



Fiscal Impact of Legalizing Online Poker in California

Prepared for

The California Online Poker Association

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NOTE: THIS REPORT WAS PREPARED PRIOR TO THE FEDERAL GOVERNMENT'S APRIL 2011 ACTION AGAINST THE LARGEST OFFSHORE ONLINE POKER WEBSITE OPERATORS. AS A RESULT OF THESE ACTIONS, THE FISCAL IMPACT ESTIMATES IN THIS REPORT MAY BE OUT OF DATE.

EXECUTIVE SUMMARY

Currently, playing poker online for money in California is not legal, although many Californians nevertheless play online poker “off-shore” at websites located outside of the United States. Under the terms of the federal Unlawful Internet Gaming Enforcement Act (UIGEA), states may authorize intrastate internet poker. Two bills currently pending in the California Legislature would provide for this authorization, thereby allowing online poker in California. Each of these proposals would also establish a fee to be paid to the state by website operators based on the revenues they collect from players, which would generate revenue for the state of California. This report presents the results of our analysis of the fiscal impact of online poker in California, were such activity to be authorized and taxed as envisioned by recent legislative proposals.

The Bottom Line

We estimate that, were online poker to be authorized, the state would benefit from increased revenues amounting to approximately \$1.01 billion over the next 10 years, assuming a 10 percent operator fee on gross gambling receipts (GGR) and a 5.5 percent annual growth rate. Within five years of implementation, the state can expect to receive more than \$100 million per year in new revenue as a result of the legalization of online poker.

This ten year fiscal projection is based on our baseline estimate that the state would initially earn \$82 million per year, assuming a 10 percent operator fee on gross gambling receipts (GGR).¹ These revenues would come from fees paid by poker website operators, taxes on the profits that these operators would earn, increased income taxes on player winnings, and additional taxes stemming from the increased economic activity that online poker would generate. These results are based on our estimates of the current size of the California online poker market and the stated preferences of Californians to play poker online at a legal, in-state website. Our results are summarized in Figure 1 below.

Figure 1: Baseline Annual Fiscal Impact of Legalization of Online Poker²

GGR Fee Revenue	Income Taxes on Net Winnings	Corporation Tax on Profits	Indirect Tax Revenue		Total Fiscal Impact
			Taxes on Employee Wages	Taxes on Indirect Economic Effects	
\$45,200,000	\$24,100,000	\$1,300,000	\$720,000	\$10,200,000	\$81,500,000

While this baseline figure gives us a detailed picture of the effect of legalization on specific types of state revenues, it does not fully capture the dynamics of legalization and future market growth. Both dynamics can be expected to alter the fiscal impact on the state over the next 10 years.

¹ We note that these results assume that legalization of online poker would not constitute a violation of the exclusivity provisions of current tribal-state gaming compacts. To the extent that online poker is found to violate this provision, the net fiscal impact would be much lower as a result of the loss of current revenues paid under these compacts. We are not aware of any definitive legal analysis of this issue, and therefore assume that, prior to passage of any bill authorizing online poker, the Legislature would obtain such an analysis.

² These results rely on the assumption that online poker operators would face a competitive market environment, and that the fees charged to operators would not unduly reduce marketing and player retention expenditures such that newly authorized California sites would be unable to successfully attract and retain players from current offshore operators.

Thus, we projected the growth of the likely fiscal impact of online poker based on anticipated increases in California's population and per capita personal income. We further assumed a two-year phase-in period during which current players would switch to a new legal site and new players would sign up.

In addition to new tax and fee revenues, the state can expect to see an increase in economic activity and employment as a result of the legalization of online poker. Specifically, we estimate that legalization of online poker as envisioned by current legislative proposals would result in approximately \$194 million in additional economic activity, and the creation of more than 1,100 new jobs. This new economic activity results from the fact that legalization of online poker has the potential to recapture a significant fraction of the revenue that flows from poker playing Californians to off-shore website operators. To the extent that a portion of the revenue currently going off-shore is redirected to and spent in California, as would be the case under legalization, California can expect to see an economic boost.

This additional fiscal and economic activity would add to the size of an already large California gaming sector, which currently accounts for approximately \$8.3 billion in annual revenue, employs approximately 64,000 Californians, and paid an estimated \$375 million to the state in fiscal year 2009-10 pursuant to existing gaming compacts and other sources, according to available data and research.

How the Estimates Were Generated

Estimating the amount of revenue to be generated from online poker requires several discrete steps. First, the size of the current online poker market must be estimated; second, the fraction of this market that would switch to a legal California site must be determined; and, finally, the size of the new market consisting of players that currently do not play, but would on a legal site, must be estimated.

Previous estimates of the amount of revenue that would be generated from online poker have relied on assumptions about how many Californians would play on a legal site and estimates of the current market size provided by gaming industry consultants relying on unpublished data sources and methodologies. Our analysis differs from these previous studies by relying on two independent surveys of Californians' attitudes and gaming activities, as well as analysis of actual poker player win and loss data, reviews of published research and surveys, and development of our own model to estimate revenues under a variety of scenarios. As a result, this report contains, in our opinion, the most accurate and reliable estimates of the likely fiscal impact of legalized online poker in California to date. Nevertheless, we note that any such estimates are subject to uncertainty, and ours are no exception.

INTRODUCTION

Currently, playing poker online is not legal in California, although many Californians play online at “off-shore” poker websites. Recent legislative proposals, however, have sought to change the laws governing online poker playing by Californians. These proposals would legalize, regulate, and tax online poker in California.

This report – prepared at the request of California Online Poker Association, a coalition of card clubs and tribal governments – addresses the question of how much revenue would be raised for the state from the legalization and taxation of online poker. The sections of this report addressing the size of the brick and mortar gaming industry in the state were prepared by the Center for Strategic Economic Research in partnership with the Blue Sky Consulting Group.

Our analysis draws extensively from two surveys of Californians that we conducted, as well as published data and previous research on online poker.

State of Current Law

The regulation of gambling, like many other activities, is a mixture of both state and federal control. State governments have the primary responsibility for determining what forms of gambling may take place within their borders while the federal government controls interstate and extraterritorial gambling, including transmitting bets over state lines. In 2006, the federal government enacted the Unlawful Internet Gambling Enforcement Act (UIGEA) to better define the federal restriction against interstate and extraterritorial gambling in the internet age. Under the terms of UIGEA, internet gambling did not become a punishable crime for players. Instead, the UIGEA sought to prevent financial intermediaries from transferring payments to poker sites or other internet gambling venues.

