

Internet Gaming in New Jersey

Calendar Year 2018 Report to the Division of Gaming Enforcement Submitted by:

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I. Introduction

A. Background

The yearly Internet Gaming Report in New Jersey, prepared pursuant to N.J.S.A. 5:12-95.18, evaluates online gambling activity in 2017 and examines the overall impact of Internet gaming and problematic patterns of play. The report compares play patterns of the current with prior years, focusing on player demographics, play patterns, and use of responsible gambling features.

In response to recommendations from these yearly reports, the Division of Gaming Enforcement (DGE) has implemented a number of recommendations to assist individuals in gambling responsibly, including:

- Requiring all Internet gaming sites to contain a common page referred to as the "Responsible Gaming" page in order to provide patrons with information to locate limitsetting options and other required responsible gaming information.
- Requiring all Internet gaming sites to incorporate the following specific language to alert patrons to the availability of limit-setting options on the registration page: "For the purposes of responsible gaming, this website provides you the ability to set limits on your activity. If you are interested in implementing responsible gaming limits such as deposit, loss, and time limits, as well as cooling off periods or self-exclusion from online gaming, please look for the responsible gaming logo or the responsible gaming page for additional information."
- Most importantly, instituting a standardized RG logo button, which immediately redirects patrons to the "Responsible Gaming" page. Each Internet gaming site is required to display the logo on their main page and lobby for ease of accessibility

This year, there was an increase in the number of patrons using responsible gaming features. Though the number of patrons -5,467 – is only 6.2% of the total number of gamblers analyzed, it was the first increase in four years and a sizable increase over the prior year. This uptake is due, possibly, to the DGE requirement that each operator add a standardized RG logo to each site to provide a uniform shortcut or gateway to the RG offerings required in the State.

B. 2017 Report Data

To gamble online in New Jersey, individuals must be at least 21 and located within the state while gambling. In this report, the terms "gambling" and "gaming" are used interchangeably. Typically, researchers distinguish between those who gamble for money (i.e. gambling) and gaming, which refers to video game play; however the industry refers to gambling as gaming so we adopt both terms. Similarly, those who wager on Internet gaming sites are variously referred to as gamblers, players, and bettors.

Table 1 shows the list of operators, skins, and URLs active in 2017. 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. 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).

Licensee	Platform Operator(s)	Skin(s)	Game Offerings	URL(s)
	Deer	Party Poker	Casino/Peer to Peer Poker	www.NJ.Partypoker.com
	ROar	Borgata	Casino/Peer to Peer Poker	www.Borgatacasino.com www.Borgatapoker.com
Borgata	Roar	MGM	Casino/Peer to Peer Poker	<u>casino.nj.betmgm.com</u> poker.nj.betmgm.com
	Pala	Pala	Casino/Peer to Peer Poker Blackjack/Bingo	www.palacasino.com www.palapoker.com www.palabingousa.com scorescasino.com
	NYX	Caesars	Casino	www.CaesarsCasino.com
Caesars Interactive Entertainment		Harrahs	Casino	www.HarrahsCasino.com
	888	888	Casino/Peer to Peer Poker	Us.888.com Us.888casino.com Us.888poker.com
		WSOP	Casino/Peer to Peer Poker	www.WSOP.com
Goldon	NYX	Golden Nugget	Casino	www.GoldenNuggetCasino.com nj- casino.goldennuggetcasino.com
Nugget	Rush Street	SugarHouse	Casino	www.playsugarhouse.com
	Game Account/Betfair	Betfair	Casino	www.betfaircasino.com
Tropicana	GameSvs	Tropicana	Casino	www.tropicanacasino.com
		Virgin	Casino	www.virgincasino.com
	NVV	Resorts Casino	Casino	www.resortscasino.com
Resorts Digital Gaming LLC		Mohegan Sun Casino	Casino	www.mohegansuncasino.com
	PokerStars NJ	PokerStars NJ	Casino/Peer to Peer Poker	www.pokerstarsnj.com

 Table 1. Operator and Gaming Sites in 2017

II. Methodology

The Division of Gaming Enforcement (DGE) collected raw data files from all the operators in a standardized variable format. The DGE provided the data to the Center for Gambling Studies (CGS) as zipped files on a password-protected hard drive. Those files were then transferred to an encrypted and password-protected server. Once the raw data files were extracted from compressed format, each text data file (both CSV and DAT formats) was read into SPSS format. The length and data format of all variables were standardized across all files from all casinos. Demographic files, individual bet files, balance files and responsible gaming (RG) features files were sorted by the unique player identification code (DUPI) and time/data stamp variable. To analyze the data, the individual bet files from all casinos were combined into a single file containing all bets across all casinos by all players. Using SPSS (version 25), the data was cleaned again and analyzed for missing or erroneous data, and questionable data was checked with the DGE for verification and/or correction. The resulting file was then matched to demographic, balance and RG features files by the unique player identification code (DUPI) and aggregated using SPSS. Univariate and bivariate statistics were used to analyze daily player betting behavior across all casinos and all games, betting behavior across regions, betting behavior by time of day, and patterns of play of all players and those who opted to utilize RG features.

III. Player Demographics

Although more players signed up for accounts in 2017 compared to the prior year, only 21% of new players (n=57,549) placed at least one bet online. In total, there were 115,778 players with active online accounts this report year. Player age was inaccurate or missing in files provided to us by the operators for 3.7% (n=4,335) of the sample, and gender information was missing, as it has been in all prior years, for nearly a quarter of the sample, due to missing gender data from one provider. While it was not possible to conduct trend analyses due to changes in providers and offerings, where possible, this report will reference overall trends from 2014 through the present for context. Overall, information on gender and age was available for 88,810 players for this report (Table 2).

Table 2. Missing Data Summary							
Missing Data Summary	Valid Sample	Missing	Total				
Gender	88,803	26,975	115,778				
Age	111,443	4,335	115,778				

A. Age and Gender

Though the age of players, overall, has remained relatively stable across the past four years, the proportions within those age groups have shifted. Within New Jersey, the number and percentage of younger players, between 21 and 24, has increased since 2014, while the proportion of players ages 45 to 64 has slightly decreased (Table 3).

By gender, 2017 had the highest proportion of women across years of legalized online gaming, whereas the proportion of men who live both in and outside New Jersey decreased (Table 3). Rates of online gambling among women living in New Jersey increased from 29.3% in 2016 to 30.2% in 2017. In contrast, about 69.8% of New Jersey residents who gambled online were men, a decrease from 2014 and 2016 (70.7% each) and 2015 (74.9%). Between 2016 and 2017, there also was a similar increase in the total proportion of female gamblers and a decrease of male gamblers living outside New Jersey (Table 3).

Age	In NJ 2	2014	In NJ	2015	In NJ 2	016	In NJ 2	017
Group	%	Ν	%	Ν	%	Ν	%	Ν
21-24*	12.3	7,811	13.5	9,561	**11.1	6,512	14.2	11,007
25-34	35.3	22,211	35.5	25,148	34.6	20,294	34.7	26,947
35-44	22.2	13,986	21.8	15,468	22.9	13,437	22.3	17,343
45-54	16.6	10,486	16.2	11,479	17.1	10,054	15.9	12,368
55-64*	9.2	5,781	8.9	6,326	** 9.7	5,711	8.9	6,909
65+	4.4	2,481	4.1	2,894	4.6	2,689	4.0	3,129
	100		100		100		100	
Total	62,7	56	70,	876	58,69	97	77,7()3
Mean	38.	8	38.	56	39.0	2	38.4	9
SD	12.9	91	13.	06	13.1	3	13.1	1
Gender	In NJ 2	2014	In NJ	2015	In NJ 2	016	In NJ 2	017
	%	Ν	%	Ν	%	Ν	%	Ν
Male^	70.7	44,366	74.9	49,078	70.7	41,533	69.8	54,241
Female	29.3	18,328	25.1	16,454	29.3	17,164	30.2	23,462
	100		100		100		100	
Total	92.3	62,756	89.9	65,532	89.2	58,697	87.5	77,703
Age	Outside of	[•] NJ 2014	Outside o	f NJ 2015	Outside of	NJ 2016	Outside of	NJ 2017
Group	%	Ν	%	Ν	%	Ν	%	Ν
21-24*	10.29	539	11.4	880	**8.9	631	10.2	1,129
25-34	39.61	2,075	44.1	3,405	**41.9	2,986	**38.2	4,243
35-44*	23.16	1,212	23.3	1,801	23.4	1,667	23.5	2,612
45-54*	14.62	766	13.0	1,003	**15.1	1,074	15.3	1,701
55-64*	7.84	411	6.1	468	7.4	527	** 8.9	989
65+*	4.48	235	2.2	171	3.3	235	3.8	426
	100		100		100		100	
Total	5,23	38	7,7	28	7,12	0		11,100
Mean	38.4	18	36	53	37.5	7		38.71
SD	12.9	98	11.	36	12.0	4		12.65

Table 3. Comparing Online Gamblers Living In and Outside New Jersey by Age

Gender	Outside NJ 2014		Outside	Outside NJ 2015		Outside NJ 2016		Outside NJ 2017	
	%	Ν	%	Ν	%	Ν	%	Ν	
Male^	75.6	3,958	80.9	5,950	76.9	5,473	71.6	7,952	
Female	24.3	1,275	19.1	1,403	23.1	1,647	28.4	3,148	
	100		100		100		100		
Total	7.7	5,238	10.8	7,353	10.1	7,120	12.5	11,100	

* Significant differences across years for specific age range (p < .001)

** Identifies the year in which a significant difference in the proportion of users was observed for the corresponding age range (p < .001)

^ Indicates a significant gender difference across each of the four years (p < .001)

Players may register for multiple accounts across different sites (see Table 4). Overall, a slightly higher proportion of gamblers played on either one account or five or more accounts in 2017, compared to 2016, when slightly more players held two, three, or four accounts but fewer single accounts or accounts of five or more.

Table 4.	Number	of Sites B	Bet on by	Account Hol	der and Perce	ent in 2017

Number of	Number of	Percent
sites bet	account holders	
1	46,243	62.7
2	11,667	15.8
3	5,268	7.1
4	3,175	4.3
5	2,223	3.0
6	1,662	2.3
7	1,274	1.7
8	1,022	1.4
9	688	0.9

Note: No significance testing was conducted because the number and offerings of casinos changed across years.

