



## **Internet Gaming in New Jersey**

Calendar Year 2020 Report to the  
Division of Gaming Enforcement  
Submitted by:

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## I. Introduction

The current Internet Gaming Report in New Jersey, prepared pursuant to N.J.S.A. 5:12-95.18, evaluates online gambling activity in 2019. In it, we examine the overall impact of Internet gaming and problematic patterns of play across all players and bets during the year. The report compares relevant play patterns in the current year with those of prior years to isolate trends across time periods and/or abrupt shifts in play by demographic groups, activities, and/or responsible gambling status.

Individuals who gamble online in New Jersey must be at least 21 years old 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 2019. 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).

**Table 1. Operator and Gaming Sites in 2019**

Licensee	Platform Operator(s)	Skin(s)	Game Offerings	URL(s)
<b>Borgata</b>	Bwin	BetMGM (Roar)	Casino/Peer to Peer Poker	www.nj.partypoker.com
		Borgata	Casino/Peer to Peer Poker	www.Borgatacasino.com www.poker.borgataonline.com
	Pala	Pala	Casino/Peer to Peer Poker Blackjack/Bingo Peer to Peer Poker	www.palacasinocom www.palabingousa.com www.palapoker.com
		Scores	Casino	www.scorescasino.com
	BetMGM	BetMGM	Casino Peer to Peer Poker	www.casino.nj.betmgm.com www.poker.nj.betmgm.com
		Party Casino	Casino/Peer to Peer Poker	www.nj.partycasino.com
	<b>Caesars Interactive Entertainment</b>	NYX	Caesars	Casino
888		Harrahs	Casino	www.HarrahsCasino.com
		888	Casino/Peer to Peer Poker	www.Us.888casino.com www.Us.888poker.com
		WSOP	Casino/Peer to Peer Poker	www.WSOP.com
<b>Golden Nugget</b>	NYX	Golden Nugget	Casino	www.casino.goldennuggetcasin o.com
	Rush Street	SugarHouse	Casino	www.playsugarhouse.com
	Game Account/ Betfair	Game Account/ Betfair	Casino	www.betfaircasino.com
	SBTech	Betamerica	Casino	www.nj.betamerica.com
<b>Tropicana</b>	GameSys	Tropicana	Casino	www.tropicanacasino.com
		Virgin	Casino	www.virgincasino.com
<b>Resorts Digital Gaming LLC</b>	NYX	Resorts Casino	Casino	www.resortscasino.com
		Mohegan Sun Casino	Casino	www.mohegansuncasino.com
	Poker Stars NJ	Poker Stars NJ	Casino/Peer to Peer Poker	www.pokerstarscasinonj.com
<b>Hard Rock</b>	GiG	Hard Rock	Casino	www.hardrockcasino.com
	Bet365	Bet365	Casino	www.nj.bet365.com-platform
	NYX/Kindred	Unibet	Casino	www.nj.unibet.com-Platform
<b>Ocean</b>	Game Account	Ocean	Casino	www.oceanonlinecasino.com
	GAN	Parx	Casino	www.nj.parxcasino.com

## II. Methodology

Analyses were conducted from multiple raw data files, collected by the Division of Gaming Enforcement (DGE) from all the operators in a standardized variable format. The DGE provided the data to the Center for Gambling Studies (CGS) through an encrypted portal, which was developed exclusively for this project. Those files are housed on 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. 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. 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

About 31% more new online gambling accounts were initiated in 2019 (N=635,252) compared to 2018 (N=486,541). Of these, about 13.5% (n=85,538) were initiated by previous account holders, and 87% (n=549,714) were first-time accounts by new players. Among all account holders, 24.2% (n=256,752) were “active,” meaning the player placed at least one casino bet, played poker, or played in a tournament after opening the account. As indicated in Table 2, gender information was missing for 20.1% (n=51,536) of the active account holders, as some vendors do not request gender information from their players.

**Table 2. Missing Data Summary**

Missing Data Summary	Valid Sample	Missing	Total
Gender	205,216	51,536	256,752
Age	256,746	6	256,752

### A. Age and Gender

Overall, rates of online gambling among New Jersey and non-New Jersey residents continued to increase, with higher increases observed among non-residents (217%) compared to residents (112%) between 2018 and 2019; about 90% of gamblers in 2015 were NJ residents, compared to only 80% in 2019 (Table 3).

In prior years, the mean age of players fluctuated slightly but was oldest in 2018; the proportion of women in the NJ resident sample slowly rose to a high of about 32% in 2018 as well. However, in 2019, both gambling cohorts registered a decline in player age and an increase in male participation (Table 3). Among New Jersey residents, the two youngest age groups (21-24, 25-34) made up more than half of all online gamblers in 2019 (51%), the largest proportion across all years of analyses and a significant increase from about 41% in 2018. In addition, the mean age of NJ resident gamblers was at its lowest in all years of legalized online gambling, at just over 37. At the same time, the proportion of NJ resident gamblers age 35 and older declined, with those age 45 and older comprising a smaller percentage of gamblers than in any other year. In 2019, 45 to 54 year olds made up only 14% of the total; 55 to 64 year olds, 8%, and 65+, 3%. This decline among the 35+ age groups followed a year (2018) in which participation was the highest across all years. A similar shift occurred among non-NJ resident gamblers, where participation among 21 to 24 year olds increased from about 8% to just under 11%, and among 25 to 34 year olds, which increased from nearly 35% to 37% from 2018 to 2019. Among non-NJ residents, only participation among 35 to 54 year olds declined, with the two oldest age cohorts remaining similar to the prior year.

After a steady increase in participation across years, the proportion of women gambling in online casinos dropped among NJ residents from about 32% to 28%. These proportions were the smallest for women since 2015. Conversely, participation among men declined across four years before increasing from about 68% to about 72% among residents in 2019. Among non-residents, participation for both women and men was more variable across the five years than for NJ residents.

**Table 3. Comparing Online Gamblers Residing Inside and Outside New Jersey by Age (n = 256,746) and Gender (n = 205,216)**

Age Group	In NJ 2015		In NJ 2016		In NJ 2017		In NJ 2018		In NJ 2019	
	%	n	%	n	%	n	%	n	%	n
21-24 <sup>a</sup>	13.5	9,561	11.1	6,512	14.2	11,007	8.8	8,618	14.1	29,208
25-34 <sup>b</sup>	35.5	25,148	34.6	20,294	34.7	26,947	32.4	31,612	37.0	76,819
35-44 <sup>c</sup>	21.8	15,468	22.9	13,437	22.3	17,343	25.2	24,571	23.5	48,678
45-54 <sup>d</sup>	16.2	11,479	17.1	10,054	15.9	12,368	17.7	17,253	14.2	29,349
55-64 <sup>e</sup>	8.9	6,326	9.7	5,711	8.9	6,909	10.7	10,485	8.0	16,504
65+ <sup>e</sup>	4.1	2,894	4.6	2,689	4.0	3,129	5.1	5,024	3.3	6,838
Total		70,876		58,697		77,703		97,563		207,396
Mean		38.6		39.0		38.5		40.6		37.1
SD		13.1		13.1		13.1		13.2		12.5
Gender	In NJ 2015		In NJ 2016		In NJ 2017		In NJ 2018		In NJ 2019	
	%	n	%	n	%	n	%	n	%	n
Male <sup>f</sup>	74.9	49,078	70.7	41,533	69.8	54,241	67.8	66,173	72.4	118,775
Female	25.1	16,454	29.3	17,164	30.2	23,462	32.2	31,390	27.6	45,288
Total	89.9	65,532	89.2	58,697	87.5	77,703	86.2	97,563	79.9	164,063

Age Group	Outside NJ 2015		Outside NJ 2016		Outside NJ 2017		Outside NJ 2018		Outside NJ 2019	
	%	n	%	n	%	n	%	n	%	n
21-24 <sup>g</sup>	11.4	880	8.9	631	10.2	1,129	7.5	1,175	10.5	5,181
25-34 <sup>h</sup>	44.1	3,405	41.9	2,986	38.2	4,243	34.6	5,388	37.0	18,236
35-44 <sup>i</sup>	23.3	1,801	23.4	1,667	23.5	2,612	28.0	4,359	24.7	12,212
45-54 <sup>j</sup>	13.0	1,003	15.1	1,074	15.3	1,701	16.8	2,614	14.6	7,211
55-64 <sup>k</sup>	6.1	468	7.4	527	8.9	989	8.8	1,372	8.6	4,248
65+ <sup>l</sup>	2.2	171	3.3	235	3.8	426	4.4	683	4.6	2,262
Total		7,728		7,120		11,100		15,591		49,350
Mean		36.6		37.6		38.7		39.9		38.5
SD		11.4		12.0		12.6		12.5		13.0
Gender	Outside NJ 2015		Outside NJ 2016		Outside NJ 2017		Outside NJ 2018		Outside NJ 2019	
	%	n	%	n	%	n	%	n	%	n
Male <sup>m</sup>	80.9	5,950	76.9	5,473	71.6	7,952	73.1	11,395	77.5	31,910
Female	19.1	1,403	23.1	1,647	28.4	3,148	26.9	4,196	22.5	9,243
Total	10.1	7,353	10.8	7,120	12.5	11,100	13.8	15,591	20.1	41,153

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

- a. Lower in 2018 than all other years; higher in 2019 & 2017 v. 2015 & 2016; higher in 2015 v 2016
- b. Lower in 2018 than all other years; higher in 2019 than all other years; lower in 2016 & 2017 v. 2015
- c. Higher in 2018 than all other years; Lower in 2015 & 2017 than 2016 & 2019; lower in 2016 v. 2019
- d. Lower in 2019 than all other years; higher in 2018 than all other years; lower in 2017 & 2015 v. 2016
- e. Lower in 2019 than all other years; lower in 2016 v. 2018; lower in 2017 & 2015 v. 2016
- f. Higher in 2015 than all other years; higher in 2019 than 2016-18; Lower in 2018 v. 2016 & 2017
- g. Lower in 2018 than all other years, lower in 2016 v. 2015, 2017, 2019
- h. Lower in 2018 than all other years; higher in 2015 than all other years; lower in 2019 & 2017 v. 2016
- i. Higher in 2018 than all other years; higher in 2019 v. 2015
- j. Higher in 2018 than all other years; Higher in 2016, 2017 & 2019 v. 2015
- k. Lower in 2015 than all other years; lower in 2016 v. 2017, 2018, 2019
- l. Lower in 2015 than all other years; higher in 2019 v. 2016 & 2017; higher in 2018 v. 2016
- m. Higher in 2015 than all other years; Lower in 2017 & 2018 v. 2016 & 2019

In 2019, roughly 75% of players (n=191,689) patronized only one or two online gambling sites, nearly 20% (n=50,313) played on three to five sites, and slightly less than 6% (n=14,750) patronized six or more sites (Table 4).



**Table 4. Number of Betting Sites and Percentage in 2019**

<b>Number of sites bet</b>	<b>Number of account holders</b>	<b>Percent</b>
1	132,302	51.5
2	59,387	23.1
3	27,672	10.8
4	14,385	5.6
5	8,256	3.2
6	4,887	1.9
7	3,159	1.2
8	2,128	0.8
9	1,446	0.6
10	1,032	0.4
11	823	0.3
12	548	0.2
13	363	0.1
14	210	0.1
15	104	<0.1
16	35	<0.1
17	13	<0.1
18	2	<0.1

As indicated in Table 5, a majority of players patronized just one or two sites, however that proportion has decreased from about 86% in 2015 to about 75% in 2019. In contrast, the percentage of patrons playing on three or four sites has nearly doubled over the same time frame. Only a very small proportion of players gamble on five or more sites, and that proportion slightly decreased between 2018 and 2019 despite increases in the number of available sites.