Although some forms of interstate gambling are expressly illegal under federal law, states may allow players within the state’s boundaries to play online real money games such as poker. California, however, currently has no such law. As such, it is legal to play poker in Native American tribal casinos and state-approved card clubs inside California, but not legal to play online poker on a site that allows players from California, other states, and other countries to wager against each other. The effect of the federal law prohibiting interstate internet gambling and California’s lack of a law authorizing intrastate internet gambling has been to channel players in California to off-shore sites that still attract U.S. players. This arrangement does not offer protections for the player in the case of bad behavior by the off-shore site’s operator or other players, such as fraud, rigging of games, or failure to pay players their winnings.

Several recent legislative proposals – both at the state and federal levels – are attempting to change the nature of internet gambling. In December 2010, two bills were introduced for the new California legislative session. Senator Wright introduced Senate Bill 45 while Senator Correa introduced Senate Bill 40. Both bills would award contracts or licenses for online poker sites in exchange for fees based on gross gaming revenue and make it a misdemeanor either to operate an unauthorized site or for players to gamble on unlicensed sites. At the federal level, proposals by Representative Barney Frank and Senator Harry Reid would authorize an expansion of internet gambling. The fiscal impact of these federal proposals would depend on the specific

elements of the proposal ultimately adopted, but the potential exists for a federal bill to pre-empt the state's ability to permit and charge a fee on online poker operations.

Previous Research on the Fiscal Impact of Online Poker

In response to an earlier effort to legalize online poker in California, two previous analyses have examined the fiscal impact of such a policy. These estimates, by the consulting firms LECG and Genest Consulting, both found that the size of the current off-shore market is substantial, and that the extent to which this market could be “recaptured” by legal California sites would directly influence the fiscal impact of the policy. However, these reports differed on how additional income taxes on player winnings would contribute to the fiscal impact, with LECG estimating a sizeable player income tax impact and Genest Consulting anticipating relatively little from this revenue source.³ The primary reason offered by Genest Consulting for the anticipated lack of additional personal income tax collections was an expectation that a relatively small share of the current market would be recaptured by a California site as a result of the taxes that would need to be paid by operators and winners. Ultimately, Genest wrote that legalization would result in a “not substantial increase in personal income tax collections” from player winnings.⁴

While both of these efforts are thoughtful analyses of the likely fiscal impact of internet poker and make a contribution to the state of knowledge on this topic, both also fail to provide any original, California-specific data about the extent to which legalization would (a) recapture California players currently playing online at off-shore sites and (b) attract new players interested in online poker, but unwilling to play at off-shore sites. Instead, these reports rely on market size estimates prepared by gaming industry consultants relying on undisclosed methodologies and data sources and assumptions on the extent of recapture and market growth that can be expected under legalization.

The research presented in this report relies on the results of two surveys we conducted designed to estimate the extent of recapture that can be expected and the likely increase in the size of the market that can be anticipated as new players take advantage of the newly legalized status of online poker in California. As the previous research acknowledges, the extent of recapture and the number of new players willing to play on a legal California site are directly relevant to estimating the fiscal impact of legalization.

HOW BIG IS THE “BRICK AND MORTAR” GAMING INDUSTRY IN CALIFORNIA?

The gaming industry has gained presence in California over recent years, particularly due to the burgeoning tribal gaming industry which resulted from the passage of the Indian Gaming Regulatory Act in 1988 and Proposition 1A in California in 2000.⁵ The tribal casinos that emerged as a result of these two measures join the state's card clubs as the most significant

³ In addition, Genest Consulting based its fiscal impact estimate on the assumption that legalized internet poker would violate the exclusivity provisions of current tribal-state compacts. The estimates presented here assume that any law, if ultimately adopted by the legislature, would not violate this exclusivity provision. To the extent that this is not the case, the estimates presented in this report would need to be reduced by the amount of the current compact revenue that would be lost.

⁴ Genest Consulting memo to Allison Harvey, January 29, 2010, p. 1.

⁵ Hill, Elizabeth G. (1998, January). *Gambling in California: An Overview*. Sacramento, CA: California Legislative Analyst's Office, 8-14.

elements of the state’s gaming industry. In this section, we report the size and scope of the California gaming industry (defined here as tribal gaming and commercial card rooms) using a variety of resources, such as industry and academic literature and publicly available data sources.⁶

To summarize the most recently available complete data on the California gambling industry: In 2008, approximately 65 tribal casinos and 84 card rooms operated in California, employing nearly 53,000 and 12,000 residents, respectively.^{7,8} With a total of 64,000 employees, the gambling industry is comparable in size to industries such as Transit & Ground Passenger Transportation or the combination of the Mining and the Power Generation & Supply industries. Moreover, as shown in Figure 3, these facilities brought in \$7.4 billion and \$889 million in gambling revenue in 2008.^{9,10} In the section below, we explore the revenue and employment generation of the gambling industry in more depth.

Figure 2-California Gambling Industry Revenue

<i>Data Source</i>	<i>Revenue*</i>		
	<i>Tribal Casinos</i>	<i>Card Rooms</i>	<i>Total</i>
National Indian Gaming Commission (NIGC), 2008	\$7,363.5	--	\$7,363.5
Casino City Press, 2008	--	\$889.1	\$889.1
<i>Combined Revenue Total</i>			\$8,252.6

Center for Strategic Economic Research, December 2010

*In millions.

Literature Resources

Our literature review found that limited research on the size of the statewide gambling industry has been published. The California State Library, California Research Bureau and the Legislative Analyst’s Office (LAO) present the most detailed literature on the size of the gambling industry in California through their studies on the role, history and rules of gambling within the state. In a 1998 report, the LAO broke down the industry into lottery, card rooms, horse racing, charitable gambling, and Indian gambling. While it did not cite specific Indian gambling revenue numbers, the report did list the 1996 card room industry size at 176 active card rooms which took in approximately \$660 million.¹¹

⁶ The data sources we examined are varied when looking at non-tribal gambling information in California—while some data specifically delineates card room revenue; other sources aggregate it with horse racing, lotteries, and other gambling revenue. As a result, any variations on the definition of the California gambling industry will be noted.

⁷ Bureau of Labor Statistics. (2010). *Quarterly Census of Employment & Wages*. Washington, DC: Author. Retrieved October 30, 2010 from <http://www.bls.gov/cew/>.

⁸ Casino City Press. (2010, January). *North American Gaming Almanac* (2009-2010 ed.). Newton, Massachusetts: Author.

⁹ Op. cit., Casino City Press.

¹⁰ National Indian Gaming Commission. (2001-2009). *Tribal Gaming Revenue by Region*. Washington, DC: Author.

¹¹ Ibid., p. 14.

