

# Research Report

## Internet Gaming in New Jersey

Calendar Year 2014 Report to the  
Division of Gaming Enforcement

Submitted by:

Lia Nower, J.D., Ph.D.

**RUTGERS**

Center for Gambling Studies

School of Social Work

February 2015

To Cite This Report: Nower, L. (2015). *Internet Gaming in New Jersey*. Calendar Year 2014 Report to the Division of Gaming Enforcement. New Brunswick, NJ: Rutgers University.

Copyright ©2015 by Lia Nower

## Table of Contents

<b>LIST OF TABLES.....</b>	<b>3</b>
<b>INTRODUCTION.....</b>	<b>4</b>
<b>Player Profiles.....</b>	<b>4</b>
<b>Problem Gambling and Related Activities.....</b>	<b>5</b>
<b>High Risk Markers.....</b>	<b>5</b>
<b>Responsible Gambling Strategies.....</b>	<b>7</b>
<b>INTERNET GAMING IN NEW JERSEY.....</b>	<b>8</b>
<b>Responsible Gambling.....</b>	<b>9</b>
<b>FINDINGS.....</b>	<b>10</b>
<b>Responsible Gaming Features.....</b>	<b>12</b>
<b>SUMMARY AND RECOMMENDATIONS.....</b>	<b>15</b>
<b>REFERENCES.....</b>	<b>19</b>

## List of Tables

Table 1. Current Operator and Gaming Sites.....	9
Table 2. Patron Accounts Created By Skin 2013-2014.....	11
Table 3. Bi-Monthly Internet Gaming Win by Licensee.....	11
Table 4. Participation in Responsible Gambling Features by Skin.....	12
Table 5. Usage of Responsible Gambling Features by Gender and Age.....	13
Table 6. Use of RG Features by Age Category.....	15

## Introduction

This report, prepared pursuant to N.J.S.A. 5:12-95.18, is the first in a series of four annual reports that will examine the impact of Internet gaming on problem gambling and gambling addiction. The current report covers the first year of Internet gaming in New Jersey. Subsequent reports will be issued in the first quarter of each calendar year, as specified in a Memorandum of Agreement between the Division, Rutgers Center for Gambling Studies, and the Department of Human Services. Future reports will examine the relationship of play patterns, use of responsible gaming features, and the prevalence of Internet gaming in New Jersey to problem gambling.

Internet gaming is a form of gambling that takes place through media connected to the Internet. Used interchangeably with the term “interactive gaming,” the activity can include online poker (peer-to-peer gaming) as well as games using a random number generator (e.g. blackjack, slots, video poker).

It is estimated that 0.1% to 13% of the adult population gambles on the Internet (Broda, et al., 2008; Sproston, Hing & Palankay, 2012, Wardle et al., 2011; Wood & Williams, 2011). Legal and regulated in three states, Internet gaming bills are proposed or under consideration in an additional 10 states, including California, Pennsylvania, and Colorado. The popularity of Internet gaming is due to a number of factors, including the potential for higher wins and faster play in a convenient and relatively anonymous environment (Wood & Williams, 2009). Regulatory standards worldwide vary considerably, from those that are focused on player protection (e.g., U.K, New Jersey) to those that are, essentially, unregulated (e.g. Costa Rica)(Wiebe & Lipton, 2008).

## Player Profiles

International research has provided some insights into the profile of those who gamble online. A recent Australian study found that Internet gamblers participated in an average of 10 different forms of gambling, which was significantly higher than the average of three activities for non-Internet gamblers (Gainsbury et al., 2012) Like Internet gamblers in a Canadian study (Wood & Williams, 2009), a majority of Australian online gamblers were male and employed, with higher household incomes. Studies have also found that Internet gamblers demonstrate higher levels of risk-taking behavior and greater consumption of alcohol and illicit drugs (Kairouz, Paradis, & Nadeau, 2012; Wood & Williams, 2011), but report fewer health and psychological problems than non-Internet gamblers (Gainsbury, Russell, Hing, Wood, & Blaszczynski, 2013). Other studies have found higher levels of impulsivity (Hopley & Nicki, 2010) and more variable emotional states (Lloyd et al, 2010; Matthews, Farnsworth & Griffiths, 2009) than non-Internet gamblers. Findings regarding psychiatric comorbidity have been mixed, with

some studies finding higher rates of mental health disorders among Internet gamblers (Lloyd et al., 2010; Petry & Weinstock, 2007) and other studies reporting few differences (Jimenez-Murcia et al., 2011). Lloyd and colleagues (2010) have theorized that there are specific sub-clusters of Internet gamblers (i.e. casino, poker, “multi-activity”), which appear to differ on both demographic and clinical characteristics and could account for some of the discrepancies across populations.

## **Problem Gambling and Related Activities**

The relationship of problem gambling to online versus land-based gaming is complex. A number of studies have reported higher rates of problem and disordered gambling among Internet players (Brunelle et al., 2012; Gainsbury et al., 2014; Griffiths et al., 2011; Olason et al., 2011). For example, a study of international gamblers found prevalence rates of problem gambling three to four times higher in Internet gamblers (17.1%) as compared to non-Internet gamblers (4.1%), with poker and slot machines ranking as the two most problematic forms of play (Wood & Williams, 2009). Similarly, a large prevalence study in Britain found that problem gambling rates were significantly higher among those who gambled online when compared to those who had not (5% versus 0.5%) (Griffiths et al, 2011). However, data from the British Gambling Prevalence Survey suggested that most online gamblers also gambled offline (“mixed mode” gamblers), making it difficult if not impossible to determine which medium and/or form of gambling most contributes to problematic play (Wardle et al., 2011). Similarly, an Australian prevalence study reported rates of problem gambling that were three times higher among “interactive” (Internet, mobile phone) gamblers; however, problem and moderate risk gamblers were most likely to attribute those problems to electronic gaming machines and land-based gambling rather than to their play online (Gainsbury et al., 2014). Taken together, these findings likely suggest that the Internet provides an additional medium for individuals who are already involved in gambling activities in other venues and may already have established high-risk patterns of play.