Due to differences in operators and offerings, it was not possible to make statistical comparisons regarding site usage. However, as demonstrated in Table 5, an increasing proportion of gamblers patronized a greater number of sites in 2017. In 2014 for example, about 1.5% of gamblers visited six sites or more. However, by 2017, that proportion had risen to 7%.

	0 1			1
Number of	2014	2015	2016	2017
sites bet	Percentage	Percentage	Percentage	Percentage
1	68.71	71.9	58.5	62.7
2	18.97	14.2	19.9	15.8
3	6.02	5.5	10.8	7.1
4	2.91	3.1	5.4	4.3
5	1.88	2.1	2.9	3.0
6	1.37	1.4	1.3	2.3
7	0.14	1.0	0.8	1.7
8		0.7	0.3	1.4
9			0.0	0.9
10				0.7
11				0.1

Table 5. Percentage Comparisons of Number of Sites by Year*

*Significance levels not calculated due to changes in the number of operators across years.

Across age categories, the proportion of online gamblers in the 21 through 24 and the 25 through 34 age categories increased in 2017 compared to the prior year but declined significantly for participants aged 55 and older. This pattern was the same for both men and women, although, overall, women were overrepresented compared to men in the 45+ age categories (see Table 6). In general, men were overrepresented in the younger age ranges, with 52.6% between 21 and 34 years of age, and women were overrepresented among those 45 and older, with 37.4% of women falling in that age range. For men, this marks a mild increase over 2016, where 49.4% of men were between 21 and 34 years of age; however, there was a mild decrease by age among women, from 39.4% in 2016.

	Age Category		Gender				
Age Group			N	lale	Fe	Female	
	%	Ν	%	Ν	%	Ν	
21-24*	13.7	12,136	15.0	9,303	10.6	2,833	
25-34*	35.1	31,190	37.6	23,379	29.4	7,811	
35-44	22.5	19,955	22.4	13,925	22.7	6,030	
45-54*	15.8	14,069	14.1	8,780	19.9	5,289	
55-64*	8.9	7,898	7.6	4,728	11.9	3,170	
65+	4.0	3,555	3.3	2,078	5.6	1,477	
Total	100	88,803	100	62,193	100	26,610	

Table 6. Age Category by Total and Gender of All Online Players (N=88,803)

*Indicates a significant gender difference between men and women (p<.001)

After four years of incremental increases in the proportion of older players, the proportion decreased slightly in 2017, with 4.0% of players 65 and older, compared to 4.44% of players in 2016 (see Table 7). The average age of all players in 2017 likewise declined slightly to 38.52 years, compared to 38.86 years in 2016. Across all four years of data, the highest proportion of players was in the 25 to 34 age group, followed by ages 35 to 44 and 45 to 54. The overall proportion of male players decreased across four years from 76.78% to 70.03% of the total player cohort, with

a corresponding increase in the proportion of female players. As indicated in Table 7, findings with regard to age and gender in 2016 fluctuated significantly across the years.

Age Group	2014 (%)	2014 (n)	2015 (%)	2015 (n)	2016 (%)	2016 (n)	2017 (%)	2017 (n)
21-24	12.23	11,529	13.13	9,570	**10.85	7,143	13.7	12,136
25-34	37.67	35,503	36.75	26,785	35.37	23,280	35.1	31,190
35-44	22.68	21,378	21.96	16,003	22.95	15,104	22.5	19,955
45-54	15.50	14,608	15.64	11,399	16.91	11,128	15.8	14,069
55-64	8.27	7,796	8.62	6,284	** 9.48	6,238	8.9	7,898
65+	3.65	3,441	3.90	2,844	**4.44	2,924	4.0	3,555
Total		94,255		72,885		65,817		88,803
Ave. Age		38.78		38.36		38.86		38.52
Gender	2014 (%)	2014 (n)	2015 (%)	2015 (n)	2016 (%)	2016 (n)	2017 (%)	2017 (n)
Male	76.78	72,366	75.5	55,028	71.42	47,006	70.03	62193
Female	23.22	21,889	24.5	17,857	**28.58	18,811	**29.97	26610

Table 7: Age Category and Gender by Year for All Online Players

** Significant difference by year for either age or gender (*p* < .001)

Gender comparisons across play type are shown in Table 8. Among men, more than half (53.5%) gambled only on casino games, an increase of more than 4% over the prior year, and nearly 15% gambled across all forms. In contrast, an overwhelming proportion of women, 86.4%, gambled only on casino games, a small increase over 2016; only a small percentage, around 5%, gambled on all forms of online gambling. Overall, only 22.4% of men and 3.9% of women reported no casino gambling.

Table 8. Gender Comparison Across and	d Within Play Types in 2017	(N=88,803)
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		Gender Across Play Type												
Gender	All ty	pes	Casin	o only	Poker	Only	Tourna On	ament ly	Casir Pok	io & ker	Poke Tourna	r & ment	Casi Tourn	no & ament
	%	Ν	%	n	%	n	%	n	%	n	%	n	%	n
Male	14.8	9,205	53.5	33,283	7.7	4,813	3.6	2,223	5.6	3,508	*11.1	6,912	3.6	2,249
Female	5.1	1,353	*86.4	22,983	1.2	319	0.9	249	2.0	525	1.8	492	2.6	689
						Gende	r Withir	Play Ty	ype					
	All ty	pes	Casin	o only	Poker	Only	Tourna	ment	Casir	8 0	Poke	r &	Casi	no &
Gender							On	ly	Poł	ker	Tourna	ment	Tourn	ament
	%	Ν	%	n	%	n	%	n	%	n	%	n	%	n
Male	^87.2	9,205	59.2	33,283	^93.8	4,813	^89.9	2,223	^87.0	3,508	^93.4	6,912	^76.5	2,249

* Identifies the play type in which a significant difference in the proportion of either male or female users was observed (p < .001)

^ Indicates a significant gender difference across each of the player types (p < .001)

There were significant differences in the proportion of gamblers by age and activity preferences (Table 9). Specifically, a greater proportion of gamblers under 44 played either "poker only" or "casino and poker" relative to older age groups, whereas a higher proportion of gamblers over 35 preferred "casino only" games compared to younger gamblers. Finally, a greater proportion of gamblers under 34-years-old reported no specific preference, opting to gamble across all online offerings.

							Play T	уре						
Age Group	A II A	Гурes	Casin	o only	Poke	r Only	Tourn O	ament nly	Casi Po	ino & oker	Pol Tourr	ker & nament	Casir Tourna	10 & ament
	%	Ν	%	n	%	n	%	n	%	n	%	n	%	Ν
21-24	*13.3	1,617	61.1	7,417	*6.9	835	2.4	290	*6.0	728	7.7	934	2.6	315
25-34	*13.4	4,191	58.6	18,271	*7.5	2,329	2.8	870	*5.7	1,787	8.7	2,716	3.03	1,026
35-44	10.6	2,123	64.5	12,874	5.6	1,112	3.1	613	4.1	824	8.6	1,722	3.4	687
45-54	10.0	1,401	69.1	9,726	3.6	501	2.8	387	2.8	393	8.3	1,173	3.5	488
55-64	10.6	835	70.4	5,559	3.1	242	2.7	217	2.5	194	7.2	568	3.6	283
65+	11.0	391	68.0	2,419	3.2	113	2.7	95	3.0	107	8.2	291	3.9	139
Total	11.9	10,558	63.4	56,266	5.8	5,132	2.8	2,472	4.5	4,033	8.3	7,404	3.3	2,938

Table 9. Age Groups by Play Type (N=88,803)

*Identifies the play type in which a significant difference in the proportion of users was observed for the corresponding age range (p < .001)

Play preferences also were compared across years by gender (Table 10). The smallest proportion of men gambled across all play types in 2017, followed by 2015. Findings were similar for women, with a steady decline in participation across the "all play type" category from 2014 through 2017. This was reflected in a significant decrease in the percentage of players who played only poker or casino and poker following peak play in 2015. An increasing proportion of both men and women played only casino games across four years, with men increasing from about 33% to 54%, and women, from 74% to 86%.

Males	All ty	ypes	Casin	o only	Poker	Only	Tourn	. Only	Casin Pok	o & er	Poker&	Tourn.	Casi Tou	no & urn.
	%	Ν	%	n	%	n	%	n	%	n	%	n	%	n
2014	*25.9	18,746	33.46	24,214	8.83	6,387	5.31	3,842	4.15	3,006	19.09	13,812	3.26	2,359
2015	17.6	9,685	37.79	20,795	*15.89	8,742	3.37	1,857	*10.29	5,662	12.8	7,041	2.26	1,246
2016	*22.6	10,628	*49.2	23,147	5.6	2,653	*0.5	213	3.6	1,703	*17.8	8,358	*0.6	304
2017	*14.8	9,205	*53.5	33,283	7.7	4,813	3.6	2,223	5.6	3,508	11.1	6,912	3.6	2,249

Table 10. Gender Comparison Across Play Types: 2014, 2015, 2016 & 2017

Females	All ty	pes	Casin	o only	Poker (Only	Tourn.	Only	Casino Poke	o & er	Poker&	Tourn.	Casino Tourn	
	%	Ν	%	n	%	n	%	n	%	n	%	n	%	n
2014	*10.73	2,349	73.6	16,111	2.66	582	*2.24	490	2.46	538	*5.55	1,214	2.76	605
2015	7.48	1,335	78.0	13,925	*4.04	721	1.11	198	*4.23	756	2.97	531	2.19	391
2016	8.5	1,605	*85.4	16,068	0.9	166	0.1	18	1.6	298	3.3	615	*0.2	41
2017	*5.1	1,353	*86.4	22,983	1.2	319	0.9	249	2.0	525	1.8	492	2.6	689

* Identifies the play type in which a significant difference in the proportion of either male or female users was observed during the corresponding year (p < .001)

These trends are consistent across age categories, with casino only play increasing steadily in every age category — increasing, on average, by 20% from 2014 to 2017 (Table 11). Similarly, there were consistent decreases over time in the proportion of players gambling across all forms, though the differences are less pronounced in the younger age categories. Declining rates of those playing only poker and poker tournaments reflect those found by gender, decreasing steadily since 2014.