More recently, a report by the California State Library listed gross gaming revenues from tribal casinos and card rooms in 2004 at \$5.78 billion and \$655 million, respectively.¹² At the time of this report, 66 of the 108 federally-recognized tribes in the State of California had gaming compacts and 61 had gaming facilities. While the number of Indian gaming facilities was increasing, the number of card rooms was decreasing, but were earning more revenue. In 2001, there were 113 card rooms, 98 in 2005, falling to 86 in 2006. Despite the diminishing number of establishments, California card rooms earned \$688 million in 2003, increasing from \$563 million in 2002, as reported by the American Gaming Association.¹³

In the following year, a separate report by the LAO specifically addressed the tribal gaming industry in California. This report stated that in 2006, 53 of the California tribes operated 54 Class III casinos (with “Nevada-style games” such as slot machines and blackjack) and one Class II casino (with games such as bingo and poker). At this time, the California Indian gaming industry took in around \$7 billion in revenues, according to the LAO.¹⁴

Data Analysis Resources

While these reports provide succinct overviews of the California gambling industry, additional data sources provide supplemental information on the industry’s establishment and employment size, revenue, and wages. Data from the Bureau of Labor Statistics’ Quarterly Census of Employment and Wages (QCEW), the National Indian Gaming Commission (NIGC), and the Casino City Press were analyzed and are provided in the figures on the following pages. Data from all sources show the overall growth of the gambling industry within the State of California over recent years. The impact of the global recession is also plainly evident on what some have said is a “recession proof” industry¹⁵—as seen in either a dip or plateau between the 2008 and 2009 data points in most of the charts, showing that even gambling can fall prey to tough economic times.¹⁶

¹² Simmons PhD., Charlene Wear. (2006, May). *Gambling in the Golden State 1998 Forward*. Sacramento, CA: California State Library, California Research Bureau, 1-6, 107-120.

¹³ *Ibid.*, pp. 1-6, 107-120.

¹⁴ Hill, Elizabeth G. (2007, February). *Questions and Answers: California Tribal Casinos*. Sacramento, CA: California Legislative Analyst’s Office, p. 8.

¹⁵ Meister, PhD., Alan. (2009, December). *Indian Gaming Industry Report*. Newton, Massachusetts: Casino City Press, p. 2.

¹⁶ The QCEW data provides specific gambling data for both private and tribal establishments in California. This information was aggregated using NAICS codes that are representative of the gambling industry. NAICS codes 713210 and 721120 are specific to casinos and casino hotels (though 713210 includes riverboat casinos but such businesses are not legal in California and therefore do not influence the results). NAICS code 713290 includes card rooms as well as other gambling establishments that are not included in this study, such as lotteries, bingo halls and parlors, and off-track betting facilities. Therefore, these numbers are not a precise representation of this report’s gambling industry definition, but nevertheless can be used to illustrate the overall impact of gaming in California. Another resource, ReferenceUSA (company database), was used to attempt to delineate the activities within the 713290 NAICS code specific to those within the gambling industry definition. Although these two sources differ in their final assessment of the total number of establishments classified with NAICS 713290 in California, our analysis of the ReferenceUSA records shows that roughly 25 percent of establishments currently within this sector are card rooms. The ReferenceUSA search identified 283 establishments that had NAICS code 713290 as their primary industry description. This number is much larger in comparison to the total of 62 “Other Gambling” establishments in 2009 according to QCEW data. When the ReferenceUSA list was cross-checked against the CGCC list of licensed card rooms, it was reduced to 70 establishments. According to this abbreviated list, there are 14,637 current card room employees working at 70 establishments.

In 2009, around 63,000 people were employed in the gambling industry, as shown in Figure 3, accounting for 0.43 percent of California's total employment. Employment in statewide gambling establishments has grown steadily throughout the last decade, climbing from about 36,000 in 2001 to almost 64,000 at the highest point in 2008. Even in light of the recession, employment declined only slightly in 2009 from the previous year.

Figure 3



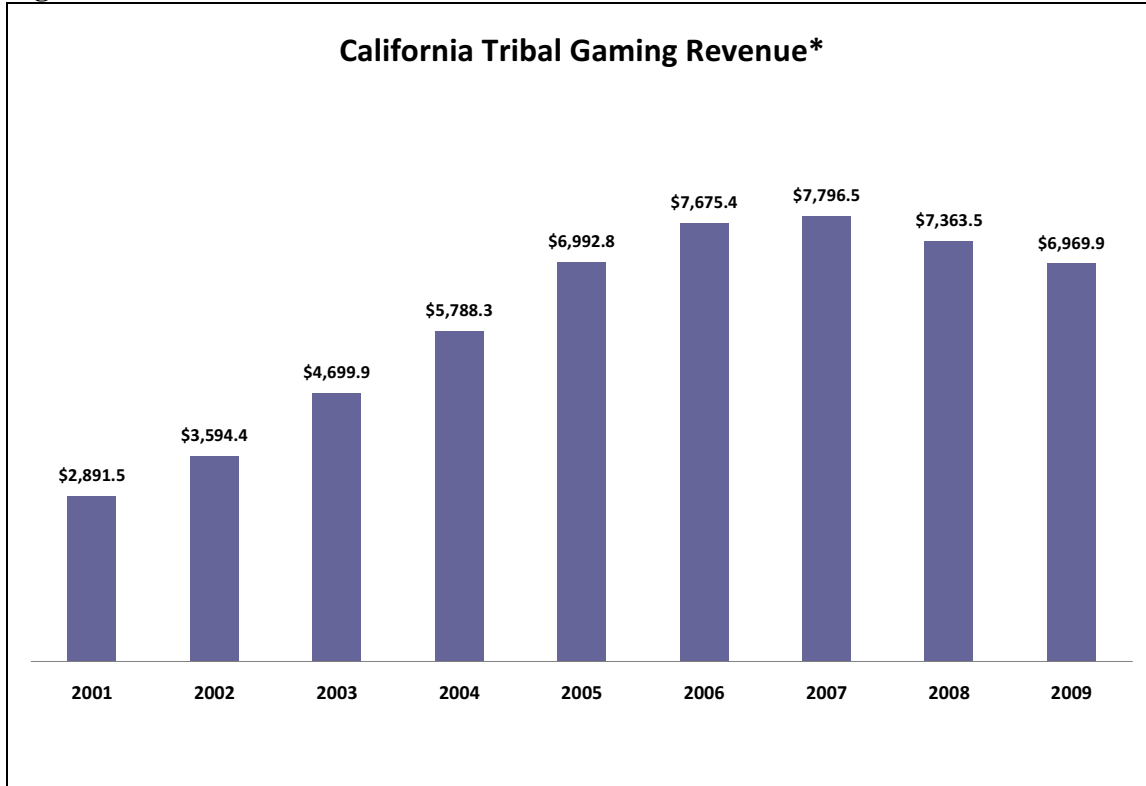
Center for Strategic Economic Research, December 2010

Data Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Tribal gaming revenue in California, as shown in Figure 4, totaled almost \$7 billion in 2009. While card rooms are still a substantial part of the gambling industry, Indian gaming dominates in California. When expanding this research to the United States, California leads with 27.4 percent of total Indian gaming in the United States. Oklahoma is a distant second with only 10.8 percent.¹⁷

¹⁷ Op. cit., Meister. p.23.

