) each sport, and (2) sports parlay cards. Management independent of the sports book reviews these reports on at least a monthly basis and management investigates any large or unusual statistical fluctuation. Management must undertake these investigations within one month of the month-end statistical report.

1.7.2.4 Audits

Government audits are a method of assuring proper cash controls. The government must retain a trained and competent staff to conduct the audits with sufficient regularity to be a deterrent force to illegal or poor accounting practices. The Nevada State Gaming Control Board has 89 auditors. Typical audit objectives are to ensure that the sports book (1) is not paying or allowing unlicensed persons to receive gaming revenues; (2) has adequate internal control procedures; (3) is following its internal control procedures for the handling of cash and transactions; (4) is properly reporting its revenues; and (5) is paying all taxes and fees.

Government audits often are unannounced and have irregular intervals to prevent licensees from simply following good accounting principles and legal compliance only when they expect to be audited. These audits may involve long detailed reviews or spot compliance with certain regulations or procedures. The failure of a licensee to allow agents to access records on demand can be deemed an unsuitable method of operation, and can subject the licensee to disciplinary action including restrictions, fines, or potential revocation of licensing.

1.7.2.5 Surveillance

Casino surveillance simply means to conduct covert observations of the casino operations, usually with video cameras. Casino surveillance is an integral part of the sports book plan of internal controls. Many jurisdictions require minimum levels of casino surveillance. The

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186 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(j).
187 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 58(k).
188 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 92 and 93.
189 Nevada Gaming Control Board, Minimum Internal Control Standards, Race And Sports, Standard 94.
The purpose of surveillance is to (1) safeguard the licensee’s assets, (2) deter, detect, and prosecute criminal acts, and (3) maintain the public trust that licensed gaming is honest and free of criminal elements.¹⁹¹

Larger casinos have surveillance rooms that resemble a control center. In front of a sweeping desk are dozens of video monitors; behind them are shelves of video recorders. Virtually every area of a casino, including the sports book, is under surveillance by high-resolution cameras. Surveillance in the sports book typically covers the windows, counters, and cash drawers. Most cameras have zoom capacities -- some so refined that they can allow the operator to read the fine print on a person’s high school or college ring. The surveillance personnel can follow a person moving through the property by switching cameras. They can zoom in on a patron at the table, make black and white and color stills, and, of course, have permanent records through the video tapes. Three principal types of cameras used are motion or automatically activated cameras, Pan Tilt and Zoom Cameras (PTZ), and dedicated cameras.

1.7.2.6 Enforcement

The Enforcement Division of the Gaming Control Board conducts law enforcement, investigative, and intelligence activities for the Board. The Enforcement Division is divided into the Complaint/Compliance Section and the Criminal/Intelligence Section. The Enforcement Division’s primary task, which the Complaint/Compliance Section carries out, is to ensure the integrity of all gaming activity, including sports books in Nevada. Agents investigate allegations of cheating by customers or sports book employees, and investigate suspicious activities related to any betting event. They also investigate player disputes, review surveillance systems, and investigate sports book compliance with regulations and accepted standards of operation. The Criminal/Intelligence Section gathers information on organized crime activities, including any attempts by illegal bookmakers to use Nevada sports books to lay-off illegal wagers from other jurisdictions, or to attempt to use the sports books for money laundering. It also investigates allegations of skimming and hidden interest in sports books by unsuitable persons. Enforcement agents regularly meet with sports book managers to review compliance procedures. Undercover enforcement agents regularly visit sports books to assure regulatory compliance.

The significant degree of active oversight by the Enforcement Division over activities of the Nevada sports book is illustrated by enforcement actions, set forth below, over the past five years.

Employee Theft. Some Minimum Internal Controls are designed to prevent any defrauding of the sports books by its own employees. However, if several employees agree to participate in illegal activity, the sports book can be defrauded. In 2012, the Palms Casino Resort was defrauded of more than $800,000, by a scheme devised by its sports book supervisor Michael Albanese.

¹⁹¹ See Nevada Gaming Commission Regulation 5.160.
and other employees – Matthew Kidle, an administrator, and Kassie Baker, a ticket writer.\textsuperscript{192} The employees schemed with a sports bettor, Charles Pecchio, to accept invalid horse racing wagers from him; paying out winning bets and refunding losing bets from 2006 and 2007.\textsuperscript{193} Jerry Markling, Chief of Enforcement for the Nevada Gaming Control Board, said this kind of activity is very rare because the "scheme can only work if you have employees involved."\textsuperscript{194} The Board participated with Homeland Security agents to investigate the operation, which led to the convictions. Albanese received one year in prison, Kidle received three years of probation (one year under home confinement), Baker received three years of probation, and Pecchio received three years of probation (ten months under home confinement); all defendants were ordered to share in the restitution of $232,231 to the Palms.\textsuperscript{195}

A prevalent issue for the Enforcement Division is money laundering. Federal laws require Currency Transaction Reports for transactions of more than $10,000 in one day; the bettor must provide identification so the sports book may provide accurate reports to the Federal Government. Some bettors try to evade the requirements by structuring their bets to avoid reporting. Vigilant sports book employees must report these and other suspicious wagering patterns to the Board and to the Financial Crimes Enforcement Network, and investigations will follow.

\textbf{Federal Recordkeeping.} In 2011, Robert Walker, a member of ACME Group Trading (a well-known sports betting business), pled guilty to a single misdemeanor count of causing a violation of record keeping and procedures.\textsuperscript{196} \textit{The Golden Nugget Race and Sports Book} accepted $72,020 in wagers from Walker within two weeks.\textsuperscript{197} Federal laws require accurate information regarding the persons who place wagers of more than $10,000 in one day. Walker admitted that he willfully did not advise the sports book that he was placing the bets on behalf of ACME Group Trading.\textsuperscript{198} This withholding of information caused the

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{193} Ibid.
  \item \textsuperscript{195} German, supra note 194.
  \item \textsuperscript{197} Ibid.
  \item \textsuperscript{198} Ibid.
\end{itemize}
\end{footnotesize}
Golden Nugget to fail to comply with federal laws. Walker was sentenced to one year of unsupervised probation as part of his plea agreement.

Permitting Runner Wagers from Illegal Bookmakers. In 2013, the former Director of Risk Management and Vice President of Cantor Gaming, Michael Colbert, pled guilty to a single felony charge of conspiracy regarding a nationwide illegal bookmaking ring. Colbert was charged with enterprise corruption, money laundering, and conspiracy charges which, if he were convicted, would lead to a sentence of 25 years in prison. 24 other persons were involved in the illegal bookmaking and money laundering. Colbert knew that runners (persons who place bets on behalf of another person for compensation) were being used at Cantor Gaming’s Race and Sports Book at the M Resort in Henderson, Nevada. In a 33-page state complaint, the Board stated that Colbert helped move millions in sports wagers for Gadoon “Spanky” Kyrollos through runner Paul Sexton and others. Sexton pled guilty to money laundering and is alleged to have placed 4,464 sports wagers worth about $22 million with Cantor Gaming from July 2011 to October 2012. According to the complaint, Robert Drexler, another runner, placed 1,612 wagers amounting to $7.9 million. The Board also filed an 18-count complaint alleging that CG Technology (formerly known as Cantor Gaming) CEO Lee Amaitis should have known that his vice president was involved with the illegal betting operation. In 2014, the Board agreed to settle the complaint with a record fine of $5.5 million against the company.

Gambler Arrests for Involvement in Illegal Wagers and CTR Reporting. In April 2014, Mitchell Garshofsky and Aaron Virchis each entered guilty pleas to a

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199 Ibid.
200 Ibid.
202 Ibid.
203 Ibid.
205 Ibid.
206 Ibid.
207 Ibid.
single felony count of operating an illegal gambling enterprise.\textsuperscript{208} The two men were originally charged in 2013 with engaging in illegal chip transfers between their Cantor Gaming accounts at various Strip casinos to avoid filing Currency Transaction Reports.\textsuperscript{209} The IRS and state gaming agents raided Garshofsky’s home in 2012 and seized evidence of an illegal bookmaking operation involving offshore betting organizations.\textsuperscript{210} Garshofsky and Virchis were alleged to have made more than $1 million in chip transfers to avoid the federal currency filing requirements.\textsuperscript{211} It also was alleged that Virchis used fake Social Security numbers when filing Currency Transaction Reports at Palace Station and Bellagio.\textsuperscript{212}

**Gambler Arrests for Involvement in Illegal Wagers and Federal Structuring Violations.** In June 2014, the Las Vegas Review-Journal reported that a federal grand jury had indicted sports bettor Glen Cobb, his 82-year-old parents, and his stepdaughter, all charged with operating a multimillion-dollar illegal bookmaking operation.\textsuperscript{213} They also were charged with conspiracy to structure $2.6 million by using casinos and Bank of America to prevent the IRS from discovering the money.\textsuperscript{214} The bookmaking operation allegedly involved offshore sports books.\textsuperscript{215} Prosecutors sought to recover $13.2 million in cash and casino chips from the family and gambling enterprise which operated from March 2011 through December 2013.\textsuperscript{216} The casinos were used between December 2008 and November 2013 to structure funds to avoid the federal currency reporting laws.\textsuperscript{217} “According to the indictment, Cobb and company tried to conceal from the IRS $1.4 million at the Mirage, $503,303 at the LVH resort, $199,500 at The…


\textsuperscript{209} Ibid.

\textsuperscript{210} Ibid.

\textsuperscript{211} Ibid.

\textsuperscript{212} Ibid.


\textsuperscript{214} Ibid.

\textsuperscript{215} Ibid.

\textsuperscript{216} Ibid.

\textsuperscript{217} Ibid.
Venetian, $183, 500 at the South Point and $79,350 at the Fremont. They also are alleged to have structured $256,136 at Bank of America.”

1.7.2.7 Operating Requirements

Reserves

Sports books must comply with Nevada Gaming Commission Regulation 22.040, which governs reserve requirements. The actual amount of the reserve must exceed the sum of the amount held on account for patrons, plus amounts for wagers whose outcomes will not be decided within 30 days after acceptance of the wagers, plus the amounts owed but unpaid by the sports book on winning wagers. The reserve must be: (a) in a bond, cash or cash equivalent; (b) if cash or cash equivalent, held by a federally-insured financial institution; and (c) monitored monthly by an independent certified public accountant. The Board Chairman must approve the agreement between the book and the financial institution or insurance carrier.

Runners and Lay-Offs – Wagers in Excess of $10,000

Concerns that illegal sports betting operations could use Nevada sports books to lay-off illegal bets in other states led to tight Nevada regulations. The fear was that illegal bookmakers could place messenger bettors or runners (persons who place bets for others for compensation) in the various Nevada sports books. The illegal bookmakers would instruct these runners to place lay-off wagers, necessary to balance their illegal bookmaking activities in another state, particularly when the wagering line in Las Vegas was favorable. This scheme requires the runner to have both large sums of cash or chips in his or her possession and the ability to communicate with the out-of-state bookmaking operations. Therefore, regulations prohibit sports books from allowing runners to place wagers. Specifically, the regulation provides: “No book or agent or employee of a book may accept a wager from a person who the book, agent, or employee knows or reasonably should know is a messenger bettor or is placing the wager in violation of state or federal law.”

Sports books cannot accept large wagers (over $10,000) without obtaining the patron’s name, permanent address, and social security number -- and also examining and copying a government-issued identification like a driver’s license or passport. The sports book needs to maintain records of the amount of each wager over $10,000 and personal identifiers of the patron.

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218 Ibid.
219 Nevada Gaming Commission Regulation 22.040(1).
220 Nevada Gaming Commission Regulation 22.040(5).
221 Nevada Gaming Commission Regulation 22.040(6)(e).
222 Nevada Gaming Commission Regulation 22.061(1).
223 Nevada Gaming Commission Regulation 22.061(1).
or his agent, including name, permanent address, social security number and document number for government-issued identification. These wagers must be logged in a Book Wagering Report and submitted to the Board every month. The sports books also need to keep multiple transaction logs that prevent any circumvention of these requirements. They also must log all wagers in excess of $5,000, or in smaller amounts that aggregate in excess of $5,000 that the sports book or its employees know are from a player in a designated 24-hour period.\textsuperscript{224} Once the aggregate amount hits $5,000, the casino must log a physical description of the patron, the patron’s name if known, and identifiers on the wager itself. Before completing a wager that would aggregate over $10,000, the sports book has to get full identification of the patron.\textsuperscript{225} A sports book violates the regulations if it or its officers, employees or agents encourage or instruct the patron in any manner so as to willfully evade or circumvent the recording and reporting requirements.

\textit{Suspicious Wager Report}

Sports books must report any incidents that violate or evade any federal, state or local law or regulation prohibiting wagering on any amateur non-collegiate or collegiate sport or athletic event and prohibiting wagering by, or on behalf of, a coach or participant in a collegiate sport or athletic event. Also, after examining the available facts, including the bettor’s background, they also must report any sort of wager for which there is no reasonable explanation or apparent lawful purpose, or that is not the sort of wager that the particular patron would normally be expected to place.\textsuperscript{226} For example, if a writer has personal knowledge that a person usually places bets for $100, but one day he places a bet for $5,000 and there is no reasonable explanation for the wager after examining the available facts, this wager would be considered suspicious. If a patron refuses to provide identification when cashing in a winning ticket of more than $10,000, a suspicious wager report will be filled with identifying information and reported to the Board. There can be other reasons why a patron might refuse to provide identification (e.g., the player does not want a spouse to know about his or her gambling), but if the Board is building a case against a criminal, suspicious wager reports will supplement the investigation. Also, for example, if a person places a $5,000 wager on a football team that seems sure to lose (e.g., if a team has zero wins in eight games and is playing a vastly superior team), this too may be suspicious (as perhaps the patron knows some insider information).

A sports book must file with the Board reports of suspicious wagers if they aggregate to more than $5,000, and may file a report of a suspicious wager, regardless of the amount if the licensee believes it relates to a possible violation of any law or regulation.\textsuperscript{227} The suspicious wager report must be filed within seven calendar days after the sports book initially detects it,

\textsuperscript{224} Nevada Gaming Commission Regulation 22.062(2).

\textsuperscript{225} Nevada Gaming Commission Regulation 22.062(5).

\textsuperscript{226} Nevada Gaming Commission Regulation 22.121(1).

\textsuperscript{227} Nevada Gaming Commission Regulation 22.121(2).
but if more time is needed to identify a suspect, the delay can be extended to no more than seven additional days.\(^{228}\) The patron cannot be informed that a report has been filed against him.\(^{229}\)

In 1994, Nevada sports books detected a point-shaving scheme and reported the foul play to authorities. During the 1993-1994 NCAA season, Nevada casinos alerted the Board to suspicious wagers regarding Arizona State University’s basketball games.\(^{230}\) The sports books had to move the line several times because of heavy bets against some ASU games. The Board began an investigation and notified the Federal Bureau of Investigation. Two players from the ASU basketball team, Steven Smith and Isaac Burton, had agreed to shave points. Smith was paid $20,000 per game, and he gave Burton $4,300 to intentionally miss some free throws, if needed, to shave points during games. The student bookie who initiated the scheme, Benny Silman, received a 46-month prison sentence and a $25,000 fine. Smith received a one-year sentence plus an $8,000 fine, and Burton received a two-month sentence and $8,000 fine. Gamblers who knew of the point shaving are reported to have bet a total of $506,000 on the fixed games and served time in prison.\(^{231}\) In this instance, the legal sports betting apparatus enabled law enforcement to take steps against illegal sports betting and its adverse consequences.

1.7.2.8 Dispute Resolution

Nevada has a transparent methodology for resolution of patron disputes. When a patron has a dispute with a sports book involving the payment of alleged winnings and the sports book cannot resolve it to the patron’s satisfaction, the sports book has certain statutory obligations. If the patron claims entitlement of less than $500, the sports book must inform the patron of the right to ask the Gaming Control Board to investigate the dispute.\(^{232}\) If the amount in dispute is $500 or more, the sports book must immediately notify the Board.\(^{233}\) A Board agent will investigate the matter and, within 30 days, issue a written determination resolving the dispute.\(^{234}\) Within 20 days after receipt of the agent’s decision, the aggrieved party may request a hearing before the Board to reconsider the decision.\(^{235}\) If either the patron or the casino is not satisfied with the agent’s decision, it may file a petition for reconsideration.\(^{236}\) The petition must be filed

\(^{228}\) Nevada Gaming Commission Regulation 22.121(3).

\(^{229}\) Nevada Gaming Commission Regulation 22.121(5).


\(^{236}\) Nevada Gaming Commission Regulation 7A.030.
with the Board and served on the other party, which, in turn, may file a written response within 15 days. The Board or a hearing officer will set a hearing date and place, and will notify the patron and sports book at least 20 days before the date. Either one or more Board members or a hearing examiner will conduct the hearings. The Board hearing provides all traditional notions of procedural due process, including the right to call and examine witnesses, introduce evidence, cross-examine any witnesses, impeach any witnesses, and offer rebuttal evidence. The Board has subpoena powers. The party seeking review of the agent’s decision must show why the Board should modify or reverse the decision.