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

Number of sites bet	2015 Percentage	2016 Percentage	2017 Percentage	2018 Percentage	2019 Percentage
1	71.9	58.5	62.7	59.8	51.5
2	14.2	19.9	15.8	16.9	23.1
3	5.5	10.8	7.1	7.8	10.8
4	3.1	5.4	4.3	4.6	5.6
5	2.1	2.9	3.0	3.2	3.2
6	1.4	1.3	2.3	2.3	1.9
7	1.0	0.8	1.7	1.8	1.2
8	0.7	0.3	1.4	1.4	0.8
9		0.0	0.9	0.9	0.6
10			0.7	0.7	0.4
11			0.1	0.4	0.3
12				0.1	0.2
13				< 0.1	0.1
14					0.1
15					< 0.1
16					< 0.1
17					< 0.1
18					< 0.1
Mean					2.1
Median					1.0

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

Similar to the prior year, men were overrepresented among younger gamblers, and women, among older gamblers, in 2019 (Table 6). For example, 49% of male gamblers were younger than age 35, compared to 40% of female gamblers. Conversely, 36% of female gamblers were 45 years or older, compared to just 26% of male gamblers.

**Table 6. Age Group by Total and Gender of All Online Players**

Age Group	By Total (n= 256,746)		By Gender (n=205,212)			
	%	N	Male		Female	
			%	N	%	N
21-24 <sup>a</sup>	13.4	34,389	12.4	18,753	8.6	4,694
25-34 <sup>a</sup>	37.0	95,055	36.7	55,340	31.5	17,180
35-44 <sup>a</sup>	23.7	60,890	24.8	37,325	24.1	13,129
45-54 <sup>b</sup>	14.2	36,560	14.2	21,423	18.7	10,217
55-64 <sup>b</sup>	8.1	20,752	8.1	12,242	11.6	6,331
65+ <sup>b</sup>	3.5	9,100	3.7	5,599	5.5	2,976
Total	100.0	256,746	100.0	150,682	100.0	54,530

Significant differences across gender for specific age range ( $p < .001$ )

a. Higher proportion of males than females

b. Higher proportion of females than males

The overall population of online gamblers was younger in 2019 than any other year. In contrast to 2018, when the proportion of players 35 and older increased, 2019 reversed this trend (Table 7). In 2019, 21 to 24 year olds made up about 13% of gamblers compared with 9% in 2018, and 25-34 year olds made up 37% of gamblers compared with 33% in 2018. Meanwhile, the proportion of gamblers age 45 and older in 2019 was the lowest across all years, comprising 26% of gamblers, compared with 33% the previous year.

By gender, following years of a proportionate increase in female participation in online gambling, female participation declined by more than 4%, from 31% in 2018 to about 27% in 2019. At the same time, more men gambled online, increasing by 4% from 69% of all gamblers in 2018 to 73% in 2019. The resulting gender gap was the widest since 2015.

While the cause for these findings is unknown, increases in participation by men and younger adults correspond to the introduction of legalized sports wagering in NJ, which tends to appeal to younger, male gamblers and could produce a “halo” effect that extends to online casino gambling as well.

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

Age Group	2015		2016		2017		2018		2019	
	%	n	%	n	%	n	%	n	%	n
21-24 <sup>a</sup>	13.1	9,570	10.9	7,143	13.7	12,136	8.7	9,793	13.4	34,389
25-34 <sup>b</sup>	36.8	26,785	35.4	23,280	35.1	31,190	32.7	37,000	37.0	95,055
35-44 <sup>c</sup>	21.9	16,003	22.9	15,104	22.5	19,955	25.6	28,930	23.7	60,890
45-54 <sup>d</sup>	15.6	11,399	16.9	11,128	15.8	14,069	17.6	19,867	14.2	36,560
55-64 <sup>d</sup>	8.6	6,284	9.5	6,238	8.9	7,898	10.5	11,857	8.1	20,752
65+ <sup>d</sup>	3.9	2,844	4.4	2,924	4.0	3,555	5.0	5,707	3.5	9,100
Total	100.0	72,885	100.0	65,817	100.0	88,803	100.0	113,154	100.0	256,746
Mean		38.5		38.9		38.5		40.5		37.4
Gender	%	n	%	n	%	n	%	n	%	n
Male	75.5	55,028	71.4	47,006	70.0	62,193	68.6	77,568	73.4	150,685
Female <sup>e</sup>	24.5	17,857	28.6	18,811	30.0	26,610	31.4	35,586	26.6	54,531

Significant difference in age category across years ( $p < .001$ )

a. Lower in 2018 than all other years; higher in 2015, 2017 & 2019 v. 2016

b. Higher in 2019 than all other years; lower in 2018 than all other years; higher in 2015 v. 2016 & 2017

c. Higher in 2018 than all other years; higher in 2019 v. 2015, 2016, and 2017.

d. Higher in 2018 than all other years; lower in 2019 than all other years; higher in 2016 v. 2015 & 2017

e. Higher in 2018 than all other years; lower in 2015 than all other years; lower in 2019 v. 2016 & 2017; higher in 2017 v. 2016.

Participation in poker, both non-tournament and tournament, continues to wane, especially for men. Table 8 compares findings from 2018 and 2019. While 67% of men participated in casino-only activities in 2018, that proportion jumped to more than 83% in 2019. The percentage of men who played across all activity types remained stable, with significant decreases across all other games: poker only (7% to 3%), tournament only (6% to 1%), casino and poker (6% to 4%), poker and tournament (3% to 2%), and casino and tournament (6% to 1%). The percentage of women who only played casino games increased by 2%, from 91% to 93%, while there were significant decreases noted across all categories except for poker and tournament and all types of games.

**Table 8. Gender Comparison Across Play Types: 2018 & 2019**

Males	All types		Casino only		Poker Only		Tourney Only		Casino & Poker		Poker & Tourney		Casino & Tourney	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n
2018	4.9	3,802	67.0	51,948	6.8	5,290	6.2	4,838	5.6	4,375	3.3	2,565	6.1	4,750
2019	4.7	7,086	*83.4	125,697	*3.4	5,155	*0.7	1,060	*4.1	6,177	*2.3	3,508	*1.3	2,002
Females	All types		Casino only		Poker Only		Tourney Only		Casino & Poker		Poker & Tourney		Casino & Tourney	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n
2018	1.4	491	90.9	32,350	1.2	418	1.3	446	2.5	895	0.4	160	2.3	826
2019	2.3	1,277	*93.2	50,804	*0.7	379	*0.2	118	*1.7	908	0.5	252	*1.5	793

\*Significant difference in the proportion of users was observed between 2018 and 2019 ( $p < .001$ )

Gender comparisons in 2018, reported both across play type (i.e., showing the breakdown of gambling across all options) and within play type (i.e., showing the proportion of males versus females who patronize each activity), are shown in Table 9. Overall, men were proportionately more likely to engage in almost all gambling activities (all types, poker only, tournament only, casino and poker, poker and tournament), while women were proportionately more likely to play casino only or casino & tournament.

**Table 9. Gender Comparison Across and Within Play Types in 2019 (N= 205,216)**

Gender	Gender across play type														Total n
	All types		Casino only		Poker only		Tournament Only		Casino & Poker		Poker & Tournament		Casino & Tournament		
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	
Male	4.7 <sup>a</sup>	7,086	83.4 <sup>b</sup>	125,697	3.4 <sup>a</sup>	5,155	0.7 <sup>a</sup>	1,060	4.1 <sup>a</sup>	6,177	2.3 <sup>a</sup>	3,508	1.3 <sup>b</sup>	2,002	150,685
Female	2.3 <sup>b</sup>	1,277	93.2 <sup>a</sup>	50,804	0.7 <sup>b</sup>	379	0.2 <sup>b</sup>	118	1.7 <sup>b</sup>	908	0.5 <sup>b</sup>	252	1.5 <sup>a</sup>	793	54,531
Total	4.1	8,363	86.0	176,501	2.7	5,534	0.6	1,178	3.5	7,085	1.8	3,760	1.4	2,795	205,216
Gender	Gender within play type														Total n
	All types		Casino only		Poker only		Tournament Only		Casino & Poker		Poker & Tournament		Casino & Tournament		
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	
Male	84.7 <sup>a</sup>	7,086	71.2 <sup>b</sup>	125,697	93.2 <sup>a</sup>	5,155	90.0 <sup>a</sup>	1,060	87.2 <sup>a</sup>	6,177	93.3 <sup>a</sup>	3,508	71.6 <sup>b</sup>	2,002	150,685
Female	15.3 <sup>b</sup>	1,277	28.8 <sup>a</sup>	50,804	6.8 <sup>b</sup>	379	10.0 <sup>b</sup>	118	12.8 <sup>b</sup>	908	6.7 <sup>b</sup>	252	28.4 <sup>a</sup>	793	54,531
Total		8,363		176,501		5,534		1,178		7,085		3,760		2,795	205,216

<sup>a</sup> Indicates significantly higher proportion of bets made within the gender category ( $p < .001$ )

<sup>b</sup> Indicates significantly lower proportion of bets made within the gender category ( $p < .001$ )

There were notable changes to play behavior between 2018 and 2019 across all age groups (Table 10). Casino-only play increased across all age categories, from nearly 75% in 2018 to nearly 89% in 2019. A corresponding significant decrease occurred across all ages in poker only, tournament only, casino and poker, and casino and tournament play. While play across "all types" decreased for 21 to 34 year olds, it significantly increased among those 45 and older. The combination of

poker and tournament play decreased among those 44 and younger, but remained stable among those 45 and older.

**Table 10. Age Comparison by Play Type: 2018 & 2019**

Age Group	Year	All types		Casino Only		Poker Only		Tournament Only		Casino & Poker		Poker & Tourn.		Casino & Tourn.	
		%	N	%	N	%	N	%	N	%	N	%	N	%	N
21 - 24	2018	4.5	442	76.8	7,518	3.8	371	3.9	385	4.0	390	3.1	303	3.9	384
	2019	*2.0	681	*93.3	32,071	*1.3	464	*0.1	47	*2.1	734	*0.8	274	*0.3	118
25 - 34	2018	4.8	1,763	71.2	26,344	5.2	1,941	5.3	1,956	4.9	1,824	3.0	1,096	5.6	2,076
	2019	*3.2	3,079	*89.4	84,949	*2.0	1,886	*0.3	275	*3.2	3,025	*1.2	1,094	*0.8	747
35 - 44	2018	3.9	1,121	73.3	21,196	5.7	1,652	4.5	1,310	5.0	1,436	2.4	704	5.2	1,511
	2019	3.8	2,333	*86.6	52,728	*2.6	1,574	*0.6	339	*3.3	1,992	*1.8	1,110	*1.3	814
45 - 54	2018	2.7	529	78.1	15,517	4.8	954	4.5	885	4.1	809	1.6	320	4.3	853
	2019	*3.5	1,284	*87.6	32,042	*2.3	847	*0.7	244	*2.5	926	1.8	655	*1.5	562
55 - 64	2018	2.3	275	79.6	9,433	4.2	498	4.1	483	4.3	504	1.6	189	4.0	475
	2019	*3.8	789	*87.0	18,053	*2.3	484	*0.8	171	*2.3	483	1.9	395	*1.8	377
65 +	2018	2.9	163	75.2	4,290	5.1	292	4.6	265	5.4	307	2.0	113	4.9	277
	2019	*5.2	469	*82.1	7,468	*3.3	299	*1.1	102	*3.3	296	2.6	237	*2.5	229
Total	2018	3.8	4,293	74.5	84,298	5.0	5,708	4.7	5,284	4.7	5,270	2.4	2,725	4.9	5,576
	2019	*3.4	8,635	*88.5	227,317	*2.2	5,554	*0.5	1,178	*2.9	7,456	*1.5	3,765	*1.1	2,847

\*Significant difference in the proportion of users was observed between 2018 and 2019 ( $p < .001$ )

Although an overwhelming majority of players across all age groups play casino games only, preferences by age highlighted interesting cohort differences (Table 11). Younger players were more likely to choose casino-only play, while those age 35 and older were more likely to choose almost all other activities and combinations of activities. Notably, the combination of casino and poker play was preferred by some groups of younger (25 to 44 years) as well as the oldest (65+) players.