Figure 4



Center for Strategic Economic Research, December 2010
Data Source: National Indian Gaming Commission
*In millions.

The Casino City Press publishes information on the gaming industry throughout the world, with specific almanacs dedicated to North America and Indian Gaming. Total gaming revenue in California (aggregated totals of card room and Indian gaming revenue) was estimated using data from both Casino City Press and NICG. Figure 5 shows that total gambling industry revenue in the most recent year for which all data is available, 2008, was around \$8.3 billion (around \$889 million of which is from card rooms). Disaggregating the revenue data shows that between 2007 and 2008, when tribal gaming revenue declined 6 percent, card room revenue increased 2 percent.

Figure 5



Center for Strategic Economic Research, December 2010
Data Sources: National Indian Gaming Commission & Casino City Press
*In millions.

Fiscal Impact of Brick and Mortar Casinos

Brick and mortar casinos also pay taxes and fees to the state of California. While relatively little information about the overall net fiscal impact of these establishments is available, a report by the LAO found that in 2006 California tribal casinos brought in around \$7 billion in revenues, of which the State of California received approximately \$301 million from tribal gaming compacts.¹⁸

More recently, the Department of Finance reported that the state received \$370 million in General Fund revenue from gaming compacts in 2009-10.¹⁹ In addition, card clubs paid the state about \$6 million in licensing fees in 2006, according to the California Research Bureau.²⁰

While we note that a portion of these revenues are used for mitigation of gambling related costs and regulation of the gaming industry, overall, the gaming industry contributes approximately \$375 million in revenues to the state each year.

¹⁸ Hill, Elizabeth G. (2007, February). *Questions and Answers: California Tribal Casinos*. Sacramento, CA: California Legislative Analyst's Office, p. 8.

¹⁹ Department of Finance, Governor's Budget Summary for 2010-11, Schedule 8.

²⁰ California Research Bureau, "Gambling in the Golden State." May 2006.

FISCAL IMPACT OF LEGALIZING ONLINE POKER

Legalized online poker would add to the already large brick and mortar gaming industry in California. In this section of the report, we present our methodology for estimating the fiscal and economic effects of legalizing online poker as well as the specific results of our analysis.

Our analysis estimates the amount of revenue that would be generated from a fee charged to online poker website operators based on the revenues they collect from players, as well as the revenue from the taxes on operator profits, player winnings, and indirect economic activity from poker sites' purchases from California suppliers.

The precise terms of a poker legalization policy have not yet been defined, specifically as it relates to the operator fees. Therefore, in this report we analyzed the impact of a 10 percent operator fee on gross gambling receipts (GGR), for illustrative purposes. We also note that operators may be charged an up front license fee. We have not estimated the fiscal impact of such a fee in this report, so our fiscal impact estimates would need to be increased by the amount of any such fee, were one to be adopted.

Fiscal Impact Methodology

To estimate the amount of revenue that would be generated in California by a tax on licensed gaming sites, we estimated the following:

1. The amount of money Californians currently spend on online poker (at off-shore sites).
2. The fraction of these current players that would switch to a legal California site.
3. The number of new players that would play on a legal California site.
4. The amount that each of these groups of players would spend playing online poker.
5. The fiscal impact of this activity from online site operator fees, income taxes on online operator profits, income taxes paid by players on their winnings, and tax revenue resulting from the increased economic activity resulting from online poker in California.
6. The growth of the online poker market over the next 10 years.

In order to gather information on both the size and behavior of the current and potential future player populations, we conducted both a telephone and an online panel survey. The phone survey was designed to estimate the percent of Californians currently playing online and, more importantly, the percent of Californians that would likely start playing online poker if it were legalized. The online panel survey was designed to collect information on current and potential online poker players in order to estimate how many of the current players would switch to a legal site and how much current and future players would play on legal California sites. The surveys were conducted by the independent polling firm of Tulchin & Associates in November and December 2010.

How Many Californians Play Online Poker?

Because online gambling currently takes place largely at unregulated "off-shore" websites, data on the amount of money being generated by California players is not readily accessible. In fact, estimates are generally gathered from gaming consultants that use their industry knowledge or contacts to gather enough data for revenue estimates based on non-published data from

operators. Frequently, these studies simply estimate the global online gambling or online poker markets, and assume a share for California. This study sought a more direct estimate of the actual number of Californians playing online poker currently and the scope of their playing behavior.

Previous estimates of the number of people that play online poker for money are quite variable across a limited range. In order to estimate the fraction of Californians who play online poker, we collected data from several published surveys as well as our own telephone survey. First, a 2006 telephone survey of 7,121 Californians found that 1.1 percent of the 18 and over population had gambled online within the past year. Of these online gamblers, 65 percent had played online poker. Thus, according to the results of this survey, the percent of all Californians that play online poker for money was 0.72 percent.²¹ In November 2010, we also commissioned a telephone survey of 600 Californians and obtained an estimate of 0.75 percent of the California population engaged in real money online poker. A 2007 telephone study of 1,000 Nevada residents found that 3.7 percent had gambled online in the past 5 years.²² Of these, 74 percent had played poker for an online poker estimate of 2.7 percent of the entire population. An online survey done by Poker Players Research estimates that 2.8 percent of the United States population had played online poker for real money at least once a month in 2009.²³

We also examined two other surveys of online gambling generally, which we adjusted by the average ratio of online poker to online gambling found in the California and Nevada studies in order to develop a comparable estimate of the extent of online poker play among the population generally. First, a national survey by the Pew Research Center in 2006 found that 2 percent of Americans aged 18 and up had gambled on the internet, which we translated into a 1.4 percent estimate of online poker play.²⁴ In 2006, the American Gaming Association commissioned a national telephone survey that revealed that 4 percent of American adults gamble online, which lead to an estimate of 2.8 percent for online poker.²⁵ These survey results are documented in Figure 6 below. For the estimates used in this report, we relied on the average of these six surveys: 1.86 percent.

Figure 6: Estimates of Real Money Online Poker Playing Population

Survey	Result
2006 CA Survey	0.72%
2010 Tulchin CA Survey	0.75%
2006 Pew National Survey**	1.39%
2007 NV Survey	2.74%
2006 AGA National Survey**	2.78%
2009 PPR National Survey	2.80%
Average	1.86%

**Adjusted total online gambling results to estimates of online poker only

²¹ Rachel Volberg, Kari Nysse-Carris, and Dean Gerstein, *2006 California Problem Gambling Prevalence Survey* (California Department of Alcohol and Drug Programs, Aug 2006).