## **High Risk Markers**

Though it is difficult to apportion risk from Internet gambling alone, it is possible to identify high risk gamblers within the online gaming environment. It is well-recognized that early identification of problem gambling behaviors may limit resulting harm. The anonymous world of online gaming presents a significant though not insurmountable challenge to identifying players most at risk for developing problems. In casino environments, high risk gamblers are often known to employees because of the time they spend gambling, the things they say, or the way they behave. Similarly, family and friends who are concerned about players can usually find them in a familiar gaming venue. The online world, however, is largely anonymous to the

players' families. Transactions and betting episodes are easily hidden and patrons are largely represented by ID numbers on account data. While operators have the capacity to identify high intensity players, websites lack the human interaction between worker and player that sometimes leads to intervention.

Some researchers have attempted to develop algorithms based on betting behavior to aid in predicting which online gamblers are likely to gamble at highest risk. Though study populations in these investigations vary and may differ significantly (e.g. sports betters) from online casino and peer-to-peer players in New Jersey, the findings may be useful to highlight the most relevant variables for further study. For example, Braverman and Shaffer (2012) investigated the patterns of players who closed their accounts after one month to two years of active play due to excessive gambling. The researchers found that a frequent and intensive betting pattern, high variability across wager amounts, and increasing wager size during the first month of betting were most characteristic of high-risk players. Similarly, Dragicevic, Tsogas & Kudic (2011) reported that intensity and frequency of play were more important than trajectory or variability at predicting risky gambling behavior in a study of players at an online casino.

Expanding on these investigations, Adami et al. (2013) added two markers to the analyses: (a) a "sawtooth marker," an algorithm that identifies patterns of "ramp and crash" (i.e., increasing wager size followed by rapid drops) and (b) a proxy for overall time spent gambling using the number of different games played. Results found that players with high levels on all markers were most likely to be problem gamblers. Two other high risk patterns emerged as well: (a) those who played infrequently but, when they played, gambled with high intensity and highly variable wagers as well as saw tooth crash events and (b) those who played most often, on a number of games, with the highest number of sawtooth events, and medium intensity and variability.

Braverman and colleagues (2013) recently used the responsible gambling features of one internet gaming provider to explore predictors of gambling-related problems online using variables measuring betting activity (e.g. total active days, sum of stakes, number of various games played), dynamic changes in betting patterns suggested by Adami et al. (2013), variables that summarized gambling during specific times of the week, and variables that describe using promotional money for gambling. The analyses identified two high-risk groups: Group 1 was engaged in three or more gambling activities and evidenced higher wager variability on casino-type games and Group 2 engaged in two different gambling activities and evidence high variability for live action wagers.

Other researchers have suggested that simply analyzing betting patterns may be insufficient to identify high-risk players. Glynn and colleagues (2014) have theorized that it is important to identify "what they say" and "how they pay" in addition to "how they play." For example, Swiss

researchers interviewed senior staff members and customer service representatives from three private internet gaming companies and identified communication-based indicators that correctly predicted 76.6% of players who went on to self-exclude (Haefeli, Lischer, & Schwarz, 2011). While this study is preliminary and qualitative in its analysis, it does suggest that initiating contact with operators may serve as an indicator of risk in conjunction with other factors. Similarly, it is possible that switching among multiple credit cards, bank accounts and other forms of commerce may, likewise, be an indicator of high risk play, although there are no empirical studies exploring this theory. Financial inconsistency, player communication, and betting patterns, may prove salient variables in assisting players in limiting risk while gambling online. In addition, the use of responsible gambling features, combined with these other factors during and after initiation of the features, is also a promising area for exploration in developing harm reduction strategies.

### **Responsible Gambling Strategies**

Worldwide, a number of gaming operators and regulators have instituted money-limiting systems for online play. Typically, there are fixed or variable deposit, play, bet, loss and time limits self-imposed by the player. There has been little systematic research on the effect of limit-setting for online players, and the few early studies were plagued by methodological limitations such as abnormally high spending limits or failure to control for the effects of discrete features (see Broda et al., 2008). Recently, Auer and Griffiths (2013) evaluated responsible gambling data from an Austrian gambling website that requires all players to set time and cash-in limits, limits the cash-in amounts per week, and only allows players to increase spending limits after a 72 hour cooling off period. The study found that high intensity players, particularly those who bet on casino games, received the most benefit from these features; voluntary spending limits, particularly among poker players, had the largest effect on spending.

A study of the money limiting features on an Internet sports betting site found that, in general, the use of self-imposed limits led to more responsible play, with reductions in overall amount wagered, time spent gambling, and frequency of bets but not bet size (Nelson et al., 2008). The study also found that more than 10% of those who set limits subsequently stopped gambling, a finding that could suggest that players evaluated their behavior due to limit setting and discontinued play or that they merely stopped gambling on sites with these features and continue gambling elsewhere. Much more research is needed to understand the mechanisms whereby players seek to impose self-limits; gamble before, during, and after imposing those limits, and how those outcomes vary by age, gender and other demographic factors.

# Internet Gaming in New Jersey

New Jersey is one of only three states to legalize and regulate online gaming. Nevada, which offers only online poker, was the first state to pass legislation in June 2011. Delaware, operating a variety of games through its state lottery, is the third state.