**Table 11. Age Comparisons Across and Within Play Type (N= 256,752)**

Age Group	Age across play type													
	All types		Casino Only		Poker Only		Tournament Only		Casino & Poker		Poker & Tournament		Casino & Tournament	
	%	n	%	n	%	n	%	n	%	N	%	n	%	n
21-24	2.0 <sup>b</sup>	681	93.3 <sup>a</sup>	32,071	1.3 <sup>b</sup>	464	0.1 <sup>b</sup>	47	2.1 <sup>b</sup>	734	0.8 <sup>b</sup>	274	0.3 <sup>b</sup>	118
25-34	3.2 <sup>b</sup>	3,079	89.4 <sup>a</sup>	84,949	2.0 <sup>b</sup>	1,886	0.3 <sup>b</sup>	275	3.2 <sup>a</sup>	3,025	1.2 <sup>b</sup>	1,094	0.8 <sup>b</sup>	747
35-44	3.8 <sup>a</sup>	2,333	86.6 <sup>b</sup>	52,728	2.6 <sup>a</sup>	1,574	0.6 <sup>a</sup>	339	3.3 <sup>a</sup>	1,992	1.8 <sup>a</sup>	1,110	1.3 <sup>a</sup>	814
45-54	3.5 <sup>a</sup>	1,284	87.6 <sup>b</sup>	32,042	2.3 <sup>a</sup>	847	0.7 <sup>a</sup>	244	2.5 <sup>b</sup>	926	1.8 <sup>a</sup>	655	1.5 <sup>a</sup>	562
55-64	3.8 <sup>a</sup>	789	87.0 <sup>b</sup>	18,053	2.3 <sup>a</sup>	484	0.8 <sup>a</sup>	171	2.3 <sup>b</sup>	483	1.9 <sup>a</sup>	395	1.8 <sup>a</sup>	377
65+	5.2 <sup>a</sup>	469	82.1 <sup>b</sup>	7,468	3.3 <sup>a</sup>	299	1.1 <sup>a</sup>	102	3.3 <sup>a</sup>	296	2.6 <sup>a</sup>	237	2.5 <sup>a</sup>	229
Total	3.4	8,635	88.5	227,311	2.2	5,554	0.5	1,178	2.9	7,456	1.5	3,765	1.1	2,847

Age Group	Age within play type													
	All types		Casino Only		Poker Only		Tournament Only		Casino & Poker		Poker & Tournament		Casino & Tournament	
	%	n	%	n	%	n	%	n	%	N	%	n	%	n
21-24	7.9 <sup>b</sup>	681	14.1 <sup>a</sup>	32,071	8.4 <sup>b</sup>	464	4.0 <sup>b</sup>	47	9.8 <sup>b</sup>	734	7.3 <sup>b</sup>	274	4.1 <sup>b</sup>	118
25-34	35.7 <sup>b</sup>	3,079	37.4 <sup>a</sup>	84,949	34.0 <sup>b</sup>	1,886	23.3 <sup>b</sup>	275	40.6 <sup>a</sup>	3,025	29.1 <sup>b</sup>	1,094	26.2 <sup>b</sup>	747
35-44	27.0 <sup>a</sup>	2,333	23.2 <sup>b</sup>	52,728	28.3 <sup>a</sup>	1,574	28.8 <sup>a</sup>	339	26.7 <sup>a</sup>	1,992	29.5 <sup>a</sup>	1,110	28.6 <sup>a</sup>	814
45-54	14.9 <sup>a</sup>	1,284	14.1 <sup>b</sup>	32,042	15.3 <sup>a</sup>	847	20.7 <sup>a</sup>	244	12.4 <sup>b</sup>	926	17.4 <sup>a</sup>	655	19.7 <sup>a</sup>	562
55-64	9.1 <sup>a</sup>	789	7.9 <sup>b</sup>	18,053	8.7 <sup>a</sup>	484	14.5 <sup>a</sup>	171	6.5 <sup>b</sup>	483	10.5 <sup>a</sup>	395	13.2 <sup>a</sup>	377
65+	5.4 <sup>a</sup>	469	3.3 <sup>b</sup>	7,468	5.4 <sup>a</sup>	299	8.7 <sup>a</sup>	102	4.0 <sup>a</sup>	296	6.3 <sup>a</sup>	237	8.0 <sup>a</sup>	229
Total	100.0	8,635	100.0	227,311	100.0	5,554	100.0	1,178	100.0	7,456	100.0	3,765	100.0	2,847

<sup>a</sup> Indicates significantly higher proportion of bets made within the age category ( $p < .001$ )

<sup>b</sup> Indicates significantly lower proportion of bets made within the age category ( $p < .001$ )

## B. Regional Differences

The following analyses explored player differences by region (Table 12; Figure 1) and county (Table 13), including changes in proportion by region over prior years and the proportion of online gamblers in each county compared to their overall proportion of the NJ population.

Overall, only the percentage of players in the Gateway and Skyland regions increased in 2019, compared to the prior year. Similar to prior years, the Gateway region had the highest proportion of online gamblers, despite a slight downward trend from 2015 to 2018. In 2019, significantly more players in the Gateway region gambled online than any other year, comprising 44% of players from all regions. The Skyland region also increased by nearly 1% over 2018, following years of decreasing participation. Meanwhile, the Greater Atlantic City and Shore regions recorded the lowest percentage of players across all years of analyses, down to 5% and 16%, respectively. There were also significantly fewer players from the Delaware River region in 2019, decreasing to nearly 21%, after trending upward to more than 23% in 2018. Significant changes in the proportion of gamblers by region across years are presented in Table 12.

**Table 12. Changes in Proportion of Gamblers Across Years (n=206,644)\***

Region	% of Online Gamblers 2015	% of Online Gamblers 2016	% of Online Gamblers 2017	% of Online Gamblers 2018	% of Online Gamblers 2019
Greater A.C. <sup>a</sup>	5.2%	6.5%	6.5%	6.3%	5.1%
Delaware River <sup>b</sup>	18.7%	20.3%	22.2%	23.2%	20.9%
Gateway <sup>c</sup>	43.0%	40.2%	39.9%	39.7%	44.2%
Shore <sup>d</sup>	18.4%	18.8%	17.6%	17.1%	16.3%
Skyland <sup>e</sup>	11.7%	10.6%	10.1%	9.5%	10.4%
South Shore <sup>f</sup>	3.0%	3.7%	3.9%	4.2%	3.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

\*The table reflects only those players who are residents of New Jersey and provided zip code of residence.

All significance levels at  $p < 0.001$ .

a. Lower in 2019 than all other years; lower in 2015 v. 2016-2018

b. Lower in 2015 than all other years; higher in 2018 than all other years; higher in 2017 v. 2016 & 2019, higher in 2019 v. 2016

c. Higher in 2019 than all other years; higher in 2015 v. 2016-2018

d. Higher in 2016 than all other years; lower in 2019 than all other years; higher in 2015 v. 2017-2018

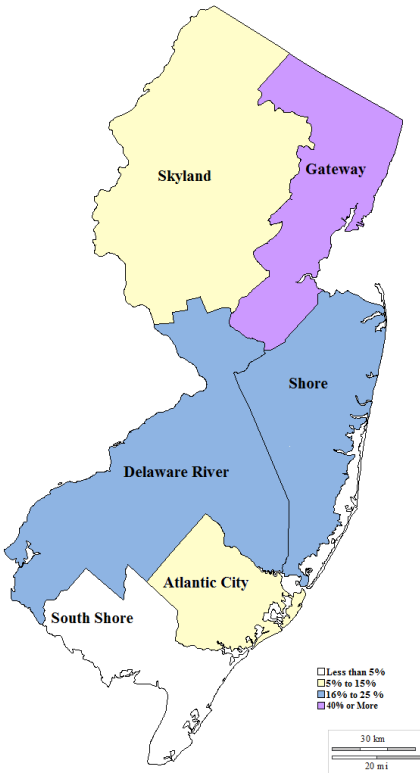
e. Higher in 2015 than all other years; lower in 2018 than all other years; higher in 2016 v. 2017

f. Lower in 2015 than all other years; higher in 2018 than all other years; higher in 2017 v. 2019

Similar to the prior year, residents of Bergen, Camden, Hudson, Middlesex, Monmouth, and Ocean Counties comprised the highest proportion of online gamblers in 2019, along with Essex County, which increased from 6.7% to 7.8% participation over 2018 (Table 13). However, among these counties, only players in Camden, Monmouth and Ocean were overrepresented among online gamblers when compared to their percentage of the population; conversely, Bergen, Essex, and Middlesex counties were underrepresented. Compared to 2018, both Bergen and Essex counties saw a proportional increase in play.

Among the medium- and small-sized counties, Atlantic, Burlington, Cape May, and Gloucester also had a significantly higher percentage of gamblers in relation to their percentage of the population. Similar to prior years, the percentage of online gamblers in Atlantic County was nearly double the percentage of county residents in the NJ population. Meanwhile, there were fewer gamblers than expected, based on population figures, in Hunterdon, Mercer, Morris, Somerset, Sussex, Union, and Warren counties.

**Figure 1. Percentage of Online Gamblers by Region**



**Table 13. Percentage of Gamblers by County (n=206,644)**

County	N	% of gamblers	% of NJ Population*
Atlantic	10,567	5.1 <sup>a</sup>	3.0
Bergen	20,192	9.8 <sup>b</sup>	10.5
Burlington	11,197	5.4 <sup>a</sup>	5.0
Camden	15,416	7.5 <sup>a</sup>	5.7
Cape May	2,839	1.4 <sup>a</sup>	1.0
Cumberland	3,627	1.8	1.7
Essex	16,125	7.8 <sup>b</sup>	9.0
Gloucester	8,862	4.3 <sup>a</sup>	3.3
Hudson	15,649	7.6	7.6
Hunterdon	1,996	1.0 <sup>b</sup>	1.4
Mercer	6,470	3.1 <sup>b</sup>	4.1
Middlesex	16,736	8.1 <sup>b</sup>	9.3
Monmouth	17,862	8.6 <sup>a</sup>	7.0
Morris	9,302	4.5 <sup>b</sup>	5.5
Ocean	15,724	7.6 <sup>a</sup>	6.8
Passaic	11,621	5.6	5.6
Salem	1,257	0.6	0.7
Somerset	5,563	2.7 <sup>b</sup>	3.7
Sussex	2,619	1.3 <sup>b</sup>	1.6
Union	11,053	5.3 <sup>b</sup>	6.3
Warren	1,967	1.0 <sup>b</sup>	1.2

<sup>a</sup> significantly higher % of gamblers in relation to % of NJ population ( $p < .001$ )

<sup>b</sup> significantly lower % of gamblers in relation to % of NJ population ( $p < .001$ )

\* Population estimates from State of New Jersey. New Jersey State Data Center. (2019). *Annual Estimates of the Population: April 1, 2010 to July 1 2019* From: [https://www.nj.gov/labor/lpa/dmograph/est/est\\_index.html](https://www.nj.gov/labor/lpa/dmograph/est/est_index.html)

## IV. Time of Day

More than three billion bets were placed in 2019, almost double the 1.7 billion bets placed overall in 2018 (Table 14). In addition, the total amount bet overall tripled from \$4.9 billion to nearly \$15 billion. These findings support the steady escalation of online betting across years since the legalization of online gambling in 2014.

The number of bets placed in every time category also increased at least 60%, with the largest increase occurring between 3 p.m. and midnight, where the number of bets increased from 587 million in 2018 to 1.2 billion in 2019 (Table 14). The most popular time to bet remained from midnight to 3 a.m., and 9 p.m. to midnight, with about 15% of all bets placed during each of those time periods. In 2019, betting from 6 p.m. to 9 p.m. (13%) increased in popularity, with 405



million bets placed, compared to 203 million in 2018. Similar to last year, about 34% of bets were placed during traditional working hours (9 a.m. to 6 p.m.).