²² Bo Bernard, Anthony Lucas, and Elena Shampner, *Internet Gambling in Nevada* (International Gaming Institute, Apr 2007).

²³ Poker Players Research, *A Few Example Charts* (Spring 2009).

²⁴ Pew Research Center, *Gambling: As the Take Rises, So Does Public Concern*, (May 2006).

²⁵ American Gaming Association, *State of the State: The AGA Survey of Casino Entertainment*, (2006).

As a tool for corroborating these survey results, we also analyzed available gaming industry data, which reveal estimates within a similar range; GBGC estimates that there are 778,000 active accounts in California while H2 Gambling Consultants estimates that there are 400,000 active accounts.^{26,27} Since more than half of online players have more than one account active at a time, the number of accounts is generally considered larger than the actual number of active players.²⁸

How Much Revenue do Site Operators Collect from Californians?

Next, we estimated poker site operator revenues (commonly referred to as Gross Gaming Revenue, or GGR) using publicly available data from one such operator, PartyPoker. We rely on this site’s annual report data to its shareholders because it is one of the few publicly traded operators. The largest online poker operators, Full Tilt and PokerStars, are private companies that do not disclose their financial data for public consumption. According to their 2008 and 2009 annual reports, PartyPoker’s gross annual revenue per player was, on average, \$647.²⁹ We used this figure to translate our estimated number of players into an estimate of the current size of the California market, which we estimate to be approximately \$317 million.

As a comparison, our total revenue estimate translates into \$8.19 per Californian. Although previous estimates of the amount online players spend per capita vary widely, our result is within the range of previous estimates. For example, revenue data reported by H2 and GBGC to the California Legislature indicates that Californian players currently spend \$8.00 and \$11.59, respectively, per capita.³⁰ Figure 7 presents a summary of our estimates of the current size of the online poker market in California.

Figure 7: Estimate of Current Annual California Real Money Online Poker Market

Percent of Californians that play online for money	1.86
Number of current players	489,210
Average site revenue per player	\$647
Total California-based revenue	\$316,600,000
Revenue per capita	\$8.19

Estimating California Revenue on Legal Sites

If California legalizes online poker, the newly licensed sites will draw players from two distinct sub-groups of the California population: current players and potential players. Current players now play on off-shore sites that can draw players from across the globe and that do not report player winnings and losses to the government for tax purposes. These players, however, also have to deal with the inconvenience of circumventing payment restrictions due to federal law and must rely on the good faith of the site operator to provide fair play and payment of winnings. How these pluses and minuses balance out for the individual player will ultimately determine how many of them switch some or all of their play to legal sites. Specifically, the ease with which current players continue to be able access off-shore sites will influence the number of

²⁶ GBGC, *US Internet Poker Market: Assessment of Internet Poker in California* (Jan 2010).

²⁷ Art Terzakis, *Senate Committee on Governmental Organization Analysis of SB 1485* (June 2010).

²⁸ A survey by GBGC found that only 44 percent use just one account. From Michael Genest, *California Revenue Estimate* (California Tribal Business Alliance, Jan 2010).

²⁹ PartyGaming, *Annual Report 2009: Winning Formula* (2010)

³⁰ Art Terzakis, *Senate Committee on Governmental Organization Analysis of SB 1485* (June 2010).

players that switch to a legal California site. To the extent that many or most of the current off-shore sites respond to new legal restrictions on their activity by making it more difficult or impossible for Californians to play at these sites, the number of players that switch to a California site would be substantially larger. On the other hand, potential new players may be an easier draw because they are not currently loyal to an off-shore operator or style of play. Nevertheless, the frequency of play and amount spent by these players is likely to be smaller relative to current players, especially in the short run.

Our online panel survey of current poker players revealed that 28.5 percent of them are likely to switch all of their play to legal California sites while another 49.6 percent of them would play on both legal and off-shore sites. These results came in response to a question that explicitly informed survey respondents that their winnings would be subject to reporting to government tax collectors. In addition, we found that, of those who would switch their play to legal sites, the reported frequency of ring-game play and amount wagered per session increased. The reported likely frequency of tournament play also increased, particularly for the group that stated that they would switch all of their play to a legal California site.

In order to estimate the amount of revenue that would be generated from current players who switch to a legal California site, we multiplied the estimated amount of money currently collected by off-shore poker site operators times the percent of Californians that we estimate would switch to a legal site (weighted by their reported frequency of play). Based on our survey results and the estimated current size of the off-shore market, we estimate that legal sites in California would draw in \$301,000,000 per year from current players.

Next, we estimated the revenue that would be generated on legal California sites from new players. Our telephone survey revealed that 7.5 percent of California adults indicated they would play poker online for money if it becomes legal. Knowing how many would likely play, we then estimated new players' likely level and intensity of play using information from our online panel survey. We asked survey respondents directly how often they were likely to play and for how long.³¹ We found that potential players would play less often and for shorter periods of time relative to current players. Therefore, based on the survey results, we estimated the size of the population that would play poker on a legal site and multiplied it times the average revenue per player, as adjusted for the intensity of play (measured by sessions per month and length of session). Overall, we estimate that new players would generate \$151,100,000 per year in revenue for California online poker sites.

Market Size Estimates

Overall, we estimate that, were California to legalize online poker, website operators could expect to collect approximately \$452 million per year.

³¹ Length of play was measured by hands per session.

Figure 8: Estimate of Baseline Annual Legal California Market

Player Type	<i>Current Players</i>	<i>New Players</i>	<i>All Players</i>
Percent of California Population over 21	1.5%	7.5%	8.9%
Number of players	381,823	1,966,242	2,348,064
Average revenue per player	\$788	\$77	\$193
Total estimated revenue	\$301,000,000	\$151,100,000	\$452,100,000

As with any estimate of the likely future activities, ours is subject to some uncertainty. First, while we believe that these results represent the most reliable, accurate data to date on the size of the current California online poker market and the number of Californians who would play on new, legal California poker sites, they are nevertheless based on survey responses, which are subject to variability. In addition, the extent to which both the federal and state governments make efforts designed to discourage play at off-shore sites will directly impact the number of players who choose to play on a legal California site. Finally, the extent to which California sites are able to attract and retain players will influence the size of the market (and the revenues generated). If these factors all align favorably and move more current players to the legal sites and increase new player wagers, then the estimates presented here may well understate the amount of revenue to be collected by operators. However, if enforcement is lax and players are not satisfied with the legal sites because of low player participation, uncompetitive rake practices, or lackluster game options, operators may see current players remain with off-shore sites while new players become (or remain) non-players once again.