As a practical matter, most hearings are before a hearing officer. At the hearing, the party seeking reconsideration may make an opening statement stating the nature of the case and why the hearing examiner should grant a decision in his or her favor. The other party may then state why the agent’s decision should be upheld, or may reserve the right to make this statement until after the petitioner puts on his or her case. Both parties then present their evidence. The hearing officer does not need to follow technical rules of evidence. The Board and the hearing officer may consider any evidence that a reasonable person would in the conduct of serious affairs. The photographs and written statements acquired through investigation may help the casino’s presentation to the Board. After the presenting all the evidence, the parties may give closing arguments. After the hearing, the hearing examiner must recommend whether to sustain, modify, or reverse the agent’s determination. This recommendation must contain findings of fact and a determination of the issues presented.

The Board must consider the recommendation and the record before making a decision. The Board may affirm or reverse the decision or remand the case for the taking of additional evidence. The decision of the Board is then subject to limited judicial review whether it favors the patron or the casino. Judicial review is available in the district court for the county where the dispute arose. Filing of a petition must occur within 20 days of the issuance of the Board’s decision. Finally, the technology that is used to conduct operations is subject to significant independent review, testing, and approval by regulators. Licensees have ongoing obligations to

\[\text{\textsuperscript{237}}\] Nevada Gaming Commission Regulation 7A.030(3).

\[\text{\textsuperscript{238}}\] Ibid.

\[\text{\textsuperscript{239}}\] Nevada Gaming Commission Regulation 7A.050.

\[\text{\textsuperscript{240}}\] Nevada Gaming Commission Regulation 7A covers the hearing process.


\[\text{\textsuperscript{242}}\] Nevada Gaming Commission Regulation 7A.070.

\[\text{\textsuperscript{243}}\] Ibid.

\[\text{\textsuperscript{244}}\] Nev. Rev. Stat. § 463.3662(1).

keep their software up to date and to report to the Board any deficiency, material risk, or errors they discover.

1.7.3 Federal Oversight of Nevada Books

Congress enacted The Bank Secrecy Act (BSA) in 1970. BSA regulations, specifically 31 CFR 103 (commonly referred to as “Title 31”) of the Act, require financial institutions to file reports with the federal government regarding the activities of their customers. These reporting requirements were intended to prevent banks and other financial service providers from being used as intermediaries for criminal activity. The BSA definition of “financial institution” includes “casino, gambling casino, or gaming establishment with an annual gaming revenue of more than $1,000,000, which is licensed as a casino, gambling casino, or gaming establishment under the laws of any state or any political subdivision of any state; or is an Indian gaming operation conducted under or pursuant to the Indian Gaming Regulatory Act other than an operation which is limited to class I gaming (as defined in section 4(6) of such Act).”

Nevada sports books that fall in this category are subject to BSA regulations.

Sports books must report certain currency payments and suspicious activity to comply with BSA regulations which are enforced by the Financial Crimes Enforcement Network (FinCEN). Sports books must file Currency Transaction Reports by Casinos (CTRC) for all cash transactions over $10,000, either individually or in the aggregate, in one gaming day. Besides the standard CTRCs filed for a single currency transaction, casinos must file CTRCs for reportable multiple transactions identified through the aggregation of daily records. If a sports book observes reportable multiple transactions, it must attempt to identify the customer using all records available, including any electronic data or previously filed BSA forms and tax forms. As such, the sports book will periodically update records used to assist with customer verification to ensure their accuracy.

A sports book must have internal controls to detect suspicious activity, using a risk-based approach for the areas of products and services, customers, geographic areas, and transaction types. While all suspicious activity may not warrant a CTRC because of the currency transaction value, a SARC must be filed if the sports book observes a suspicious activity whether attempted or completed and involving $5,000 or more in funds or other assets.

FinCEN expects the following types of information in SARCs:

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247 The forms used to report such activities are FinCEN Form 103: Currency Transaction Reports by Casinos (CTRC) and FinCEN Form 102: Suspicious Activity Report by Casinos and Card Clubs (SARC).

• Complete subject identifying information, such as name, permanent address, government-issued identification number, date of birth and patron account number
• A concise and clear narrative that provides a complete description of the suspicious activity including:
  o describing the suspicious activity in a complete and chronological way;
  o identifying “who,” “what,” “when,” “why,” “where,” and “how”;
  o identifying whether the transaction was attempted or completed;
  o noting any actions (taken or planned) by the sports book, including any internal investigative measures to maintain records of the suspicious activity; and
  o including contact information for persons at the sports book with additional information about the suspicious activity.  

Marginal Effects of Team Relocation: An Economic Analysis

In this section, we examine the economics associated with sports wagering in Las Vegas (and elsewhere) to determine the marginal effects of moving a team to the city. Here, we examine incentives for parties that may be involved in wagering on sports (including the availability of remote wagering to place wagers) and the systems that can be put in place in Las Vegas to address issues/deficiencies. Finally, we perform an economic analysis of the expected results associated with such a move.

1.8 Remote Wagering

To understand the potential change in sports wagering incentives from relocation to Las Vegas, it is useful to understand the influence of remote wagering in comparison to the size/scope of regulated wagering in and out of Nevada. Today, illegal/quasi-legal sites host the majority of sports wagering across the world. The International Centre for Sport Security has summarized the globalization of this phenomenon:

"More than 8,000 operators offer sports bets in the world. Most of these operators – roughly 80% – are established in territories applying a low rate of tax and few inspections (Alderney, Gibraltar, Isle of Man, Malta, the Cagayan province in the Philippines, the Kahnawake territories in Quebec, Antigua and Barbuda, Costa Rica, etc.). Most of these operators offer their bets all over the world, often without obtaining the national authorisations required in the countries of their clients"

249 The FinCEN casino-specific Web site also provides the casino industry with BSA compliance information and is available at http://www.fincen.gov/financial_institutions/casinos/.
Among athletes, the available evidence suggests that internet/mobile based wagering is continuing to become an increasingly important medium, though most methods of sports wagering appear to be growing to some degree. In a study of more than 23,000 NCAA Division I athletes, Paskus, Derevensky, and Temcheff found that internet/mobile wagering was the second most frequented method for sports wagering (behind bets with friend), with 33.7% of sports wagers placed via that medium in the past year.  

Table 3: Method used for placing sports wager among male NCAA athletes.

<table>
<thead>
<tr>
<th>Among those betting sports at all, during year, used that method at all</th>
<th>Males 2008</th>
<th>Males 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bet with friends</td>
<td>92.7%</td>
<td>91.5%</td>
</tr>
<tr>
<td>Bet with a student bookie</td>
<td>7.8%</td>
<td>8.4%</td>
</tr>
<tr>
<td>Bet with an off-campus bookie</td>
<td>7.5%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Bet via internet or phone/text</td>
<td>26.3%</td>
<td>33.7%</td>
</tr>
<tr>
<td>Bet at a casino, sports book, lottery</td>
<td>18.5%</td>
<td>20.9%</td>
</tr>
<tr>
<td>Bet through an intermediary</td>
<td>6.7%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Remote wagering has completely changed the economics of the sports wagering industry. In a 2012 publication, Forrest noted that the emergence of internet-based sports books has significantly reduced the average cost of wagering. Similarly, the ICSS (2014) noted that:

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“Twenty years ago, the Italian Totocalcio operator, the worldwide leader in sports bets during the 1980s offered return rates capped at 50%; today, the main online betting operators, in strong competition, offer rates superior to 90% with some reaching 99%.”

These rates are much more competitive than rates generally available at Nevada sports books, since the latter books must pay tax on gross gaming revenue, generally have higher overhead, and are subject to substantial regulatory procedures. This reduction in price both increases the amount of liquidity in the market and makes smaller advantages from inside information more profitable. As described by Forrest, this has shifted most fix-associated wagering to remote sites:

“...all recent large scale fixing is known, from the evidence in the cases which have come to light, to have involved wagers being placed in Asian markets where transactions are effectively anonymous... Attempts to reduce liquidity by imposing restrictions in domestic betting markets may, if anything, prove counter-productive. For example, if certain bet types are prohibited, or if domestic operators are constrained to offer ‘unattractive’ odds, serious bettors, who are responsible for a disproportionate share of volume, may shift their activities to the international market, further enhancing liquidity in the part of the market where regulatory supervision is weak or non-existent. This appears to be the opposite of what is needed. There is a prima facie argument for improving choice and value for bettors willing to trade in a supervised environment because, where they do so, this will reduce liquidity in the unsupervised sector.”

One of the author’s key points is that high liquidity is useful for match fixers, as it allows for larger wagers to be placed without arousing suspicion. While this may appear to make Nevada a target, Forrest also notes that it is important for fixers to be able to make wagers without regulatory supervision. This explains the popularity of remote wagering in many Asian countries, such as China and India, where sports betting is prohibited and faces little to no regulation.

To provide context for this liquidity, a 2012 study by the “Institut de Rérelations Internationales et Stratégiques, stated that an agent could safely bet €200,000–300,000 on a Belgian Second Division soccer match (a relatively small event).

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Scholars believe that illicit online wagers – arising from the lack of a legal option, but not directly associated with fixing – are contributing to the potential for corruption. Sports economists Humphreys and Perez have suggested that expansion of regulated gambling in North America would help curb both illegal wagers and fix-associated wagers, due to reduced liquidity:

Two groups would clearly lose from an expansion of sports betting opportunities in North America: illegal sports book makers and “offshore” internet sports books that currently operate in the Caribbean and Central American countries with liberal gambling laws. An expansion of legal sport betting opportunities in the US would reduce the handle at these locations, if the legal opportunities are substitutes for their betting options.257

From a theoretical perspective, expanded wagering in Nevada from team relocation would not have a direct effect on match integrity. In fact, any increase in overall demand for Nevada-based NFL wagering is likely to be due to converted bettors from the unregulated market. As such, small reductions in illicit gambling may occur, if wagers that previously increased liquidity in illegal markets are brought into regulated casinos.

1.9 Further Legal/Regulatory Options to Reduce Risk

Sports integrity programs from as far apart as Australia and Europe have common themes. For example, INTERPOL’s Integrity in Sports program recommends cooperation that includes “partnerships between national football associations and betting organizations as well as public authorities including law enforcement and regulators.”258 Likewise, the Australia sports ministers proposed a model highlighted by sports-controlling bodies entering integrity agreements with the legal betting agencies to exchange information as part of a larger effort for information exchange and cooperation between governments, major sports, betting operators and law enforcement.259 Even the International Olympic Committee (IOC) is looking to legalized sports books as both an ally in the fight against game-fixing but also as a source of funding for such efforts. The head of the IOC has proposed that legislation provide that a portion of gambling revenues go back to the sports organizations to help protect the integrity of the sport.260

Against this backdrop, the cooperative efforts that could be established between the NFL, the gaming industry and the regulators in consideration for allowing a team to locate to Las Vegas are extensive.

259 Ibid.
1.9.1 Integrity Agreements

The sports books and the NFL can enter into integrity agreements to cooperate in monitoring games and sharing data along with suspicious activity reports.261

1.9.2 Suspicious Activity Reports

Nevada sports books already have both federal and state requirements to file suspicious activity reports regarding patron actions. The sports books can share these reports and any augmented reports (such as a duty to report suspected violation of league rules) with the NFL concurrent with reporting to the respective governmental agencies. Britain has a similar requirement for licensed sports books to report suspicious activities or breach of a sporting rule with both the regulator and the sports league.262 The British regulators also maintain a dedicated confidential tip line.263 Between April 1, 2014 and March 31, 2015, the British gambling authorities received 199 cases of suspicious betting activities, with 151 of these reported by the licensed sports books.264

1.9.3 Additional Information Sharing/Early Warning Systems/Forensic Reviews

Nevada sports books have recorded data on every wager made at their locations. If this data were collected and shared, it could provide a valuable tool for detection of game-fixing and point shaving. Data analysis is valuable in two major ways. First, early warning systems based on irregular betting patterns can detect possible game-fixing and point shaving in real time. Second, forensic review of historic data can uncover “relationships that might be evident from consideration of thousands of contests and the betting markets even though no individual incident was so exceptional as to justify cancelling all transactions.”265

A statewide system of sharing information between the sports books and the NFL along with the use of early warning systems can provide a significant mechanism for detection. This system could be similar to that used by ESSA, a European organization made up of licensed land-based and online operators. ESSA has an information-sharing agreement with major


262 Section 15.1 of the Licence Conditions and Codes of Practice (LCCP) requires licensed betting operators to provide the sports governing bodies with information related to a breach of a rule of the sport governing body, Gambling Commission. (2013, April). Retrieved from http://www.gamblingcommission.gov.uk/Gambling-sectors/Betting/Operating-licence-holders/Information-that-must-be-provided/Reporting-suspicious-bets.aspx


sporting bodies and regulators. Its early warning system assembles and identifies irregular betting threats based on millions of traceable wagers provided from the sports operators’ database. The 148 alerts in 2013 resulted in 30 suspicious betting reports being filed with the relevant sporting bodies and regulatory authorities. A sports book operator licensed in Europe described its in-play NFL betting model as a complex system undertaking 3.5 billion calculations per game, allowing them “to compare bets struck with what is actually happening during the game” and therefore to track price movements “before and after bet placement.” The key to the effectiveness of the system is information sharing under memorandums of understanding with more than 400 sports book operators that not only share data but also report suspicious activity.

Odds monitoring is not without limitations. The operators and the enforcement arm do not have information from the vast illegal market, where most game fixers will seek liquidity and protection from detection of their identities. As one commentator noted: “Contrary to their financial market counterparts, these alert systems do not have access to betting volumes. In these conditions, it seems difficult to go beyond an advanced state of suspicion.” Second, the odds tracking will not reflect wagers that the sports book rejects because they are suspicious. These will need to be detected through suspicious activity reports. Nevertheless, Nevada sports books could still share unusual line movement and alerts from foreign operators on NFL games that are the regular part of the sports books’ monitoring for their betting integrity.

1.9.4 Special Integrity Unit

Nevada could authorize and assign dedicated agents or a unit within the Enforcement Division of the State Gaming Control Board to work on combating game-fixing. A Special Integrity Unit would be particularly important since low priority is given to sports gambling and


269 Carpenter, supra note 80.


271 See e.g., Bozkurt, supra note 261.

272 Ibid.
related crimes by state and local law enforcement. This unit could be similar to Great Britain’s, where a dedicated Sports Betting Intelligence Unit possesses powers to both void bets and prosecute offenders.273 A Nevada-based Special Integrity Unit can have specific authority including (1) police investigation powers including free access to all sports book data and employees, the right to interview witnesses, subpoena power over non-licensees, (2) police intelligence powers, (3) technology and personnel to conduct data review and analysis, and (4) the power to recommend or bring disciplinary or criminal prosecutions.274 The Special Integrity Unit could support both the leagues’ and the sports books’ own prevention and deterrent efforts by monitoring betting activities of key individuals.275

1.9.5 Review of Specific Wager Types

Nevada could adopt regulations that restrict certain types of wagers on NFL games. Two jurisdictions, France and Victoria, Australia, give the sports leagues the right to determine which events sports books can accept wagers on -- and the type of wagers that they can accept.276 Much of the concern regarding the events on which legal bookmakers can accept wagers does not apply to the NFL. These are directed at prohibiting wagers on games in minor leagues where the teams may not have a sports organization to monitor integrity and the results may not be widely publicized.277 In the most extreme cases, bookmakers and bettors were conned into wagering on games that were not even played. This rule is meant to limit the wagering on games least likely to have integrity issues because the athletes are fairly paid, the scrutiny of the competition is intense and the sports organization has a commitment to integrity. A European Parliament Resolution on Online Gambling (September 2013) promotes a ban on wagering on “negative events” such as penalties.278 Another type of ban could be against wagering concerning events that are not based on athletic performance, such as the flip of the coin in football or the game attendance figures. To assist with these reviews, Nevada-based stakeholders should consider a new regulation or law stating that any wager in excess of a certain amount (e.g. $5,000) could be made only through a documented account – via “account-based wagering.” There could certainly

273 The Gambling Commission’s Betting Integrity Decision Making Framework, supra note 263.


275 Ibid.


be an allowance for casual betting activity (the simple, low-level, over-the-counter transactions), but account-based wagering could be reasonably mandated over a span of time.

1.9.6 New Criminal Sanctions

Finally, Nevada could adopt new laws and enforce existing laws against illegal or corrupt wagering. It could create harsher criminal sanctions than those currently on the books for persons involved in game-fixing or point shaving. These enhanced laws may provide a better forum for corruption related prosecutions. Nevada could also use the Special Integrity Unit to help enforce laws against the illegal internet betting sites.

1.10 The Microeconomics of Sports Wagering

While it seems that, in general, a flow of money to regulated Nevada sites (however small) would do more good than harm in addressing match fixing, the more important question is whether there would be a marginal increase in match fixing if a team relocated to Las Vegas. Forrest provides a useful supply/demand model of match fixing to understand these complicated impacts, where the frequency of fixes is a function of suppliers of match fixes (insiders), and demanders of match fixes.