Overall, the average bet amount increased by more than 50% across all time periods, although some of the increases were skewed by a few very large bets. Median wagers across all time periods were \$1.00, an increase from 2018 in the time periods from noon to midnight. The maximum amount wagered increased in the 9 a.m. to 12 p.m. time category (from \$20,000 to \$40,000), noon to 3 p.m. (from \$30,000 to \$500,000), 6 p.m. to 9 p.m. and 9 p.m. to midnight, (\$25,000 to \$40,000), and from 3 a.m. to 6 a.m. (\$25,224 to \$250,000). The other time categories saw decreases in the maximum wager amount.

**Table 14. Casino Wagers by Time Category in 2019 (n=3,083,517,002)**

Time Category	# of Bets (mill.)	Percent of Total Bets	Max Wager Amount	Mean Wager	Median Wager	Std. of Wager	Sum Wager
6 a.m.-9 a.m.	326.1	10.6	40,000.00	4.67	1.00	51.72	1,523,919,662.41
9 a.m.-12 p.m.	405.3	13.1	40,000.00	4.50	1.00	49.66	1,823,583,616.38
12 p.m.-3 p.m.	344.8	11.2	500,000.00	4.64	1.00	60.88	1,601,496,927.76
3 p.m.-6 p.m.	308.2	10.2	40,000.00	4.99	1.00	55.94	1,537,320,638.83
6 p.m.-9 p.m.	405.4	13.1	40,000.00	4.61	1.00	52.39	1,870,456,752.17
9 p.m.-12 a.m.	462.3	15.0	40,000.00	5.06	1.00	56.82	2,336,769,460.75
12 a.m.-3 a.m.	463.4	15.0	50,000.00	5.18	1.00	67.40	2,399,822,342.42
3 a.m.-6 a.m.	368.0	11.9	250,000.00	4.84	1.00	60.97	1,782,394,908.01
Total	3,083.5	100.0	500,000.00	4.82	1.00	57.50	14,875,764,308.73

Compared to last year when women placed more bets than men, men in 2019 placed more bets and wagered more than twice the amount of women in every time period (Table 15). In addition, men placed almost twice as many bets in 2019 (1.5 billion) than 2018 (756 million), and women’s betting activity increased from 920 million to 1.4 billion bets. Accounting for the proportion of bettors by gender, women made more bets than men from midnight to noon, while men bet more from 3 p.m. to midnight. This finding reverses the preference noted in 2018, when men gambled more from midnight to 9 a.m., and women, from 6 p.m. to midnight. Women and men showed slightly different preferences when making highest mean bets, with women placing their largest bets from 3 a.m. to 6 a.m. (\$2.90), followed by midnight to 3 a.m. (\$2.76), then 6 a.m. to 9 a.m. (\$2.71). Men placed their highest average bets from midnight to 3 a.m. (\$7.10), followed by 9 p.m. to midnight (\$6.85), then 3 p.m. to 6 p.m. (\$6.63).

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

Time of Day	Male			Female			Total		
	# 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. <sup>b</sup>	155.8	10.6	6.15	147.0	10.7	2.71	302.9	10.6	4.48
9 a.m.-12 p.m. <sup>b</sup>	190.3	12.9	6.04	184.7	13.5	2.52	375.0	13.2	4.31
12 p.m.-3 p.m.	164.8	11.2	6.19	152.9	11.2	2.46	317.7	11.2	4.39
3 p.m.-6 p.m. <sup>a</sup>	154.0	10.4	6.63	129.8	9.5	2.38	283.8	10.0	4.69
6 p.m.-9 p.m. <sup>a</sup>	194.5	13.2	6.20	179.0	13.1	2.34	373.5	13.1	4.35
9 p.m.-12 a.m. <sup>a</sup>	221.7	15.0	6.85	203.2	14.8	2.56	424.9	14.5	4.80
12 a.m.-3 a.m. <sup>b</sup>	221.3	15.0	7.10	207.3	15.1	2.76	428.7	15.1	5.00
3 a.m.-6 a.m. <sup>b</sup>	174.6	11.8	6.33	166.2	12.1	2.90	340.8	12.0	6.33
Total	1,477.0	100.0	6.47	1,370.2	100.0	2.59	2,847.2	100.0	4.60

Significant differences across gender for specific age range ( $p < .001$ )

<sup>a</sup> Higher proportion of males than females

<sup>b</sup> Higher proportion of females than males

Betting increased across all age groups in 2019. This was most notable among the youngest bettors, ages 21 to 34, who placed more than twice as many bets as they did in 2018 (532 million v. 247 million; see Table 16). Overall, those in the 45 to 54 age group still placed the largest number of bets, but the proportion placed by this group decreased from 30% of bets placed in 2018 to 28% of bets placed in 2019. There was a similar decline in 2019 among 55 to 64-year-old players (from 23% to 21%) and those 65 and older (10% to 9%). All age categories from 21 to 44 saw proportional increases in play.

Time of day preferences varied across age groups, with younger bettors playing more in the afternoon and night, and older bettors, from morning through early evening. The highest percentage of play among those ages 21 to 54 was between 9 p.m. and 3 a.m. Similarly, players aged 55 to 64 demonstrated a small preference for 9 p.m. to midnight, followed by midnight to 3 a.m., and 6 p.m. to 9 p.m. Patterns among the oldest players – those 65 and older – were different, with the highest percentage of bets placed from 9 a.m. to noon and 6 p.m. to 9 p.m.

Comparisons within time categories provided additional insight. The youngest players, ages 21 to 24, were overrepresented among players gambling from noon to 3 a.m.; similarly, players 65 and older preferred gambling from 6 a.m. to 9 p.m. Conversely, players between 35 and 54 years were overrepresented among those who gambled overnight and early morning, with 35 to 44-year-olds preferring to play from midnight to noon and 45 to 54-year-olds, from 6 p.m. to 9 a.m. Players in two age groups demonstrated a preference for two distinct time periods, from noon to 6 p.m. and 3 a.m. to 6 a.m. for 25 to 34 year olds, and from 6 a.m. to noon and 6 p.m. to midnight for those ages 55 to 64.

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

Time of Day	21-24		25-34		35-44		45-54		55-64		65+		Total # of Bets (mill.)
	# 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.	4.4	7.6 <sup>b</sup>	47.3	10.0 <sup>b</sup>	74.2	10.6 <sup>a</sup>	89.0	10.7 <sup>a</sup>	65.6	10.6 <sup>a</sup>	29.8	11.0 <sup>a</sup>	310.3
9 a.m.-12 p.m.	6.5	11.3 <sup>b</sup>	59.3	12.5 <sup>b</sup>	92.5	13.2 <sup>a</sup>	108.2	13.0 <sup>b</sup>	82.0	13.2 <sup>a</sup>	38.4	14.1 <sup>a</sup>	386.9
12 p.m.-3 p.m.	7.1	12.2 <sup>a</sup>	54.3	11.5 <sup>a</sup>	78.2	11.2 <sup>b</sup>	88.9	10.7 <sup>b</sup>	68.8	11.1 <sup>b</sup>	34.1	12.5 <sup>a</sup>	331.3
3 p.m.-6 p.m.	7.2	12.5 <sup>a</sup>	51.1	10.8 <sup>a</sup>	70.1	10.0 <sup>b</sup>	78.7	9.5 <sup>b</sup>	61.3	9.9 <sup>b</sup>	30.8	11.3 <sup>a</sup>	299.1
6 p.m.-9 p.m.	8.2	14.1 <sup>a</sup>	61.4	13.0 <sup>b</sup>	89.3	12.8 <sup>b</sup>	109.0	13.1 <sup>a</sup>	86.8	14.0 <sup>a</sup>	38.1	14.0 <sup>a</sup>	392.9
9 p.m.-12 a.m.	9.4	16.2 <sup>a</sup>	71.7	15.1 <sup>b</sup>	105.6	15.1 <sup>b</sup>	128.7	15.5 <sup>a</sup>	95.8	15.4 <sup>a</sup>	36.6	13.4 <sup>b</sup>	447.6
12 a.m.-3 a.m.	9.4	16.2 <sup>a</sup>	72.6	15.3 <sup>b</sup>	106.6	15.2 <sup>a</sup>	127.3	15.3 <sup>a</sup>	90.6	14.6 <sup>b</sup>	34.7	12.7 <sup>b</sup>	441.1
3 a.m.-6 a.m.	5.8	10.0 <sup>b</sup>	56.0	11.8 <sup>a</sup>	83.5	11.9 <sup>a</sup>	101.0	12.2 <sup>a</sup>	70.6	11.4 <sup>b</sup>	29.5	10.8 <sup>b</sup>	346.3
Total	58.0	100.0	473.6	100.0	700.0	100.0	830.7	100.0	621.3	100.0	271.9	100.0	2,955.6
% of total	2.0		16.0		23.7		28.1		21.0		9.2		100.00

<sup>a</sup> Indicates significantly higher proportion of bets made for this age group within the time of day category ( $p < .001$ )

<sup>b</sup> Indicates significantly lower proportion of bets made for this age group within the time of day category ( $p < .001$ )

Gambling activity increased across all regions, from the smallest increase of 73% in the Southern Shore (from 60 million to 104 million bets placed) to an 88% increase in Greater Atlantic City (from 76 to 142 million) from 2018 and 2019 (Table 17). The proportion of gambling by region was very similar in both years, with slight but notable increases in Greater Atlantic City and Delaware River and a slight decrease in Shore. Gateway bettors continued to place the highest proportion of bets, 40% of all bets placed. Across all regions, the heaviest gambling activity occurred between 9 p.m. and 3 a.m. In addition to those preferences, players in the Greater Atlantic City region also favored betting between 9 a.m. and noon and 3 a.m. to 6 a.m.; those in the Delaware River, Gateway, Shore, Skyland, and Southern Shore regions also bet heavily from 6 p.m. to 9 p.m., and 9 a.m. to 12 p.m.

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

Time of Day Category	Greater Atlantic City		Delaware River		Gateway		Shore		Skyland		Southern Shore		Total # of Bets (mill.)
	# 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.	16.2	11.5 <sup>a</sup>	64.9	10.4 <sup>b</sup>	118.2	10.3 <sup>b</sup>	55.4	10.4 <sup>b</sup>	30.4	10.5 <sup>a</sup>	11.7 <sup>a</sup>	11.2 <sup>a</sup>	296.7
9 a.m.-12 p.m.	19.3	13.6 <sup>a</sup>	80.0	12.8 <sup>b</sup>	146.5	12.8 <sup>b</sup>	72.6	13.6 <sup>a</sup>	37.4	13.0 <sup>b</sup>	13.9	13.3 <sup>a</sup>	369.6
12 p.m.-3 p.m.	15.5	10.9 <sup>b</sup>	70.3	11.2 <sup>a</sup>	124.0	10.8 <sup>b</sup>	62.0	11.6 <sup>a</sup>	32.9	11.4 <sup>a</sup>	11.8	11.4 <sup>a</sup>	316.6
3 p.m.-6 p.m.	13.6	9.6 <sup>b</sup>	64.7	10.3 <sup>a</sup>	111.5	9.7 <sup>b</sup>	55.8	10.4 <sup>a</sup>	30.3	10.5 <sup>a</sup>	10.4	10.0 <sup>b</sup>	286.3
6 p.m.-9 p.m.	17.1	12.0 <sup>b</sup>	86.7	13.9 <sup>a</sup>	148.5	13.0 <sup>b</sup>	74.0	13.9 <sup>a</sup>	39.8	13.8 <sup>a</sup>	13.7	13.2 <sup>b</sup>	379.9
9 p.m.-12 a.m.	19.3	13.6 <sup>b</sup>	97.0	15.5 <sup>a</sup>	175.8	15.3 <sup>a</sup>	80.4	15.1 <sup>b</sup>	45.9	15.9 <sup>a</sup>	15.0	14.5 <sup>b</sup>	433.5
12 a.m.-3 a.m.	22.1	15.6 <sup>a</sup>	91.7	14.6 <sup>b</sup>	180.1	15.7 <sup>a</sup>	75.6	14.2 <sup>b</sup>	41.0	14.2 <sup>b</sup>	15.0	14.5 <sup>b</sup>	425.5
3 a.m.-6 a.m.	18.7	13.2 <sup>a</sup>	70.8	11.3 <sup>a</sup>	141.0	12.3 <sup>a</sup>	58.2	10.9 <sup>a</sup>	31.3	10.8 <sup>b</sup>	12.4	11.9 <sup>a</sup>	332.3
Total	141.6	100.0	626.0	100.0	1,145.6	100.0	534.1	100.0	289.0	100.0	103.9	100.0	2,840.3
% of total	5.0		22.0		40.3		18.8		10.2		3.7		100.0

<sup>a</sup> Indicates significantly higher proportion of bets made for this region within the time of day category ( $p < .001$ )

<sup>b</sup> Indicates significantly lower proportion of bets made for this region within the time of day category ( $p < .001$ )

Betting patterns significantly differed across time periods by age (Table 18). Compared with 2018, average bet size in 2019 increased for every age group at every time period except for those 65 and older who gambled from 6 p.m. to 9 p.m., when the average bet size remained the same; the median bet size also increased across all groups and time periods. The largest average bet in each time frame in 2018 ranged from \$3.39 to \$5.95, while, in 2019, the largest average bet in each time frame ranged from \$7.34 to \$9.18.