Ago								Play T	ype	Casin	0.8	Poke	or 8 .	Casin	0 8
Group	Year		vpes	Casino	Only	Poker	Only	On	lv	Pok	ker	Tourna	ment	Tourna	iment
		%	n	%	n	%	n	%	'n	%	n	%	n	%	n
	2014	24.17%	2,790	*40.34%	4,656	8.98%	1,036	3.98%	459	4.64%	535	14.70%	1,696	3.20%	369
24.24	2015	16.42%	1,571	43.53%	4,166	15.37%	1,471	1.99%	190	12.20%	1,168	8.68%	831	1.81%	173
21-24	2016	16.30%	1,164	*66.19%	4,728	3.85%	275	0.29%	21	3.37%	241	9.39%	671	0.60%	43
	2017	13.32%	1,617	*61.12%	7,417	6.88%	835	2.39%	290	6.00%	728	7.70%	934	2.60%	315
	2014	24.88%	8,793	*36.07%	12,749	8.86%	3,133	5.01%	1,771	4.24%	1,498	17.92%	6,333	3.02%	1,067
25.24	2015	17.23%	4,615	40.78%	10,922	15.10%	4,044	2.93%	785	10.30%	2,760	11.62%	3,112	2.04%	547
25-34	2016	21.99%	5,119	*52.58%	12,240	5.41%	1,260	0.45%	105	3.66%	852	15.29%	3,560	0.62%	144
	2017	13.44%	4,191	*58.58%	18,271	7.47%	2,329	2.79%	870	5.73%	1,787	*8.71%	2,716	3.29%	1,026
	2014	21.53%	4,608	*42.59%	9,116	7.69%	1,645	4.91%	1,050	3.63%	778	16.40%	3,511	3.25%	696
25.44	2015	13.94%	2,231	49.12%	7,860	12.65%	2,025	3.22%	516	7.73%	1,237	10.84%	1,735	2.49%	399
35-44	2016	17.93%	2,708	59.85%	9,039	4.45%	672	0.33%	50	2.93%	442	14.04%	2,120	0.48%	73
	2017	10.64%	2,123	*64.52%	12,874	5.57%	1,112	3.07%	613	4.13%	824	8.63%	1,722	3.44%	687
	2014	18.64%	2,726	*52.21%	7,635	4.98%	729	4.12%	602	2.84%	416	13.96%	2,042	3.25%	475
	2015	12.55%	1,431	56.11%	6,396	9.86%	1,124	2.82%	322	6.27%	715	9.76%	1,113	2.61%	298
45-54	2016	15.89%	1,768	64.94%	7,227	3.06%	341	0.31%	35	2.21%	246	13.13%	1,461	0.45%	50
	2017	9.96%	1,401	*69.13%	9,726	3.56%	501	2.75%	387	2.79%	393	8.34%	1,173	3.47%	488
	2014	18.04%	1,409	*55.38%	4,325	3.71%	290	3.99%	312	2.74%	214	13.01%	1,016	3.12%	244
	2015	12.46%	783	59.72%	3,753	8.47%	532	2.47%	155	6.17%	388	8.37%	526	2.34%	147
55-64	2016	15.93%	994	66.05%	4,120	2.85%	178	0.22%	14	2.44%	152	12.17%	759	0.34%	21
	2017	10.57%	835	*70.38%	5,559	3.06%	242	2.75%	217	2.46%	194	7.19%	568	3.58%	283
	2014	17.60%	607	*54.80%	1,890	4.12%	142	4.23%	146	3.04%	105	12.90%	445	3.31%	114
65.	2015	13.68%	389	57.07%	1,623	9.39%	267	3.06%	87	5.27%	150	8.97%	255	2.57%	73
65+	2016	16.42%	480	63.65%	1,861	3.18%	93	0.21%	6	2.33%	68	13.75%	402	0.48%	14
	2017	11.00%	391	*68.05%	2,419	3.18%	113	2.67%	95	3.01%	107	8.19%	291	3.91%	139

Table 11. Age Comparison by Play Type between 2014, 2015, 2016 & 2017

	2014	22.29%	21,113	*42.62%	40,371	7.36%	6,975	4.58%	4,340	3.74%	3,546	16.26%	15,403	3.13%	2,965
-	2015	15.12%	11,020	47.64%	34,720	12.98%	9,463	2.82%	2,055	8.81%	6,418	10.39%	7,572	2.25%	1,637
Total	2016	18.59%	12,233	59.58%	39,215	4.28%	2,819	0.35%	231	3.04%	2,001	13.63%	8,973	0.52%	345
	2017	11.89%	10,558	*63.36%	56,266	5.78%	5,132	2.78%	2,472	4.54%	4,033	8.34%	7,404	3.31%	2,938

* Identifies the play type in which a significant difference in the proportion of users was observed for the corresponding year (*p* < .001)

B. Regional Differences

By county, Ocean, Bergen, Middlesex, Monmouth, and Camden counties had the highest number of players in 2017, although the proportion of players decreased overall from 2016 for all but Camden County. Compared to the New Jersey population, gamblers in the Gateway and Skyland regions were significantly underrepresented and those in the Greater Atlantic City (all years), Delaware region (2016, 2017), Shore and South Shore (2016, 20217) were significantly overrepresented in various years (See Table 12).

Proportionate representations across regions did not change significantly from 2016 to 2017. However, there were slight increases in the percentage of online gamblers located in the Delaware River region and a slight decrease in patrons in the Gateway and Shore regions. As indicated below the table, the primary differences in proportions in most regions focused on 2016 and 2017 versus 2014 and 2015 differences.

Region	% of Total NJ Population	2014	2015	2016	2017
Greater A. C. ^a	3.0%	4.8%	5.2%	6.5%	6.5%
Delaware River ^b	18.8%	18.6%	18.7%	20.3%	22.2%
Gateway ^c	48.3%	42.9%	43.0%	40.2%	39.9%
Shore ^d	13.7%	18.6%	18.4%	18.8%	17.6%
Skyland ^e	13.5%	12.2%	11.7%	10.6%	10.1%
S. Shore ^f	2.8%	2.9%	3.0%	3.7%	3.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 12. Percentage of New Jersey Resident Online Gamblers by Region and Year (N=77,551)

p < 0.0001 for all analyses

a, b, f 2016 and 2017 higher than 2014 and 2015

c 2016 and 2017 lower than 2014 and 2015 $\,$

d 2017 lower than other years

e 2016 and 2017 lower than other years

As demonstrated in Table 13, gamblers were significantly overrepresented, compared to their proportion of the New Jersey population, in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth and Ocean counties and significantly underrepresented in Bergen, Essex, Hunterdon, Mercer, Morris, Passaic, Somerset and Union counties. Five counties had no statistically significant differences.

Figure 1. Percentage of Online Gamblers by Region



Table 13. Percentage of Gamblers byCounty

County	Ν	% of	% of NJ
		gamblers	Population [^]
Atlantic	5,006	6.5	3.0 *
Bergen	6,805	8.8	10.5*
Burlington	4,383	5.7	5.0*
Camden	6,331	8.2	5.7*
Cape May	1,283	1.7	1.0*
Cumberland	1,723	2.2	1.7*
Essex	4,918	6.3	9.0*
Gloucester	3,333	4.3	3.3*
Hudson	5,299	6.8	7.6
Hunterdon	728	0.9	1.4*
Mercer	2,566	3.3	4.1*
Middlesex	6,727	8.7	9.3
Monmouth	6,628	8.5	7.0*
Morris	3,230	4.2	5.6*
Ocean	6 <i>,</i> 985	9.0	6.7*
Passaic	3,563	4.6	5.7*
Salem	577	0.7	0.7
Somerset	2,063	2.7	3.7*
Sussex	993	1.3	1.6
Union	3,627	4.7	6.3*
Warren	783	1.0	1.2

*p=.0001

^Population estimates from State of New Jersey. New Jersey State Data Center. (2019). *Annual Estimates of the Population: April 1, 2010 to July 1. From: 2019.*

https://www.nj.gov/labor/lpa/dmograph/est/nst-01.xlsx.

IV. Time of Day

The total number of wagers this year were significantly higher in 2017 than in prior years. For example, there were 67 million bets placed between 6 a.m. and 9 a.m. in 2016, and more than double that amount — 152 million bets — during that time period in 2017. Despite the total amount wagered and number of bets, the maximum bet sizes were lower this year, ranging from \$10,000 to \$20,000 compared to \$20,000 to \$30,000 in the prior year.

Table 14 summarizes the wagers on casino games across time periods in 2017. The mean wagers among those playing casino games were largest between 3 a.m. and 6 a.m. (\$4.28 per bet), followed by 6 a.m. to 9 a.m. (\$3.83 per bet) and midnight to 3 a.m. (\$3.79 per bet). This outcome is consistent with results from 2016 and may underscore the need to analyze persistence in play without time-out breaks during those hours to determine if individuals are playing longer in overnight hours compared to other time periods.

There were substantial increases in 2017 compared to 2016 in the number of bets made between 6 a.m. to 9 a.m. (67.07 million vs 151.93 million), 9 a.m. to 12 p.m. (88.49 million vs 189.89 million), 12 p.m. to 3 p.m. (115.35 million vs 157.85 million), 12 a.m. to 3 a.m. (162.67 million vs 224.09 million), and 3 a.m. to 6 a.m. (88.16 million vs 180.41 million). The sum of all wagers during these periods also increased by 101.79%, 95.64%, 21.69%, 27.71%, and 74.76%, respectively. The number of bets in all other time ranges were within +/- 1.4% of the previous year, however, the sum of all wagers decreased by 4%.