The demand for match-fixing may come from several different sources. It may be internal (i.e., the player, referee, or other sporting organization member), but Forrest (2013) notes that all major recent cases of match-fixing have originated from external bettors. Demand for fixes will be related to one of three key factors:

- Market liquidity
  - i.e., higher volume events allow for lower risk of detection and lesser chance of shifting odds in response to the wager
- Risk of detection
  - i.e., poor detection by sports books, regulators, or law enforcement will increase demand
- Punishment for being detected
  - i.e., weak punishment by sports books, regulators, or law enforcement will increase demand

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279 Carpenter, supra note 80.

280 See e.g., Bozkurt, supra note 261.

281 Forrest and Simmons (2003) previously described a model where the decision to engage in match fixing is made by comparing the expected gain with the expected loss, and found that this assumption of rationality fits real-world behavior well.

On the supply side, many different potential insiders can provide information or a strategic ability to affect game-related outcomes, each with different incentive structures and abilities to influence events. The expected gain to the insider is the bribe/incentive offered, which is weighed against the likelihood that the fix can successfully be executed. The expected loss is a function of the likelihood of being caught, punishment if caught, the value of performing poorly (loss of performance-related pay, glory, or prize money), and the psychological cost of having betrayed the sport.

Insiders supplying match fixes are described as, potentially:

- Players
- Referees
- Coaches
- Medical staff
- Facility staff

Several circumstances can affect the willingness of an insider to supply a fix. These circumstances can be broadly categorized into four areas: detection, punishment, loss of compensation, and psychological costs. To elaborate, the probability of an insider being willing to fix a match is increased if:

- Detection risk is low
  - e.g., poor detection by sports books, poor detection by leagues, plausible alternative explanations for poor performance
- The punishment for being detected is low
  - e.g., low legal penalties, low league penalties, low social penalties (such as loss of goodwill from fans)
- The loss of performance-related pay, glory, or prize money is low
  - e.g., low relative salary, limited incentive structure/long-term contracts, lesser popular sports

282 The authors identify a 1997 incident where stadium technicians were found to have accepted payments to make the lights fail, and cause several games to be cancelled.

283 Forrest notes that fixing of games is much more likely in smaller leagues with lower compensation: “…evidence from the criminal trials concerning corruption in European football where the highest frequency of fixes has been in the second tiers of national leagues and in minor national leagues, such as that of Finland.” Forrest, D. (2013). Match fixing: An economics perspective. In M. R. Haberfield & D. Sheehan (Eds.), Match-fixing in international sports, existing process, law enforcement and preventative strategies (pp. 177). Switzerland: Springer.

284 Less strategic insiders are often contacted for information, despite not having as much direct effect on outcomes. In a recent study administered to 453 NCAA Division I Athletic Trainers (ATCs), Mathner, Martin, Carroll, and Neal found that 8.1% of ATCs stated they were aware of an ATC at their institution and 8.5% at other institutions, who were contacted by an outside source to share the condition of an athlete and/or team. 15% of ATCs stated they placed bets on professional and/or college sports. No ATCs stated that they had bet on one of their own
Humphreys and Perez note, “Prior to [the NBA Donaghy scandal], no allegations of game-fixing related to gambling have been made in the four major professional sports leagues in North America in some time. College sports, on the other hand, periodically experiences episodes of game-fixing. However, NCAA athletes receive no compensation beyond tuition and room and board, providing NCAA athletes with an incentive to engage in this behavior.”

- Psychological cost of having betrayed the sport are low
  - e.g., pre-existing resentment of sport/league

To understand the risks of relocation, we therefore need to understand how each of those factors changes upon a move to Las Vegas. An important note is that we are not examining the expansion of sports gambling, but rather the relocation of a sports franchise to a sports gambling market. This is a subtle but important distinction. The question in this study relates not to the effect of sports wagering on NFL stakeholder ethics, but more simply the effect of a change in access to the stakeholders based in or visiting Las Vegas.

When considering the change in risk, we consider whether being located in Las Vegas changes any of the influences on supply or demand of match fixes. Table 4 describes the likely change in the demand for match fixing, given relocation to Las Vegas.

<table>
<thead>
<tr>
<th>Table 4: Expected change in the demand of match fixing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externally Solicited</td>
</tr>
<tr>
<td>Market Liquidity</td>
</tr>
<tr>
<td>Increased Demand</td>
</tr>
<tr>
<td>There may be a small increase in demand, due to the proximity of casinos and suppliers of fixes, but nearly all wagers associated with fixing are likely to remain in the underground economy.</td>
</tr>
<tr>
<td>Risk of detection</td>
</tr>
<tr>
<td>Decreased Demand</td>
</tr>
<tr>
<td>Detection risk in unchanged for most externally solicited fixes (wagered through unregulated channels), but wagers in casinos would be at a higher detection risk.</td>
</tr>
</tbody>
</table>


Overall, the available evidence suggests that the relocation is likely to have a small effect on reducing match fixing -- or no effect. While there may be a positive effect on market liquidity due to the convenience of access in Las Vegas, most match fixing-related wagers are more likely to continue through the underground economy. The increased risk of detection in Las Vegas, which affects both the demand and supply of match fixes, is directionally expected to reduce the size of the match fixing markets.
Table 5: Expected change in the supply of match fixing

<table>
<thead>
<tr>
<th>Risk of detection</th>
<th>Players</th>
<th>Referees</th>
<th>Coaches</th>
<th>Medical Staff</th>
<th>Facility Staff (incl. Front Office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Supply</td>
<td>While convenience of access increases, Nevada has a more rigorous regulatory structure than any prior mechanism (e.g. internet) used for placing wagers.</td>
<td>Decreased Supply</td>
<td>While convenience of access increases, Nevada has a more rigorous regulatory structure than any prior mechanism (e.g. internet) used for placing wagers.</td>
<td>Decreased Supply</td>
<td>While convenience of access increases, Nevada has a more rigorous regulatory structure than any prior mechanism (e.g. internet) used for placing wagers.</td>
</tr>
<tr>
<td>Punishment</td>
<td>Unchanged Supply</td>
<td>Punishment by law enforcement and the league are similar in both markets.</td>
<td>Unchanged Supply</td>
<td>Punishment by law enforcement and the league are similar in both markets.</td>
<td>Unchanged Supply</td>
</tr>
<tr>
<td>Loss of performance related pay/glory</td>
<td>Unchanged Supply</td>
<td>Incentives to perform well remain the same.</td>
<td>Unchanged Supply</td>
<td>Incentives to perform well remain the same</td>
<td>Unchanged Supply</td>
</tr>
<tr>
<td>Psychological costs</td>
<td>Unchanged Supply</td>
<td>Evidence of behavior suggests being closer to a regulated market may be useful for managing behavior, even beyond the immediate reach of the regulators (see note).</td>
<td>Unchanged Supply</td>
<td>Evidence of behavior suggests being closer to a regulated market may be useful for managing behavior, even beyond the immediate reach of the regulators (see note).</td>
<td>Increased supply</td>
</tr>
</tbody>
</table>

Note: The available evidence of behavior suggests that being closer to a regulated market, with sufficient controls for identifying unscrupulous behavior, may be useful for managing behavior, even beyond the immediate reach of the regulators. A range of literature around unethical behavior by Dan Ariely and his co-authors has provided insight into the types of behaviors that need to be reinforced or stigmatized. In particular, developing a culture where unethical acts are reprimanded is particularly important. As noted by Gino, Ayal, and Ariely, “the findings suggest that peer influence is an important factor in unethical behavior…relatively minor acts of dishonesty by in-group members can have a large influence on the extent of dishonesty, and that techniques that help to stigmatize the bad apples as out-group members and strengthen the saliency of their behavior could be...
useful tools to fight dishonesty.”286 Those experimental findings are consistent with self-reported information from over 23,000 NCAA athletes.287 Among male athletes, the two most effective ways stated to influence student-athletes not to wager on sports are influences from 1) a coach, or 2) teammates. This may be particularly important in the sports wagering sub-culture where, as we described, the majority of wagering occurs in unlicensed and unregulated venues. Unethical behavior has been shown to spread among athletes. Gould and Kaplan provided strong evidence that team members of Jose Canseco, the onetime professional baseball player who stated publicly that he used steroids, were much more likely to use performance enhancing drugs up until 2003, when drug testing was implemented.288 None of 30 other comparable players from the same era had a similar effect.


Psychology and Public Health: Disordered Gambling Considerations

In this section, we provide an examination of the potentially unique dimensions of gambling disorders that might arise should a team operate in Las Vegas. Here, we begin by defining the disorder, and then we explore the emerging literature on gambling exposure. Next, we apply these scientific findings to NFL contexts, and conclude by examining the support services that might address these concerns. In general, this research suggests that the relationship between exposure to gambling (for instance, among new NFL players residing in Las Vegas) and gambling disorders is more complicated than previously thought.

1.11 Gambling Disorders

The phenomenon commonly called problem gambling has been in the diagnostic books since the 1980s, but our understanding has evolved significantly (and scientifically) since then. The most recent diagnostic description of disordered gambling lays out the following characteristics:

“Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:

i. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
ii. Is restless or irritable when attempting to cut down or stop gambling.
iii. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
iv. Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).

v. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
vi. After losing money gambling, often returns another day to get even (“chasing” one’s losses).

vii. Lies to conceal the extent of involvement with gambling.

viii. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.

ix. Relies on others to provide money to relieve desperate financial situations caused by gambling.”

Most macro-level analyses of this disorder focus on prevalence rates – i.e., the percentage of the population that is likely to have a gambling disorder. In this section, we will examine whether an increase in problem gambling disorders would occur due to a relocation of a NFL franchise to

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Las Vegas, and whether NFL employees (including athletes) are at a higher level of risk for developing a gambling-related disorder.

1.12 Exposure to Gambling and Adaptation to Gambling Disorders

When considering the public health and addiction impacts of increased exposure to casino gambling, stakeholders have long wondered about the effects that gambling availability might have on the prevalence of problem gambling. For many years, researchers could only speculate on the true public health impacts of exposure to gambling; however, today the field benefits from a more nuanced and science-based understanding, grounded in published research. Today, the research suggests, at the very least, that the relationship between exposure (for instance, among new NFL players residing in Las Vegas) and gambling disorders is hardly linear – and as noted throughout this report, exposure is rarely novel anymore in the U.S., as gambling in some form is now legal in nearly all states.

Initially, the understandable belief was that increased exposure to gambling would lead to linear increases in problem gambling prevalence – in essence, more exposure would lead to more problem gambling. While many scholars noted the limitations of this early era’s research tools, the field remained concerned and somewhat convinced that exposure and problem gambling were inexorably correlated. More recently, as researchers have had access to more, better data, and as they have applied more sophisticated research techniques, a subtler relationship has emerged.

Some have pointed out that access itself is difficult to define, and that the development of a disorder is usually multifaceted. In fact, as is the case with many health problems, at least three factors can interact and influence the development of a gambling disorder: the host (the individual), the agent (the gambling game) and the environment (which itself is complex, and might include a variety of gambling environments ranging from the simple – like a lottery ticket – to the complex – such as those found in massive risk-taking markets like stocks). Meanwhile, exposure has also been more precisely defined, with more recent work exploring dimensions of distance, duration, and type of exposure.


In the end, these tools and perspectives have coalesced into an understanding that the available evidence points to multiple types of disordered gambling trends once a person (or region) is exposed. In fact, measurements of increasing, stabilizing, and decreasing prevalence rates have been documented in the literature.\(^{293}\) However contradictory (or confusing) this may seem, this observation is understandable when we take a step back to think about the ways in which this disorder is similar to many other health problems. Sophisticated analyses have led to an understanding that gambling disorders look like any number of other health problems associated with exposure – in that immediately after exposure, increases in afflictions are observed, but these spikes eventually slow, and rates can even decline over time.\(^{294}\)

With disordered gambling, vulnerable populations are likely to develop gambling problems at first exposure (leading to a spike in prevalence). At this point the gambling problem has a problem, in that after it infects the vulnerable, the only people it has left to infect are the less vulnerable. Simultaneously, another “problem” arises: people begin to learn about health risks (perhaps through prevention and education programs) and potentially become less vulnerable themselves. In the end, this means that disordered gambling prevalence rates can and do decline after exposure.\(^{295}\)

This trajectory is summarized in Figure 3:


\(^{294}\) Declines can happen for a variety of reasons: the sick can get healthy, the vulnerable can learn about prevention, and/or the non-vulnerable can remain unafflicted.

Some researchers note that at a macro level, the stabilization/decline trajectory has support, as rates have stabilized and/or declined during a period of significant gambling expansion. For example, a national 1979 study identified a lifetime rate of 0.7% – and more recent studies place these figures at 0.4% to 0.6%.  

As Shaffer and Martin note:


...contrary to predictions derived from the exposure model, the prevalence of PG has remained stable or been influenced by adaptation during the past 35 years despite an unprecedented increase in opportunities and access to gambling...consistent with the exposure model, observers often identify increases in the rate of gambling related problems soon after new opportunities to gamble become available. However, consistent with the adaptation model, research also shows that the prevalence rate of gambling disorders only increases in the short-term; over time the rate stabilizes and then tends to decline.

The recently developed “regional exposure model” (REM) assists in better understanding the ways in which exposure in gambling-heavy areas contributes to gambling problems, and how these dynamics might affect gambling (and gamblers) in Nevada.298 The REM quantifies key variables (such as “dose,” “potency,” and “direction of gambling availability”) into a standardized index, the Regional Index of Gambling Exposure (RIGE). These scholars then examined problem gambling rates using this index.299 In this analysis, they noted that Nevada had the highest exposure score on the RIGE index. Based purely upon exposure, we might expect Nevada to have eight times the normal problem gambling rates. Instead, however, the state’s prevalence rates fall between 0.3–1.0%, which suggests that exposure alone does not explain gambling disorders. Of course, one plausible explanation here is that Nevadan have adapted, and that the negative effects of gambling have stabilized (and/or declined).300

1.13 Problem Gambling in an NFL Population

Overall, there is no scientific reason to believe that problem gambling related issues will be higher among an NFL population than in the general population. While no studies exist that examine problem gambling among high-level athletes or other members of professional athletic organizations, a few studies have examined student-athlete related populations.

For instance, Weinstock, Whelan, Meyers, and Watson301 noted that “student-athletes reported similar rates of gambling frequency, use of a bookmaker, and disordered gambling as


As shown in Table 6, the 2012 estimate of pathological gamblers among male NCAA athletes was 0.7%. This is a rate similar to the general population. If these populations mature in a similar way through adulthood, it seems likely that we would not observe any unique vulnerability among NFL team members.

### Table 6: Gambling Severity among Male NCAA Athletes (DSM-IV Classification)

<table>
<thead>
<tr>
<th>Category</th>
<th>2004 Study</th>
<th>2008 Study</th>
<th>2012 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-gambler</td>
<td>29.3%</td>
<td>33.7%</td>
<td>42.3%</td>
</tr>
<tr>
<td>Social gambler</td>
<td>66.7%</td>
<td>62.5%</td>
<td>55.8%</td>
</tr>
<tr>
<td>At-risk gambler</td>
<td>2.9%</td>
<td>1.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Probable pathological gambler</td>
<td>1.1%</td>
<td>2.0%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Among a wider population interested in sports betting, the relationship to gambling disorders is mixed. As of 2012, there were 67 publicly available problem gambling prevalence studies for U.S. states. Among those studies, 16 found a positive correlation between sports betting behavior and problem gambling, second only to horse/dog racing among gambling forms. There were two studies conducted in Nevada during that period, and neither found a relationship between sports betting participation and problem gambling.

### 1.14 Support Services

While there appear to be no population-wide concerns about a change in gambling disorders, several support programs can still be provided for athletes and related stakeholders to minimize potential harm. In addition to general support resources for problem gamblers, Miller et al. provided seven recommendations addressing the potential for gambling addiction among athletes. They are:

1. Provide screening for athletes as a part of routine annual physical exams that address other clinical issues, including addictive disorders and major affective disorders.
2. Provide a zero-tolerance policy for gambling and other forms of addictions and provide readily available counseling for athletes.
3. Develop a comprehensive Code of Conduct for athletes that specify standards, expectations and guidelines for activities such as gambling behaviors.
4. Devise methods and programs that promote prevention education training modules similar to those that address orthopedic and sports injury prevention in the overall life of the athlete.

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303 Ibid.
5) Evaluate the role of sports boosters, particularly with regard to their ability to be role models and influence the impact of athletes on competitive sport.

6) Provide athletes with the awareness of all team policies related to health promotion, and disease and disorder prevention including the availability of professional consultation and referral for addictive-related disorders.

7) Develop and utilize algorithms and pathways for care in providing standardized approaches to addressing addictive disorders in athletes\textsuperscript{304}

As we will discuss in our conclusions and recommendations section, it is our view that these represent reasonable standards to embrace should a team operate in Las Vegas – and that many of these suggestions have long since been adopted, or should be, regardless of whether a team operates in Las Vegas. By creating awareness around general support resources for problem gamblers, and by providing resources similar to those recommended by Miller et al., incremental health concerns from gambling disorders can be mitigated.

As is the case with many fields associated with gambling, this is an area in which Las Vegas is experienced; in fact, the city hosts a sizable treatment, awareness, and recovery community. Las Vegas’s Problem Gambling Center (PGC) was launched in the 1980s by Dr. Robert Custer, the “founding figure” of problem gambling treatment, and then handed over to Dr. Robert Hunter, who has treated problem gamblers for over thirty years. The Center is consistently highlighted in the state’s Nevada Problem Gambling Project as a model treatment facility, and generating strong evaluations and recovery metrics from current and past clients\textsuperscript{305}.