In January 2010, State Sen. Raymond Lesniak (D-Union) and other legislators introduced bills in the Senate and State Assembly to allow licensed Atlantic City casinos to offer online gaming within the borders of New Jersey. The bill passed the Senate by a vote of 29 to 5. After an amendment, the bill passed the Assembly 63 to 11 in 2011 and the State Senate passed the revised bill 34 to 2. In early 2011, Gov. Chris Christie vetoed the online gambling bill.

In 2012, Sen. Lesniak and his colleagues introduced Senate Bill S1565 and a companion bill, Assembly Bill A2578, which were adopted by the New Jersey Legislature. Gov. Christie issued a conditional veto requesting revisions, including the dedication of more money to problem gambling services. Following those changes, the New Jersey Legislature passed the amended bill, which was signed into law by Governor Christie on Feb. 26, 2013. Under the new law, only casinos currently licensed in Atlantic City were eligible to partner with online gaming operators, and those partnership arrangements had to be filed before July 1 of 2013. In addition to a \$400,000 operating/licensing fee and a \$250,000 Responsible Internet Gaming Fee, operators are required to pay 15% of Internet gaming gross revenue in taxes, deposited into the Casino Revenue Fund, which pays for programs that benefit qualifying senior citizens and people with disabilities. An additional 2.5% of Internet gross gaming revenue is reinvested in projects approved by the Casino Reinvestment Development Authority. To gamble on line in New Jersey, players must: (a) be 21 years old or older and (b) be located within New Jersey.

Table 1 shows the current list of operators, skins, and URLs. For purposes of this report, the “Licensee” is the land-based gaming corporation, the “Operator” is the internet gaming provider, and the “Skin” refers to the brand, which may have one or more associated websites, displayed in Table 1 as a URL. In contrast to Nevada, which legalized only online poker, New Jersey’s legislation allows both casino games (e.g., Blackjack, Spanish 21, Bonus Blackjack, American and European Roulette, craps, slot machines, video poker) and peer-to-peer games (e.g. No-limit and Limit Hold’em Poker, Pot Limit Omaha (PLO), Seven Card Stud, Draw Poker, Omaha Hi/Lo).

**Table 1. Current Operator and Gaming Sites**



Licensee	Platform Operator(s)	Skin(s)	Game Offerings	URL(s)
<b>Borgata</b>	Bwin	Bwin	Casino/Peer to Peer Poker	www.NJ.Partypoker.com
		Borgata	Casino/Peer to Peer Poker	www.Borgatacasino.com www.Borgatapoker.com
	Pala	Pala	Casino/Peer to Peer Blackjack	www.palacasin.com
<b>Caesars Interactive Entertainment</b>	888	Harrahs	Casino	www.HarrahsCasino.com
		888	Casino/Peer to Peer Poker	us.888.com us.888poker.com us.888casino.com
		WSOP	Casino/Peer to Peer Poker	www.WSOP.com
	Amaya	Caesars	Casino	www.CaesarsCasino.com
<b>Golden Nugget</b>	Bally	Golden Nugget	Casino	www.GoldenNuggetCasino.com nj-casino.goldennuggetcasino.com
	Game Account/Betfair	Game Account/Betfair	Casino	www.betfaircasino.com
<b>Tropicana</b>		Tropicana	Casino	www.tropicanacasino.com
	GameSys	Virgin	Casino	www.virgincasino.com

## Responsible Gambling

Internet gaming in New Jersey is regulated by the Division, which requires operators to include a number of responsible gambling features for players who want to limit losses and reduce the potential harm that accompanies loss of control over gambling and problem gambling behavior. Those features include limits on the amount of money you can deposit to use for play, the amount you can lose, and the amount of time you can spend gambling. Players may also set a minimum 72 hour cooling-off period and self-exclude from online gaming sites for a period of one or five years.

### Additional Responsible Gambling Features

The Regulations require that players receive:

- A full explanation of all imposed fees and charges related to gaming transactions;
- Access to account statements detailing activity for at least six months preceding 24 hours prior to the request and “be capable” of providing a summary statement of all patron activity during the past year including:
  - deposits to the internet or mobile gaming account
  - withdrawals from the internet or mobile gaming account

- win or loss statistics
- beginning and ending account balances
- self-imposed responsible gaming limit history if applicable
- The right to set responsible gaming limits, set a cooling off period for no less than 72 hours, and to self-exclude
- Information on contacting the gambling hotline and the Council on Compulsive Gambling of New Jersey, and other temporary requirements that can be found at <http://www.nj.gov/oag/ge/docs/TempRegs/responsiblegamingrequirementsdisplay.pdf>.

In addition to options for cooling off and self-exclusion, players in New Jersey can set:

- A deposit limit on a daily, weekly, or monthly basis that specifies the maximum amount of money a player may deposit into the Internet gaming account during a specific period of time;
- A spend limit on a daily, weekly, and monthly basis that specifies the maximum amount a player can lose during a specific period of time;
- A daily time limit that specifies the maximum number of play hours from log in to log off.

Decreases in limits take effect at next log in, and increases, after the time period of the previous limit expires and after the player reaffirms the requested increase. When lifetime deposits exceed \$2,500, players are barred from wagering until they acknowledge: (a) they have met the Division's gaming deposit threshold of \$2,500; (b) they have the capability to establish responsible gaming limits or close his or her account; and (c) the availability of the 1-800-GAMBLER helpline.

## Findings

The internet gaming “soft play” period went live on November 21 and 24-hour gaming operations began on November 25, 2013.