Last year's report noted a shift in play from gambling outside traditional work hours to wagering during traditional work hours. In 2016, 32.3% of all bets were placed between the hours of 9 a.m. and 6 p.m.; in 2017, the percentage increased to 33.7%. The proportion of bets made between midnight and 6 a.m. also increased, from 23.7% to 28.1%. Overall, a significantly higher proportion of bets in 2017 compared to the prior year were placed between 3 a.m. and 6 a.m. (12.5% versus 8.3%), and the mean wagers were highest in the period from 3 a.m. to 9 a.m. Those who bet in the overnight hours (9 p.m. to 9 a.m.) wagered more money and placed more bets than those who gambled between 9 a.m. and 9 p.m. In total, 484.1 million bets were placed during traditional work hours, between 9 a.m. and 6 p.m., a 41.7% increase over 2016 totals.

Time Category	# of Bets (mill.)	Percent of Total Bets	Max Wager amount	Mean Wager	Std. of Wager	Sum Wager
6 a.m.–9 a.m.	151.93	10.6	10,000.00	**3.83	29.27	494,085,710.60
9 a.m12 p.m.	189.89	13.2	12,000.00	3.49	25.87	578,412,660.70
12 p.m3 p.m.	157.85	11.0	10,000.00	3.27	30.18	480,276,656.60
3 p.m6 p.m.	136.43	9.5	20,000.00	3.06	34.89	417,618,905.90
6 p.m9 p.m.	184.23	12.8	15,000.00	2.83	33.48	521,272,205.40
9 p.m12 a.m.	214.06	*14.9	20,000.00	3.08	34.38	659,940,771.10
12 a.m3 a.m.	224.09	*15.6	20,000.00	3.79	34.54	752,156,117.80
3 a.m6 a.m.	180.41	12.5	15,000.00	**4.28	34.59	624,488,926.40

Table 14. Casino Wagers by Time Category in 2017 (N=1,438,892,577)

* Significant difference in the proportion of bets wagered relative to other time frames (p < .001)

** Significant difference in the mean wager relative to other time frames (p < .001)

By gender, men placed more bets than women overall, including during the hours of 9 a.m. to 6 p.m. (244 versus 240 million bets, respectively), though the differences were non-significant (Table 15). The mean wagers by men were nearly double those of women in most time periods, except in the 3 a.m. to 6 a.m. period, when the difference was slightly less. The highest proportion of bets by both men and women was placed between midnight and 3 a.m., followed by 9 p.m. to midnight, and 9 a.m. to noon. Men and women were least likely to gamble between 3 p.m. and 6 p.m.

		Male			Female			Total	
Time Category	# of Bets (mill)	% of total	Mean Wager	# of Bets (mill.)	% of total	Mean Wager	# of Bets (mill.)	% of total	Mean Wager
6 a.m.–9 a.m.	76.9	10.6	4.87	75.0	10.5	2.81	151.9	10.6	3.83**
9a.m12p.m.	98.0	13.5	4.50	91.9	12.9	2.54	189.9	13.2	3.49
12p.m3p.m.	80.0	11.0	4.26	77.9	10.9	2.30	157.8	11.0	3.27
3 p.m6 p.m.	66.0	9.1	4.14	70.4	9.9	1.91	136.4	9.5	3.06
6 p.m9 p.m.	92.8	12.8	3.79	91.4	12.8	1.89	184.2	12.8	2.83
9p.m12.am.	108.1	14.9	4.15	106.0	14.8	2.04	214.1	14.9	3.08
12 a.m3 a.m.	111.4	15.4	4.83	112.7	15.8	2.72	224.1	15.6	3.79
3 a.m6 a.m.	91.1	12.6	5.38	89.3	12.5	3.17	180.4	12.5	4.28**
Total	724.1	100	4.46	714.7	100	2.4	1438.9	100	3.43

Table 15. Number and Proportion of Bets by Gender and Time of Day

* Indicates a significant gender difference in the average wager between males and females across all time periods (*p* < .001)

** Indicates significantly higher average wager by time. (p < .001)

By age, players in the 45 to 54 age group placed the most bets in 2017 (441 million)– more than 100 million bets more than the next highest betting group of 35 to 44-year-olds (338 million) (Table 16). The highest proportion of players under 54 bet between midnight and 3 a.m., although adults ages 55 to 64 were most likely to gamble between 9 p.m. and midnight, and those 65 and over, from 9 a.m. to noon. For all but the oldest players, the 9 p.m. to 3 a.m. time slot was the most popular, in terms of both frequency of play and number of total bets. Gamblers who were 65 and older were less likely than other groups to gamble between 9 p.m. and 3 a.m. and more likely to bet between 9 a.m and 3 p.m.

Time Category	21-2	24	25-	34	35-	44	45-5	54	55-	64	65	+
Time Category	# of Bets (mill.)	% of total										
6 a.m.–9 a m.	4.87	10.5	27.57	10.8	36.77	10.9	46.07	10.4	25.87	9.9	10.79	11.2
9 a.m12p.m.	5.79	12.5	33.17	13.0	45.01	13.3	57.44	13.0	33.99	13.0	14.50	*15.0
12 p.m-3 p.m.	5.13	11.1	27.90	10.9	36.34	10.7	46.82	10.6	29.17	11.2	12.50	*12.9
3 p.m6 p.m.	4.87	10.5	24.60	9.6	30.15	8.9	39.95	9.1	25.76	9.9	11.10	11.5
6 p.m9 p.m.	5.82	12.6	30.44	11.9	39.95	11.8	57.49	13.0	37.06	*14.2	13.46	13.9
9 p.m12 a.m.	6.48	14.0	36.12	14.1	49.48	14.6	67.78	15.4	41.25	15.8	12.96	*13.4
12 a.m3 a.m.	7.45	16.1	40.97	16.0	55.66	16.5	70.64	16.0	37.98	14.5	11.38	*11.8
3 a.m6 a.m.	5.93	12.8	34.69	13.6	44.82	13.3	54.81	12.4	30.26	11.6	9.90	10.3
Total	46.34	100	255.46	100	338.19	100	441.00	100	261.33	100	96.58	100

 Table 16. Number and Proportion of Bets by Time of Day and Age Category

* Significant difference in the proportion of players across age range for specific time frames (p < .001)

The proportion of players by region was largely consistent, however, online gamblers in the Greater Atlantic City area were overrepresented among players wagering between 6 a.m. and 9 a.m. and underrepresented among bettors between 9 p.m. and 12 a.m; there was a meaningful decrease in this group from 17.9% in 2016 to 12.5% in 2017 (Table 17). Overall, across all regions, betting increased between 3 a.m. and noon, compared to the prior year, and decreased by about 5% on average during the hours of 9 p.m. to midnight.

Time	Gre Atlant	ater tic City	Delaware River		Gate	way	Sho	ore	Skyla	and	Southerr	h Shore
Category	# of Bets (mill.)	% of total	# of Bets (mill.)	% of total	# of Bets (mill.)	% of total	# of Bets (mill.)	% of total	# of Bets (mill.)	% of total	# of Bets (mill.)	% of total
6 a.m.–9 a.m.	8.74	*12.4	30.77	10.6	56.62	10.1	29.02	10.5	15.66	10.7	5.41	11.0
9 a.m12 p.m.	9.60	13.6	38.29	13.2	70.94	12.7	38.49	13.9	19.18	13.1	6.54	13.3
12 p.m3 p.m.	7.39	10.5	32.40	11.2	59.05	10.5	32.04	11.6	16.20	11.0	5.39	10.9
3 p.m6 p.m.	6.48	9.2	27.75	9.6	52.08	9.3	27.32	9.9	13.87	9.4	4.63	9.4
6 p.m9 p.m.	8.15	*11.6	37.70	13.0	70.89	12.7	37.68	13.6	19.09	13.0	6.17	12.5
9 p.m12 a.m.	8.78	12.5	43.11	14.9	85.95	15.3	41.38	15.0	22.49	15.3	6.99	14.2
12 a.m3 a.m.	11.19	15.9	44.82	15.5	91.26	16.3	39.95	14.4	22.33	15.2	7.61	15.4
3 a.m6 a.m.	10.07	14.3	35.18	12.1	73.36	13.1	30.62	11.1	17.97	12.2	6.61	13.4
Total	70.41	100	290.01	100	560.15	100	276.5	100	146.78	100	49.33	100

Table 17. Number and Proportion of Bets by Time of Day and Region

* Significant difference in the proportion of players across geographical regions for specific time frames (p < .001)

By time of day (see Table 18), players ages 21 to 24 placed the largest average wagers across all time periods, and the players ages 55 to 64 placed the lowest mean wagers.

Time category	Age category	Maximum	Mean (\$)	Std. Dev. (\$)	Median (\$)
	21-24	6,000	*5.67	30.34	1.00
	25-34	9,000	4.90	43.84	1.00
fam to 0 am	35-44	6,000	3.68	19.22	1.00
0 a.m. 10 9 a.m.	45-54	4,400	4.00	30.33	1.00
	55-64	7,831	*2.56	12.21	1.00
	65+	10,000	3.21	35.63	0.80
	21-24	9,000	*4.97	27.93	1.00
	25-34	6,000	4.31	32.28	1.00
0.2 m to $12 n$ m	35-44	12,000	3.85	28.71	1.00
9 a.m. to 12 p.m.	45-54	5,000	3.44	24.70	1.00
	55-64	5,000	2.29	11.01	0.90
	65+	9,300	2.95	28.66	0.80