Increases in bet size were inverse to age, such that the largest increase occurred among the two youngest age groups, and the smallest increase occurred among the oldest gamblers. Notably, the median bet size, which is unaffected by extreme bets, also increased among younger players (21 to 24) across all time frames, by \$.25 to \$.40. Overall, there were no decreases in mean or median bet amounts for any age group in 2019. Median bets increased to around \$1 for all ages in all time frames except for the 65 and older group, who placed median bets of \$.88 to \$.90 in all time frames except 3 a.m. to 6 a.m.

On average, players between 21 and 34 years old wagered the most money across all time frames. Average bet amount decreased as age increased, with those ages 65 and over making the smallest average wagers in each time period, despite occasional players in that age group who wagered very large amounts (\$500,000 from 12 p.m. to 3 p.m., \$350,000 from 3 a.m. to 6 a.m.). Similarly, those ages 65 and over placed the largest maximum bet in all but the 12 a.m. to 3 a.m. time period; from 9 p.m. to midnight, players in both the 65 and over the 45 to 54 age groups each placed \$40,000 bets.

**Table 18. Within Time of Day Comparisons of Casino Wagers By Age**

Time of Day	Age category	Maximum	Mean (\$)	Std. Dev. (\$)	Median (\$)
<b>6 a.m.-9 a.m.</b>	21-24	30,000.00	8.54	154.10	1.00
	25-34	24,000.00	6.93	50.20	1.00
	35-44	20,000.00	5.36	48.25	1.00
	45-54	30,000.00	4.16	41.50	1.00
	55-64	18,000.00	3.52	39.94	1.00
	65+	40,000.00	3.06	84.07	0.90
<b>9 a.m-12 p.m.</b>	21-24	20,000.00	6.92	50.82	1.00
	25-34	25,500.00	7.34	60.26	1.00
	35-44	30,000.00	5.32	57.74	1.00
	45-54	24,000.00	3.73	35.50	1.00
	55-64	20,000.00	3.28	36.36	1.00
	65+	40,000.00	2.86	73.51	0.88
<b>12 p.m.-3 p.m.</b>	21-24	6,000.00	6.95	33.22	1.05
	25-34	20,000.00	7.52	54.58	1.00
	35-44	17,824.00	5.43	49.48	1.00
	45-54	30,000.00	3.78	32.10	1.00
	55-64	25,000.00	3.51	41.82	1.00
	65+	500,000.00	2.95	143.37	0.80

<b>3 p.m.-6 p.m.</b>	21-24	9,000.00	7.55	39.79	1.00
	25-34	25,500.00	8.12	65.00	1.00
	35-44	20,000.00	5.70	50.77	1.00
	45-54	30,000.00	4.11	41.78	1.00
	55-64	19,200.00	3.78	51.50	0.90
	65+	40,000.00	3.05	91.00	0.80
<b>6 p.m.-9 p.m.</b>	21-24	8,000.00	7.50	43.89	1.00
	25-34	20,000.00	7.46	62.75	1.00
	35-44	26,864.20	5.19	45.73	1.00
	45-54	30,000.00	4.22	53.02	1.00
	55-64	30,000.00	3.50	49.94	1.00
	65+	40,000.00	2.55	61.32	0.80
<b>9 p.m.-12 a.m.</b>	21-24	30,000.00	8.18	65.55	1.00
	25-34	30,000.00	7.94	67.77	1.00
	35-44	20,000.00	5.84	51.45	1.00
	45-54	40,000.00	4.67	61.53	1.00
	55-64	20,000.00	3.48	40.15	1.00
	65+	40,000.00	2.87	73.73	0.88
<b>12 a.m.-3 a.m.</b>	21-24	30,000.00	9.07	132.11	1.00
	25-34	30,000.00	8.45	90.21	1.00
	35-44	50,000.00	6.14	77.42	1.00
	45-54	30,000.00	4.30	59.92	1.00
	55-64	10,000.00	3.54	27.87	1.00
	65+	30,000.00	2.81	71.28	0.90
<b>3 a.m.-6 a.m.</b>	21-24	30,000.00	9.18	173.88	1.00
	25-34	64,404.52	7.11	64.72	1.00
	35-44	52,500.00	5.36	56.74	1.00
	45-54	30,000.00	4.11	44.23	1.00
	55-64	22,443.80	4.04	49.08	1.00
	65+	250,000.00	3.10	103.03	1.00

## V. The Top 10%

In 2019, a total of 13,262 players qualified for inclusion in the “Top 10%” group, characterized by highest average total of yearly bets placed, betting days, and total amount bet over the course of the year. These criteria for this group, which have been utilized since the inception of legalized online gambling, includes in the analyses only players who met all indicators of high-frequency and high-intensity wagering. Compared to the prior year, more than double the number of players in 2019 qualified for inclusion in the Top 10%. Of note, improved data quality has allowed us to examine a larger proportion of data, therefore to conduct comparisons across years we have re-run selected variables from previous years within current inclusion parameters; in some cases, this results in numbers that differ slightly from those in prior reports.

Table 19, below, shows Top 10% membership by gender and age. Women represented a significantly smaller proportion of the Top 10% than in all prior years, down to 42% from a high of nearly 55% in 2018. Similarly, men regained the majority in 2019, making up 58% of Top 10% players, a nearly 13% jump over the 45% proportion in 2018. Despite this shift, the percentage of women represented in the Top 10% is notable, as they comprised only 27% of all online gamblers in 2019.

Compared to 2018, there was a drop in the average age of players in this group for both men and women in 2019. In addition, consistent with findings in all years *except* 2018, men in this group were younger (46 years) and women, older (48 years), although large standard deviation values suggest wide variation in the ages of these players.

**Table 19. Top 10% of Casino Gamblers Across Years by Gender, Age (n=12,624)**

Males						
Year	%	n	Age			
			Minimum	Maximum	Mean	Std.
2015	47.9	1,064	21.7	89.3	<sup>a</sup> 47.1	12.4
2016	49.3	1,750	21.0	88.0	<sup>a</sup> 47.6	12.2
2017	*51.8	2,128	21.0	86.9	<sup>a</sup> 45.2	12.1
2018	*45.4	2,406	21.4	97.0	<sup>a</sup> 49.5	12.0
2019	*57.7	7,290	21.0	98.0	<sup>a</sup> 45.6	12.6
Females						
Year	%	n	Age			
			Minimum	Maximum	Mean	Std.
2015	52.1	1,155	21.2	80.8	<sup>b</sup> 48.8	11.4
2016	50.7	1,798	21.0	90.0	<sup>b</sup> 48.9	11.7
2017	*48.2	1,981	21.2	89.6	<sup>b</sup> 47.4	11.6
2018	*54.6	2,894	21.0	87.8	<sup>b</sup> 49.7	11.4
2019	*42.3	5,334	21.0	88.0	<sup>b</sup> 48.0	11.9

\*Significant difference in proportion of males to females in 2019 compared with all other years; significant difference in 2018 v. 2017 ( $p < .001$ )

a. Higher in 2018 than all other years; higher in 2015 & 2016 v. 2017 & 2019 ( $p < .001$ )

b. Higher in 2018 v. 2017 & 2019; higher in 2015 & 2016 v. 2017 ( $p < .001$ )

As in past years, most players in the Top 10% played only casino games, though poker combinations made a modest resurgence in 2019 when compared to the prior year (Table 20). About 14% of players in the Top 10% paired their casino play with poker in some form: poker (3.7%), tournament poker (3.6%), or both (7.1%). Still, a greater proportion of Top 10% players preferred casino-only play in 2019 than in all years except 2018.

**Table 20. Top 10% by Play Type (n =13,262)**

Type	2015		2016		2017		2018		2019	
	%	n	%	n	%	n	%	n	%	n
All Types <sup>a</sup>	18.0	424	20.6	731	13.6	557	3.5	188	7.1	941
Casino Only <sup>b</sup>	70.7	1,664	76.0	2,696	75.6	3,107	96.5	5,111	85.6	11,348
Casino & Poker <sup>c</sup>	5.6	132	2.8	100	2.7	111	0.0	0	3.7	491
Casino & Tournament <sup>d</sup>	5.6	132	0.6	21	8.1	334	0.0	0	3.6	482

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

a. Lower in 2018 than all other years; higher in 2016 than all other years; lower in 2019 v. 2015 & 2017; lower in 2017 v. 2015

b. Lower in 2015 than all other years; higher in 2018 than all other years; higher in 2019 v. 2016 & 2017

c. Lower in 2018 than all other years; higher in 2015 than all other years; higher in 2019 v. 2017

d. Lower in 2018 than all other years; higher in 2017 than all other years; lower in 2016 v. 2019 & 2015; lower in 2019 v. 2015

There were significant shifts in betting behavior among Top 10% players in 2019 compared to previous years (Table 21). The median number of total betting days (192) was lower than in all other years of analysis, but the standard deviation was highest, suggesting even greater variability in days bet with this group. Players wagered on an average of four sites in 2019, down slightly from an average of five sites in both 2017 and 2018, though some players wagered on the maximum number of sites available.

Players placed the fewest number of yearly bets, on average, in 2019 (166,070 bets) compared to other years. However, metrics for amounts wagered were generally higher. For example, the average single wager of \$9.39 placed in 2019 was more than double the average single wager of any other year. The average total yearly wager (\$711,287) was significantly higher in 2019 than 2015 and 2018. Similarly, the maximum amounts wagered generally increased across all metrics (mean=\$413; median=\$90) to the highest across all years; the mean and median amounts of the second highest year, 2015, were \$231 and \$57, respectively. Taken together, these findings indicate bettors in the Top 10% were betting more money but less frequently than in past years.