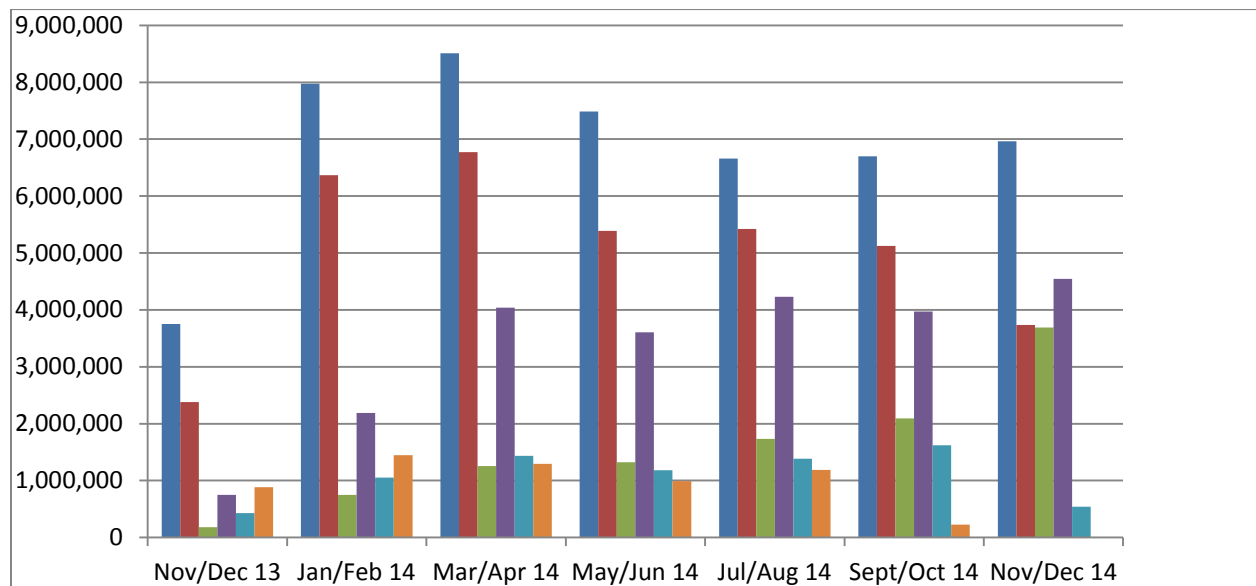
By the end of 2013, 126,231 internet gaming accounts were created, which rose by nearly 321% to 531,626 by the end of December 2014. Total number of patron accounts by skin ID is presented in Table 2; the total proportion of multiple versus single account holders, however, is unknown so the figures are not reflective of the actual number of players.

**Table 2. Patron Accounts Created By Skin 2013-2014**

Skin ID	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	2014 Total per Skin
A	5,182	14,275	5,464	3,132	1,489	965	982	857	967	793	448				34,554
B	1,802	2,945	2,508	3,268	1,893	2,025	2,245	1,801	1,666	1,272	1,220	815	2,025	4,081	29,566
C	3,075	2,004	2,876	6,237	4,593	1,967	2,092	2,411	2,840	3,094	3,330	2,640	3,587	2,660	43,406
D	2,522	3,777	8,208	4,576	3,412	1,965	1,688	2,327	3,089	2,683	2,580	2,482	2,848	3,193	45,350
E	6,038	9,843	11,237	6,879	10,105	7,679	7,017	6,344	5,759	5,376	4,604	5,753	7,584	3,555	97,773
F	6,443	16,042	13,409	7,168	5,569	3,958	3,397	5,413	4,232	4,006	3,682	3,337	3,697	3,882	84,235
G	4,488	2,934	5,791	3,616	3,219	3,184	3,140	1,799	1,760	2,100	2,649	1,875	2,138	1,534	40,227
H	207	238	729	1,077	1,711	1,887	2,060	614	606	612	698	604	599	525	12,167
I	307	2,086	1,935	3,052	2,307	1,709	1,180	1,277	1,277	1,535	1,581	1,488	1,552	1,740	23,026
J	14,040	9,984	11,988	7,785	6,399	4,166	3,775	3,430	3,580	3,603	3,103	2,566	2,916	2,472	79,807
K	7,248	10,751	7,406	3,669	2,687	1,293	1,137	1,155	1,050	1,153	990	1,011	1,015	950	41,515
<b>Monthly Total</b>	<b>51,352</b>	<b>74,879</b>	<b>71,551</b>	<b>50,459</b>	<b>43,384</b>	<b>30,798</b>	<b>28,713</b>	<b>27,428</b>	<b>26,826</b>	<b>26,227</b>	<b>24,885</b>	<b>22,571</b>	<b>27,961</b>	<b>24,592</b>	<b>531,626</b>

In a little over a month of operations, internet gaming revenue, called “win,” was about \$8.4 million (\$7.4 million in December), with two licensees capturing nearly three-fourths of the market share. By December of 2014, monthly win had risen to \$10.7 million, an increase of 45.3% over December 2013, with increasing parity among most licensees. From inception in late November 2013 through December 2014, Internet gaming generated a total of \$131.2 million in win. Of that, 15% of gross revenue was paid in taxes to the State of New Jersey and 2.5% was paid to the Casino Reinvestment Development Authority. See Table 3 for relative revenue distribution by licensee.

**Table 3. Bi-Monthly Internet Gaming Win by Licensee**



## Responsible Gaming Features

Among the states with legalized Internet gaming, New Jersey’s regulations are the most clearly directed toward aiding consumers in making informed choices about their gambling behavior and promoting responsible gambling. These actions come, in part, in response to Governor Chris Christie’s explicit directive to annually explore the relationship of Internet gaming and problem gambling. To that end, the Division has required all operators to meet specific criteria to encourage responsible gambling. Some of those requirements are to: (a) display the current time and time elapsed during the session; (b) provide information on resources and helpline numbers as well as account and game history; and (c) options to set limits on losses, deposits, time played; to “cool off” for a minimum of three days; and to self-exclude through the Division from all internet gaming sites.