	21-24	10,000	4.82	46.60	1.00
	25-34	9,000	4.35	50.67	1.00
12 nm to 2 nm	35-44	10,000	3.80	29.27	1.00
12 p.m. to 3 p.m.	45-54	3,400	2.95	19.19	1.00
	55-64	5,022	2.13	9.31	0.88
	65+	9,500	2.53	27.75	0.80
	21-24	11,000	*5.97	94.11	0.90
	25-34	12,000	4.12	57.17	1.00
	35-44	20,000	3.53	28.26	0.90
3 p.m. to 6 p.m.	45-54	5,000	2.49	11.19	0.90
	55-64	2,500	2.10	9.81	0.80
	65+	11,200	2.45	31.22	0.75
	21-24	10,000	*5.69	90.27	0.90
	25-34	15,000	4.27	61.22	1.00
Com to Oom	35-44	10,000	2.96	19.96	0.90
6 p.m. to 9 p.m.	45-54	4,900	2.23	9.74	0.80
	55-64	5,000	2.11	11.83	0.80
	65+	10,000	2.47	36.82	0.70
	21-24	12,000	5.42	71.88	0.90
	25-34	12,000	4.52	64.47	1.00
0 n m to 12 n m	35-44	20,000	3.44	25.15	1.00
9 p.m. to 12 a.m.	45-54	5,376	2.41	11.35	0.90
	55-64	5,000	2.24	13.83	0.80
	65+	13,050	2.76	40.57	0.80
	21-24	13,300	*5.89	74.55	1.00
	25-34	12,000	4.93	52.32	1.00
12 a m to 2 a m	35-44	20,000	3.76	20.84	1.00
12 a.m. to 3 a.m.	45-54	4,000	3.60	25.75	1.00
	55-64	9,600	2.53	15.48	1.00
	65+	10,000	3.81	53.50	0.90
	21-24	10,000	*6.43	51.30	1.00
	25-34	15,000	5.33	50.88	1.00
2 a m ta 6 a m	35-44	5,000	4.01	19.76	1.00
5 a.m. to 6 a.m.	45-54	5,000	4.41	31.89	1.00
	55-64	5,000	2.95	14.11	1.00
	65+	10,000	3.88	56.59	1.00

* Significant difference in the mean wager across age ranges within the specified time frame (p < .001)

V. The Top 10%

As in prior years, players whose gambling frequency and intensity placed them in the top 10% of all online gamblers were analyzed separately. This year, a total of 4,109 gamblers qualified for inclusion in this group, characterized by highest average total of yearly bets placed, betting days, and total amount bet over the course of the year. This criteria was designed to exclude players

who only placed in the high category on one or two of the three criteria and to isolate those who were highest with regard to both frequency and intensity of wagering.

For the first time since 2014, men (51.8%) surpassed women (48.2%) in this category, although the proportion is significantly lower than the overall proportion of male gamblers in New Jersey, which is more than double the proportion of women (Table 19). While the mean age of the Top 10% has fluctuated in the past four years, overall, it continues to decrease incrementally for both men and women, from a high in 2014 of 48 years for men and 49 years for women to a low in 2017 of 45 years for men and 47 years for women. This decrease in age is slightly more pronounced for men than for women.

				A	ge	
Males	%	Ν	Minimum	Maximum	Mean	Standard Deviation
2017	*51.8	2,128	21	87	*45.22	12.14
2016	49.3	1,750	21	88	47.60	12.19
2015	48.2	1,330	21	89	46.89	12.17
2014	*46.6	1,253	21	86	47.91	12.36
				A	ge	
Females	%	Ν	Minimum	A Maximum	ge Mean	Standard Deviation
Females	% *48.2	N 1,981	Minimum 21	A Maximum 90	ge Mean 47.44	Standard Deviation 11.59
Females 2017 2016	% *48.2 50.7	N 1,981 1,798	Minimum 21 21	A Maximum 90 90	ge Mean 47.44 48.86	Standard Deviation 11.59 11.67
Females 2017 2016 2015	% *48.2 50.7 51.8	N 1,981 1,798 1,427	Minimum 21 21 21 21	A Maximum 90 90 83	ge Mean 47.44 48.86 49.35	Standard Deviation 11.59 11.67 11.47

Table 19. Within Gender Comparisons of Top 10% of Casino Gamblers across Years (N=4,109)

* Significant differences across years within gender (p < .001)

Consistent with the trend away from poker toward casino games, more than 75% of players in 2017 only gambled on casino games, which is down slightly from 2016, but a 6% increase from 2014 (Table 20). Significantly fewer players in 2017 played both casino and tournament poker and/or all forms of gambling. In 2017, nearly half the proportion of players in the Top 10% played casino and poker compared to 2014 and about 7% fewer players engaged in all types of gambling.

Type	20 1	L4	20	015	201	6	20	17			
Type	%	Ν	%	Ν	%	Ν	%	Ν			
Casino only	69.3	2,050	70.2	2,055	76.0*	2,696	75.6*	3,107			
Casino & Poker	4.8	141	5.9	173	2.8*	100	2.7	111			
Casino & Tournament Poker	5.3	156	5.7	166	0.6*	21	8.1*	334			
All Types	20.7	612	18.2	531	20.6*	731	13.6*	557			

Table 20. To	op 10% by	Game Types
--------------	-----------	------------

* Significant differences across years for the specified play type (*p* < .001)

In 2017, the number of players meeting criteria for the Top 10% increased, from around 3,000 players in 2014 and 2015, to 3,500 players in 2016, to 4,100 players in 2017 (Table 21). In addition,

the average numbers of sites used by players has steadily increased, from a low of three sites in 2014 to a high of nearly five sites in 2017. Changes are best reflected in the median, which represents the number occurring in the middle of the data. [Note: The median was not computed for the first year of operation]. Although median values have remained consistent at four sites across years, the maximum number of sites played has increased from six sites in 2014 to 11 sites in 2019. This suggests that a growing number of players are playing on more sites, though players in the middle of the group are maintaining a preference for about four sites.

Similarly, the average total yearly wager for this group, has significantly risen over the past four years, from \$499,000 in 2014 to \$684,000 in 2017. The median value for total year wager has likewise increased in this group from more than \$244,000 in 2015 to nearly \$282,000 in 2017, while the median for all other casino bettors was about \$743. These factors could be partially accounted for by the steady increase in total number of yearly bets, where both the mean, about 225,000, and the median, about 177,000 bets, have steadily increased since 2014.

Comparing the Top 10% of players in 2017 to all other casino gamblers further highlights these findings (see Table 21). The median player in the Top 10% bet on four times as many sites as other players and bet on about 76 times as many days (227 versus 3 days). On average, players in this group bet most days of the year, an average of 231 days, compared to just 20 days for other gamblers.

Similarly, for this group compared to other gamblers, the average maximum wager was \$201 versus \$61 other gamblers (median=\$53 versus \$10) and the total average yearly wager was \$684,000 versus \$26,000 (median=282,000 versus \$742). On average, the Top 10% placed about nine times more bets per year than other casino gamblers (225,000 versus 26,000 bets); median bettors in this group placed 177,000 bets compared to just 349 bets.

Play Patterns	Ν	Variable	Maximum	Mean	Std Dev	Median
		# of Sites Wagered	6.00	3.06	1.54	Not reported
		Total Betting Days	364.00	*158.07	77.99	In 2014
Top 10%	2 050	Max Wager (\$)	36,750.00	180.99	939.94	
2014	2,959	Avg. Single Wager (\$)	322.62	3.96	12.52	
		Total Yearly Wager (\$)	78,756,599.90	499,219.85	1,946,473.26	
		Total Number of Yearly Bets	1,464,282.00	160,658.23	128,989.65	
		# of Sites Wagered	8.00	3.93	2.22	4.00
		Total Betting Days	365.00	206.09	72.19	198.00
Top 10%	2 0 2 5	Max Wager (\$)	20,900.00	228.86	706.46	56.00
2015	2,925	Avg. Single Wager (\$)	274.12	3.87	11.36	1.58
		Total Yearly Wager (\$)	20,403,084.42	521,776.87	1,034,933.05	244,328.97
		Total Number of Yearly Bets	1,016,555.00	183,353.24	136,946.69	142,921.50
		# of Sites Wagered	10.00	4.22	2.5	4.00
		Total Betting Days	365.00	230.45	71.21	226.00
Top 10%	3 548	Max Wager (\$)	29,860.00	195	728.65	50.00
2016	3,340	Avg. Single Wager (\$)	308.36	4.18	11.5	1.68
		Total Yearly Wager (\$)	31,032,290.91	611,806.03	1,440,431.25	263,220.93
		Total Number of Yearly Bets	1,482,919.00	202,518.84	154,437.15	159,407.00
		# of Sites Wagered	11.00	4.74	2.85	4.00
		Total Betting Days	365.00	230.81	72.6	227.00
Top 10%	4 109	Max Wager (\$)	20,000.00	200.5	631.55	52.5
2017	4,105	Avg. Single Wager (\$)	521.73	**4.43	14.25	1.78
		Total Yearly Wager (\$)	121,146,575.80	684,450.84	2,570,263.95	281,576.30
		Total Number of Yearly Bets	1,480,312.00	225,397.49	170,865.98	176,979.00
		# of Sites Wagered	11.00	1.85	1.63	1.00
All other		Total Betting Days	365.00	20.49	42.39	3.00
Casino	69 686	Max Wager (\$)	15,000.00	60.51	254.49	10.00
bettors	05,000	Avg. Single Wager (\$)	1,600.00	6.72	25.17	1.53
2017		Total Yearly Wager (\$)	95,523,063.50	25,867.51	437,616.86	742.79
		Total Number of Yearly Bets	134.067.00	7.357.78	25.125.22	349.00

Table 21. Play Patterns of Top 10 Percent Gamblers Compared to All Others (Casino BetsOnly)

* Significant difference in Total Days Bet across years (p < .001)

**Significant differences in Average Single Wage across years (p < .001)

VI. Responsible Gaming Features

In 2017, a total of 5,467 online casino gamblers used responsible gaming (RG) features. This marks the first increase in utilization since its first full year in 2014, when the number of players opting for RG declined from 13,422 in the first year to a low of 4,745 in 2016. The slight increase in 2017 comes after the first full year that a standardized Responsible Gambling (RG) logo was mandated by the DGE to be installed on each online gaming website and the mobile apps that offer gaming.

Similar to prior years, the mean age of RG users in 2017 remained at 39 years, with an age range of 21 to 95 years (Table 22). There was a significant increase in participation among the youngest group, from 8.5% in 2016 to 11.5% in 2017. The proportion of patrons using RG features in the middle age range – from 35 to 54 years – remained consistent across the prior two years, though use by those ages 25 to 34 continued to decline to 33% in 2017 from a high of nearly 37% in 2015.