**Table 21. Play Patterns of Top 10% Gamblers Compared to All Others (Casino Only)**

Play Patterns	Variable	Maximum	Mean	Std.	Median
<b>Top 10% 2015</b> <b>n=2,352</b>	# of Sites Wagered	8.0	<sup>a</sup> 3.9	2.2	4.0
	Total Betting Days	365.0	<sup>b</sup> 205.3	72.2	197.0
	Max Wager (\$)	20,900.00	<sup>c</sup> 231.42	741.30	57.00
	Avg. Single Wager (\$)	252.96	<sup>d</sup> 4.38	11.93	1.77
	Total Yearly Wager (\$)	20,403,084.42	<sup>e</sup> 525,067.67	1,037,333.39	245,716.28
	Total Number of Yearly Bets	1,016,555.0	<sup>f</sup> 182,052.6	135,453.1	141,958.8
<b>Top 10% 2016</b> <b>n=3,548</b>	# of Sites Wagered	10.0	<sup>a</sup> 4.2	2.5	4.0
	Total Betting Days	367.0	<sup>b</sup> 230.5	71.2	226.0
	Max Wager (\$)	29,860.00	<sup>c</sup> 195.00	728.65	50.00
	Avg. Single Wager (\$)	308.36	<sup>d</sup> 4.18	11.50	1.69
	Total Yearly Wager (\$)	31,032,290.91	611,806.03	1,440,431.25	263,220.93
	Total Number of Yearly Bets	1,482,919.0	<sup>f</sup> 202,518.8	154,437.2	159,407.0

<b>Top 10% 2017</b>  <b>n=4,109</b>	# of Sites Wagered	11.0	<sup>a</sup> 4.7	2.9	4.0
	Total Betting Days	366.0	<sup>b</sup> 230.8	72.6	227.0
	Max Wager (\$)	20,000.00	<sup>c</sup> 200.50	631.55	52.50
	Avg. Single Wager (\$)	521.73	<sup>d</sup> 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	1,480,312.0	<sup>f</sup> 225,397.5	170,866.0	176,979.0
<b>Top 10% 2018</b>  <b>n=5,299</b>	# of Sites Wagered	13.0	<sup>a</sup> 4.9	2.9	4.0
	Total Betting Days	365.0	<sup>b</sup> 225.4	71.0	221.0
	Max Wager (\$)	61,571.77	<sup>c</sup> 228.50	1,345.28	52.88
	Avg. Single Wager (\$)	433.16	<sup>d</sup> 3.79	12.53	1.63
	Total Yearly Wager (\$)	61,273,210.37	<sup>e</sup> 585,977.25	1,517,005.16	264,318.45
	Total Number of Yearly Bets	2,171,045.0	<sup>f</sup> 211,383.1	160,853.6	165,472.0
<b>Top 10% 2019</b>  <b>n= 13,262</b>	# of Sites Wagered*	17.0	<sup>a</sup> 4.3	3.2	3.0
	Total Betting Days*	365.0	<sup>b</sup> 200.6	81.2	192.0
	Max Wager (\$)*	64,404.52	<sup>c</sup> 413.36	1,463.28	90.00
	Avg. Single Wager (\$)*	2,447.51	<sup>d</sup> 9.39	45.10	2.27
	Total Yearly Wager (\$)*	170,478,017.30	<sup>e</sup> 711,287.03	2,934,828.53	258,844.72
	Total Number of Yearly Bets*	2,900,000.0	<sup>f</sup> 166,070.2	171,173.0	113,436.0
<b>All other Casino Bettors 2019</b>  <b>n= 232,993</b>	# of Sites Wagered	16.0	1.5	1.3	1.0
	Total Betting Days	365.0	16.4	31.7	4.0
	Max Wager (\$)	500,000.00	108.41	1,135.46	20.00
	Avg. Single Wager (\$)	300,000.00	15.07	625.13	2.83
	Total Yearly Wager (\$)	122,144,079.10	21,496.58	361,914.80	750.80
	Total Number of Yearly Bets	901,643.0	3,232.4	12,505.6	225.0

All differences significant at  $p < .001$

a. # of Sites Wagered: Lower in 2015 than all other years; 2016 lower v. 2017-2019; 2019 lower v. 2017 & 2018

b. Total Betting Days: Lower in 2019 than all other years; 2015 lower v. 2016-2018; 2017 higher v. 2018

c. Max Wager: Higher in 2019 than all other years

d. Avg. Single Wager: Higher in 2019 than all other years

e. Total Yearly Wager: 2019 higher v. 2015 & 2018

f. Total Number of Yearly Bets: Lower in 2019 than all other years; higher in 2017 than all other years; 2016 & 2018 higher v. 2015

Differences in gambling behaviors are more pronounced when comparing the Top 10% to all other casino gamblers (see Table 21, above, last two rows). The average Top 10% gambler bet on more than four sites, compared to other casino gamblers who played on fewer than two sites on average. In addition, members of the Top 10% bet on 12 times as many days – 201 versus 16 days on average. Similarly, the average total yearly wager among the Top 10%, \$711,287, was 33 times higher than that of other casino gamblers (\$21,496); median total yearly wagers reflected the same discrepancy (\$258,844 v. \$750). Top 10% gamblers also placed 51 times more bets (166,070) in 2019, on average, than other casino gamblers, who placed an average of just 3,232 bets. As in 2018, the mean (\$15.07) and median (\$2.83) single bets of other casino bettors were higher than those of the Top 10% (mean=\$9.39; median=\$2.27). Taken together, the findings suggest that Top 10% players gambled more money on more bets across more days on more sites than all other casino gamblers but the amounts of any one bet were generally smaller than those of the average player.



## VI. Responsible Gaming Features

A total of 10,063 casino or poker gamblers used responsible gaming (RG) features in 2019. While this represents an increase in raw number of RG users, the proportion of gamblers using RG features declined to 3.9% of all gamblers, down from 5.9% of all gamblers in 2018.

RG gamblers were, on average, younger in 2019 than in 2018 but older than in all other prior years of analysis, with a mean age around 40. Gamblers under 34 years were significantly more likely to use RG features in 2019 compared to 2018, despite an uneven pattern of feature usage over the past five years. There were modest declines in use among those 45 years and older, compared with 2018, however, the proportion of RG users in that age has generally increased since 2015.

**Table 22. Users of RG Features Overall and by Age Category (Casino & Poker Players)**

Category	Use RG Features 2015		Use RG Features 2016		Use RG Features 2017		Use RG Features 2018		Use RG Features 2019	
	%	N	%	n	%	n	%	n	%	N
RG Users as Proportion of All Gamblers	6.2	4,895	6.0	4,745	4.9	5,467	5.9	7,437	3.9	10,063
<b>Age Category</b>										
21 –24 <sup>a</sup>	11.1	545	8.5	404	11.5	629	5.1	378	7.2	720
25 –34 <sup>b</sup>	35.3	1,730	35.0	1,659	33.8	1,848	30.8	2,288	33.1	3,326
35 –44 <sup>c</sup>	22.9	1,123	24.9	1,181	24.4	1,335	27.3	2,030	26.7	2,683
45-54 <sup>d</sup>	17.7	868	18.4	872	18.8	1,028	20.3	1,506	18.2	1,833
55-64 <sup>e</sup>	9.9	483	9.7	458	8.4	458	12.0	890	10.9	1,099
65+ <sup>f</sup>	3.0	146	3.6	171	3.1	169	4.6	345	4.0	402
Min		21.0		21.0		21.0		21.0		21.0
Max		93.6		91.0		94.6		98.6		98.0
Mean <sup>g</sup>		39.1		39.3		39.0		41.9		40.1

Significant differences in the proportion of RG users for the corresponding age range ( $p < .001$ )

a. Lower in 2018 than all other years; Lower in 2019 & 2016 than 2015 & 2017

b. Lower in 2018 than all other years

c. 2018 & 2019 higher v. 2015; 2018 higher v. 2017

d. 2018 higher v. 2015 & 2019

e. 2018 higher v. 2015-2017; 2019 higher v. 2017

f. 2015 & 2017 lower v. 2018

g. 2018 & 2019 higher v. 2015-2017; 2018 higher v. 2019

After a year of increase, the proportion of women who utilized RG features in 2019 significantly declined compared with 2018, from nearly 37% to 32% (Table 23). Conversely, the proportion of men significantly increased, from 63% in 2018 to 68% in 2019. Overall, men gamble more than women, however, within-gender comparisons found that women who gamble were significantly more likely to use RG features than men (5.7% v. 4.4%, respectively; Table 23).

**Table 23. All RG Users (Casino & Poker Players)**

Year	RG Users by Gender					
	Male		Female		Total	
	%	n	%	N	%	n
2015	<sup>a</sup> 67.6	3,124	<sup>a</sup> 32.4	1,498	100.0	4,622
2016	65.5	3,106	34.5	1,639	100.0	4,745
2017	<sup>a</sup> 66.8	3,650	<sup>a</sup> 33.2	1,817	100.0	5,467
2018	<sup>a</sup> 63.4	4,712	<sup>a</sup> 36.6	2,725	100.0	7,437
2019	<sup>a</sup> 68.0	6,611	<sup>a</sup> 32.0	3,109	100.0	9,720
	RG Users vs. Non-Users 2019					
	Male		Female		Total	
	%	n	%	N	%	n
Use RG	<sup>b</sup> 4.4	6,611	<sup>b</sup> 5.7	3,109	4.7	9,720
Don't Use RG	95.6	144,074	94.3	51,422	95.3	195,496

a. Proportion of males to females is significantly different in 2015, 2017 & 2019 v. 2018 ( $p < .001$ )

b. Females significantly higher proportion of RG use v. males ( $p < .001$ )

The following tables focus on only those RG players who play casino games, not poker-only players, to facilitate comparisons. In 2019, the maximum number of sites continues to increase along with an increase in the number of sites available; however, the mean (4 sites) and median (3 sites) number of sites patronized by RG gamblers has stabilized, along with the average total number of yearly bets (Table 24). There were other notable increases in play patterns between 2018 and 2019. For example, the average number of betting days increased from about 80 to 92 days. The average minimum wager nearly tripled, from \$.35 to \$1.04 and the average single wager doubled, from \$11 to \$22. Average maximum wagers similarly increased, from about \$213 to \$392. In addition, the average total yearly wager increased by more than a third from \$253,000 to more than \$344,000. Taken together, these findings suggest that individuals using RG features are betting larger amounts, both incrementally and cumulatively, per bet placed.

**Table 24. Play Patterns of RG Gamblers: 2018 & 2019 (Casino Only)**

Play Patterns	RG Gamblers 2018 (n=7,180)			
	Max	Mean	Std	Median
#Sites Wagered	13.0	4.1	2.9	3.0
Total Betting Days	365.0	*79.5	92.3	39.0
Min. Wager (\$)	300.00	*0.35	5.76	0.01
Max. Wager (\$)	28,800.00	*212.70	792.90	50.00
Avg. single Wager (\$)	4,112.20	*11.02	64.82	1.98
Total Yearly Wager (\$)	61,272,210.37	*253,626.89	1,170,509.16	50,195.42
Total Number of Yearly Bets	1,165,909.0	65,701.5	112,215.1	18,725.5

Play Patterns	RG Gamblers 2019 (n=9,884)			
	Max	Mean	Std	Median
#Sites Wagered	17.0	4.0	3.3	3.0
Total Betting Days	365.0	*91.8	94.3	57.0
Min. Wager (\$)	650.00	*1.04	13.7	0.01
Max. Wager (\$)	52,500.00	*392.03	1,244.03	80.00
Avg. single Wager (\$)	4,633.47	*22.31	90.15	3.57
Total Yearly Wager (\$)	102,233,341.06	*344,360.34	1,553,620.38	65,003.78
Total Number of Yearly Bets	2,238,062.0	63,748.1	121,152.6	14,709.0

\*Significant difference between years ( $p < .001$ )

There were significant differences in play patterns between users of RG features and non-users in 2019 (Table 25). RG players gambled on more than twice as many sites, 4 vs 1.6 sites, and had nearly four times as many betting days on average, 92 compared with 24 days; this comparison is even more pronounced when comparing the median RG (57 days) and non-RG (5 days) player. Wagering amounts also varied, with the average maximum wager among RG players (\$392) nearly three and a half times larger than the average non-RG player (\$114). The average amount wagered across the full year also was substantially different, with individuals using RG features posting mean total wagers of about \$344,360 (\$65,004 at the median) compared to non-RG players averaging \$46,498 and just \$817 at the median. RG gamblers also placed a significantly higher number of yearly bets, on average (63,748 vs. 9,838), and at the median (14,709 vs. 244). Overall, RG users bet significantly more frequently and in higher amounts than non-RG gamblers, suggesting that limit-setting may be an important strategy in mitigating overspending in this group.