Table 4 provides an overview of the number of account holders across skins that opted to utilize specific responsible gambling (RG) features.

**Table 4. Participation in Responsible Gambling Features by Skin**

	<b>Set Loss Limit</b>	<b>Chng Loss Limit</b>	<b>Set Deposit Limit</b>	<b>Chng Deposit Limit</b>	<b>Set Time Limit</b>	<b>Chng Time Limit</b>	<b>Set Cool Off Period</b>	<b>Self-Excluded (1 year)</b>	<b>Self-Excluded (5 years)</b>
	226	133	272	262	108	0	451	24	33
	452	183	926	425	936	297	611	34	43
	169	88	226	209	71	0	277	18	23
	310	186	282	291	95	0	494	34	25
	424	306	1,071	979	160	100	1,512	87	51
	446	235	1,071	599	115	69	451	11	11
	990	406	2,310	1,327	396	130	881	39	36
	41	16	399	399	24	2	724	132	34
	94	133	304	521	36	33	64	62	45
<b>Total Acct.</b>	<b>3,152</b>	<b>1,686</b>	<b>6,861</b>	<b>5,012</b>	<b>1,941</b>	<b>631</b>	<b>5,465</b>	<b>441</b>	<b>301</b>
<b>%</b>	<b>.59%</b>	<b>.32%</b>	<b>1.30%</b>	<b>.95%</b>	<b>.37%</b>	<b>.12%</b>	<b>1.04%</b>	<b>.08%</b>	<b>.06%</b>

Overall, participation in these limit-setting activities varied significantly, a low of 314 players (.06%) opting for five-year self-exclusion to a high of 6,851 players (1.30%) opting to set deposit limits, by far the most popular option. In total, very few patrons accessed the responsible gambling features; possible reasons for low uptake will be discussed in a later section. However, data for this first report was extremely limited, so it is not possible to evaluate the use of these features by skin. In addition, the information provided was for player accounts by skin, which does not aggregate by discrete player accounts. That is, a player could access the

same or different features across three or four skins where s/he has accounts; therefore, a player would be counted each time s/he accessed a feature. In addition, data was available by gender, age and limit-setting preference from some but not all operators. Table 5 provides a snapshot of the gender and age profile of data on RG features.

**Table 5. Usage of Responsible Gambling Features by Gender and Age**

Mean Age By Skin	%Male	Mean Age Male	Range In Years	%Female(n)	Mean Age Female	Range in years	Skin Type
37.53(SD=11.12)	78.8%	36.44(SD=10.68)	21-86	21.2%	41.58(SD=10.68)	21-80	Casino/Poker
41.46(SD=13.55)	54.3%	39.91(SD=13.58)	21-98	45.7%	43.30(SD13.29)	21-104	Casino
38.83(SD12.86)	80.4%	36.79(SD12.52)	21-102	19.6%	41.97(SD13.53)	21-94	Casino/Poker
43.19(SD10.48)	69.9%	42.04(SD11.06)	22-71	30.1%	46.06(SD=8.28)	28-69	Casino
38.29(SD=12.17)	73.1%	37.49(SD=12.17)	21-81	44.9%	40.44(SD=12.00)	22-81	Casino
38.74(SD11.46)	62.2%	36.94(SD10.94)	21-75	37.8%	41.71(SD=11.71)	22-79	Casino
36.06%(SD 10.61)	79.5%	34.54(SD9.59)	21-75	41.9%	41.94(SD12.25)	22-79	Casino/Poker
33.46%(SD9.14)	91.0%	32.99(SD8.95)	21-74	9.0%	38.13(SD9.72)	22-62	Casino/Poker
<b>Overall Mean Age: 38 Years</b>		<b>Overall Mean Age Male: 37 Years</b>			<b>Mean Age Female: 47 Years</b>		

There were several interesting differences among the groups. For example, at one skin offering casino games and poker, more than three-fourths of players (N=3,611) were male (78.8% versus 21.2% female), with a mean age of 37.53 years (SD 11.12). Among those patrons, there were statistically significant differences in age by gender, with men ranging in age from 21 to 86 (SD=10.68) and women, averaging 41.58 years (SD=11.78) and ranging from 21 to 80 years,  $F(1,3609)=134.21, p \leq 001$ . In contrast, patrons of another skin that offered only casino games were older, with an overall mean age of 43.19 years (SD=10.48). By gender, there were also significant differences by age in this group, with women averaging 46 years (SD=8.28) and ranging in age from 28 to 69; men averaged 42 years (SD=11.06) and ranged in age from 22 to 71 years,  $F(1,622.87) = 5.813, p = .017$ . The skins with the highest percentage of female players provided only casino games.

A majority of players who accessed RG features chose to set deposit limits. An average of 762 players set some form of deposit limit; this varied widely by skin, ranging from a minimum of 226 players to a maximum of 2,310 players. Of those who set limits, 73% (n=557), on average, later opted to change those limits. It is unknown, however, whether those changes resulted in raising, lowering, or removing limits, because only data on the number of changes but not the nature of changes was available. Similarly, across skins, an average of 350 players set limits on the amount of money they could lose, ranging from a minimum of 41 players on one skin to 990 on another skin. Of those who set loss limits, most (53.49%) opted to change those limits; an

average of 187 players across skins changed their pre-set loss limits though, once again, it is impossible to tell from the limited data whether those limits were increased, lowered or removed. A total of 5,465 account holders opted to set a minimum three-day cooling-off period, making the cooling-off option the second most popular RG feature. In addition, 447 players sought a 1-year and, 314, a 5-year period of self-exclusion from online gaming; however it is unknown whether those individuals first opted for the less stringent “cooling-off” then moved to self-exclusion, self-excluded after using other RG features, or selected self-exclusion as the first and only option.