Meanwhile, the city’s Gamblers Anonymous (GA) community is large and active, with several dozen meetings per week. Finally, the Nevada Council on Problem Gambling covers everything outside of treatment – from awareness to prevention to a call center – and its Executive Director, Carol O’Hare, recently won the National Council on Problem Gambling’s highest service honor\textsuperscript{306}.

What is clear, then, is that the city of Las Vegas not only hosts a large gambling industry, but also is home to a range of established services for problem gamblers. This status should give hope to those with gambling problems and help placate the fears of those who worry that gambling problems may emerge should a team operate in the city.


\textsuperscript{306} Disclosure: two of this study’s authors (Bernhard and Cabot) sit on the Nevada Council on Problem Gambling’s Advisory Board.
Gambling disorders are serious health disorders and NFL athletes are hardly immune – as the sad tale of Art Schlichter reveals.\textsuperscript{307} These disorders can be devastating, affecting individuals, families, and organizations (including sports organizations). As such, any league contemplating a move to a locale with gambling access should invest in strong prevention, education, and treatment programs – ideally with a sound research-based foundation, to ensure that these are scientifically driven and monitored for effectiveness.

Other Sociological and Criminological Considerations

This section examines common non-gambling-related concerns that stakeholders articulate when discussing the placement of a major professional sports franchise in Las Vegas. While the vast majority of concerns about potential Las Vegas professional sports teams pertain to legalized sports betting,\textsuperscript{308} other worries have also been expressed and merit further discussion. Most of these concerns, it seems, pertain to potential problems with the allegedly unique aspects of the Las Vegas community. Given the city’s marketing campaigns suggesting that the city is a place where trouble can be easily found, the concern is understandable. Emerging empirical data can help determine the degree to which these concerns are legitimate.

The study of Las Vegas as an urban, cultural, business, criminological, and community phenomenon has long been popular, though studies and reports have often been conducted in a less than scientific fashion. As the urban sociologist Michael Ian Borer\textsuperscript{309} notes, even academics succumb to the allure of the extreme over the accurate when describing Las Vegas, as authors of all stripes (academics, journalists, and fiction writers alike) tend to prefer the “interesting” to the “true.” In doing so, these critics typically:

“...waver between two extremes: an uncritical, obsessively populist boosterism that depicts Las Vegas as a pioneer of new urban forms and sustainability, and a nostalgia-driven, elitist ethnocentrism that confounds moral judgments and aesthetic tastes, proclaiming Vegas to be the pinnacle of postmodern simulation— the city that is not a city, where style trumps substance.”\textsuperscript{310}

More esteemed commentators are not immune to this polemic tendency. In 1984, Chief Justice of the U.S. Supreme Court Warren Burger was invited to speak at the annual American Bar Association conference – a conference that happened to take place in Las Vegas. At first,


\textsuperscript{309} Borer has also conducted academic analyses of stadia and professional sports teams; he has authored the definitive academic work on Fenway Park, Farewell to Fenway.

Burger bristled at the suggestion that he appear, declaring that "I, for one, will not be there because it’s an unsavory and unsuitable place for me to speak." Ultimately, Burger did in fact deliver the keynote.\footnote{Green, M. S. (2011). Sociologists! UNLV Gaming Research & Review Journal, 15(2), 121-122. Retrieved from http://digitalscholarship.unlv.edu/grrj/vol15/iss2/12}

Professional sports leagues have also long expressed a strong skepticism about coming to Las Vegas for business purposes. In this section, we will examine the key claims of this skepticism, in an effort to illuminate – as scientifically as possible – the contours of these non-gambling concerns. These concerns typically center around two major issues:

1) The concern about a lack of local culture and community.

2) The concern that there is more non-gambling trouble to be had in Las Vegas than in other cities (including cities with major sports franchises).

While the former might contribute to depressed ticket sales,\footnote{At least among local residents; analyses conducted by the Montreal Expos (when that team contemplated moving to Las Vegas) suggested that the team would sell 35-45% of its tickets to tourists, who today number 41 million on an annual basis (see, e.g., Thomsen, I. (2004, December). Why not Vegas? Sports Illustrated, 101(23). Retrieved from http://www.si.com/vault/2004/12/13/8215517/why-not-vegas} the latter would almost certainly contribute to scandals, disrepute, and possibly detrimental economic impacts for teams and leagues.

\section*{1.15 Lack of Culture and Community}

“I hate Las Vegas.”

-- Cultural Critic Sharon Zukin\footnote{Dickens, D. R. (2011). Is Las Vegas a ‘real’ city? UNLV Gaming Research and Review Journal, 15(2), 119-120. Dickens indicates that this quote was from a video presentation at the 2011 American Sociological Association Annual Meeting in Las Vegas.}

One of the criticisms aired most frequently about Las Vegas pertains to a lack of community culture – by which, many critics seem to mean a lack of “high” culture. The city long lacked a legitimate arts scene or major performing arts center,\footnote{Littlejohn, D. (1999). The real Las Vegas: Life beyond the strip. Oxford, NY: Oxford University Press.} for instance, and the fact that it boasted no major sports team seemed a natural extension of this community dearth.\footnote{Muecke, M. (2001). Welcome to fabulous Las Vegas: Contestations from gambling to water rights. Presented at the Architecture Conference Proceedings and Presentations West Regional Conference.} In the past decade, a First Friday event has attracted visitors to join an increasingly vibrant downtown arts community, which includes an “Arts District” that has spilled over into adjacent sections of the
area. And with its new Smith Center for the Performing Arts, the city now boasts a $245 million performing arts venue that has been called “awe-inspiring” and a “technological marvel.”

Of course, the city still lacks a major sports franchise, save the occasional visit of teams for exhibitions or one-off events like the temporary relocation of the Oakland A’s while their stadium was being renovated, or the Utah Jazz’s handful of “home” games at the then-newly-opened Thomas and Mack Center in the mid-1980s. The implied causal direction here is unclear: after all, it could be that a lack of local community and culture discourages owners of sports franchises to set up shop in Las Vegas, and/or it could be that the lack of culture is caused by the lack of a sports franchise (among other factors).

In either case (and even if neither is the case), a brief examination of culture and community – or lack thereof – seems merited here.

Many criticisms of Las Vegas are also directed at several other communities that currently have professional teams – in particular, communities that tend to be located in the western and southern U.S. For instance, one common criticism is that the city is indisputably transient. This could lead to trouble for local franchises seeking a rabid fan base, as a team in a city of transients may well find large numbers of locals supporting visiting teams. This is a common criticism, in fact, of teams in retiree-heavy Arizona or Florida, where the large population of retirees contributes to major groups of fans at, say, Diamondbacks games rooting for the visiting Chicago Cubs. In fact, this trend actually began with the relocation of the Brooklyn Dodgers to Los Angeles in 1958, and the conscious decision of the team’s broadcasters not to root for their team on air – on the grounds that the majority of the fans in southern California had relocated to the area, and hence had hometown loyalties to the visiting teams that the Dodgers were playing.

Transience also can create economic costs. Las Vegas’s high foreclosure rates during the Great Recession were devastating (and the highest in the nation at various points). However, the foreclosure phenomenon in Las Vegas was not altogether or qualitatively different from the other states that shared the dubious claims to highest-in-the-nation foreclosure rates – specifically, Florida, California, and Arizona (all of which, of course, have multiple professional sports teams).

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Other critics lament Las Vegas’s many gated communities, and this subject has recently launched a fairly sizable academic field of its own. Gated communities, critics allege, can hinder the type of social cohesion found in more open and accessible spaces, and hence it follows that this might contribute to a lacking of the kind of social cohesion that coheres around local sports teams. Typically, however, extant academic analyses note that the same aforementioned states (Florida, California, and Arizona) have also seen a proliferation of gated communities over the past generation or so, and that upon closer scientific examination, Las Vegas’s gated communities look much like those found in places like Seattle. Therefore, while it appears clear that the city has a housing structure with plentiful gated communities, this does not appear to be a sufficient condition for professional sports franchise failure.

The city that Las Vegas is compared with most often in urban studies circles is Los Angeles. Both are cities whose economies are heavily driven by the recreation and entertainment sector, both attract passionate accusations of superficiality and dysfunctional hyper-modernism, both have a heavily suburbanized population in which questions often arise about community, and both have experienced substantially and speedy growth as part of the rise of the Sunbelt since the end of World War II.

The urban historian Greg Hise summarizes a number of interesting parallels between the two:

“For two decades I have been studying a city people either love or love to hate. Those in favor, the advocates, have trumpeted climate, creativity and innovation, including a re-invention of self. Their counterparts, the detractors, decry an irrigated desert, a city that’s crass, brash, and vulgar, where people conflate surface with substance. My reference is to Los Angeles, not Las Vegas, though a recent move to Nevada has brought to my attention similarities in the rhetoric and tropes people rely on when they talk about these cities... when it comes to Los Angeles and Las Vegas, few people are undecided.”

A separate academic treatise with a subtitle trumpeting its examination of “The Real Las Vegas” contains dozens of references to these cities’ inter-connectivity, as does Moehring and Green’s definitive history of the city of Las Vegas. These parallels track everything from the


highways and railroads that serve as lifelines between the two cities, to similar challenges with water, to the entertainment pipelines that stretch from Hollywood to Las Vegas, to growth patterns. As Los Angeles receives (re-)consideration as an NFL city, it appears that Las Vegas shares similar strengths, weaknesses, and dynamics.

Meanwhile, historian Hal Rothman’s book *Neon Metropolis: How Las Vegas Started the Twenty-first Century* views the city positively, placing it into broader context among major American cities:323

“As New York once defined the commercial economy and Chicago, the city of big shoulders, epitomized the industrial city, Las Vegas illustrates one of the pillars of the postindustrial, postmodern future. ... It is the place to be as the new century takes shape, for in its ability to simultaneously attract and repel, it characterizes American hopes and fears... [Las Vegas’] constant reinvention, once scorned as flimsy and fraudulent, shaped its transformation from peripheral to paradigmatic and has become a much-envied trait.”

In sum, viewed through certain lenses Las Vegas is less than unique, given that it shares many hypothetically dysfunctional characteristics of other “post-modern” cities (cities with major sports franchises). Meanwhile, some academics find reason to laud the city’s “paradigmatic” and “much-envied” characteristics when compared with other major American cities. What is certainly unique to Las Vegas, however, has to do with the contours of its tourism economy – a topic to which we will turn in the next section.

### 1.16 Trouble: Is there more in Las Vegas?

"If I'm having to take a team to Vegas, I want it to be the second game of a back-to-back, and we fly out right away afterward."

-- NBA Coach Doc Rivers324

Over the years, various professional league representatives have suggested that criminological problems would plague a team in Las Vegas, and would lead to consequent public relations nightmares. On a macro level, this is an empirical question, and one that can be illuminated via existing crime data and research. In this section, we will explore the contours of trouble – defined loosely as criminal activity and related events that could lead to negative public relations – in Las Vegas, viewed through the lens of professional sports.


For a long time, it was assumed that the presence of casinos contributed to an increase in local crime – something that would concern NFL stakeholders, of course, given that Las Vegas hosts more casinos than any other locale in the world. This perspective started to grow more nuanced, however, when a 1985 study emphasized the importance of counting new visitors drawn by casinos when calculating crime statistics, as these individuals can both commit crimes and be the victims of crimes. This early study made key distinctions, noting that while the volume of crime increased in Atlantic City after casinos were introduced, the victimization rate (which calculates the risk for a given individual within the city) actually decreased. Today, this is the approach preferred by academics as well as by the Federal Bureau of Investigation (FBI), which insists that changes in crime levels be examined relative to changes in the population, such as those changes that result from a tourism draw.325

Most studies that have emerged since this seminal work support this same type of calculation. When using these calculations, casinos appear to have crime impacts similar to other events or attractions that draw large crowds – such as a football game. In a 1998 synthesis of research on casinos and street crime by Miller & Schwartz, these authors concluded:

*We have not found here any compelling evidence to suggest that there is something unique about casinos that causes an increase in street crime in the surrounding area. Of course, with increased people traffic, it is entirely likely that the raw number of crimes will go up... if large numbers of new hotel and motel rooms are built, particularly if little security is provided and it becomes known that people are leaving valuables (jewelry, cameras, winnings) in these rooms, then an increase in burglary should not be unexpected. None of these arguments, however, is different from those for resort areas and tourist attractions... So far, there is no reason to believe that gambling casinos are different from any other tourist attraction in this regard.*326

Since this synthesis, more evidence has emerged in support of this conclusion. A 2010 study deployed several controls to account for the effects of tourism when studying casinos and crime. In this analysis, certain criminal activities were actually found to decrease in number. Overall, evidence was lacking for the notion that crimes would increase when casinos opened:

*I find very limited support for the proposition that new casinos increase local crime rates. Opening new casinos appears to increase the number of burglaries in the county after a lag of a few years. Opening new casinos appears, however, to


reduce the number of motor vehicle thefts and aggravated assaults. Increased casino activity, measured using turnstile count of casino patrons, seems to reduce rates of larceny, motor vehicle theft, aggravated assault, and robbery.

Other academics have reached similar conclusions, suggesting that casinos are similar to non-casino attractions when it comes to crime:

...while it has been consistently argued by many that casinos generate crime, this latest analysis is yet another empirical verification that casinos venues may not be all that different from non-casino environs in terms of crime prevalence and patterns. Barthe and Stitt provided evidence that casinos may not be deserving of the label ‘hot spots’ for crime.327 Then, Barthe and Stitt further found that casino generated ‘hot spots’ were not very different from non-casino ‘hot spots’ in terms of criminogenic patterns.328

Further building upon this foundation, a 2011 study conducted an interesting analysis comparing areas with casinos to areas with ski resorts, and found that property crime rates in ski resort counties were actually higher than those found in casino gaming counties. Once more, the evidence suggested that where casinos do have an effect, it is similar to that of other amenities that draw large crowds.

These analyses are not limited to the U.S. market. Using a stronger modeling approach than many past studies, two recent articles have focused on crime and casino impacts in Alberta, Canada. Once again, though the evidence was complex, the authors conclude that their work “provides little support for the idea that casinos increased crime in Alberta over this period.” Another group of Canadian researchers analyzed the same market using other data sources and concluded that “legalized gambling likely has a minor or negligible impact” on crime, and even found that “increased legal gambling availability has significantly decreased rates of illegal gambling.”

In sum, while absolute numbers of crimes may increase with any temporary population increase, it does not seem that casinos have the adverse influence on crime rates that was once assumed. If casinos do not seem to constitute a unique criminological influence, then, perhaps more can be learned from looking at “major league” cities and these cities’ relationships with crime. Table 7 examines FBI Uniform Crime Reporting (UCR) data to help illuminate some of


these issues. Table 7 summarizes the crime data from each of the metropolitan areas that host NFL teams and compares those same figures for Las Vegas.\textsuperscript{329}

\begin{footnote}
\textsuperscript{329} Though these statistics have legitimate limitations (see, e.g., Mosher, C., Miethe, T. D., & Hart, T. C. (2010). \textit{The mismeasure of crime}. Thousand Oaks, CA: Sage Publications), they typically represent the best available information on these types of crimes, and scholars frequently use them for comparisons of this nature.
\end{footnote}
<table>
<thead>
<tr>
<th>City</th>
<th>Crime Rate</th>
<th>Violent Crime Rate</th>
<th>Property Crime Rate</th>
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<tr>
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<td>821</td>
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<td>623</td>
</tr>
<tr>
<td>St. Louis, MO</td>
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<td>62</td>
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</table>

At least as these data measure crime, Las Vegas is not a negative outlier in criminological activity. Were Las Vegas to join the NFL tomorrow, the city’s property crime rate would rank as the fifth lowest in the league, its violent crime rate would be tenth lowest, and its overall crime rate would be sixth lowest. Hence, based upon these FBI crime calculations, the city would rank among the safest communities in the NFL.

However, some might reasonably suggest that major sports events (and teams) bring a dynamic that is lost in the aggregation of these statistics. Crime rates produce a snapshot of an entire populace, but do not provide much guidance when it comes to the individual criminological challenges that a pro team might face. A more relevant question may be: “Would Las Vegas be prepared to handle the ostensibly unique policing and security challenges associated with professional sports teams?”

In examining these dynamics, it appears that Las Vegas police agencies, like Nevada gaming regulatory agencies, have benefited from many years of engaging special kinds of challenges. As it pertains to sports team policing matters, the Las Vegas police and security community may even have relevant experience and expertise that extends beyond the standard intimate knowledge that law enforcement in other communities possess. This is because the city has experience with several large and idiosyncratic events, and it has long hosted major sports events with any number of security challenges.