Estimating the Fiscal Impact

The state of California would draw additional revenues from legalized online poker in three main ways: taxes paid on operator revenues and profits, increased income taxes from player winnings, and additional taxes paid by suppliers and employees of gaming sites.

The largest revenue source from site operators is the GGR fee. The revenue brought in by the operator GGR fees is dependent only on the fee rate and the gross gambling revenue (GGR) of the online site operators. We estimate that a 10 percent operator GGR fee would generate approximately \$45 million per year for the state of California.

We also estimated additional corporate income tax revenues on profits earned by site operators. The amount of these additional tax revenues are proportional to the amount of profits that operators would earn. Because there are no current sites operating in California, however, we do not have any state-specific data to rely on in estimating operator profits. The extent of these profits will depend on the GGR fee established, the competitiveness of the online poker market, the extent to which Californians choose to play online poker, the success of operators in operating their businesses, and a host of other factors. Absent specific information about the extent of likely profits from California operators, we relied on publicly available financial data from PartyPoker's parent company, PartyGaming. According to these figures, pre-tax profit in 2009 was 13.3 percent of GGR. In order to model the impact of the GGR fee, we allocated the fee across the reported categories of expenditures and profits, reducing each by a proportionate share. We then multiplied the resulting profit percent times our estimate of GGR from recaptured California players and then times the corporate tax rate (8.84 percent). However, since some proportion of California site operators may be tribal governments, we assumed that only half of the total gaming revenue is subject to corporate taxes. Thus, we calculate that the state of

California would see \$1,300,000 per year in increased corporation taxes from site operators under a 10 percent operator GGR fee.

In addition to these direct taxes on site operators, we estimate that recaptured economic activity by the new California poker sites will bring in additional revenue from sources such as income taxes paid by site operator employees and taxes on indirect economic activity from employee and operator purchases from California companies. Overall, we estimate that this additional economic activity will result in an additional \$10,900,000 per year in revenues under a 10 percent GGR fee. Of this, \$720,000 is increased income tax revenue generated by new employee incomes and \$10,200,000 is from increased spending on services and supplies by the sites and their employees.

To calculate the increased employee income tax revenue, we multiplied the gross gaming revenue estimate from recaptured California players times the expected salary costs times the average state income tax rate in 2008 (4.28 percent). We estimated salary costs were two-thirds of the reported total staff costs and that they were reduced in direct proportion to the GGR fee rate. To calculate the increased services spending and its multiplier effect in the economy we multiplied gross gaming revenue from recaptured California players times the expected services and staff spending times an indirect multiplier determined from an IMPLAN analysis of the economic impact of legalized online poker times the ratio of state revenues to California gross state product (5.25 percent). The indirect economic effects account for the fact that money spent by site operators on services and employees is subsequently cycled through the economy as it moves through the supply chain. The state revenue to gross state product ratio utilizes state general fund budget data and California economics data to translate increased direct and indirect economic activity into increased state revenue.

Estimating Income Tax Revenue from Player Net Winnings

One of the most important revenue impacts of online poker legalization stems from the increase in income tax reporting on net winnings. Upon legalization, player winnings and losses would be reported automatically to the state every year, since all transactions are recorded electronically by site operators. As a result, tax reporting compliance will be dramatically higher than it is currently for off-line gaming or off-shore online gaming. The extent of this additional income tax revenue depends on how much additional money will be won, lost, and reported. Most analyses of net poker winnings rely on IRS data on overall net gambling winnings. However, these data lump together online poker play with other, vastly different gambling activities such as slot machines, sports betting, and lotteries. They also suffer from well-known underreporting.

Therefore, to arrive at our income tax estimate, we used two large online poker databases that report players' net profit data from tournaments (officialpokerrankings.com) and net earnings data from ring games (pokertableratings.com). Both of these sites track a large volume of online poker play by account name in order to inform players of their current ranking or their current table adversaries, among other uses. These sites also supply us with net win data that are uncomplicated by the effects of tax-reporting. To calculate the average net win per player, we collected a random sample of 300 players from the ring game dataset before looking up their play in the tournament database. This allowed us to measure the average net winnings of the two different types of players identified in our surveys: ring game only players and combined

tournament and ring game players. Ring game only players were identified by their absence from the tournament database.³²

Even though most players were net losers, the size of some players' net winnings results in higher average net win per player results than may, at first glance, be expected. For example, the percent of players that were net winners in ring game play was only 16 percent, but the maximum amount won was \$52,715 while the maximum lost was \$34,545. The same holds true for tournament play, where only 19 percent of players were net winners but the largest net winner in our sample won \$180,429 while the largest loser lost \$10,298. The average net win per ring game only player was \$15 and for combined players was \$975. When averaged across future online players weighted by their play type (i.e. ring only or both ring and tournament) and intensity (new players play in significantly fewer tournaments; for example), we estimate that net winnings per player will only be \$211 per year.

To translate net winnings into income tax revenue, we then used data on the adjusted gross income class of IRS gambling winners to calculate a weighted average state income tax rate of 4.87 percent to apply to these net winnings, arriving at a \$24,100,000 annual revenue estimate. This is equal to \$10 in income tax revenue per player.

FISCAL IMPACT RESULTS

Based on our analysis, we find that annual revenues for the state of California would total approximately \$82 million per year, not taking into account the dynamics of longer-run market growth. Figure 9 shows the estimated amounts that the state can expect from the GGR fee, income taxes on net winnings, corporation taxes on profits and taxes on indirect economic activity (further explained in the next section).

Figure 9: Baseline Annual State Revenue Estimates

GGR Fee Revenue	Income Taxes on Net Winnings	Corporation Tax on Profits	Indirect Tax Revenue		Total Fiscal Impact
			Taxes on Employee Wages	Taxes on Indirect Economic Effects	
\$45,200,000	\$24,100,000	\$1,300,000	\$720,000	\$10,200,000	\$81,500,000