Age Category	Use RG Fe 201	eatures 4	Use RG Fe 201	eatures 5	Use RG Fe 201	atures 6	Use F Features	RG 2017	
	%	Ν	%	Ν	%	Ν	%	Ν	
21-24	9.2	1,236	*10.9	782	*8.5	404	*11.5	598	
25-34	31.2	4,181	*36.6	2,632	34.9	1,659	33.4	1,735	
35-44	23.2	3,111	23.5	1,690	*24.9	1,181	*24.2	1,259	
45-54	19.8	2,656	17.2	1,235	*18.4	872	*19.2	998	
55-64	*11.4	1,533	9.0	647	9.7	458	8.6	447	
65+	* 5.3	705	2.9	205	3.6	171	3.2	165	
Ν	13,42	22	7,191		4,745		5,467		
Min	21		21		21		21		
Max	95		110)	91		95		
Mean	40.1	.7	38.7	3	39.2	9	39.02		

Table 22. RG Feature Users by Age Category

*Identifies the year in which a significant difference in the proportion of RG users that were observed for the corresponding age range (p < .001)

In contrast to 2016, when a higher proportion of users were women, nearly equal percentages of men and women, 7%, utilized RG features in 2017 (Table 23). Among all RG users, about 65% were men and 35% were women, proportions that roughly parallel the percentages of men (70%) versus women (30%) who gamble online, despite some overrepresentation by women.

	т	otal	N	/ ale	Fe	male		Brea by (akdown Gender 2014	Brea by G 2	kdown iender 015	Break by Go 20	xdown ender 916	Breal by G 20	kdown ender)17
	%	Ν	%	n	%	n		%	Ν	%	n	%	n	%	n
Use RG	7.0	5,202	7.1	3,418	7.0	1,784	Male	60	8,106	68.1	3,328	65.5	3,106	65.4	3,418
Don't Use RG	93.0	68,593	92.9	44,827	93.0	23,766	Female	40	5,394	31.9	1,559	34.5	1,639	34.6	1,784

**p* < .000

Comparing play patterns for RG gamblers across a four-year period revealed notable changes over time (Table 24). First, the maximum number of sites used by RG gamblers has steadily

increased, from six in 2014 to 11 in 2017. In addition, there have been significant increases in the average: single wager (\$8 in 2014 to \$11 in 2017), total betting days (55 days in 2014 to 92 days in 2017), total yearly wager (\$139,000 in 2014 to 298,000 in 2017) and total number of yearly bets (36,000 in 2014 to 72,000 in 2017). Significant differences in the medians were likewise noted for total yearly wager and total number of yearly bets.

Play Patterns			RG Gamblers 20)14	
	N	Max	Mean	Std	Median
#Sites Wagered	10,421	6.00	2.33	1.46	Not reported
Total Betting Days	10,421	364.00	54.62	72.51	
Min. Wager (\$)	10,421	127.50	0.41	2.67	
Max. Wager (\$)	10,421	36,750.00	143.61	688.32	
Avg. single Wager (\$)	10,421	705.31	8.38	24.83	
Total Yearly Wager (\$)	10,421	421,950.67	139,289.25	697,860.80	
Total Number of Yearly Bets	10,421	1,464,282.00	36,000.00	80,753.90	
Play Patterns			RG Gamblers 20	15	
	N	Max.	Mean	Std.	Median
#Sites Wagered	4,640	8.00	3.17	2.16	2.00
Total Betting Days	4,640	364.00	73.14	84.56	37.00
Min. Wager (\$)	4,640	500.00	0.60	8.79	0.05
Max. Wager (\$)	4,640	35,996.00	209.85	780.38	49.60
Avg. single Wager (\$)	4,640	739.67	^^9.63	26.50	2.44
Total Yearly Wager (\$)	4,640	13,914,295.50	194,177.21	600,300.60	36,937.58
Total Number of Yearly Bets	4,640	976,557.00	48,500.40	91,146.71	10,198.50
Play Patterns			RG Gamblers 20	16	
	N	Max	Mean	Std	Median
#Sites Wagered	4,745	10.00	3.48	2.51	3.00
Total Betting Days	4,745	365.00	*85.81	92.71	48.00
Min. Wager (\$)	4,745	75.00	0.35	2.38	0.01
Min. Wager (\$) Max. Wager (\$)	4,745 4,745	75.00 19,935.00	0.35 *220.07	2.38 708.96	0.01 50.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$)	4,745 4,745 4,745	75.00 19,935.00 308.36	0.35 *220.07 4.18	2.38 708.96 11.50	0.01 50.00 1.69
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$)	4,745 4,745 4,745 4,745	75.00 19,935.00 308.36 25,552,745.38	0.35 *220.07 4.18 **260,236.45	2.38 708.96 11.50 890,169.50	0.01 50.00 1.69 *50,006.05
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets	4,745 4,745 4,745 4,745 4,745	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07	2.38 708.96 11.50 890,169.50 103,929.18	0.01 50.00 1.69 *50,006.05 15,119.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns	4,745 4,745 4,745 4,745 4,745	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20	2.38 708.96 11.50 890,169.50 103,929.18	0.01 50.00 1.69 *50,006.05 15,119.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns	4,745 4,745 4,745 4,745 4,745 4,745 N	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean	2.38 708.96 11.50 890,169.50 103,929.18 17 Std	0.01 50.00 1.69 *50,006.05 15,119.00 Median
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered	4,745 4,745 4,745 4,745 4,745 4,745 N 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85	2.38 708.96 11.50 890,169.50 103,929.18 017 Std 2.83	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered Total Betting Days	4,745 4,745 4,745 4,745 4,745 N 5,202 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00 365.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85 *92.29	2.38 708.96 11.50 890,169.50 103,929.18 17 Std 2.83 94.83	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00 56.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered Total Betting Days Min. Wager (\$)	4,745 4,745 4,745 4,745 4,745 N 5,202 5,202 5,202 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00 365.00 76.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85 *92.29 0.26	2.38 708.96 11.50 890,169.50 103,929.18 5td 2.83 94.83 2.26	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00 56.00 0.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered Total Betting Days Min. Wager (\$) Max. Wager (\$)	4,745 4,745 4,745 4,745 4,745 N 5,202 5,202 5,202 5,202 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00 365.00 76.00 20,000.00	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85 *92.29 0.26 205.73	2.38 708.96 11.50 890,169.50 103,929.18 5td 2.83 94.83 2.26 661.46	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00 56.00 0.00 50.00
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered Total Betting Days Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$)	4,745 4,745 4,745 4,745 4,745 N 5,202 5,202 5,202 5,202 5,202 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00 365.00 76.00 20,000.00 1,008.38	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85 *92.29 0.26 205.73 ^11.36	2.38 708.96 11.50 890,169.50 103,929.18 5td 2.83 94.83 2.26 661.46 38.18	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00 56.00 0.00 50.00 2.40
Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$) Total Number of Yearly Bets Play Patterns #Sites Wagered Total Betting Days Min. Wager (\$) Max. Wager (\$) Avg. single Wager (\$) Total Yearly Wager (\$)	4,745 4,745 4,745 4,745 4,745 N 5,202 5,202 5,202 5,202 5,202 5,202 5,202	75.00 19,935.00 308.36 25,552,745.38 1,116,086.00 Max 11.00 365.00 76.00 20,000.00 1,008.38 95,523,063.50	0.35 *220.07 4.18 **260,236.45 ^59,450.07 RG Gamblers 20 Mean 3.85 *92.29 0.26 205.73 ^11.36 **297,841.32	2.38 708.96 11.50 890,169.50 103,929.18 77 Std 2.83 94.83 2.26 661.46 38.18 1,733,687.12	0.01 50.00 1.69 *50,006.05 15,119.00 Median 3.00 56.00 0.00 50.00 50.00 2.40 51,735.66

Table 24. Play Patterns of RG Gamblers between 2014, 2015, 2016 & 2017 (Casino Only)

* Significant difference in Total Days Bet across years (p < .001)

** Significant difference in Total Yearly Wagers (*p* < .001)

^ Significant difference in Total Number of Yearly Bets (p < .001)

^^ Significant differences in Average Single Wager (p < .001)</p>

In 2017, the gap between RG and non-RG players widened on a number of gambling indicators. Similar to findings the prior year, RG gamblers in 2017 reported more than three times the average number of betting days compared to non-RG gamblers (92.29 days versus 27.64 days per year). Examining the median betting days, however, provided a starker contrast: An RG player in the middle of all RG players bet 56 days, compared to non RG-gamblers who bet just three days (Table 25). Similarly, the average maximum wager for RG players was significantly higher than non-RG players (\$205.73 versus \$57.84), and the median maximum wager was \$50 compared to just \$10 for non-RG players. RG gamblers wagered an average of about \$298,000 per year, a figure obviously inflated by players wagering very high amounts, as evidenced by the median yearly wager of \$52,000 in 2017. By comparison, non-RG players bet an average of \$46,000, and the median player wagering just \$743 all year. Those significant differences also are reflected in differences in total yearly bets: RG players averaged 71,797 bets per year (median=21,000), about 4.6 times the bets by non-RG gamblers, who placed nearly 15,532 bets (median=353).

Table 25: Thay Tatterns of Re		ite earlisiers (eas			
Play Patterns		RG	Gamblers 20	17	
	Ν	Max	Mean	Std	Median
#Sites Wagered	5,202	11.00	*3.85	2.83	3.00
Total Betting Days	5,202	365.00	**92.29	94.83	56.00
Min. Wager (\$)	5,202	76.00	0.26	2.26	0.00
Max. Wager (\$)	5,202	20,000.00	^205.73	661.46	50.00
Avg. single Wager (\$)	5,202	1,008.38	^^11.36	38.18	2.40
Total Yearly Wager (\$)	5,202	95,523,063.50	297,841.32	1,733,687.12	51,735.66
Total Number of Yearly Bets	5,202	1,349,317.00	71,797.30	122,192.05	20,563.00
Plav Patterns		Νοι	n-RG Gamblei	rs 2017	
	Ν	Max	Mean	Std	Median
#Sites Wagered	68,593	11.00	1.87	1.67	1.00
Total Betting Days	68,593	365.00	27.64	60.55	3.00
Min. Wager (\$)	65,281	950.00	0.80	6.93	0.01
Max. Wager (\$)	65,281	15,000.00	57.84	236.41	10.00
Avg. single Wager (\$)	65,281	1,600.00	6.21	23.23	1.50
Total Yearly Wager (\$)	65,281	121,146,575.80	45,823.30	627,564.85	743.20
	69 502	1 490 212 00	15 522 24	61 022 07	252.00

* Significant difference in the # Sites Wagered (p < .001)

** Significant difference in Total Days Bet across years (p < .001)</p>

^ Significant difference in Max Wager (p < .001)

^^ Significant differences in Average Single Wager (p < .001)</pre>

The range of RG features are listed in Table 26. Patrons in New Jersey have the option of using one or more features and switching, altering, or discontinuing limit-settings. To isolate the use of one particular feature, we analyzed the proportion of players, by gender, who used only one feature at a time. Those features have been fully described in prior reports. As indicated in Table 26, men were more likely to choose loss (spend) limit in all years but 2015, when the 72-hour cool-off was the most popular option. The proportion of men opting to self-exclude has also steadily increased over time: from a low of 54% in 2014 to a high of 67% in 2017. There is an

opposite trend for women. In 2014, self-exclusion was the most popular feature among women, with 46% of all RG gamblers opting for self-exclusion alone. Over time, that proportion has dropped to a low of 33% of female gamblers in 2017. The proportion of women using two or more features and/or using any one feature has equalized over time, although, in the past two years, women have expressed a slight preference for the time limit setting feature.