The city’s history with sports events that are relevant to this discussion is fairly extensive. Boxing events have long dominated the local professional sports scene, and the more recent rise of Mixed Martial Arts has also contributed to the city’s reputation as the “Fight Capital of the World.”330 There are many other well-recognized events in Las Vegas each year:

- The Las Vegas Motor Speedway has hosted NASCAR weekends every year since 1998, and according to Las Vegas Events, this event has ranked in the top five for NASCAR attendance in each of the past 10 years.
- The “Super Bowl of Rodeo,” the National Finals Rodeo (NFR) has been held in the city each December since 1985. The most recent edition broke all previous attendance records (with 177,565 total attendees).
- UNLV hosts large college basketball events in a facility (the Thomas & Mack Center and the adjacent Cox Pavilion) that also hosts USA Basketball’s training campus and the NBA Summer League.
- The NBA, NHL, and MLB each host annual preseason games in Las Vegas.

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• The PGA Tour hosts events at Las Vegas courses each fall.

• The nation’s largest professional rugby event (the USA Sevens International Rugby Tournament) is hosted each spring.

• Seven NCAA conference basketball tournaments were held in Las Vegas last year, including five in casino environments.

Furthermore, beyond the scope of these sports events are even larger gatherings like the Electric Daisy Carnival (which drew 134,000 visitors per day in its most recent three-day event) and New Year’s Eve (which poured 400,000 visitors onto the Las Vegas Strip this past year).

The development of an increased NCAA basketball presence has taken place despite the NCAA’s longstanding opposition to gambling. In a recent Washington Post article on this surprising phenomenon, Mountain West Conference Commissioner Craig Thompson actually cited the city’s gaming regulatory environment as a positive. Thompson noted that other NCAA conference tournaments are held in environments where the wagering lines are not monitored – in contrast to Nevada, where these lines are carefully watched via algorithmic and investigative techniques previously described.331

Because of these experiences, this is a field, like gaming law and casino operations, where Las Vegas has actually exported its intellectual capital to other jurisdictions that seek to emulate the city’s successes. Because of the Las Vegas Metropolitan Police Department’s (LVMPD) diverse experience with large crowds, global police forces, intelligence agencies, and other security firms have frequently trained in the city (and sought the LVMPD’s consulting expertise in their own backyards). These entities include the London and New York City Police Departments, as those agencies sought to enhance their own techniques when dealing with large-scale crowds of a nature that Las Vegas frequently encounters. For example, while the Los Angeles Police Department struggled under the weight of the Electric Daisy Carnival when it was held there, by most accounts, the event has been comparatively peaceful during its stay in Las Vegas.332

Many of these entities are interested in Las Vegas’s apparent successes in policing massive New Year’s Eve crowds, and a recent criminological study supports this positive assessment “based on the absence of injuries associated with violence, as well as the limited need for police interference or action within the crowd festivities.”333

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years, this particular event was not handled well by local police, but that the Las Vegas Metropolitan Police department has since developed a proactive, pre-planned strategy that learned from earlier mistakes. In their conclusions, the authors find that “this systematic analysis of twenty-five interventions used by LVMPD suggests that their tactics alter all five dimensions of opportunity as defined by situational crime prevention theory” and conclude by agreeing that while defining “success” can be difficult, this approach has proven “highly effective.”

Part of the reason for this effectiveness is academic – specifically, an academic partnership with the local university. UNLV’s Criminal Justice Department houses the Crowd Management Research Council (CMRC), which has been instrumental in assisting LVMPD in managing crowds safely, relying heavily upon a research-based situational crime prevention approach. Furthermore, the CMRC is also beginning to use innovative new techniques, including drone technology, to help with the types of crowd management issues that arise. As host to one of the only crowd management institutes in the world (one that has met with NFL stakeholders to improve security issues), the city is well equipped as a policing thought leader.

This is not to say that policing problems in the city of Las Vegas are non-existent, as events like the 2007 NBA All-Star Game demonstrate. That event, which sparked a mass conversation on crime, race, revelry, and mass sporting events in Las Vegas, led to 403 arrests (though some debated the degree to which this figure diverged substantially from other weekends with large events in the city). In the end, a piece in Columbia Journalism Review concluded that:

...most of the media — local and national — (said) that the sensationalism of Vegas outweighed the drabness of the All-Star Game, and while there were some problems associated with 300,000 people and a bottomless supply of liquor, for the most part a good time was had by all.

Nonetheless, many still view this weekend as a cautionary tale when contemplating the crime impacts of major sports events in the city. It is unclear what this one-time event means for the longer-term prospects of having a team in Las Vegas, though certainly the slower-burn nature of an extended season is different from a singular event like an All-Star Game. What has become clear is that the All-Star weekend has served as a case study and lesson.

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334 Ibid.
As with gaming operations and regulation, it is not the case that Las Vegas is necessarily any “smarter” or “better” than other jurisdictions when it comes to policing – it is just that the city has learned from frequent experience with more (and often more complex) policing challenges than most other locales. In both policing and gaming regulation, given how often this experiential learning is repeated in Las Vegas, the city seems committed to learning from its own history. The challenges associated with hundreds of thousands of intoxicated visitors over an NBA All-Star Weekend or New Year’s Eve are complex and evolving. Based on the perspective of both local and faraway police agencies, it seems that a “Las Vegas approach” is one that others often seek to replicate.

Of course, the criminological concerns about professional athletes residing and playing in Las Vegas take place at a far more micro level – or more precisely, at the individual level, with crimes that involve individual athletes. Once again, a comparison seems merited, and upon examination, it becomes clear that these kinds of criminal concerns are not limited to Las Vegas.

NFL athletes’ crimes have been under increasing scrutiny of late. A recent CBS News item highlighting 38 “NFL Athletes in Trouble with the Law” revealed that crime locations are strikingly diverse in professional football populations. As has become commonplace in the national media, this story focused on the recent criminal activity of more than three dozen NFL players. It featured incidents that ranged from the relatively minor to the severe, and in doing so highlighted crimes committed in Phoenix, Charlotte, Indianapolis, New Jersey, Massachusetts, Kansas City, New York City, Orange County (CA), Dallas, Mississippi, Florida, Pennsylvania, Oakland (CA), Virginia, Newport Beach (CA), Texas, Atlantic City, Atlanta, Philadelphia, Austin, Minneapolis, Mobile, Cleveland, Tampa, Miami, and Houston. None of the listed incidents happened in Las Vegas.

Professional athletes have certainly run into legal trouble in Las Vegas, as the recent arrest of NHL player Jarret Stoll (on cocaine charges) demonstrates. As is the case with the broader public, Las Vegas is arguably one of the sports world’s favorite vacation destinations. On any given weekend, the city is visited by athletes from virtually every major sports league on the planet. Due to the high profile nature of Las Vegas’s entertainment district, negative events occurring in the city appear to be more likely to be exposed, reported, and clicked upon in news websites – and as such, this kind of “click bait” tendency will be of concern to any team in the city.

Nor are NFL athletes completely immune from trouble in Las Vegas. Most recently and notoriously, O.J. Simpson was arrested for an incident in a Las Vegas casino hotel room, and

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eventually put on trial and convicted. In our conversations with representatives from the Las Vegas Metropolitan Police Department, this incident was highlighted as a positive illustration of a situation that was handled “with professionalism, and set a tone for him as well as other celebrities as to what will and will not be tolerated” by law enforcement in the city.

Whether or not this claim is valid, several observations are clear. First, Las Vegas is experienced in policing entertainment venues – including sports venues. Second, despite common concerns to the contrary, casinos do not seem to pose a unique criminological threat. Third, the city’s crime statistics do not make it an unsafe outlier; by some measures, it appears to have lower than average crime rates, particularly among NFL franchise cities. Fourth, in both gaming regulation and policing, jurisdictions from around the world seek advice from those charged with keeping Las Vegas safe from criminal activity. Finally, we note that while local law enforcement has experience in addressing celebrity-related crime and disruptions, the high profile and public nature of the city is likely to magnify any negative events.

Conclusions and Recommendations

The purpose of this study was to review several important issues that are commonly considered when examining whether Las Vegas is a suitable location for an NFL team. In particular, this report addressed two broad questions:

1) Will the presence of legal sports wagering (and gambling more generally) in Nevada lead to integrity issues for a professional league franchise in Las Vegas?

2) Will operating in Las Vegas lead to unique policing, disciplinary, and/or image issues for a professional league?

The study team approached these topics by first completing a comprehensive review of the relevant research literature on each of these topics, focusing on the ways in which various academic disciplines (business, law/regulation, economics, psychology/public health, sociology, and criminology) provide key research-based findings. Where literature was deficient or did not fully address the intended area of study, the research team corresponded with more informed parties, examined other information sources, and applied their expert judgment as researchers and practitioners with approximately 100 years of cumulative experience in these fields. To further ensure quality, this report has been subjected to a peer review, overseen by an editor of an academic journal with relevant expertise in this field, and including experts both inside and outside of academe.

1.17 Conclusions

Sports integrity is the most prominent concern for the NFL – a concern that is shared, to varying degrees, by other leagues. Las Vegas boasts a sizable legal sports gambling market, and the fear is that this could lead to major integrity issues, such as game fixing or point shaving. Overall, the available evidence suggests that the relocation of an NFL team to Las Vegas is likely to have no effect on the prevalence of game fixing. While the convenience of access to place wagers in Las Vegas provides some small changes in incentives, most game fixing-related wagers are likely to continue to be placed through the underground economy. There is little incentive for criminals to use Las Vegas sports books to place wagers as Nevada has a strong regulatory and enforcement structure in place, characterized by:

1. Strict regulation and accountability of bookmakers
2. Transparent accounting processes
3. Robust minimum internal controls
4. High prices relative to remote/illegal wagering

Due to the increased risk of detection in Las Vegas sports books, which affects both the demand and supply of game fixes, criminal behavior related to game fixing is unlikely to change as a result of team relocation to Las Vegas. We conclude (alongside many other observers) that due to the rigor of Nevada’s regulatory practices, the state’s approach actually provides sports leagues with their best opportunity to protect themselves when it comes to the all-important issue of integrity. While the research team was satisfied that the current system is adequate to achieve that outcome, we identified several areas where institutions could be improved for greater sport security. These recommendations are summarized in the next section.

When we turn our attention to concerns of a public health nature, our focus shifts to gambling disorders. Our analysis of the most recently published literature here indicates that contrary to previously held beliefs, exposure to gambling is neither a certain nor a linear driver of gambling disorders. Locating a team in Las Vegas – a city with well-developed problem gambling resources – should not necessarily lead to gambling problems for sports franchise employees. Having said this, one gambling disorder is too many, and the consequences can be devastating for individuals (and teams). In the next section we provide recommendations on sound problem gambling strategies.

Concerns of a sociological nature typically have to do with community disconnects that can be found in Las Vegas, where much of the population is relatively new to the valley, and where transience is a constant. The problem with identifying these characteristics as a disqualifier for the city, however, is that many communities with similar characteristics already have an NFL franchise – or, as in the case of the cities in Los Angeles and Orange County, previously had them. On the community metrics we analyze, Las Vegas does not score much better or worse than other major cities in the American South and West.

Of final concern is the notion that teams would run into any number of issues with the law in Las Vegas, thanks in part to its famous gambling and non-gambling offerings. While we note limitations with crime data, FBI statistics suggest that the city would rank among the safest
in the NFL if it were to join the league. Casinos, meanwhile, are not the crime driver that many feared. And of course, recent events with professional athletes have revealed that crimes can and do occur in any number of communities – including presumably safe communities.

1.18 Recommendations

In this last section, we provide a series of recommendations should an NFL team (re-)locate to Las Vegas. Some of these are directed at leagues/teams, and some are directed at Nevada-based entities.

**Recommendation 1:** If an NFL team moves to Las Vegas, the affiliated professional league and team should immediately develop a collaborative relationship with local gaming regulatory authorities to ensure that information and expertise sharing is maximized, best practices are followed, and prompt reporting of any concerns is ensured. Indeed, the team, the league, and gaming authorities should work together from the moment the (re-)location is planned.

These efforts should include:

- A statewide system of information sharing between the sports books and the NFL, along with the use of early warning systems can provide a significant mechanism for detection. This system could be similar to that used by ESSA, a European organization made up of licensed land-based and online gaming operators.
- Evaluating the authorization and assignment of dedicated agents or a unit within the Enforcement Division of the State Gaming Control Board to work on combating game-fixing. This Special Integrity Unit would be particularly important given the low priority currently assigned to sports gambling-related crimes in most U.S. jurisdictions.
- Examining whether certain types of bets (on “negative” events such as penalties, or on non-athletic events like the flip of the coin) should be accepted.
- Strengthening criminal sanctions for illegal or corrupt wagering.
- Develop an investigative (and/or licensing) procedure for the hiring and continued observation of non-athletic employees in a position to affect outcomes.

**Recommendation 2:** If an NFL team were to move to Las Vegas, it should establish certain compliance and training plans. These plans should:

- Outline the nature of the relationship of the teams and offices to the gaming industry.
- Incorporate independence standards for team management that could include an independent reporting capability to league security.
- Require the retention of a formal compliance officer (either full time or on an engagement basis) who manages the plan on behalf of team management.
- Incorporate cooperative meetings with local gaming regulators and police officials.
- Require a significant hiring with expertise in gaming regulation.
- Require a significant hiring with expertise in local law enforcement.
• Include annual training requirements for management, team members, staff, public relations officials, and other key employees.
• Develop a system of documentation for high-risk individuals known to the team management who pose a risk to team members (essentially a watch list.)
• Provide team management with ongoing updates on the risk of illegal/offshore online gaming activities available to the team and employees.
• Assemble and convene compliance committee meetings at least quarterly, and document such actions for review.
• Emulate the West Coast Conference’s approach when that league comes to the city for its basketball tournament – specifically, deliver intensive gambling educational programs to all employees, focusing curricula on sports gambling laws and regulations, as well as case studies that illuminate problematic behaviors.
• Develop a strong problem gambling prevention, education, and treatment program for all employees, relying on the latest scientific research (and then evaluated scientifically). This should be done in collaboration with a team of leading researchers as well as the most prominent local resource and service providers (such as the Nevada Council on Problem Gambling and the Problem Gambling Center).

Appendix 1: Nevada Minimum Internal Controls for Sports Books

Note 1: The term “voucher” as used in these MICS refers to a printed wagering instrument, usually issued for use in a betting kiosk, with a fixed dollar wagering value and is redeemable for cash or cash equivalents. Unredeemed vouchers that were issued as payment for winning wagers are included in revenue when the vouchers expire (i.e., purged vouchers are included in gross revenue).

Note 2: The term “betting kiosk” as used in these MICS refers to a self-activated machine that patrons use to place wagers, open accounts, and make account deposits and/or withdrawals. It is considered a writer/cashier station. MICS applicable to writers/cashiers (or writer/cashier stations) are also applicable to a betting kiosk unless otherwise stated within the MICS.

Note 3: A book licensed to accept pari-mutuel wagers must also comply with the Pari-Mutuel MICS. A pari-mutuel book, including pari-mutuel only books, must comply with the Race and Sports MICS, as applicable.

Note 4: For any Board-authorized computer applications, alternate documentation and/or procedures which provide at least the level of control described by these MICS as determined by the Audit Division will be acceptable, and a MICS variation pursuant to Regulation 6.090 will be unnecessary.

Note 5: These MICS apply to satellite and outstation books (as defined in Regulation 22) unless otherwise stated within the MICS.
Note 6: These MICS apply to any Board-authorized inter-casino linked system. However, the operator of the inter-casino linked system and the licensee may share the responsibility for compliance, with some procedures performed by the licensee and other procedures performed by the operator of the inter-casino linked system. The procedures that the operator of the inter-casino linked system will perform are to be delineated as such within the race and sports section of the written system of internal control pursuant to Regulation 6.090.

Note 7: A “signature” on a document provides evidence of the person’s involvement and/or authorization of the intentions reflected in this document. It is typically in the form of a stylized script associated with a person. The stylized script “signature” may include the first letter of the person’s first name along with the person’s full last name. The “initials” of the person would not meet the requirement of a “signature.”

**Equipment Standards**

1. The date and time generated by the race and sports computer system during ticket writing is tested each day by a supervisor independent of the ticket writing and cashiering function (this person may also be independent of the book). For outstation and satellite books this test is performed at the location where the administrative function is performed.

2. Race and sports books must contact the Naval Observatory Master Clock to verify the correct time each day events are held and wagers are accepted. The race and sports computer system should then be adjusted as required.

   Note 1: A telephone number for the Naval Observatory Master Clock is (202) 762-1401.

   Note 2: The above MICS do not apply to outstation and satellite books if the time cannot be changed by employees of such books.

   Note 3: The above MICS do not apply when the time within the race and sports computer system is kept accurate through the use of an independent automated update process.

3. The test performed pursuant to MICS #1, and any adjustments necessary due to discrepancies, is documented in a log (or in another equivalent manner) which includes the station number, date, time of test, time per race and sports computer system, name or signature of the employee performing the test, and any other relevant information. For outstation and satellite books the logs must be made available at each licensed location upon request.

4. All date- and time-stamping machines used for voided tickets and manual payouts are directly and permanently wired to the electrical supply system or have a back-up power source to ensure an accurate time in the event of power loss to the machines.

5. Only personnel independent of the book have access to fuses or other similar power control mechanisms used in connection with the stamping machines.