For purposes of analyses, data sets were combined for three skins with complete data profiles, to investigate gender, age, and RG feature differences. Two of these skins offer casino and poker and one, casino only gaming. Of 2,841 total players who accessed RG features across the three skins, only 26.1% did so at a casino-only skin. Overall, patrons to the three sites were 79.4% male and 20.6% female, though, broken out by skin, men were overrepresented at sites that featured poker (79.5% and 91.0% versus 62.2%). The data provided did not include gender breakdowns for the total player population, only for those who accessed RG features, so it is not possible to assess whether these percentages are representative of the overall patron population by skin.

Players who sought limit-setting across the three skins ranged in age from 21 to 79 years with a mean of 35.75 years ( $SD=10.52$ ). About 79% of players were men ( $n=2,256$ ) while 21% players were women ( $n=585$ ). There were statistically significant gender differences by age,  $F(1,2839)=210.70$ ,  $p\leq.001$ , with men averaging of 34.35 years ( $SD=9.7$ ) and women, 41.18 years ( $SD=11.66$ ). By skin, there were notable gender differences as well, with a significantly higher proportion of women accessing RG features on casino-only sites, and men, on sites that feature casino games and poker,  $\chi^2(2, 2841)=224.23$ ,  $p\leq .001$

For patrons of these skins, opting for a cooling-off period ( $n=842$ , 39.0%) was the most popular responsible gambling feature, followed by setting deposit limits ( $n=811$ , 28.5%) and setting a loss limit ( $n=729$ , 25.6%). Those percentages remained relatively consistent across the casino/poker skins, however, for the casino-only skin, all RG features were patronized equally (20% per feature). Analyzed by gender, there were statistically significant differences in RG preferences by gender,  $\chi^2(4, 2841)=41.11$ ,  $p\leq .001$ , resulting from a higher than expected preference by males for loss limits and a lower than expected preference for deposit limits; conversely, fewer women than expected opted for loss limits and more than expected, for deposit limits. In order, men preferred cooling off (29.3%), loss limit (27.3%), deposit limit (26.3%), time limit (10.0%) and self-exclusion (7.1%). Women opted first for setting deposit limits (37.1%) followed by cooling off (30.8%), loss limit (19.0%), time limit (9.6%) and self-exclusion (3.6%).

For all three skins, there were significant reported differences by age,  $F(1, 2839)=210.70$ ,  $p \leq .001$ , and by individual skin,  $F(1,742)=31.443$ ,  $p \leq .001$ . In addition to differences by gender, there were also significant differences in choices of RG features by age,  $F(4, 2836)=4,251$ ,  $p=.002$ . Post hoc tests further demonstrated that those who set loss limits were significantly younger than those who opted to set deposit limits or a cooling-off period. These differences in age were non-significant by gender. To further explore the relationship of features to age, data was recoded into age categories: Group 1=21-34, Group 2=35-54, Group 3=55+. As indicated in Table 6, a majority of patrons across skins were 35 years old or younger.

**Table 6. Use of RG Features by Age Category**

Age Category	Percentage of Sample	Preferred RG Feature	Preferred Feature by Gender	
			Male	Female
21-34	58.8%(n=1598)	Cooling Off	Cooling Off	Deposit
35-54	34.4%(n=1053)	Deposit Limit	Cooling Off	Deposit
55+	6.7%(n=190)	Cooling Off	Deposit	Cooling Off

There were significant differences in preferred RG feature by age,  $\chi^2(8, 2841)=23.11$ ,  $p=.003$ , with younger players preferring a cooling-off period followed by setting a loss limit; middle adults opting for deposit limits followed by cooling off period; and older adults choose cooling off followed by deposit limits. There were also significant differences by age in feature preference by gender for women,  $\chi^2(8, 585)=26.37$ ,  $p \leq .001$ , but not for men, who selected RG features in the proportions that were statistically predicted. In contrast, more younger women than expected opted for loss limits, though deposit limits received the highest endorsement (33.8%) followed by cooling off (28.2%). Among middle adults, deposit limits were, by far, the most preferred feature (43.9%), followed by cooling off (29.8%). Older adult women preferred cooling off (40.2%) and deposit (23.0%), though fewer women than expected chose deposit.

## Summary and Recommendations

Legalized internet gaming is a new phenomenon in the United States. Of the three states currently regulating the activity, only New Jersey has undertaken a quantitative evaluation of player behavior across operators and an investigation into a potential relationship between online gaming and problem gambling behavior. As a result, the data available for the first year report was extremely limited, with operators responding to requests from the Division for data that is not readily available. In the coming years, it will be important to have a systematic data transfer protocol to speed the delivery of data and provide a rich and accurate series of data sets for analysis.

There was insufficient data to examine the demographic make-up of players per skin to evaluate whether New Jersey gamblers were reflective of other Internet gamblers in the research literature. However, a preliminary exploration of available data on patrons of responsible gaming (RG) features suggests that New Jersey players appear demographically similar to those in other published reports: They are predominantly men, particularly on poker sites, averaging around mid-30s and significantly younger than the women who gamble online, who prefer sites that offer casino games. Other factors cited in the research literature – educational, employment and marital status, and ethnicity – will be considered in the upcoming prevalence study of online gaming in New Jersey. That study should also provide information on whether, as in other studies, there are sub-clusters of Internet gamblers, some characterized by multi-modal play in which the Internet provides an additional rather than a primary venue.