Projecting the Fiscal Impact Results over Time

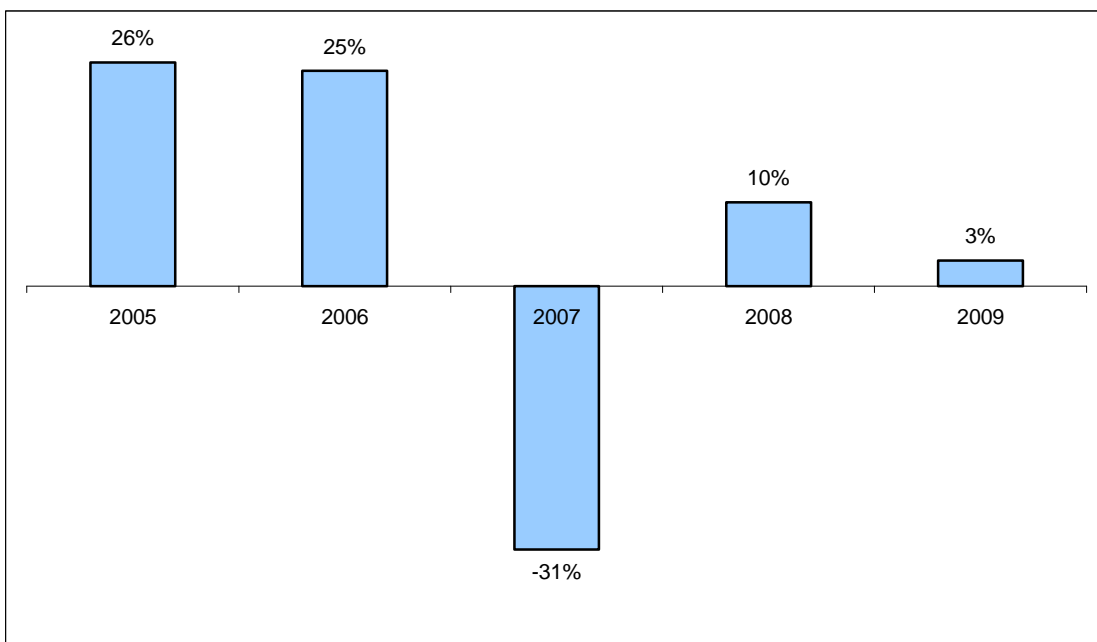
While the baseline figure gives us a detailed picture of the sources of the state revenues that will be affected by legalization of online poker, it does not fully capture the dynamics of legalization and future market growth. Both dynamics can be expected to alter the fiscal impact on the state over the next 10 years.

Specifically, following legalization it will likely take some time for current players to switch from off-shore sites and for potential new players to begin playing at new legal sites. In addition, the amount of revenue that these new legal sites would earn can be expected to grow over time. To address these factors, we projected the likely fiscal effects of legalization over a ten year period.

³² If that absence was not due to database coverage differences.

Preparing such an estimate, however, is not a straightforward exercise. The popularity of online poker has waxed and waned in the recent past, as shown in Figure 10. Some analysts have even asserted that the market has already reached its peak. At a minimum, it appears unlikely that the rapid growth online poker saw in the middle of the last decade will be repeated. In addition, the relative newness of and the dearth of public data on online poker make projections based on the few published annual growth rates problematic. Therefore, rather than rely on previous reports, we developed our own projections for online poker growth based on factors that appear likely to contribute to growth in the sector over time: the size of the playing population, the propensity of this population to play, and the personal income of this population.

Figure 10: GBGC Estimates of Yearly Changes in U.S. Gross Gambling Revenue from Online Poker³³



First, we estimated the number of new players that would play on a legal California site and their intensity of play based on our surveys. Then, we estimated the likely increase in the number of current and new players over the next ten years as well as the likely increase in amount that these players would spend. Increases in the number of players were based on estimated annual population growth using figures prepared by the Department of Finance. Based on the most recent estimates for 2010 and 2020, the population is anticipated to grow at a rate of 1.2 percent per year over the next ten years. Next, we estimated per-capita personal income growth to be 4.2 percent per year over the next ten years, based on an analysis of the average annual growth rates for the last ten years of pre-recession data.³⁴ We then used the combination of these figures (5.5 percent) to grow the baseline annual revenue estimate (adjusted for phase-in) after the first year of legalization. Specifically, we projected that it would take two years for all current players to

³³ GBGC, *US Internet Poker Market: Assessment of Internet Poker in California* (Jan 2010).

³⁴ We exclude 2009 from our results under the assumption that the next 10 years will not see another recession as deep as the most current one.

switch and for new players identified in our survey to begin playing. Therefore, in our ten year projections, half of the baseline revenue estimate is realized in the first year and all of the baseline revenue (adjusted for growth) is realized in the second year following implementation.

Although our growth estimate is based on different underlying calculations, it can be compared to an estimate prepared by GBGC. According to GBGC, the United States online poker market is set to grow 6 percent per year in 2011 and 2012, assuming no change in the legal status of online poker.³⁵ LECG, using an unknown methodology, assumes a steady state 4.7 percent growth rate for off-shore players and a decreasing set of rates between 17 and 7 percent for new players in their nine-year fiscal forecast. In comparison, our projections are in line with (although slightly less than) GBGC estimates. Finally, it is important to note that to the extent interest in poker grows at a greater rate than the underlying drivers of population and income and as reflected in our survey results, the ten-year fiscal impact forecast would also be greater. Therefore, our estimate can be considered to be a conservative projection of the likely growth over time.

With both the two-year phase-in and annual growth rate applied to our baseline estimate, we project that online poker will bring in approximately \$1.01 billion to the state over the next 10 years. In fact, by year 5, the state will be earning more than \$100 million per year, as shown in Figure 11.

Figure 11: Projected Ten Year Fiscal Impact³⁶

Year	Fiscal Impact
1	\$40,800,000
2	\$86,000,000
3	\$90,700,000
4	\$95,700,000
5	\$101,000,000
6	\$106,500,000
7	\$112,400,000
8	\$118,600,000
9	\$125,100,000
10	\$132,000,000
TOTAL	\$1,008,800,000

ECONOMIC IMPACT OF LEGALIZATION

In addition to the fiscal impact results presented above, we analyzed the economic effects of legalizing online poker in California. If California were to legalize online poker, a sizeable fraction of the revenue currently flowing to off-shore poker website operators would instead be collected by California poker websites and spent on employee wages and supplier purchases in California. This recaptured revenue and the indirect and induced economic activity that results constitutes new economic activity for California.

³⁵ GBGC, "US Internet Poker Market: Assessment of Internet Poker in California," January 2010.

³⁶ Even though the baseline amount of \$82 million is not directly in this table, it is the basis for all estimates. For example, Year 1 is half of the baseline revenue estimate, in order to adjust for phase-in. In Year 2, the entire baseline amount is increased by our growth rate. Every year thereafter is the previous year's revenue estimate increased by the growth rate.

To estimate the extent of these effects, we used our online survey to estimate the amount that Californians currently spend off-shore that would instead be spent at in-state poker websites.³⁷ We then used the PartyPoker financial data to estimate the fraction of these additional revenues that would be spent on employee wages and purchases from suppliers. Finally, we used the IMPLAN model to estimate the extent of the economic activity that would result.

Based on our survey and analysis, we estimate that approximately \$253,000,000 that Californians are currently spending off-shore would be recaptured from off-shore poker websites. Because much of this recaptured revenue from off-shore operators would be spent locally, it constitutes new economic activity for California. Of this, we estimate that approximately \$25,100,000 would be spent on employee wages, \$26,100,000 would be spent on new player acquisition and other sales and marketing activities, \$13,200,000 would be spent on webhosting and technology services, and \$20,000,000 would be spent on other administrative functions or supplier purchases. These added expenditures would, in turn, result in additional economic activity as these employees and suppliers of the poker sites make additional purchases in the California economy.