RG Type 2014	Male Female		ale	Total		
	%	Ν	%	Ν	%	Ν
Cool-off only	64.0	514	36.0	289	6.0	803
Deposit Limit only	*75.5	597	24.5	194	5.9	791
Loss (Spend) Limit only	*83.8	243	16.2	47	2.2	290
Time limit only	67.4	559	32.6	270	6.2	829
Self-exclusion only	54.0	4,326	**46.0	3,684	59.7	8,010
Two or more RG features	66.1	1,777	33.9	910	20.0	2,687
Total N% of gender	59.8	8,106	40.2	5,394	100.0	13,410
	Mean	Std	Mean	Std	Mean	Std
# of RG features used	^1.68	0.99	^1.69	0.98	^1.68	0.99
RG Type 2015	Ma	ale	Fem	ale	Тс	otal
	%	Ν	%	Ν	%	Ν
Cool-off only	73.4*	301	26.6	109	9.3	410
Deposit Limit only	67.2	713	32.8	348	24.0	1,061
Loss (Spend) Limit only	66.2	137	33.8	70	4.7	207
Time limit only	66.4	211	33.6	107	7.2	318
Self-exclusion only	63.1	323	36.9	212	13.0	575
Two or more RG features	62.5	1,152	37.5	690	41.7	1,842
Total N% of gender	65.2	2,877	34.8	1,536	100.0	4,413
	Mean	Std	Mean	Std	Mean	Std
<pre># of RG features used</pre>	1.59	0.86	1.71	0.93	1.62	0.88
RG Type 2016	Ma	ale	Fem	ale	Тс	otal
	%	Ν	%	Ν	%	N
Cool-off only	64.3	404	35.7	224	13.2	628
Deposit Limit only	64.3	617	65.7	343	20.2	960
Loss (Spend) Limit only	78.5	227	21.5	62	6.1	289
Time limit only	59.8	144	**40.2	97	5.1	241
Self-exclusion only	64.9	392	35.1	212	12.7	604
Two or more RG features	65.2	1,306	34.8	698	42.2	2,004
Total N% of gender	65.5	3,106	35.5	1,639	100.0	4,475
H of DC footunes used	Mean	Std	Mean	Std	Mean	Std
# OF RG Teatures used	1.08	0.99	1.09	0.99	1.08	0.98
RG Type 2017	~	iviale	0/	remale	0/	Total
Cool off only	%	N FC2	%	N 200	%	N OF 4
	66.0	562	34.0	289	16.4	851
Deposit Limit only	65.1	619	34.9	332	18.3	951
LOSS (Spend) Limit Only	/1.1	192	28.9	/8	5.2	270
Time limit only	60.2	162	39.8	107	5.2	269
Seit-exclusion only	66./	510	33.3	255	14./	/65
I wo or more RG features	65.4	1,307	34.6	690	38.4	1,997
I otal N% of gender	65./	3,418	34.3	1,/84	100.0	5,202
	Mean	Std	Mean	Std	Mean	Std

Table 26.	Within Gender Comparisons across Years of RG Features (Casino Players Only)
(N=5,467)	

*Significant difference in the proportion of male players using the specified RG Feature across years (p < .001) ** Significant difference in the proportion of female players using the specified RG Feature across years (p < .001) ^ Significant difference in # of RG Features Used across years among Male, Female, and Total Players (p < .001) Players in New Jersey also have the option of changing their limit-setting: adding new features, removing features, increasing or decreasing limits. In contrast to Table 26, above, which displays data for those who used only one feature or engaged two or more, Table 27, below, provides a snapshot of changes to each RG feature (i.e. set-up, change in limit set, turning off limit, turning limit back on) by players using that feature exclusively and/or using multiple features ("across all features").

As indicated, players who used multiple features made the most changes, followed by those using deposit-limit or cool-off. Players opting to set a time limit made the fewest number of total changes, an average of three (median=1). Those who enabled more features made more changes, nearly 11 changes with a median of four, which is a slight increase over the prior year.

Table 27. Changes to No reatines by No rype								
RG feature	N	Mean	Std.	Median	Total number of changes			
Cool-off	2,115	8.83	17.62	3.00	18,666			
Time limit	724	2.55	4.29	1.00	1,848			
Spend limit	1,296	5.45	12.93	3.00	7,064			
Deposit limit	2.432	9.29	18.90	3.00	22,596			
Across all features	5,202	10.59	23.11	4.00	55,082			

Table 27. Changes to RG Features by RG Type

Compared to other RG gamblers, players in the Top 10% this year made, on average, three times as many changes to cool-off limits and more than twice the number of changes to deposit limits (Table 28), though the median for deposit limits, three changes, was the same for both groups. Mean comparisons on time and loss (spend) limits were more closely aligned between the two groups, however, the median for time limits was twice the median for other gamblers.

Table 20. Changes to No reactives. Top 10/0 V. Other Gamblers									
RG Feature*	N	Mean	Std.	Median					
Cool-off Top 10%	599	16.88	28.32	6.0					
Cool-off Others	1,556	5.93	10.12	2.0					
Time limit Top 10%	199	3.26	6.81	2.0					
Time limit Others	525	2.29	2.77	1.0					
Loss (spend) limit Top 10%	385	7.36	18.85	3.0					
Loss (spend) limit Others	911	4.64	9.26	3.0					
Deposit limit Top 10%	737	15.60	29.67	3.0					
Deposit limit Others	1,695	6.54	10.27	3.0					

Table 28. Changes to RG Features: Top 10% v. Other Gamblers

*All comparisons between Top 10% and Other are significant (p < .001).

By age, gamblers in the 45 to 54 age group made the highest average number of changes overall, particularly to multiple features (15 changes) and cool-off (12 changes), though the median for multiple features was higher for those in the 35 to 44 age group (Table 29). Overall, players 65 and over made the fewest average number of changes across loss (spend) limit, deposit limit, and multiple features, though both mean and median values across all groups and features were non-significant.

Age Group		Multiple	Cool-off	Time limit	Loss limit	Deposit limit
		features				
	Maximum	164.00	56.00	25.00	43.00	88.00
21 to 24	Mean	10.69	5.33	2.84	4.69	7.30
n=598	Std.	18.73	7.83	4.48	6.45	13.32
	Median	4.00	2.00	1.00	3.00	3.00
	Maximum	375.00	137.00	82.00	258.00	275.00
25 to 34	Mean	11.00	7.33	3.02	7.41	9.09
n=1,735	Std.	29.74	14.06	6.75	20.70	19.16
-	Median	5.00	3.00	1.00	3.00	3.00
	Maximum	263	242.00	16.00	79.00	167.00
35 to 44	Mean	14.63	10.14	2.46	4.58	10.01
n=1,259	Std.	25.84	20.13	2.59	5.99	17.52
	Median	6.00	3.00	2.00	3.00	4.00
	Maximum	390.00	195.00	34.00	113.00	310.00
45 to 54	Mean	14.79	12.05	2.30	4.68	10.10
45 10 54	Std.	29.02	22.25	3.06	8.91	22.79
n=998	Median	5.00	4.00	1.00	3.00	4.00
	Maximum	195.00	217	10.00	38.00	160.00
55 to 64	Mean	11.76	9.64	1.88	4.50	9.07
n=447	Std.	23.06	22.32	1.67	4.95	18.93
	Median	4.00	3.00	1.00	3.00	3.00
	Maximum	103.00	44.00	11.00	13.00	55.00
65+	Mean	9.97	7.71	3.00	3.62	6.08
n=165	Std.	15.72	10.54	2.57	3.25	9.51
	Median	4.50	3.00	2.00	3.00	3.00

Note: No significant differences detected.

Comparing men to women, women made slightly more changes to deposit limits, cool-off, and multiple features, although the medians were higher only for multiple features and deposit limits (Table 30). Conversely, men made slightly more changes to time limit and loss (spend) limit, but the only the time limit median was higher. None of the differences was significantly different.

Table 30.	Number of	Changes	Made to RG	features: By	v Gender
10010 001		Changes	111000 10 110	icutui coi b	J GCHGCI

Gender		Multiple	Cool-off	Time limit	Loss limit	Deposit limit
		features				
	Maximum	390.00	242.00	82.00	258.00	310.00
Male	Mean	20.55	8.15	2.66	5.97	9.17
n=3,418	Std.	34.31	16.78	4.82	14.87	19.58
	Median	9.00	3.00	2.00	3.00	3.00
	Maximum	307.00	195.00	34.00	113.00	169.00
Female	Mean	21.85	10.13	2.4	4.44	9.51
n=1,784	Std.	30.89	19.07	3.20	7.87	17.62
	Median	11.00	3.00	1.00	3.00	4.00

Note: No significant differences detected.

Table 31 depicts comparisons of players with different play preferences on the changes to RG features. There were three statistically significant differences between the groups. Players who

played both casino and tournament poker made the highest mean number of changes when using multiple features, 33 (median=15), and deposit limit, 17 changes (median=6). In contrast, casino only patrons who enacted loss limits made the least number of changes, four (median=3).