A main focus of this first report was the use of RG features across skins. A common misconception about RG features is that they are intended for problem gamblers. In reality, studies have found that these features are most useful to high intensity players (Auer & Griffiths, 2013) and recreational gamblers without problem symptoms (Nower & Blaszczynski, 2010), because problem gamblers are reluctant to use features that may inhibit them from chasing losses. To that end, combining RG features with the opportunity to gamble online should allow players to customize the experience and make informed choices about the time and money they are spending.

Unfortunately, the data showed that the use of the current features in New Jersey is very low. Only around 1% of all account holders accessed the most popular feature, deposit limit. Of those who set deposit limits, most changed them at some point, though there was not available data on whether those players increased, decreased, or eliminated the limit. A high proportion of those who accessed other features opted to change them as well. The data failed to differentiate players who accessed features on one account from those with multiple accounts who used the same feature or features across skins. In the latter case, far fewer than 1% of the players would be accessing RG features after aggregating accounts and tying them to one user.

There are a number of possible reasons for low uptake of RG features but three are the most likely contributors. First, a visual survey across skins revealed that RG features are difficult to access and to understand. The presentation varies by website, but most skins place some or all of the features within the player's account tab, which may or may not be visible from the front page. Second, the type is very small and explanations of individual features are severely limited; it is likely most patrons either don't notice the features or fail to read or understand the explanations. Third, there is no educational component provided to players at sign-up about RG options, outreach to encourage usage, or incentives to set reasonable limits. The lack of consistency across sites makes it difficult for players, particularly those with multiple



accounts, to access the tools that would aid in harm reduction. The provision of RG options is likewise unstandardized. For example, some operators have the cooling-off and self-exclusion options with the limit-setting provisions and others do not. Clocks, though required, are difficult to find, much less to see.

A more robust data set would provide insight into which players access RG features, the nature of their play before and after sign-up, whether RG players are demographically representative of the larger player pool across skins, and how RG players differed from non-RG players. In addition, it will allow us to evaluate the multifactorial nature of high-risk play, which has historically been analyzed exclusively by betting behavior and patterns. It is likely that other factors such as account balance monitoring, customer service contacts, application and removal of RG features, and use of multiple payment sources will likely provide useful information regarding the complex relationship of online gambling and high-risk play. This will, in turn, allow the State to develop protocols and improve RG features to better assist players in making informed choices and maintaining positive levels of play.

Accordingly, we would make the following **recommendations**:

1. Incorporate RG sign-up and education into account sign-up. Ideally, the Division would develop a brief, standardized educational module on available features. At sign up, players would be redirected to the RG module to receive the educational information then redirected directly back to the RG sign-up page on the individual skin. Only after completing the limit-setting opt-in or out screens, would the player complete the sign-up process. This would function similarly to retail sites that redirect buyers to PayPal to authorize payment before completing a sale. A more restrictive alternative procedure would provide the education then set default limits for all players, similar to privacy defaults on Facebook and other sites, which players can choose to change or remove. This approach will better ensure that players are fully aware of the nature and extent of RG features and devote some level of thought to the process before making a choice.
2. Increase branding for RG features. Create an easily identifiable logo (such as “RG” in a large, bright graphic) that would be placed in the same location on the front page of all skins and would immediately redirect the player to the RG page. From there, players could be directed to limit-setting education then to the RG feature selection pages. That page should include the limit-setting features, cooling off, and self-exclusion options all in the same menu. Increasing branding, visibility, and ease of use of accessing RG education and features would likely encourage players to give more consideration to the features.
3. Require players who increase a limit or discontinue a feature and those who exceed their \$2,500 lifetime deposit limit to be redirected to the RG education link. There, they

would need to reaffirm their choices after completing the education module and endorsing a reason for the change before reinitiating play. Sites could be required to use pop-ups, similar to those that are used to launch a game or when attempting to wager more than the balance.

4. Provide a standardized format for accessing player protection features: Ideally, clicking the RG logo would bring players to a page with standardized contents and sub-contents. For example:
  - a. RG features redirect and sign-up
  - b. Problem Gambling Services (hotline, Council, gambling myths and screens etc.)
  - c. Player account activity statements (These should be available for the same timeframe across skins and accessible within a prescribed period of time.)
5. Label all the required features the same. For example, “RG” instead of “patron protection,” “Problem Gambling Information” instead of myths, risk info, hotlines etc.
6. Create a standardized clock that is clearly visible and place it in a standardized location on the each page. If possible, incorporate the clock with the RG feature logo in one stand-alone box.

These minor modifications should greatly assist players in finding, assessing, and, if applicable, utilizing responsible gaming features. It will also begin to develop a standardized platform for RG features, which could be utilized with new providers or with new state compacts should Internet gaming continue to expand offerings and encompass more jurisdictions.