6. At least once each day someone independent of the ticket writing function examines and tests the stamping machines to ensure the date and time accuracy to the nearest minute. For satellite books, the ticket writer can perform this test.
Note: If the stamping machine is interfaced with a time clock such that the time on the stamping machine is kept accurate through the use of an independent automated update process, then this procedure is not required.

7. In addition to performing the test pursuant to MICS #6, the same test is performed at least weekly by someone independent of the book.

Note: The above MICS do not apply to satellite books.

8. The test, and any adjustments necessary due to discrepancies, is documented in a log (or in another equivalent manner) which includes the station number, date, time of test, time on machine, name or signature of employee performing the test, and any other relevant information.

9. Keys (originals and all duplicates) to the date and time stamping machines are maintained and used by a department or personnel who are independent of the ticket writing and cashiering functions.

**Wagering Standards**

10. Whenever a betting station is opened/closed for wagering or turned over to a new writer/cashier, the writer/cashier signs on/off and the race and sports computer system creates a record indicating the writer’s/cashier’s identity, the date and time, station number, and the fact that the station was opened/closed.

11. Upon accepting a wager, a record of the wager is created in the race and sports computer system that contains the ticket number, the date and time and terms of the wager. The terms of the wager (listed as the “ticket description” in the race and sports computer system reports) include: event/racing meet (or race track), event/race number, event/race date, wager selection (e.g., horse number, team name and number), type of wager (e.g., money line bet; point spreads; over/under amounts; win, place and show; etc.) and dollar amount wagered. The record of the wager is documented as follows:

   a. An original betting ticket that includes the book’s name and address is printed and given to the patron.

   Note: If a wager is placed using communications technology an original betting ticket does not need to be created. Regulation 22.140(9) requires that all wagering communications shall be electronically recorded (separate from the race and sports computer system) and retained for a period of 60 days.

   b. A restricted computer system record which is created concurrently with the generation of the original betting ticket. The restricted record is not accessible to book employees except for inquiry only functions.

12. If a book voids a betting ticket, then:

   a. A void designation is immediately branded by the race and sports computer system on the ticket with the computer system updated to reflect the void transaction. Alternatively, a ticket can be voided manually in the race and sports computer system by entering or scanning the ticket number to update the computer system to reflect the void transaction and immediately writing/stamping a void designation on the original ticket.
b. For not-in-computer voids, the date and time when the ticket was voided is stamped on the original.

c. All voids are signed by the writer/cashier and a supervisor (who did not write the ticket) at the time of the void. The supervisor may be from another gaming department. For satellite books the second signature can be a supervisor of the host property.

Note: If the original ticket is unavailable (e.g., printer malfunction) a document is created to reflect the void transaction.

13. A sporting event wager is not accepted after the start of the event unless “in progress” or a similar notation is indicated on the original and each copy of the betting ticket, and the race and sports computer system creates and maintains a record that documents the supervisor’s approval.

Note: The second half of a football game, for example, is considered a separate event when set up in the race and sports computer system as an independent event for accepting wagers; accordingly, supervisor approval does not need to be recorded as long as the wager is accepted before the start of the second half.

14. A race wager is not accepted after the occurrence of post time, as defined in Regulation 22.

15. Race event documentation (i.e., track sheet) is created daily and includes, at a minimum, the race date, the name of track, the race number, and field of horses scheduled to run by horse number and name for each race. The race event document is updated to indicate any horses subsequently scratched. This document is forwarded to the accounting/audit department at the end of day.

16. The wagering cutoff times are established in accordance with the provisions of Regulation 22 and entered into the race and sports computer system.

17. The race and sports computer system either is incapable of transacting/accepting a wager subsequent to the above cutoff times or produces a report that specifically identifies such wagers.

18. The race and sports computer system either is incapable of voiding a ticket subsequent to the cutoff time or produces a report that specifically identifies such voided tickets.

19. The race and sports computer system is incapable of allowing a cutoff/starting time to be entered into the race and sports computer system (including changes to cutoff/starting times) that is a time earlier than the current time of day.

20. Tickets will not be written or voided after the outcome of an event is known.

21. A gaming establishment that is only licensed for a sports book (and not a race book) cannot accept a wager on horse or other animal races.

**Book Wagering Reports**

22. Within 24 hours after the end of a designated 24-hour period, wagering multiple transaction logs created pursuant to Regulation 22.062 are submitted to the accounting department.

23. If book wagering reports are prepared by race and sports book personnel pursuant to Regulation 22.061(6), the completed book wagering reports are submitted to the accounting department by no later than 24 hours after month’s end.
**Payout Standards**

24. Vouchers issued by the race and sports computer system (including through betting kiosks) must include: the voucher number, the book’s name and address, the date/time and dollar amount.

   Note: The above MICS apply to vouchers issued as payment for winning wagers, “change due” from a wager transaction, and as a result of a purchase of a voucher.

25. Prior to patrons receiving payouts on winning tickets, event/race results are entered into the race and sports computer system for computerized grading of all wagers. Unpaid winning ticket and voucher reports are restricted to authorized personnel independent of the race and sports book.

26. Prior to making payment on a ticket/voucher or crediting the winnings to the patron’s wagering account:
   a. The writer/cashier enters or scans the ticket/voucher number into the race and sports computer system to authorize the payment; or
   b. For wagering account wagers, when the event results are posted in the race and sports computer system, the computer system automatically authorizes payment of winning wagers and updates the patron’s wagering account.

27. After scanning by the writer/cashier, the race and sports computer system brands the ticket/voucher with a paid designation, the amount of payment and date. Alternatively, if a writer/cashier manually enters or scans the ticket/voucher number into the race and sports computer system, the writer/cashier either immediately writes/stamps the date, amount of payment and a paid designation on the patron’s ticket/voucher or attaches to the patron’s copy a computer system “paid” ticket that indicates a paid designation, the ticket/voucher number, the amount of payment and date.

28. In case of race and sports computer system failure, tickets may be paid. In those instances where a race and sports computer system failure has occurred and tickets are manually paid, a log will be maintained that includes:
   a. Date and time of race and sports computer system failure.
   b. Reason for failure.
   c. Date and time race and sports computer system is restored.

29. For all payouts that are made without race and sports computer system authorization, after the manual grading of the ticket, the date and time must be stamped on the patron’s copy, and the amount of the payment and a paid designation is written (or stamped) on the patron’s copy of the ticket/voucher.

30. For those payouts, including payouts for contest/tournament winners, that are made without race and sports computer system authorization (i.e., system inoperative):
   a. Before completing the payout, the book manager or other authorized supervisory personnel reviews the documentation supporting and explaining the payout and signs the ticket/voucher as evidence of review.
   b. An individual, once the race and sports computer system is operative, immediately enters all manually paid tickets/vouchers into the race and sports computer system to verify the accuracy of
the amount paid for the tickets/vouchers and the manual grading of the tickets. Should the race
and sports computer system remain inoperative at the end of the day, the procedures required by
MICS #68c are required.

Note: Any manually paid tickets that had been previously purged from the race and sports computer
system do not need to be entered into the race and sports computer system.

31. The race and sports computer system is incapable of authorizing payment on a ticket/voucher that has
been previously paid, a voided ticket/voucher, a losing ticket, or an unissued ticket/voucher.

32. If a progressive pool is used for wagers, adequate documentation is retained regarding the rules.

Wagering Accounts

33. The book shall establish procedures for patron wagering accounts for sports and non-pari-mutuel race
wagering pursuant to the requirements of Regulation 22 and such procedures are delineated within the
race and sports section of the written system of internal control pursuant to Regulation 6.090. The
delineation must also include a description of the procedures established for in-person patron
wagering account registration at a self-service betting kiosk for sports and non-pari-mutuel wagering.
In addition, all procedures established for this standard must ensure that:

   a) For sports and non-pari-mutuel wagering account withdrawals transacted at a self-service betting
      kiosk, each patron is limited to a daily maximum withdrawal amount of $500.

   b) For any sports and non-pari-mutuel wagering account withdrawals initiated at a self-service
      betting kiosk, compliance with the procedures of Cage and Credit Standards #37 and #39 is to be
      met if the requested withdrawal exceeds the daily maximum limit of $500.

34. Supervisory approval is required to access a patron’s wagering account when patron wagering,
deposit or withdrawal activity has not occurred within the wagering account for more than 180 days.

Promotional Payouts, Drawings and Giveaway Programs

35. The conditions for participating in promotional payouts, including drawings and giveaway programs,
are prominently displayed or available for patron review at the licensed location.

36. Promotional payouts, including those as a result of drawings and giveaway programs, that are either
deducted from gross gaming revenue, or are greater than or equal to $500 and not deducted from
gross gaming revenue, are documented at the time of the payout to include the following:

   a. Date and time.

   b. Dollar amount of payout or description of personal property (e.g., car).

   c. Reason for payout (e.g., promotion name).

   d. Signature(s) of the following number of employees verifying, authorizing, and completing the
      promotional payout with the patron:

      1) Two employee signatures for all payouts of $100 or more that are deducted from gross
      gaming revenue;
Note: For approved computerized systems that validate and print the dollar amount of the payout on a computer-generated form, only one employee signature is required on the payout form.

2) One employee signature for payouts of less than $100 that are deducted from gross gaming revenue; or

3) One employee signature for payouts of $500 or more that are not deducted from gross gaming revenue.

e. Patron’s name (for drawings only).

Note: MICS #36 documentation may be prepared by an individual who is not a race and sports book department employee as long as the required signatures are those of the employees completing the payout with the patron.

37. If promotional cash (or cash equivalent) payouts, including those as a result of drawings and giveaway programs, is less than $500 and are not deducted from gross gaming revenue, documentation is created to support bank accountability.

Note: Required documentation may consist of a line item on a cage or race and sports accountability document (e.g., “43 $10 race and sports cash giveaway coupons = $430”).

**Contests/Tournaments**

Note: MICS #38 - #43 apply to contests/tournaments conducted at a single book, and also to those conducted at multiple, affiliated books.

38. All contest/tournament entry fees, prize payouts, participant’s wagering selections, and contest/tournament results are recorded in the race and sports computer system.

Note 1: The above MICS does not apply to contests/tournaments that are free to enter (i.e., no entry fees or other prerequisites such as a minimum amount of wagers to qualify).

Note 2: Noncash prize payouts from contests/tournaments are to be completed in accordance with MICS #35 - #37. Such payouts are not required to be recorded in the race and sports computer system.

39. When contest/tournament entry fees and payouts are transacted, the transactions are recorded on a document that contains:

a. Patron’s name.

b. Date of entry/payout.

c. Dollar amount of entry fee/payout (both alpha and numeric, or unalterable numeric) and/or nature and dollar value of any noncash payout.

d. Signature of individual completing transaction attesting to the receipt or disbursement of the entry fee/payout with the patron and, for contest/tournament winners, the verification through the race and sports computer system of the winner.

e. Name of contest/tournament.
40. The contest/tournament entry fees and prize payouts are summarized and posted to the accounting records on at least a monthly basis.

41. Contest/tournament rules are included on all entry forms/brochures and are prominently displayed or available for patron review at the licensed location. The rules must include at a minimum:
   a. All conditions patrons must meet to qualify for entry into, and advancement through, the contest/tournament.
   b. Specific information pertaining to any single contest/tournament, including the dollar amount of money placed into the prize pool.
   c. The distribution of funds based on specific outcomes.
   d. The name of the organizations (or persons) registered pursuant to NRS 463.169 that conducted the contest/tournament on behalf of, or in conjunction with, the licensee if applicable.

42. Results of each contest/tournament are recorded and available for participants to review. The recording includes the name of the event, date(s) of event, total number of entries, dollar amount of entry fees, total prize pool, and the dollar amount paid for each winning category. The name of each winner is recorded and maintained but not made available to the participants unless authorized by management personnel.

   Note: For free tournaments, the information required by the above MICS must be recorded except for the number of entries, dollar amount of entry fees and total prize pool.

43. The aforementioned contest/tournament records are maintained for each event.

Checkout Standards

44. The race and sports computer system indicates the amount of net cash that should be in each writer/cashier station. A supervisor is required to access this information.

45. For each writer/cashier station, a summary report is completed at the conclusion of each shift including:
   a. Computation of cash turned in for the shift, and any variances between the cash turn-in and the amount of net cash that the race and sports computer system indicates should be in each station.
   b. Signatures of two employees who have verified the cash proceeds turned in for the shift.

Note 1: MICS #45 is also to be performed whenever there is a change of a writer/cashier at a station during a shift. In such a case when the cash is transferred from one writer/cashier to the next writer/cashier, the cash summary report for the shift is to reflect for each writer/cashier and each station the amount of cash turn-in and any variances between the cash turn-in and the amount of net cash that the race and sports computer system indicates should be in each writer/cashier station.

Note 2: MICS #45 does not apply to areas outside the race and sports book area (e.g., casino cage) that cash tickets.

Note 3: MICS #45 does not apply to betting kiosks.
Note 4: Alternatively, MICS #44 and #45 may be performed for each writer/cashier rather than each writer/cashier station.

46. For each betting kiosk:
   a. At least weekly, all winning tickets and vouchers in the kiosk are removed by a minimum of two employees.
   b. At least weekly, a minimum of two employees remove all cash from the kiosk, count the cash and document the count.
   c. Whenever employees remove winning tickets or vouchers from a kiosk, or cash is removed from or inserted into a kiosk, kiosk reports are generated from the kiosk regarding kiosk transactions and accountability.
   d. At least weekly and whenever employees remove winning tickets, vouchers or cash from a kiosk, the kiosk transactions are reconciled by race and sports book or accounting employees as follows: all the cash remaining in each kiosk to the cash loaded into the kiosk plus/minus cash transactions. The kiosk reports are compared to the transactions recorded by the race and sports computer system. Variances are documented and investigated.
   e. Winning tickets and vouchers are ultimately delivered to the accounting department.

Employee Segregation of Duties

Note: Administrative functions include setting up events, changing event data, and entering results at any time.

47. Employees who perform the supervisory function of approving void tickets do not write tickets unless:
   a. The only supervisory function allowed is approval of void tickets prior to post time.
   b. A supervisor, acting as a writer, may not authorize a void for a ticket that he wrote.
   c. All tickets written by a supervisor which are subsequently voided and all not-in-computer voids must be recorded in a log, used specifically for that purpose, which indicates the supervisor’s/writer’s name and the name of the person authorizing the void.
   d. The log must be forwarded to a department independent of the book (i.e., accounting/audit) on a daily basis for a 100% audit of void tickets (using the log and the tickets) for the proper signatures on the ticket, a void designation on the ticket, date and time of the void on the ticket (for not-in-computer voids), any indications of past-post voiding, and other appropriate regulation compliance. Any discrepancies noted and investigations performed must be documented in writing and maintained.
   e. A department independent of the book (i.e., accounting/audit) must perform a 100% audit of the exception report for any inappropriate use of the supervisory password. Any discrepancies noted and investigations performed must be documented in writing and maintained.

48. Employees, including supervisors, who write or cash tickets are prohibited from accessing the administrative terminal or performing administrative functions.
Note: An employee assigned writer/cashier functions is not allowed to switch for certain shifts or days to having administrative functions. Conversely, an employee assigned administrative functions is not allowed to switch for certain shifts or days to having writer/cashier functions.

**Generic Passwords for Casino Cage Cashiers**

Note: MICS #49 does not apply when a supervisor signs onto a common terminal with his or her individual password and the supervisor takes responsibility for the race and sports payouts.

49. Generic passwords for the race and sports computer system are prohibited in the casino cage unless:
   
a. Each cashier redeems tickets from the cashier’s assigned window bank.

b. After verifying the winning ticket in the race and sports computer system, the cashier then signs the patron’s copy of the ticket, immediately date/time stamps the ticket at the cashier’s assigned window, and then maintains the ticket in the cashier’s cash drawer.

c. Each cashier is assigned a unique date/time stamp used solely at the cashier’s assigned window.

d. Payouts of $2,000 or more require the supervisor to enter the supervisor’s approval code and to sign the ticket.

e. Payouts of $10,000 or more require supervisory personnel independent of the cage department to enter an approval code and to sign the ticket.

f. A summary sheet is prepared that lists all of the cashiers working that shift, the cashiers’ assigned windows, the date/time stamp identification, and the total tickets cashed per cashier. The total of that report is then balanced to the total cashed per the race and sports book end-of-shift report.

g. Any discrepancies noted and investigations performed are documented in writing and maintained.

**Computerized Player Tracking Systems**

Note 1: Compliance with MICS #50 - #55 is required for all computerized race and sports player tracking systems.

Note 2: As used in these Race and Sports MICS, the term “point” or “points” is a generic term and refers to a representative of value awarded to a patron based upon specific criterion established by the licensee. Commonly, points are earned by patrons by placing wagers or purchasing room, food, beverage or entertainment admissions. Patron accounts in a player tracking system are used to track points earned/awarded to patrons.

50. The addition/deletion of points to player tracking accounts other than through an automated process related to actual play must be sufficiently documented (including substantiation of reasons for increases) and authorized/performed by supervisory personnel of the player tracking, promotions, or race and sports departments. The addition/deletion of points to player tracking accounts authorized by supervisory personnel is documented and is randomly verified by accounting/audit personnel on a quarterly basis.