Play Type		Multiple features	Cool-off	Time limit	Loss limit	Deposit limit
	Maximum	358.00	137.00	82.00	210.00	200.00
All 3 types	Mean	18.42	6.47	3.19	6.89	7.73
n=1101	Std.	30.34	13.23	7.69	15.58	13.39
	Median	9.00	2.00	2.00	7.3.00	4.00
	Maximum	390.00	242.00	34.00	113.00	310.00
Casino Only	Mean	20.34	9.52	2.26	*4.25	8.89
n=489	Std.	30.85	18.73	2.71	7.24	18.30
	Median	10.00	3.00	1.00	3.00	3.00
Casino 8	Maximum	222.00	80.00	27.00	49.00	143.00
Casillo &	Mean	22.76	8.12	2.95	7.31	10.75
POREI	Std.	32.35	13.98	4.32	9.58	19.93
11-201	Median	10.00	3.00	2.00	5.00	3.00
Casino &	Maximum	375.00	176.00	16.00	258.00	275.00
Casilio &	Mean	*33.48	10.37	3.14	9.59	*17.05
n-221	Std.	53.58	20.98	3.37	29.59	32.25
11-331	Median	15.00	4.00	2.00	3.00	6.00

 Table 31. Number of Changes Made to RG features: By Play Type

*p >.001

The final analysis focused on self-excluders, comparing changes to RG features of those players who used RG features prior to self-exclusion to those users who never went on to self-exclude (Table 32). While there were no significant differences between the groups, self-excluders made more changes on average than non-self-excluders to all features, and medians were also higher for self-excluders on all features except for cool-off and loss(spend) limit.

Self-excluder	Yes/No	Multiple	Cool-off	Time limit	Loss (Spend)	Deposit
		features			limit	limit
Did not colf	Maximum	390.00	242.00	82.00	258.00	310.00
oveludo	Mean	10.37	8.62	2.47	5.26	9.09
(n=2,674)	Std.	24.80	18.29	4.40	12.41	19.38
(11-5,674)	Median	3.00	3.00	1.00	3.00	3.00
Salf	Maximum	212.00	122.00	25.00	210.00	156.00
Sell-	Mean	11.12	9.38	3.07	6.38	10.37
(n=1, 529)	Std.	18.34	15.74	3.52	15.27	16.13
(11-1,528)	Median	5.00	3.00	2.00	3.00	5.00

Table 32. Number of Changes Made to RG Features: Self-Excluders Versus Non-Self-Excluders

Note: No significant differences detected.

VII. Summary and Recommendations

Online wagering in New Jersey continues to be a popular activity, with the overall number of players continuing to increase over the past four years, particularly among those who live outside of the State. Despite this continued growth, there have been some important trends for this reporting year. There has been a small but steady increase in the proportion of emerging adults, particularly males ages 21 to 24, from a low of 7,864 in 2014 to a high of 12,136 in 2017. In addition, players who are not betting on one preferred site are betting on an increasing number of sites, with more than 9% of players gambling on five to nine sites. The proportion of women gamblers relative to men continues to increase as well, likely due to the increasing popularity of casino games compared to poker play, which has declined in popularity particularly among the youngest age group. Taken together, these findings suggest that online gambling is becoming more popular with younger adults, who demonstrate an increasing preference for casino games versus poker play. This trend suggests that responsible gambling efforts should begin to target this age group, identifying incentives that would encourage younger players to set limits. Given that gambling disorder, particularly among men, develops slowly over time and that severity is often greatest among those with the earliest gambling onset, it is important to develop limitsetting strategies that both educate and encourage young players, ideally at sign-up, to set responsible limits on play. This is particularly important with the advent of legalized sports wagering, which is known to be particularly popular with younger age groups. Providing 24-7 access to a range of online gambling activities, including those with in-game wagers, increases the likelihood that young gamblers will access multiple forms of gambling across multiple platforms.

For the first times since legalization of online gambling, a higher proportion of men compared to women were categorized in the "Top 10%" group, gambling at the highest frequency, intensity and expenditure of all casino gamblers. Notably, the average number of players in this group, as well as sites patronized, has steadily increased across years, as has the average total yearly wager. Among this group, the mean age has likewise continued to decline, from a high in 2014 of almost 48 years to the current average of 45 years for men and from 49 years to 47 years for females. Players in this group ranged in age from a low of 21 years to a high of 90 years in 2017. Going forward, it will be important to evaluate these players by age, examining play patterns of younger gamblers relative to older players to identify high risk indicators among the youngest groups.

For the first time in four years, there was an increase in the number of patrons using responsible gaming features. Though the number of patrons – 5,467 – is only 6.2% of the total number of gamblers analyzed, it still represents a considerable increase over patronage in the prior year. This uptake is due, possibly, to the DGE requirement that each operator add a standardized RG logo to each site to provide a uniform shortcut or gateway to the RG offerings required in the State.

For RG offerings to be effective, they should be promoted, explained, and easily accessed. For RG offerings to be effective, they should be promoted, explained, and easily accessed. The DGE

has already implemented a number of recommendations from these yearly reports, including consistent branding, information, and labeling of RG features across sites and a logo to improve access. The next step in increasing utilization and informed choice would be to institute uniform education about each feature, ideally at signup or regular intervals; at that time, gamblers would learn about each feature and have the opportunity to try out a variety of limits to see which, if any, could promote their positive play.

In making these recommendations, we acknowledge that many steps and stakeholders are involved in implementing even minor suggestions. Recommendations, therefore, are intended as evidence-based suggestions to focus regulatory efforts and evolve New Jersey offerings as a flagship program, however we acknowledge that some of these offerings will take time and collaboration to achieve. Accordingly, we would recommend:

Recommendation 1: Promoting uniform self-exclusion

Unlike limit-setting, which is individually determined by the time and/or money resources available to each player, self-exclusion is an RG feature that can be applied uniformly across all forms of gambling and all gamblers. Unfortunately, in New Jersey, self-exclusion has been differentially applied by each regulatory entity that oversees a specific activity: casinos, online, racing. There is currently no self-exclusion option available to problem lottery players, who should also receive this service. We know from these analyses, the research literature and our prevalence study in New Jersey that the most severe problem gamblers typically patronize multiple gaming activities and/or sites and often prefer to exclude from all forms for a specified term rather than one or two for different exclusion periods. To accomplish that end, gamblers in New Jersey are required to enroll repeatedly across multiple platforms, choose from among different terms of exclusion, and/or navigate systems that sometimes require travel and associated stigma of face-to-face interactions; this cumbersome process likely dissuades gamblers from accessing self-exclusion and mitigates against the goal of harm minimization.

For those reasons, we recommend that the DGE:

- Develop a standardized, centralized sign-up platform for self-exclusion that would provide a single access point for all online gamblers, including sports wagerers, and a menu where players could choose to exclude from some or all sites in New Jersey for specified terms. That information would then be conveyed to providers for implementation, possibly through an integrated site.
- Coordinate with regulatory bodies governing other forms of gambling (i.e. casinos, racing, lottery) to work toward developing one centralized platform and menu for self-exclusion across all forms of gambling in New Jersey, with standardized language, procedures, and terms of exclusion. Currently, the lottery offers no option for self-exclusion, though the advent of online purchasing has brought 24/7 access to players on their mobile phones; self-exclusion for racing can necessitate that players apply through a cumbersome online process and also physically to travel to the track or to Trenton to exclude in person. In addition, the only available self-exclusion term for racing is one year, in contrast to the options available for online casino, poker, and sports wagerers.

Given that the goal of self-exclusion is to allow problem gamblers to erect a barrier between themselves and problem gambling, irrespective of the activity, we would strongly urge the DGE to work with other regulatory agencies, ideally beginning with the Racing Commission, to develop a single-source self-exclusion offering online, which would allow users to select the forms of gambling for exclusion and an exclusion period from multiple options. We acknowledge that the success of this process would require coordination, cooperation of multiple stakeholders, and, possibly, legislation. The DGE has indicated a willingness to reach out to sister agencies to share expertise in online registration, which could be an important starting point to work toward standardized offerings in the State.

Recommendation 2: Review/revise RG offerings, incorporate education and enrollment at signup

A growing body of research internationally suggests that RG features are most successful when they are incorporated at sign-up, provide education on each available tool, facilitate informed choice and positive play through the availability of information about games and individual play, and remind patrons who use tools when they are reaching limits and/or exhibiting signs of potentially harmful play.

In New Jersey, few players use RG tools, but those who do, historically, reduce their gambling expenditures. We recommend that the DGE reevaluate the nature, scope, and deployment of RG offerings and consider the following:

- Integrating a standardized platform of RG tools at sign-up, which combines a brief tutorial
 of each feature with the opportunity for players to set limits. Currently, there are existing
 RG platforms in Europe that integrate into provider systems for the purpose of behavioral
 tracking. A similar, albeit simpler, platform could greatly enhance online offerings in New
 Jersey and bring uniformity to the education, integration, and effectiveness of RG
 offerings in New Jersey.
- Offering players additional RG tools that have proven effective in other jurisdictions in
 promoting positive play such as pop-up up warning messages when gamblers near time
 or loss limits and additional limit options like maximum single wager. We would also
 recommend considering requiring a uniform player information display (PID), which has
 been used in jurisdictions like Victoria, Australia to inform gaming machine players of
 return-to-player and odds of each winning combination, as well as individual player
 information such as cash-in (amount of deposit), credits played (money wagered during
 session), credits won (amount won by player during session), cash out (amount paid out
 by machine), credits available (amount available on machine for wager), session start
 time, session length, and amount wagered since log-on.

In addition to these suggestions, it is important to develop a strategy to work with operators to actively promote the use of RG tools, ideally incorporating them at sign-up and into product marketing strategies. Given that operator marketing efforts rely on sophisticated, specialized, and highly targeted data analyses, such a partnership would allow RG education and offerings to

be promoted to emerging adults, a group that is likely most at risk of excessive gambling online. Responsible gambling tools are only effective if they are promoted and used and, in New Jersey, it remains a concern that so few patrons use the existing RG features.