## References

- Adami, N., Benini, S., Boschetti, A., Canini, L., Maione, F., & Temporin, M. (2013). Markers of unsustainable gambling for early detection of at-risk online gamblers. *International Gambling Studies, 13*, 188-204.
- Auer, M., & Griffiths, M. D. (2013). Voluntary limit setting and player choice in most intense online gamblers: An empirical study of gambling behaviour. *Journal of Gambling Studies, 29*, 647-660.
- Braverman, J., LaPlante, D. A., Nelson, S. E., & Shaffer, H. J. (2013). Using cross-game behavioral markers for early identification of high-risk internet gamblers. *Psychology of Addictive Behaviors, 27*, 868.
- Braverman, J., & Shaffer, H.J. (2012). How do gamblers start gambling: Identifying behaviour markers for high-risk internet gambling. *European Journal of Public Health*. Advance online publication. doi:10.1093/eurpub/ckp232.
- Broda, A., LaPlante, D. A., Nelson, S. E., LaBrie, R. A., Bosworth, L. B., & Shaffer, H. J. (2008). Virtual harm reduction efforts for Internet gambling: effects of deposit limits on actual Internet sports gambling behaviour. *Harm Reduction Journal, 5*, 27
- Brunelle, N., Leclerc, D., Cousineau, M.M., Dufour, M., Gendron, A., & Martin, I. (2012). Internet gambling, substance use, and delinquent behavior: An adolescent deviant behavior involvement pattern. *Psychology of Addictive Behaviors, 26*, 364.
- Dragicevic, S., Tsogas, G., & Kudic, A. (2011). Analysis of casino online gambling data in relation to behavioural risk markers for high-risk gambling and player protection. *International Gambling Studies, 11*, 377-391.
- Gainsbury, S. M., Russell, A., Hing, N., Wood, R., Lubman, D. I., & Blaszczynski, A. (2014). The prevalence and determinants of problem gambling in Australia: Assessing the impact of interactive gambling and new technologies. *Psychology of Addictive Behaviors, 28*, 769-779.
- Gainsbury, S. M., Russell, A., Hing, N., Wood, R., & Blaszczynski, A. (2013). The impact of internet gambling on gambling problems: A comparison of moderate-risk and problem Internet and non-Internet gamblers. *Psychology of Addictive Behaviors, 27*, 1092.
- Gainsbury, S., Wood, R., Russell, A., Hing, N., & Blaszczynski, A. (2012). A digital revolution: Comparison of demographic profiles, attitudes and gambling behavior of Internet and non-Internet gamblers. *Computers in Human Behavior, 28*, 1388-1398.

- Glynn, J., Choi, K., Walter, K., & Blaszczynski, A. (February, 2014). *Best and emerging practices in the regulation of Internet gambling*. Poster presented at the 3rd Annual New Horizons in Responsible Gaming Conference, Vancouver, British Columbia, Canada.
- Griffiths, M., Wardle, H., Orford, J., Sproston, K., & Erens, B. (2011). Internet gambling, health, smoking and alcohol use: Findings from the 2007 British Gambling Prevalence Survey. *International Journal of Mental Health and Addiction, 9*, 1-11.
- Haefeli, J., Lischer, S., & Schwarz, J. (2011). Early detection items and responsible gambling features for online gambling. *International Gambling Studies, 11*, 273-288.
- Hopley, A.A., & Nicki, R.M. (2010). Predictive factors of excessive online poker playing. *Cyberpsychology, Behavior, and Social Networking, 13*, 379–385.
- Jiménez-Murcia, S., Stinchfield, R., Fernández-Aranda, F., Santamaría, J. J., Penelo, E., Granero, R., et al. (2011). Are online pathological gamblers different from non-online pathological gamblers on demographics, gambling problem severity, psychopathology and personality characteristics? *International Gambling Studies, 11*, 325-337.
- Kairouz, S., Paradis, C., & Nadeau, L. (2012). Are online gamblers more at risk than offline gamblers?. *Cyberpsychology, Behavior, and Social Networking, 15*, 175-180.
- Lloyd, J., Doll, H., Hawton, K., Dutton, W.H., Geddes, J.R., Goodwin, G.M., & Rogers, R.D. (2010a). Internet gamblers: A latent class analysis of their behaviours and health experiences. *Journal of Gambling Studies, 26*, 387–399.
- Matthews, N., Farnsworth, B., & Griffiths, M.D. (2009). A pilot study of problem gambling among student online gamblers: Mood states as predictors of problematic behavior. *Cyberpsychology and Behavior, 12*, 741–745.
- Nelson, S., LaPlante, D., Peller, A., Shumann, A., LaBrie, R., & Shaffer, H. (2008). Real limits in the virtual world: Self-limiting behaviour of Internet gamblers. *Journal of Gambling Studies, 24*, 463–477.
- Nower, L. & Blaszczynski, A. (2010). Gambling motivations, money-limiting strategies, and precommitment preferences of problem versus non-problem gamblers. *Journal of Gambling Studies, 26*, 361-372.
- Olason, D.T., Kristjansdottir, E., Einarsdottir, H., Haraldsson, H., Bjarnason, G., & Derevensky, J. (2011). Internet gambling and problem gambling among 13 to 18 year old adolescents in Iceland. *International Journal of Mental Health and Addiction, 9*, 257-263.
- Petry, N.M., & Weinstock, J. (2007). Internet gambling is common in college students and associated with poor mental health. *American Journal on Addictions, 16*, 325–330.

- Sproston, K., Hing, N., & Palankay, C. (2012). Prevalence of gambling and problem gambling in New South Wales. *Sydney: NSW Office of Liquor, Gaming and Racing*.
- Wardle, H., Moody, A., Griffiths, M., Orford, J., & Volberg, R. (2011). Defining the online gambler and patterns of behaviour integration: Evidence from the British Gambling Prevalence Survey 2010. *International Gambling Studies, 11*, 339-356.
- Wiebe, J., & Lipton, M. D. (2008). *An Overview of Internet Gambling Regulations*. Report prepared for the Ontario Problem Gambling Research Centre, Ontario, Canada.
- Wood, R. T., Williams, R. J., & Lawton, P. K. (2007). Why do internet gamblers prefer online versus land-based venues? Some preliminary findings and implications. *Journal of Gambling Issues, 20*, 235-252
- Wood, R.T., & Williams, R.J. (2011). A comparative profile of the Internet gambler: Demographic characteristics, game-play patterns, and problem gambling status. *New Media & Society, 13*, 1123-1141.
- Wood, R.T. & Williams, R.J. (2009). *Internet Gambling: Prevalence, Patterns, Problems, and Policy Options*. Final Report prepared for the Ontario Problem Gambling Research Centre, Guelph, Ontario, Canada.