Overall, according to our analysis, legalization of online poker would result in an increase in overall economic activity of approximately \$193 million and the creation of more than 1,100 new jobs. Figure 12 (below) shows the industries with the largest employment and output changes resulting from legalization of online poker.

Figure 12: Increased Employment and Output from Legalization of Online Poker

Sector	Total Employment	Total Output
Amusement parks, arcades, and gambling industries	220.6	\$37,355,972
Advertising and related services	187.0	\$27,929,924
Food services and drinking places	60.4	\$3,980,451
Data processing, hosting, ISP, web search portals and related services	48.1	\$13,650,219
Real estate establishments	40.1	\$7,568,809
Employment services	35.5	\$1,584,987
Offices of physicians, dentists, and other health practitioners	21.0	\$2,774,623
Wholesale trade businesses	20.4	\$4,120,575
Services to buildings and dwellings	19.0	\$1,247,956
Legal services	17.6	\$3,435,696
Other	453.0	\$89,991,094
Total	1,123	\$193,640,304

CONCLUSION

We estimate that, were online poker to be authorized, the state would benefit from increased revenues amounting to approximately \$1.01 billion to the state over the next 10 years, assuming a 10 percent operator GGR fee, a two-year phase-in, and a 5.5 percent annual growth rate. In fact, by year 5, the state will be earning more than \$100 million per year from online poker,

³⁷ We did not include the additional amount that these Californians would spend, over and above what they are currently spending, as these expenditures are likely shifted away from existing in-state businesses and so do not constitute new economic activity, but rather a redirection of existing activity.

based on our projections. These revenues would come from fees paid by poker website operators, taxes on the profits that these operators would earn, increased income taxes on player winnings, and additional taxes stemming from the increased economic activity that online poker would generate.

In addition to additional tax and fee revenues, the state can expect to see an increase in economic activity and employment as a result of the legalization of online poker. Specifically, we estimate that legalization of online poker as envisioned by current legislative proposals would result in \$194 million in additional economic activity, and creation of approximately 1,100 new jobs. This new economic activity results from the fact that legalization of online poker has the potential to recapture a significant fraction of the revenue that flows from poker playing Californians to off-shore website operators. To the extent that a portion of the revenue currently going off-shore is redirected to and spent in California, as would be the case under legalization, California can expect to see an economic boost.

This additional fiscal and economic activity would add to the size of an already large gaming sector, which currently accounts for approximately \$8.3 billion in annual revenue, employs approximately 64,000 Californians, and pays an estimated \$375 million to the state pursuant to existing gaming compacts and other sources, according to available data and research.

APPENDIX A: TELEPHONE AND ONLINE SURVEY METHODOLOGY

Telephone Survey Methodology

The telephone survey was conducted by Tulchin Research, which used by professional interviewers to contact and ask questions of survey respondents. The survey reached 600 adults, 21 years or older, in California. The survey was conducted November 21-23, 2010, and interviews were conducted in English.

The survey was conducted using RDD (random-digit-dial) methodology. Respondents were chosen at random from a list of a computer-generated random sample of both listed and unlisted landline telephone numbers. Once a household was reached, an adult respondent (ages 21 years or older) was chosen for interviewing using the “youngest adult male” method to ensure a representative sample. The data were weighted by gender, age, ethnicity, and region to ensure an accurate reflection of the population. The sample size with these weights applied is 600.

In interpreting survey results, all surveys are subject to potential sampling error. This means the results of this survey may differ from results derived from interviewing the entire universe of all California adults 21 years of age and older. The size of the sampling error depends upon the total number of respondents in the survey, the number of respondents of a particular question, and the percentage distribution responses to a specific question. The survey’s margin of error is plus or minus 4.0 percent at the 95 percent confidence level. This means that 95 times out of 100, if a response to a given question to which all respondents answered was 50 percent, we could be 95 percent confident that the true percentage would fall within plus or minus 4.0 percent of this percentage or between 46.0 percent and 54.0 percent. The sampling error for subgroups is larger.

Online Survey Methodology

The online survey was conducted by Tulchin Research, which utilized an online panel provided by an online sample vendor. The survey reached 463 adults, 21 years or older, in California. Among the 463 respondents, 263 current online poker players were identified based on a screening question and 200 potential online poker players were defined based on their intent to play online poker if it were to become legal. The survey was conducted November 29 – December 7, 2010.

Panelists were recruited by the sample vendor through thousands of web sites the vendor works with directly as well as with data aggregators. The majority of the recruitment is contracted through aggregators to help ensure expansive reach to thousands of web properties and millions of visitors to those properties. This approach is designed to optimize the probability that the panel reflects the overall composition of that segment of the online population. Members are recruited nationwide through a broad, diverse network of sources using thousands of different internet channels to ensure broad geographic and demographic representation.

In interpreting survey results, all surveys are subject to potential sampling error. The size of the sampling error depends upon the total number of respondents in the survey, the number of respondents of a particular question, and the percentage distribution responses to a specific question. The online survey’s margin of error is plus or minus 4.54 percent at the 95 percent

confidence level. This means that 95 times out of 100, if a response to a given question to which all respondents answered was 50 percent, we could be 95 percent confident that the true percentage would fall within plus or minus 4.54 percent of this percentage, or between 45.44 percent and 54.54 percent. The sampling error for subgroups is larger, where the margin of error for the sample of 263 current online poker players is plus or minus 6.2 percent and the margin of error for the sample of 200 potential online poker players is plus or minus 6.9 percent, at the 95 percent confidence level for both subgroups.

The table below represents the estimated sampling error for different percentage distributions of responses.

Sampling Error by Percentage
(at 95 in 100 confidence level)

PERCENTAGES NEAR		10	20	30	40	50	60	70	80	90
SAMPLE SIZE										
800		2.1	2.8	3.2	3.4	3.5	3.4	3.2	2.8	2.1
700		2.2	3.0	3.4	3.6	3.7	3.6	3.4	3.0	2.2
600		2.4	3.2	3.7	3.9	4.0	3.9	3.7	3.2	2.4
500		2.6	3.5	4.0	4.3	4.4	4.3	4.0	3.5	2.6
400		2.9	3.9	4.5	4.8	4.9	4.8	4.5	3.9	2.9
300		3.4	4.5	5.2	5.5	5.7	5.5	5.2	4.5	3.4
200		4.2	5.5	6.4	6.8	6.9	6.8	6.4	5.5	4.2
100		5.9	7.8	9.0	9.6	9.8	9.6	9.0	7.8	5.9