**Table 25. Play Patterns of RG and Non-RG Gamblers (Casino Only)**

Play Patterns	RG Gamblers 2019 (n=9,884)			
	Max	Mean	Std	Median
#Sites Wagered	17.0	*4.0	3.3	3.0
Total Betting Days	365.0	*91.8	94.3	57.0
Min. Wager (\$)	650.0	1.04	13.70	0.01
Max. Wager (\$)	52,500.0	*392.03	1,244.03	80.00
Avg. Single Wager (\$)	4,633.47	22.31	90.15	3.57
Total Yearly Wager (\$)	102,233,341.06	*344,360.34	1,553,620.38	65,003.78
Total Number of Yearly Bets	2,238,062.0	*63,748.1	121,152.6	14,709.0
Play Patterns	Non-RG Gamblers 2019 (n= 236,371)			
	Max	Mean	Std	Median
#Sites Wagered	16.0	*1.6	1.4	1.0
Total Betting Days	365.0	*23.6	51.0	5.0
Min. Wager (\$)	100,000.00	3.43	208.24	0.16
Max. Wager (\$)	500,000.00	*113.66	1,152.42	20.00
Avg. Single Wager (\$)	300,000.00	14.45	620.46	2.77
Total Yearly Wager (\$)	170,478,017.32	*46,697.71	730,147.66	817.44
Total Number of Yearly Bets	2,900,000.0	*9,838.2	49,751.7	244.0

\*Significant difference between RG Gamblers and Non-RG Gamblers ( $p < .001$ )

A range of RG features including self-exclusion, cool-off, and deposit, loss (spend) and time limits are available to players in New Jersey, who may choose to enact one or more. Table 26 presents the feature preferences among RG players. Similar to the prior year, deposit limits (26%) and cool-off (22%) remain the preferred RG features among those who select only one feature, although a high proportion of players chose cool-off and a slightly lower proportion, deposit limits, in 2019. In contrast to 2018, when 12.8% of RG users chose self-exclusion only, fewer patrons (8.4%) selected only that feature in 2019. In 2018, setting both deposit and loss (spend) limits was the most popular combination, endorsed by 7.9% of RG users, but, in 2019, using both deposit limits and cool-off features was the preferred combination (9.0% of users)

**Table 26. RG Feature Preferences (Casino Only) n= 9,884**

<b>Single RG Feature Engaged</b>	<b>%</b>	<b>n</b>
Deposit Limit Only	26.3	2,604
Cool-Off Only	21.9	2,167
Self-Exclusion Only	8.4	835
Loss (Spend) Limit Only	5.1	506
Time Limit Only	3.4	337
<b>Total of Single RG Feature Engaged</b>	<b>65.1</b>	<b>6,449</b>
<b>Two or More RG Features Engaged</b>	<b>%</b>	<b>n</b>
Deposit and Cool-Off	9.0	885
Deposit and Loss (Spend) Limits	5.1	509
Cool-Off and Deposit and Loss (Spend) Limits	4.1	401
Cool-Off and Self-Exclusion	2.9	288
Deposit, Loss (Spend) and Time Limits	2.7	269
Cool-Off and Deposit, Loss (Spend) and Time Limits	2.0	195
Deposit, Cool-Off and Self-Exclusion	1.3	127
Deposit and Time Limits	1.2	123
Cool-Off and Loss (Spend) Limit	1.1	109
Loss (Spend) and Time Limits	1.0	99
Deposit and Self-Exclusion	1.0	94
Cool-Off and Deposit and Time Limits	0.7	65
Cool-Off, and Loss (Spend) and Time Limits	0.6	55
Cool-Off and Time Limit	0.4	44
Self-Exclusion and Deposit and Loss (Spend) Limits	0.4	37
Cool-Off, Self-Exclusion, and Deposit, Loss (Spend) and Time Limits	0.4	36
Self-Exclusion, Loss (Spend) and Time Limits	0.2	22
Self-Exclusion and Deposit, Loss (Spend) and Time Limits	0.2	17
Cool-Off, Self-Exclusion and Loss (Spend) Limit	0.2	16
Cool-Off, Self-Exclusion and Deposit and Time Limits	0.1	13
Self-Exclusion and Loss (Spend) Limit	0.1	11
Self-Exclusion and Time Limit	0.1	5
Self-Exclusion and Deposit and Time Limits	0.1	5
Cool-Off, Self-Exclusion and Time Limit	0.1	5
Cool-Off, Self-Exclusion and Deposit and Loss (Spend) Limits	<0.1	3
Cool-Off, Self-Exclusion, and Loss (Spend) and Time Limits	<0.1	2
<b>Total of Two or More RG Features Engaged</b>	<b>35.0</b>	<b>3,435</b>

By gender, both men and women preferred setting only deposit limits, followed by engaging the cool-off feature or using deposit limit and cool-off combined (Table 27). A greater proportion of men (9%) compared to women (6%) chose self-exclusion, while women were more likely to use multiple RG features (40% vs. 33%). Preferred features also varied across age categories, with users aged 21 to 34 less likely to use multiple RG features. These findings are due, in part, to declining participation by age in choosing self-exclusion as an exclusive RG feature; for example, 14% of players ages 21 to 24 choosing self-exclusion only, declining to only about 5% of those ages 65 and older. This may indicate younger players with difficulty controlling their gambling may seek a barrier to access rather than managing play with limit-setting.

**Table 27. RG Feature Preferences (Casino Only): By Gender and Age Group**

RG Features (Single Selection)																
	Male		Female		21-24		25-34		35-44		45-54		55-64		65+	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Deposit Limit Only	26.7	1,723	25.5	787	27.6	196	27.9	911	25.9	680	26.3	476	23.4	254	22.4	87
Cool-Off Only	22.6	1,461	20.4	631	26.7	189	24.2	791	20.3	533	18.5	335	20.9	227	23.7	92
Self-Exclusion Only	9.0	583	5.9	181	14.2	101	10.3	337	7.3	191	6.7	122	6.1	66	4.6	18
Loss (Spend) Limit Only	5.5	356	4.0	123	7.1	50	5.2	169	4.9	128	4.9	88	5.0	54	4.4	17
Time Limit Only	3.2	206	4.0	123	2.0	14	2.1	70	3.7	97	4.3	78	5.1	55	5.9	23
Two or More RG Features	32.9	2,123	40.2	1,242	22.4	159	30.2	987	37.9	994	39.3	711	39.6	430	38.9	151
Two or More RG Features (Most prevalent)																
	Male		Female		21-24		25-34		35-44		45-54		55-64		65+	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Deposit Limit and Cool-Off	8.4	545	10.7	330	6.5	46	8.6	280	10.3	270	8.5	154	9.5	103	8.2	32
Deposit and Loss (Spend) Limits	4.8	307	6.3	196	2.0	14	3.6	117	5.3	138	7.0	126	6.8	74	10.3	40
Cool-Off and Deposit and Loss (Spend) Limits	3.6	231	5.4	167	2.0	14	3.0	97	4.4	115	4.8	87	6.6	72	4.1	16
Cool-Off and Self-Exclusion	2.8	180	3.1	95	3.5	25	3.3	107	3.1	82	2.4	44	2.5	27	0.8	3
Deposit, Loss (Spend) and Time Limits	2.5	163	3.3	101	0.7	5	1.7	55	3.3	87	3.5	64	3.7	40	4.4	17
Cool-Off and Deposit, Loss (Spend) and Time Limit	1.9	121	2.3	71	0.7	5	1.3	42	2.2	59	3.0	54	2.9	31	1.0	4
Deposit Limit, Cool-Off and Self-Exclusion	1.3	84	1.3	39	0.3	2	1.7	55	1.3	33	1.5	28	0.5	5	1.0	4
Cool-Off and Loss (Spend) Limits	1.1	74	0.9	29	1.7	12	1.0	32	1.2	31	1.0	18	0.8	9	1.8	7
Deposit and Time Limits	1.1	72	1.6	49	0.6	4	1.2	40	1.4	36	1.6	29	0.9	10	1.0	4
Deposit Limit and Self-Exclusion	1.1	71	0.6	19	1.3	9	1.2	40	0.8	21	0.7	13	0.6	7	1.0	4
Loss (Spend) and Time Limits	1.1	68	0.8	24	0.8	6	0.7	23	1.0	27	1.4	26	0.7	8	1.8	7
Cool-Off and Deposit and Time Limits	0.6	40	0.7	22	0.4	3	0.6	20	0.8	21	0.7	12	0.7	8	0.3	1
Cool-Off and Loss (Spend) and Time Limits	0.5	31	0.8	24	0.4	3	0.4	13	0.6	17	0.7	12	0.9	10	0.0	0
Self-Exclusion and Deposit and Loss (Spend) Limits	0.3	17	0.6	19	0.1	1	0.3	10	0.3	8	0.6	11	0.6	6	0.3	1

There are significant shifts in RG preferences by gender across years (Table 28). Men were significantly more likely to choose a single feature to manage their play in 2019 than in any other year. This is evidenced by their significantly higher utilization of cool-off only (nearly 23%) and deposit limit only (nearly 27%) features. Meanwhile, use of self-exclusion only was significantly lower in 2019, down to 9%, compared with 2016 through 2018. Among women, the most notable change in preference was a nearly 5% increase in utilization of cool-off only (to 20%) and a 4% decrease in self-exclusion only (to 6%) compared to 2018.

**Table 28. Within Gender Comparisons across Years of RG Features (Casino Only)**

RG Type 2015	Male		Female		Total	
	%	n	%	n	%	n
Deposit Limit only	<sup>a</sup> 24.9	664	<sup>g</sup> 23.0	333	24.2	997
Cool-off only	<sup>b</sup> 11.0	292	<sup>h</sup> 7.2	105	9.6	397
Self-exclusion only	<sup>c</sup> 10.5	279	<sup>i</sup> 11.9	173	11.0	452
Loss (Spend) Limit only	<sup>d</sup> 4.8	128	4.6	66	4.7	194
Time Limit only	<sup>e</sup> 7.4	196	<sup>j</sup> 7.2	104	7.3	300
Two or more RG features	<sup>f</sup> 41.5	1,106	<sup>k</sup> 46.1	668	43.1	1,774
Total N % of gender	100.0	2,665	100.0	1,449	100.0	4,114
	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>
# of RG features used	1.6	0.9	1.7	0.9	1.7	0.9
RG Type 2016	Male		Female		Total	
	%	n	%	n	%	n
Deposit Limit only	<sup>a</sup> 20.3	581	<sup>g</sup> 22.2	356	21.0	937
Cool-off only	<sup>b</sup> 13.3	380	<sup>h</sup> 13.6	218	13.4	598
Self-Exclusion only	<sup>c</sup> 12.5	357	<sup>i</sup> 12.9	208	12.6	565
Loss (Spend) Limit only	<sup>d</sup> 7.4	211	3.8	61	6.1	272
Time Limit only	<sup>e</sup> 4.3	124	<sup>j</sup> 5.8	93	4.9	217
Two or more RG Features	<sup>f</sup> 42.2	1,207	<sup>k</sup> 41.8	671	42.0	1,878
Total N % of gender	100.0	2,860	100.0	1,607	100.0	4,467
	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>
# of RG features used	1.7	0.9	1.6	0.9	1.7	1.0
RG Type 2017	Male		Female		Total	
	%	n	%	n	%	n
Deposit Limit only	<sup>a</sup> 18.5	619	<sup>g</sup> 19.0	332	18.6	951
Cool-off only	<sup>b</sup> 16.8	562	<sup>h</sup> 16.5	289	16.7	851
Self-Exclusion only	<sup>c</sup> 15.2	510	<sup>i</sup> 14.6	255	15.0	765
Loss (Spend) Limit only	<sup>d</sup> 5.7	192	4.5	78	5.3	270
Time Limit only	<sup>e</sup> 4.8	162	<sup>j</sup> 6.1	107	5.3	269
Two or more RG Features	<sup>f</sup> 39.0	1,307	<sup>k</sup> 39.4	690	39.1	1,997
Total N % of gender	100.0	3,352	100.0	1,751	100.0	5,103
	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>
# of RG features used	1.6	0.9	1.6	0.9	1.6	0.9