Note: The above MICS do not apply to the deletion of points related to inactive or closed accounts through an automated process.
51. Employees who redeem points for patrons cannot have access to inactive or closed accounts without supervisory personnel authorization. Documentation of such access and approval is created and maintained.

52. Patron identification is required when redeeming points without a player tracking card.

53. Changes to the player tracking system parameters, such as point structures and employee access, must be performed by supervisory personnel independent of the race and sports department. Alternatively, changes to player tracking system parameters may be performed by race and sports supervisory personnel if sufficient documentation is generated and the propriety of the changes are randomly verified by personnel independent of the race and sports department on a quarterly basis.

54. All other changes to the player tracking system must be appropriately documented.

55. Rules and policies for player tracking accounts including the awarding, redeeming and expiration of points are prominently displayed or available for patron review at the licensed location.

**Computer Reports**

Note 1: Documentation equivalent to the following must be prepared for satellite books on a “per book” basis.

Note 2: Wagers placed using communications technology can be included in the documentation of the central site book that accepted and recorded the patron’s wager. If so, such procedures are delineated within the race and sports section of the written system of internal control pursuant to Regulation 6.090.

56. Adequate documentation of all pertinent race and sports book information is generated by the race and sports computer system.

57. This documentation is restricted to authorized personnel. The generation of end-of-day race and sports computer system reports must be performed by or observed by an employee from a department independent of the race and sports book department. Each report indicates the date, book’s name (or other identifier), and title of report.

Note: As used in MICS #58 and #59 race and sports computer system report descriptions, the term “ticket description” refers to the terms of the wager as described in MICS #11.

58. Race and sports computer system documentation is created daily and includes, at a minimum, the following reports:

a. Transaction report that lists, by writer/cashier, for each write, payout, and void transaction: the ticket number, transaction date and time, writer/cashier station number, writer/cashier number, transaction type, ticket description, and amount of transaction. The report lists, by writer/cashier, and in total, the amount of write, voids, payouts, vouchers issued, and vouchers redeemed.

Note: The transaction report may be a combination of more than one report (e.g., one for write and one for payouts). Wagering account transactions may be in a separate wagering account transaction report.
b. Race prices report that lists, for each meet’s race: the race date and time (stop betting time), the race number, the winners (e.g., horse identification) and payout amounts for the different types of wagers.

c. Sports book results report that lists, for each event: the event date and cutoff time (as previously entered into the race and sports computer system), the event (e.g., team names and team identifications), and the event results/winners.

d. Futures reconciliation report that lists the amount of, by date of event/race for today and future event dates: wagers written on previous days (previous write), wagers written today on future events (write today or future write), wagers written on previous days refunded today (previous canceled today), wagers written on previous days for today’s event/race (futures back-in), and total remaining wagers written for events/races in the future (net write).

e. Futures reports:
   1) Futures back-in ticket detail report that lists the tickets written on previous days for events/races occurring today, by event/race, including: the ticket number, ticket description, and date of event/race. The report lists the total amount of wagers written on previous days for today’s event/race.
   2) Future ticket detail report that lists the tickets written on previous days and today for events/races in the future, by date of event/race and by event/race, including: the ticket number, ticket description, and date of event/race. The future tickets detail report lists totals of the amount of wagers by date of event/race, by event/race and for all tickets.

f. Unpaid reports:
   1) Unpaid winners detail ticket report that lists the unexpired, winning tickets that have not been paid including: the event/race date, ticket number, ticket description, and amount to be paid, and payout amounts in total.
   2) Unredeemed voucher detail report that lists the unexpired vouchers that have not been redeemed including: the voucher number, date of issue, and amount of voucher, and vouchers in total.

Note: Tickets and vouchers expire when the period of time the book will honor winning wagers/vouchers has lapsed.

g. Purge reports:
   1) Purge detail ticket report that lists the expired, winning tickets that have not been paid, by ticket number, including: the event/race date, ticket number, ticket description, and amount of payout.
   2) Purge detail voucher report that lists the expired vouchers that have not been redeemed including: the voucher number, date of issue, and amount of voucher. The report lists the total amount of vouchers to be added back into revenue.

Note: Tickets and vouchers expire when the period of time the book will honor winning wagers/vouchers has lapsed.
h. Unpaids and voucher summary reports:

1) Unpaids summary report that lists the amount of: beginning balance of unpaid tickets, previously unpaid tickets paid today, new unpaid tickets (i.e., unpaid ticket from event/race occurred today) and ending balance of unpaid tickets.

2) Voucher summary report which lists the amount of: beginning balance of unredeemed vouchers, previously unredeemed vouchers redeemed today, new unredeemed vouchers (i.e., vouchers issued today and remained unredeemed) and ending balance of unredeemed vouchers.

Note: The beginning balance is not required to be listed on the report as long as the previous day’s ending balance of unpaid/unredeemed is available.

i. Wagering account reports as follows:

1) Daily account wagering detail report that lists by writer/cashier station number, each transaction including: writer/cashier station number, wagering account number, the transaction (e.g., wager, deposit, withdrawal), and the transaction amount. The report lists totals by transaction type.

Note 1: The daily account wagering detail report may be a part of the wagering account transaction reports or a combination of reports.

Note 2: The writer/cashier station number is not identified when the patron places a wager through a mobile device.

2) Daily account wagering summary report which lists by writer/cashier station number, for wagering accounts with activity for the day, by wagering account and in total: the amount of deposits, winnings, voided wagers, wagers, withdrawals and other adjustments. The report lists totals for write, voids/cancelled, net write payouts and net win.

j. Accrual basis recap report that lists the amount of tickets written today for today’s events/races (current write), wagers written today on future events (future write), wagers written on previous days for today’s event/race (futures back-in), accrual write, payouts from wagers written today and paid today (current payouts), payouts paid today for events on previous days (previous payouts), unpaid winners from event/race occurring today (current unpaids), accrual payout, unpaid winners and unredeemed vouchers expired today (unpaids to revenue), taxable revenue, and book revenue. The accrual basis recap report is a daily and month-to-date report. Daily and month-to-date amounts may be reflected in separate reports rather than one report.

Note 1: As used in the above accrual basis recap report:

- Accrual write is equal to: current write, (+) futures back-in.
- Accrual payout is equal to: current payouts, (+) current unpaids.
- Book (accounting) revenue is equal to: accrual write, (-) accrual payouts, (+) unpaids to revenue.
• For cash basis, taxable revenue on NGC tax returns is equal to: current write, (+) future write, (-) current payouts, (-) previous payouts, (+) expired unredeemed vouchers when vouchers were included in payout amounts.

• For modified accrual basis, taxable revenue on NGC tax returns is equal to: accrual write, (-) current payouts, (-) previous payouts, (+) expired unredeemed vouchers when vouchers were included in payout amounts.

Note 2: Alternatively, the accrual basis recap report may include “today’s write” and “today’s payouts” rather than “current write” and “current payouts” as follows:

• Today’s write is equal to: current write, (+) future write.

• Today’s payouts is equal to: current payouts, (+) previous payouts.

k. Exception information (sorted by exception type), including:

1) Voids, past-post voids, in-progress voids, past-post write, in-progress write.

2) Changes in odds, cut-off times, results, event data.

3) All supervisory approvals.

59. The race and sports computer system documentation for wagering account activity is created on demand, and includes, at a minimum, for a day, month-to-date, year-to-date and two-year cumulative basis:

a. Customer transaction detail report that lists, by wagering account and in total, for all wagering accounts: the wagering account number, beginning balance, each deposit (date and amount), wagers and cancelled wagers (ticket number, transaction date and time, and ticket description), winning wagers (ticket number, transaction date and time, ticket description, and payout amount), net win, withdrawals (date and amount), adjustments (date and amount), and ending balance.

b. Customer transaction summary report that lists, by wagering account and in total, for all wagering accounts: the wagering account number, patron’s name, beginning balance, deposits, amount of wagers (write and cancelled wagers), amount of winning wagers, net win, withdrawals, adjustments, and ending balance.

Note 1: All wagering accounts regardless of account balance must be included on the customer transaction summary report.

Note 2: Daily, month-to-date, year-to-date, and two-year cumulative amounts may be reflected in separate reports rather than one report.

Accounting/Audit Standards

60. The race and sports book audit is conducted by someone independent of the race, sports, and pari-mutuel operations.

Note: Such personnel may also perform the audit function for the outstation book of affiliated properties (and vice versa).
61. At least once a quarter, for each betting kiosk, foot the winning tickets and vouchers redeemed for a week and trace the totals to the totals recorded in the race and sports computer system and the related accountability document. This procedure may be performed for different kiosks throughout the quarter as long as each kiosk’s activity is examined once a quarter. Document the test and the results of investigations into all variances, by kiosk.

Note: This procedure may be performed by non accounting personnel as long as the individual has not performed the reconciliation required by MICS #46.

62. At least annually, accounting/audit personnel will foot the write on the restricted computer system record of written tickets for a minimum of three writers/cashiers for each race book and three writers/cashiers for each sports book for one day and trace the total to the total produced by the race and sports computer system.

63. Accounting/audit personnel foot the customer copy of paid tickets for a minimum of one writer/cashier station for one day per month and trace the totals to those produced by the race and sports computer system.

64. At least annually, for one day, accounting/audit personnel foot the redeemed vouchers for one writer/cashier station and trace the totals to those produced by the race and sports computer system.

65. Daily, for each writer/cashier station except for betting kiosks, the write and payouts are compared to the cash proceeds/disbursements with a documented investigation being performed on all large variances (i.e., overages or shortages greater than $100 per writer/cashier).

66. Daily, select a random sample of 5 paid transactions from the race and sports computer system transaction report and trace the transaction to the customer’s copy of the paid ticket.

67. Daily, for all sports book winning tickets and winning parlay card tickets in excess of $10,000, for all race book winning tickets in excess of $1,000, and for a random sample of ten of all other winning race and sports book tickets:
   a. The tickets are recalculated and regraded using the race and sports computer system record of event results.
   b. The date and starting time of the event/race per the results report are compared to the date and time on the ticket and in the race and sports computer system transaction report.
   c. The terms of the wagers (e.g., point spreads, money lines, etc.) per the race and sports computer system transaction report or other report indicating all point spreads and money lines at which wagers were written are reviewed and compared to an independent source for questionable activity (see Regulation 22.125).

Note 1: For sports book winning tickets and parlay card tickets, the terms of the wagers can be compared to an independent source such as a newspaper (or its website), sports league website, a licensed sports information service or other reputable source.

Note 2: The same transactions selected for MICS #68 examination may be used as part of the sample selected for MICS #67.
68. Daily, accounting/audit personnel, for payouts made without race and sports computer system authorization at the time of payment including such payouts for contest/tournament winners, will:
   a. Trace all payouts to the race and sports computer system transaction report or the purged tickets report to verify authenticity of the initial wager.
   b. For payouts subsequently entered into the race and sports computer system by race and sports personnel, compare the manual payout amount to the race and sports computer system amount.
   c. For payouts not entered into the race and sports computer system by race and sports personnel, enter the payout into the race and sports computer system and compare the manual payout amount to the race and sports computer system amount. If the system is inoperative, manually regrade the ticket to ensure the proper payout amount was made.

   Note: Appeasement payments (e.g., nonwinning ticket payouts resulting from a customer complaint or employee error) are not deductible from gross revenue.

69. Daily, the race and sports computer system’s summary of events/results report is traced to an independent source for 5% of all sporting events and 5% of all races to verify the accuracy of starting times (if available from an independent source) and final result.

   Note: The starting times for sporting events and races that are wagered on in conjunction with a tournament or contest is included in population from which the 5% sample is chosen.

70. Daily, for all voided tickets:
   a. The race and sports computer system reports that display voided ticket information are examined to verify that tickets were properly voided in the computer system.
   b. The voided tickets are examined for a void designation and proper signatures, and for not-in-computer voids, the date and time stamp on the ticket for the time of the void.
   c. For a race and sports computer system that prints void tickets, a void ticket attached to the original ticket.

71. System exception reports are reviewed on a daily basis for propriety of transactions and unusual occurrences including, but not limited to: changes in odds, cut-off times, results, and event data (both information input by book employees, and information provided directly by a disseminator); in-progress events and void authorizations. All noted improper transactions or unusual occurrences noted during the review of exception reports are investigated with the results documented.

   Note: An exception report is defined as a report produced by the computerized system identifying unusual occurrences, changes to system configuration parameters, alteration to initially recorded data, voids, etc.

72. At least one day per calendar quarter, the race and sports computer system reports (and as applicable the pari-mutuel computer system reports) are reviewed, for Regulation 22.040 compliance purposes, for the proper calculation of the following:
   a. Amounts held by the book for patrons’ wagering accounts;
b. Amounts accepted by the book as wagers on events whose outcomes have not been determined (futures); and

c. Amounts owed but unpaid by the book on winning wagers through the period established by the book for honoring winning wagers (unpaid winners and unredeemed vouchers).

73. For one day per calendar quarter, accounting/audit personnel:

a. Recalculate and verify the change in the unpaid winners and unredeemed vouchers balance to the total purged tickets and vouchers.

b. If future wagers are accepted, review the race and sports computer system reports to ascertain that future wagers are properly included in write on the day of the event.

c. Select two non-pari-mutuel race quinella winning tickets (if such tickets exist for the test day), two other non-pari-mutuel race winning tickets and two sports winning tickets to verify that the wager was accepted and payouts were made in accordance with the posted house rules.

74. Accounting/audit personnel reviews all wagering multiple transaction logs, and either ensures that book wagering reports have been completed for all reportable transactions or prepares book wagering reports for all reportable transactions pursuant to Regulation 22.061.

75. The book wagering report is signed by the employee who prepared the report.

76. Accounting remits all book wagering reports to the Board in accordance with Regulation 22.061(6).

77. Monthly, accounting/audit personnel review all contests, tournaments, promotional payouts, drawings, and giveaway programs to determine proper accounting treatment and proper race and sports book win/loss computation.

78. For all contests, tournaments, promotional payouts (including payouts from computerized player tracking activity), drawings, and giveaway programs the following documentation is maintained:

a. Copies of the information provided to the patrons describing the contests, tournaments, promotional payouts, drawings, and giveaway programs (i.e., brochures, fliers).

b. Effective dates.

c. Accounting treatment, including general ledger accounts, if applicable.

d. For tournaments and contests, the dollar amount of the prize pool. Additionally, if applicable, include the amount of contributions to the prize pool by patrons and the amount supplemented by the licensee.

e. For tournaments and contests, the name of the organizations (or persons) registered pursuant to NRS 463.169 that conducted the contest/tournament on behalf of, or in conjunction with, the licensee, if any. The extent of responsibilities (including MICS compliance responsibilities) each organization and the licensee had in the contest/tournament (e.g., ABC nonprofit is to receive 100% of the entry fees and provide noncash prizes for the winners with the licensee collecting entry fees, operating the tournament and distributing prizes to winners) will also be documented.
79. Monthly, accounting/audit personnel perform procedures to ensure that promotional payouts, drawings, and giveaway programs are conducted in accordance with conditions provided to the patrons. The procedures must include a review of documents along with employee interviews and/or observations.

80. Daily, accounting/audit personnel reconcile all contest/tournament entry and payout forms to the dollar amounts recorded in the appropriate accountability document and race and sports computer system report.

81. When payment is made to the winners of a contest/tournament, accounting/audit personnel will reconcile the contest/tournament entry fees collected to the actual contest/tournament payouts made. This reconciliation is to determine whether based on the entry fees collected, the payouts made and the amounts withheld by the gaming establishment, if applicable, were distributed in accordance with the contest/tournament rules.

82. Monthly, accounting/audit personnel reconcile gross revenue from the month-end accrual basis recap report to the general ledger and to the monthly NGC tax return. This reconciliation is documented and maintained. All variances including the variance caused by the reduction of race and sports revenue on the NGC tax return due to an allowable tax deduction supported by inter-casino linked system reports are reviewed, documented, and maintained.

83. Monthly, accounting/audit personnel review the accounting records (including the reconciliation documentation from MICS #82) and the NGC tax returns to ensure that the write and win has been properly reported according to the appropriate revenue area (i.e., non-pari-mutuel race write and win listed under race, pari-mutuel race write and win included under pari-mutuel race, etc.).

84. Monthly, accounting/audit personnel review the NGC-32 form to determine that all non-pari-mutuel race wagers have been reported, broken out by disseminator and by track. If a single wager is accepted involving more than one track (e.g., a parlay wager off the board), determine that the wager is apportioned on a pro rata basis to each track.

Note: This procedure must be calculated manually when the race and sports computer system does not properly apportion a single wager involving more than one track on a pro rata basis to each track.

85. Monthly, accounting/audit personnel reconciles the information on the NGC-32 form to pari-mutuel and non-pari-mutuel write and win information reported on the corresponding NGC-31 report, with the reconciliation documented and any variances investigated.

86. For race books (including pari-mutuel only books), monthly, a copy of the original NGC-32 form that was submitted to the Board is forwarded to the respective disseminators in accordance with Regulation 20.030.

Note: The NGC-32 form must be submitted to the Board and a copy forwarded to a disseminator even if there were no race wagers accepted or payouts made.

87. Quarterly, an inventory of all sensitive race and sports keys is performed and reconciled to records of keys made, issued, and destroyed. Investigations are performed for all keys unaccounted for, with the investigations being documented.
Note: Sensitive keys include, but are not limited to, keys used to access restricted computer storage media and/or restricted equipment used to conduct the race and sports book (i.e., administrative computer terminal) and to the date and time stamping machines.

88. If a progressive pool is used for wagers, accounting/audit personnel recalculate the progressive increment based on the wagering activity, at least once a week. Any variance is reviewed with the investigation results documented and maintained.

89. For race and sports computerized player tracking systems, an accounting/audit employee shall perform the following procedures at least one day per quarter:
   a. Review all point addition/deletion authorization documentation, other than for point additions/deletions made through an automated process, for propriety.
   b. Review exception reports including transfers between accounts.
   c. Review documentation related to access to inactive and closed accounts.

90. At least annually, the computerized race and sports player tracking system (in-house developed and purchased systems) is reviewed by personnel independent of the individuals that set up or make changes to the system parameters. The review is performed to determine that the configuration parameters are accurate and have not been altered without appropriate management authorization (e.g., verify the accuracy of the awarding of points based on the dollar amount wagered). The system should also be tested, if possible, to further verify the accuracy of the configuration parameters (e.g., simulate activity to verify the accuracy of the amount of points awarded). The test results are documented and maintained.

91. Documentation (e.g., log, checklist, notation on reports, and tapes attached to original documents) is maintained evidencing the performance of race and sports audit procedures, the exceptions noted and follow-up of all race and sports audit exceptions.

Statistics

92. Reports are maintained for each month and year-to-date which indicate the total amount of wagers accepted, total amount paid out on winning wagers, the net amount won by the book (i.e., taxable win), and the win-to-write percentage for:
   a. Each sport (e.g., baseball, basketball, football, hockey, golf, boxing, etc.).
   b. Sports parlay cards.
   c. Non-pari-mutuel horse/greyhound racing.

93. A report is maintained for each month and year-to-date which indicates, for pari-mutuel horse racing, the total amount of wagers accepted, the net amount won by the book (i.e., pari-mutuel gross revenue), and the win-to-write percentage.

94. The month-end race and sports statistical reports required by MICS #92 and #93 (prepared prior to the submission of the NGC tax returns for the month in which the activity occurred) are presented to and reviewed by management independent of the race and sports book on at least a monthly basis and such management investigates any large or unusual statistical fluctuations. The investigation is to be
completed no later than 30 days after the generation of the month-end race and sports statistical report.

95. The above referenced review will be performed by comparing the current period statistics for each type of event with those of applicable prior periods with investigations performed for statistical fluctuations for a month in excess of ± 5%.

   Note: Common comparisons include either:
   - The current month to the same month from the previous year.
   - A rolling year-to-date to the same year-to-date period from the prior year.

96. The results of such investigations are documented in writing and maintained.

   Note: The calculation of the statistics based upon “accounting records (or book) win” is not required and not a substitute for calculating statistics based upon NGC tax return write and win. However, such a calculation may be used as part of an analysis of any statistical fluctuations.

**Payout Procedures for Mail-In Winning Race and Sports Tickets and Vouchers**

97. Accounting/audit personnel or personnel independent of the race and sports book receive the original winning race/sports tickets and vouchers.

98. Accounting/audit personnel or personnel independent of the race and sports book record the winning race/sports tickets and vouchers on a log as a mail pay. The log includes the date received, patron’s name, and race/sports ticket numbers and voucher numbers.

99. The winning race/sports tickets and vouchers are entered into the race and sports computer system by race and sports personnel or accounting/audit personnel for validation and cancellation.

100. Accounting/audit personnel compare the “paid” winning race/sports tickets and “paid” vouchers to the mail pay log and the race and sports computer system report for paid winning race and sports tickets and vouchers. Any discrepancies are documented and reviewed with race and sports and accounting management personnel.

101. Accounting/audit personnel, independent of the individual(s) who processed the mail pay winning tickets and vouchers, reviews the patron’s correspondence submitted, the winning race/sports tickets and vouchers, the mail pay log and the race and sports computer system report for “paid” winning race and sports tickets and “paid” vouchers for any discrepancies. Any discrepancies are documented and resolved prior to remitting the proper payment amount to the patron.
Appendix 2: Acknowledgements, Disclosures, and Project Team Biographies

This research team was engaged by the University of Nevada, Las Vegas to explore and advise on issues pertaining to sports wagering, Nevada and global gaming policies, and professional sports approaches to these topics. This report is part of that paid engagement. The research team had full editorial control over the contents of this report, and chose to submit it for an independent peer review conducted by Dr. Brett Abarbanel. That review was typically comprehensive, as is Dr. Abarbanel’s style, and involved three anonymous peer reviewers to whom we are also grateful, as their critical takes enhanced every section of this report.

The authors wish to acknowledge, with heartfelt gratitude, the many experts who also contributed to this report. The criminology section benefitted significantly from the expertise of Emily Salisbury, Tamara Madensen, and Terrence Miethe of the UNLV Criminology Department. They are doing precisely what academics should: tackling the key issues of the day, in a manner that is immersed in the real-world environments of one’s own backyard and beyond. At the Las Vegas Metropolitan Police Department, Gary Schofield and his team detailed the specific policies and procedures followed there. Dr. Michael Green read the entire report with his uniquely expert eye for Las Vegas history and analysis. Peter Bernhard, the longtime Chairman of the Nevada Gaming Control Board, gave it a similarly thorough critical read to ensure the quality of the regulatory insights provided here. Dan Abdalla at the UNLV Athletic Department provided editorial insights on coaching and policing athletes who play sports in Las Vegas, and Napoleon McCallum added related insights from the perspective of a former NFL athlete now living and working in Las Vegas.

Dr. Bernhard stands to make no financial gains on any of the topics discussed in this report, and does not directly hold any financial instruments related to gaming or sporting organizations. Over the past three years, he has co-authored a report commissioned by Caesars Entertainment on problem gambling impacts in New York, reports on socio-economic impacts of potential Massachusetts-area casinos for MGM Resorts and Wynn Resorts, reports on socio-economic impacts on Vancouver-area casinos for Paragon Gaming, reports on responsible gambling for Techlink Entertainment, reports on internet gaming policy for Ocho Gaming, and a report commissioned by Las Vegas Sands on responsible gaming policies in Singapore. He has also received compensation as an expert witness on a casino branding question. Finally, he spoken at international conferences sponsored by academic, government, and industry sources, and he has received travel and honoraria for doing so. The UNLV International Gaming Institute, where Dr. Bernhard serves as Executive Director, serves as a global academic resource for gaming industry stakeholders, and as such engages in research and teaching for industry, government, and non-profit entities.

Dr. Anthony Cabot’s law firm, Lewis Roca Rothgerber, has multiple clients involved in gambling, skill contests, and sweepstakes including casinos, game manufacturers, licensed race and sports books, and fantasy league operators.
Dr. Kahlil Philander stands to make no financial gains on any of the topics discussed in this report, and does not directly hold any financial instruments related to gaming or sporting organizations. Over the past three years, he has co-authored a report commissioned by Caesars Entertainment on problem gambling impacts in New York, a report on tax policy for Bull Venture Gaming, reports on socio-economic impacts of potential Massachusetts-area casinos for MGM Resorts and Wynn Resorts, and reports on responsible gambling programming for Paragon Gaming, the Responsible Gambling Council, Marina Bay Sands, the Ontario Problem Gambling Research Centre, and BCLC. Dr. Philander is presently the Director of Social Responsibility at BCLC, a crown corporation responsible for the operation of lottery, casino, bingo and online gambling in the Province of British Columbia. He was previously the Director of Research at the UNLV International Gaming Institute, which receives funding from industry, government, and non-profit entities for educational and research programs.

During the last three years Mr. Mark Lipparelli has served as a private paid consultant to companies engaged in: 1) gaming activities whose businesses include sports wagering; and 2) professional sports. Mr. Lipparelli serves as a State Senator in the State of Nevada and also served as Chairman of the State Gaming Control Board.

Dr. Brett Abarbanel stands to make no financial gains on any of the topics discussed in this report, and does not directly hold any financial instruments related to gaming or sporting organizations. Over the past three years, she has co-authored a report commissioned by Caesars Entertainment on problem gambling impacts in New York.

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Because of the unique contours of this project, we assembled a “research dream team” for this project, with approximately 100 years of collective experience in these fields.

Biographical information on each of the key personnel is provided below:

**Bo Bernhard, Ph.D.**

Twenty years ago, Dr. Bo Bernhard began his research career at Harvard University, where as an undergraduate he completed a double major (sociology and psychology) magna cum laude thesis on the community impacts of the gaming industry. The foundations of this analysis have since been extended worldwide, and by the age of 30, Dr. Bernhard had lectured on his research on all six inhabited continents. Today, Dr. Bernhard calls Las Vegas home, but he works frequently in jurisdictions as diverse as South Africa, Australia, Singapore, South Korea, Macao, Mexico, Vietnam, Japan, Taiwan, Brazil, Russia, Portugal, Austria, Greece, England, and Canada – as well as dozens of states in the U.S. – advising government and private sector interests on policy, research, and sociological and economic impacts of the global gaming industry.
After earning his Ph.D. in 2002, Dr. Bernhard was named the inaugural Research Director at the UNLV International Gaming Institute, and he was awarded a dual professorship in hotel management and sociology. In 2011, he was named Executive Director at the IGI, where he now oversees all research and academic functions. Representing the university in these roles, Dr. Bernhard has delivered over 250 keynote addresses in clinical, regulatory, government, and policy settings. He has published in the top journals in both the business sciences (including *Cornell Quarterly*) and the social sciences (including a guest edited special volume of *American Behavioral Scientist*), and currently serves as co-executive editor for a leading peer-reviewed academic journal, *Gaming Research and Review*.

Overall, Dr. Bernhard has directed over $2.5 million in grant-funded research projects, on subjects ranging from problem gambling to the social impacts of gaming industries to internet gambling. These efforts have earned him several awards: his problem gambling efforts earned the Nevada Council on Problem Gambling’s inaugural Shannon Bybee Award, his focus on globalization earned him the World Affairs Council’s International Educator of the Year award; he has been recognized through the UNLV Hotel College’s top awards for both teaching and research, and also won the university-wide Spanos Teaching Award in 2010. More recently, he was named an inaugural Lincy Fellow at Brookings Mountain West and an inaugural CoRE (Collaborative Research and Education) Fellow at UNLV, and won the university-wide Barrick Scholar Award and the Hotel College's Denken Award for research.

**Anthony Cabot, J.D.**

Anthony Cabot is one of the world’s foremost experts in virtually every area of gaming law and policy. He has been called “the most reputable gaming attorney in the U.S.” by Chambers Global, who adds that he “has practically written the entire library of the subject.” He is a member of the Executive Committee at Lewis Roca Rothgerber, an AMLAW 100 firm. Mr. Cabot also played a leadership role in developing Lionel Sawyer and Collins’ famed gaming law practice. In these roles, he has advised governments and private sector entities in many major gaming jurisdictions in the world, in both the technology and the operations sectors.

Mr. Cabot writes prolifically on the subject of gaming law. Most recently, he co-edited *Regulating Land-Based Casinos* and *Regulating Internet Gambling* (UNLV Gaming Press), both of which are considered seminal and definitive textbooks on the topic, and are in use by jurisdictions all over the world. He also co-authored *The Law of Gambling and Regulated Gaming: Cases and Materials*, a 700+-page tome used in the gaming law class at many law schools. He is also a frequent contributor of academic, trade, and policy articles.

In academic circles, Mr. Cabot has achieved a strong reputation as the field’s top teacher and researcher. He is the honorary President of the Asia Pacific Association for Gambling Studies, which is the largest academic organization of its kind in Asia. His editorial roles include lead and/or co-editorships of *Gaming Law Journal, The Internet Gaming Report*, and *Gaming Law*.
Review, as well as editorial board roles for International Gambling Studies and Gaming Research & Review. As a longtime adjunct faculty member at the UNLV Boyd School of Law and the UNLV William F. Harrah College of Hotel Administration, Mr. Cabot has taught gaming regulation, gaming law, and gaming policy to both on-campus students and global audience of attendees via the UNLV International Gaming Institute’s educational programs. In addition, he has played a pioneering role in creating the field of gaming regulatory studies, serving as a Founder of UNLV’s Center for Excellence in Gaming Regulatory. He is a founder and past president of the International Masters of Gaming Law, and former General Counsel for the International Association of Gaming Attorneys. Mr. Cabot has a BA from Cleveland State University and a JD from the Sandra Day O’Connor School of Law at Arizona State University.

**Kahlil Philander, Ph.D.**

Dr. Kahlil Philander is one of the world’s leading economic experts on the global gaming industry. He is currently Director of Social Responsibility at the British Columbia Lottery Corp (BCLC). Prior to his work in this role, Dr. Philander served as Director of Research at the UNLV International Gaming Institute, as well as an Assistant Professor at the William F. Harrah College of Hotel Administration.

Dr. Philander’s academic and research background includes extensive experience in problem gambling, internet gaming, and socio-economic impact analysis. He formerly held the position of Senior Policy Researcher at the Responsible Gambling Council of Canada, Centre for the Advancement of Best Practices, where he was responsible for the development, evaluation, and implementation of responsible gambling program components.

Dr. Philander has worked in the gambling and policy field as an economist and researcher since 2005. He has provided analysis and research for private and public sector organizations based in Canada, the U.S., Puerto Rico, Turks and Caicos, the Bahamas, Panama, Switzerland, Singapore, Australia, and New Zealand. His research has been published in peer-reviewed journals such as Journal of Gambling Studies, International Gambling Studies, UNLV Gaming Research & Review Journal, and Tourism Economics.

Dr. Philander received his Doctorate from the University of Nevada, Las Vegas, where his dissertation focused on the economic impacts of gambling policy. He has also received a Master of Arts in Economics from the University of Toronto, and a Bachelor of Commerce degree with Honours, from the University of British Columbia.

**Mark Lipparelli, MS**

Mr. Mark A. Lipparelli is one of the world’s foremost experts on the intersections of gambling, policy, technology, and sports. From 2009 to 2012, he served as a Member and Chairman of the Nevada Gaming Control Board during a crucial and transformative period – one that encompassed both major financial crises associated with the Great Recession and major
opportunities presented during the advent of the internet gaming age. Mr. Lipparelli is credited with leading the development of the first set of interactive gaming regulations in the U.S. A current State Senator in the Nevada State Legislature, Mr. Lipparelli is Founder of Gioco Ventures, LLC and also is the founder of a consulting and advisory firm providing strategic and financial guidance to domestic and international clients ranging from investment advisory firms, national sports league, gaming operators, sports betting entities, and gaming manufacturing companies.

Mr. Lipparelli also has extensive gaming industry experience, serving as an Executive Vice President of Operations of Bally Technologies, Inc. as well as Executive Vice President of Global Gaming Systems. In these roles, he oversaw Investor Relations, Manufacturing, Intellectual Property, Strategic Planning, Product Compliance, Human Resources and Information Technology for the company. Prior to Bally Technologies Mr. Lipparelli served as President of Shuffle Master and other senior executive positions with Casino Data Systems and Cameo, Inc. Mr. Lipparelli has served on numerous boards including the Gaming Standards Association, University of Nevada Foundation, and the National Center of Responsible Gaming. Mr. Lipparelli holds a Master’s Degree in Economics from the University of Nevada, Reno, where he was a graduate of the inaugural class of that university’s prestigious Executive Development Program (EDP). Today, he serves as Co-Moderator of EDP, and also serves the university system as a founder of the UNLV Center for Gaming Regulatory Excellence.

Brett Abarbanel, Ph.D. (editor)

Dr. Brett Abarbanel is Head of Social and Recreational Gaming programs at the University of California, Los Angeles’ Gambling Studies Program, housed at the UCLA Geffen Medical School in the Department of Psychiatry and Biobehavioral Science. Over the course of her career, Dr. Brett Abarbanel has analyzed gambling policy implications in over 100 jurisdictions worldwide. She also serves as co-Executive Editor for UNLV Gaming Research & Review Journal, which publishes internationally-relevant gambling research articles representing a broad array of academic disciplines.

In 2013, Dr. Abarbanel completed her Ph.D. at UNLV, where she was recipient of several grants from both the private and public sectors, including multiple projects with Harvard Medical School faculty. In addition, she served as Project Manager for the Nevada’s largest and most comprehensive problem gambling research project to date, The Nevada Problem Gambling Project. Dr. Abarbanel was also the recipient of the Best Thesis Award and won special presidential recognition at her commencement ceremony as one of the university’s top graduates.

As an undergraduate, Dr. Abarbanel completed a Bachelor of Science in Statistics at Brown University, where she was recognized with the Hartshorn-Hypatia Award for excellence in Mathematics.
Katherine Jackson (Project Manager)

Ms. Jackson is the Associate Director of the UNLV International Gaming Institute. She is a Summa Cum Laude graduate of the William F. Harrah College of Hotel Administration’s gaming program, and also boasts marketing degrees from universities in the United Kingdom. During a 12-year executive career in England, Ms. Jackson served in project manager roles for several organizations, including the Liverpool Police Department.