RG Type 2018	Male		Female		Total	
	%	n	%	n	%	n
Deposit Limit only	<sup>a</sup> 23.2	1,042	<sup>g</sup> 24.7	665	23.8	1,707
Cool-off only	<sup>b</sup> 15.6	700	<sup>h</sup> 15.9	428	15.7	1,128
Self-Exclusion only	<sup>c</sup> 14.3	643	<sup>i</sup> 10.3	278	12.8	921
Loss (Spend) Limit only	<sup>d</sup> 5.4	244	4.2	113	5.0	357
Time Limit only	<sup>e</sup> 3.0	136	<sup>j</sup> 3.1	83	3.1	219
Two Or More Features	<sup>f</sup> 38.4	1,720	<sup>k</sup> 41.9	1,128	39.7	2,848
Total N % of gender	100.0	4,485	100.0	2,695	100.0	7,180
	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>
# of RG features used	1.6	0.9	1.6	0.9	1.6	0.9
RG Type 2019	Male		Female		Total	
	%	n	%	n	%	n
Deposit Limit only	<sup>a</sup> 26.7	1,723	<sup>g</sup> 25.5	787	26.3	2,510
Cool-off only	<sup>b</sup> 22.6	1,461	<sup>h</sup> 20.4	631	21.9	2,092
Self-Exclusion only	<sup>c</sup> 9.0	583	<sup>i</sup> 5.9	181	8.0	764
Loss (Spend) Limit only	<sup>d</sup> 5.5	356	4.0	123	5.0	479
Time Limit only	<sup>e</sup> 3.2	206	<sup>j</sup> 4.0	123	3.4	329
Two Or More Features	<sup>f</sup> 32.9	2,123	<sup>k</sup> 40.2	1,242	35.3	3,365
Total N % of gender	100.0	6,452	100.0	3,087	100.0	9,539
	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>	<b>Mean</b>	<b>Std</b>
# of RG features used	1.5	0.8	1.6	0.8	1.5	0.8

Significant difference in proportion of RG type use by gender ( $p < .001$ )

- a. Higher in 2019 than 2016, 2017, 2018; 2015 & 2018 higher than 2016 & 2017
- b. Higher in 2019 than all other years; 2017 higher v. 2015 & 2016; 2018 higher v. 2015
- c. 2019 lower than 2016-2018; 2015 & 2016 lower than 2017 & 2018
- d. Higher in 2016 than all other years
- e. Higher in 2015 than all other years; 2017 higher than 2018 & 2019; 2016 higher than 2018
- f. Lower in 2019 than all other years; 2016 higher than 2017 & 2018
- g. 2017 lower v. 2015, 2018, 2019
- h. Higher in 2019 than all other years; lower in 2015 than all other years
- i. 2019 lower than all other years; 2018 lower than 2016 & 2017
- j. 2015-2017 higher v. 2018 & 2019
- k. 2015 higher than 2017 & 2019

Players have the option to make changes to RG features, such as increasing or decreasing limits on deposits, money lost, and time spent gambling, as well as enacting additional cool-off periods. On average, those who utilized two or more features made substantially more changes to their RG use (mean=22 changes; median=9 changes). Among single-RG use players, those who utilized the two most popular features also made the most changes, with the average player using cool-off only making an average of 6.5 changes (median=2 changes); the average deposit limit only player made nearly 4 changes (median=2 changes).

**Table 29. Changes to RG Features by RG Type (Casino Only)**

RG feature	n	Mean	Std.	Median	Total number of changes
Deposit Limit Only	2,604	3.9	7.1	2.0	10,028
Cool-off Only	2,167	6.5	16.2	2.0	14,010
Loss (Spend) Limit Only	506	2.6	2.3	2.0	1,327
Time Limit Only	337	1.5	1.4	1.0	503
Two or More Features	3,435	21.6	36.8	9.0	74,068

Compared to older RG users, younger RG users made fewer changes to individual RG features and across all features (Table 30). For example, among those who used deposit limit only, 21 to 24-year-olds made fewer changes than those ages 45 to 64. Among cool-off only players, those aged 65+ made more changes on average (mean=15 changes) than all other groups, while those in the 55 to 64-year age group made more changes (mean=13 changes) than all younger groups (mean=3 to 8 changes). For players who used multiple RG features, players 21 to 34 years made fewer changes on average than players 35 to 64 years. Across the total number of changes to RG features, 21 to 24-year-olds made significantly fewer changes than all other groups, and 25 to 34-year-olds made significantly fewer than all older groups.

**Table 30. Number of Changes Made to RG Features by Age (Casino Only)**

Age Group		Deposit Limit Only	Cool-off Only	Loss (Spend) Limit Only	Time Limit Only	Two or More Features	Total changes
<b>21 - 24</b> n=608	Maximum	11.0	44.0	9.0	4.0	219.0	219.0
	Mean	<sup>a</sup> 2.6	<sup>b</sup> 2.6	1.9	1.6	<sup>c</sup> 13.8	<sup>d</sup> 5.4
	Std.	1.8	5.1	1.5	0.9	27.8	15.3
	Median	2.0	1.0	2.0	1.0	6.0	2.0
	<b>Total # of Changes</b>	500.0	497.0	97.0	23.0	2,189.0	3,306.0
<b>25 - 34</b> n=2,928	Maximum	78.0	105.0	9.0	23.0	483.0	483.0
	Mean	3.5	<sup>b</sup> 4.0	2.6	1.7	<sup>c</sup> 18.0	<sup>d</sup> 8.4
	Std.	5.6	7.4	1.6	2.6	33.3	21.1
	Median	2.0	2.0	2.0	1.0	8.0	3.0
	<b>Total # of Changes</b>	3,177.0	3,198.0	431.0	118.0	17,768.0	24,692.0
<b>35 - 44</b> n=2,432	Maximum	112.0	263.0	15.0	5.0	560.0	560.0
	Mean	4.2	<sup>b</sup> 6.3	3.0	1.5	<sup>c</sup> 23.3	<sup>d</sup> 12.3
	Std.	8.2	15.0	2.8	0.8	40.3	28.6
	Median	2.0	2.0	2.0	1.0	10.0	4.0
	<b>Total # of Changes</b>	2,831.0	3,347.0	384.0	141.0	23,178.0	29,881.0
<b>45 - 54</b> n=1,688	Maximum	74.0	147.0	22.0	5.0	404.0	404.0
	Mean	<sup>a</sup> 4.4	<sup>b</sup> 8.0	2.8	1.3	<sup>c</sup> 24.4	<sup>d</sup> 13.3
	Std.	7.7	15.4	2.9	0.8	39.6	28.5
	Median	2.0	2.0	2.0	1.0	10.0	4.0
	<b>Total # of Changes</b>	2,080.0	2,667.0	250.0	105.0	17,353.0	22,455.0



<b>55 - 64</b> <b>n=1,020</b>	Maximum	139.0	211.0	9.0	4.0	255.0	255.0
	Mean	<sup>a</sup> 4.6	<sup>b</sup> 12.9	2.1	1.5	<sup>c</sup> 25.1	<sup>d</sup> 14.8
	Std.	10.5	28.9	1.5	0.7	36.3	29.3
	Median	2.0	3.0	2.0	1.0	12.0	4.0
	<b>Total # of Changes</b>	1,179.0	2,920.0	113.0	80.0	10,772.0	15,064.0
<b>65+</b> <b>n=370</b>	Maximum	26.0	212.0	16.0	5.0	213.0	213.0
	Mean	3.0	<sup>b</sup> 15.0	3.1	1.6	18.3	<sup>d</sup> 12.2
	Std.	3.7	34.7	3.8	0.9	27.7	25.7
	Median	2.0	4.0	2.0	1.0	10.0	4.0
	<b>Total # of Changes</b>	261.0	1,381.0	52.0	36.0	2,767.0	4,497.0

Significant differences between age ranges for indicated feature(s) ( $p < 0.001$ )

a. 21-24 made fewer changes than 45-54 & 55-64

b. 65+ made more changes than all other groups; 55-64 more than all younger groups; 45-54 more than 21-24

c. 21-24 & 25-34 fewer changes than 35-44, 45-54, 55-64

d. 21-24 made fewer changes than all other groups; 25-34 made fewer changes than all older groups

While there was variation in RG feature preference between men and women, there was no significant difference in the number of changes they made to individual features (Table 31). However, overall, male players made fewer changes to RG than women (about 11 vs. 13 changes).

**Table 31. Number of Changes Made to RG Features by Gender (Casino Only)**

Gender		Deposit Limit Only	Cool-off Only	Loss (Spend) Limit Only	Time Limit Only	Two or More Features	Total Changes
<b>Male</b> <b>n=5,869</b>	Maximum	22.0	263.0	23.0	112.0	560.0	560.0
	Mean	2.8	5.9	1.5	3.8	21.2	*10.5
	Std.	2.4	14.0	1.7	6.5	38.1	25.6
	Median	2.0	2.00	1.0	2.0	9.0	3.0
	<b>Total # of Changes</b>	990	8,656	315.0	6,489	44,932	61,382
<b>Female</b> <b>n=2,906</b>	Maximum	16.0	212.0	5.0	139.0	337.0	337.0
	Mean	2.3	8.2	1.5	4.1	22.9	*12.8
	Std.	2.1	21.0	0.8	8.6	35.4	27.0
	Median	2.0	2.0	1.0	2.0	10.0	4.0
	<b>Total # of Changes</b>	278.0	5,188	179	3,249	28,412	37,306

\*Significant difference between genders ( $p < 0.001$ )

## A. Self-Exclusion

This year, we did a more in-depth evaluation of self-exclusion to better understand differences in play patterns among three groups: Group 1: those who came off self-exclusion in 2019 (n=100); Group 2: those who self-excluded for the first time in 2019 (n=1,274); and Group 3 (n=177): active bettors with one or more prior self-exclusion in their history. We adopted this focus in response to concerns voiced by stakeholders and clinicians regarding practices, policies and policing around the self-exclusion program. In particular, the CGS has received reports from treatment providers and/or their clients who complained they continued to receive marketing materials

from some operators and/or were permitted to continue gambling follow self-exclusion. Other stakeholders reported it was both difficult and stigmatizing to request lifetime self-exclusion, and some operators failed to present it as an option at parity with other terms. Across terms of self-exclusion, about 62% of all players chose to self-exclude for one year and nearly 38% chose a five-year self-exclusion period; less than 1% of players opted for lifetime self-exclusion (Table 32). There were no significant differences in the proportion of men versus women in any group.

**Table 32. Self-Exclusion Groups Within Period of Self-Exclusion**

	One Year		Five Years		Lifetime		Total	
	%	n	%	n	%	n	%	n
Group 1	87.0	87	13.0	13	0.0	0	100.0	100
Group 2	55.0	701	44.9	572	0.1	1	100.0	1,274
Group 3	98.9	175	1.1	2	0.0	0	100.0	177
Total	62.1	963	37.8	587	0.1	1	100.0	1,551

In the course of classifying groups, a fourth group emerged -- those who were still listed as on the self-exclusion list but were gambling (n=345). Following submission of the first draft of this report, the DGE checked a random sample of five individuals in that group and found that the data set they provided contained errors. Because of this issue, we removed the fourth group from these analyses.

Table 33 shows the three remaining groups, by age. Players ages 21 to 34 were significantly over-represented among those who self-excluded for the first time in 2019 (Group 2) and under-represented among those who came off self-exclusion in 2019 (Group 1) and those with one or more prior self-exclusion (Group 3). Conversely, self-excluders aged 55 and older were over-represented among Groups 1 and 3 and under-represented in Group 2.

**Table 33. Self-Exclusion Groups Within Age Category**

	21-24		25-34		35-44		45-54		55-64		65+		Total	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Group 1	3.0 <sup>b</sup>	3	24.0 <sup>b</sup>	24	23.0	23	26.0	26	17.0 <sup>a</sup>	17	7.0 <sup>a</sup>	7	100.0	100
Group 2	10.1 <sup>a</sup>	129	38.8 <sup>a</sup>	494	25.0	319	15.4	196	8.2 <sup>b</sup>	105	2.4 <sup>b</sup>	31	100.0	1,274
Group 3	1.7 <sup>b</sup>	3	20.3 <sup>b</sup>	36	30.5	54	23.2	41	15.8 <sup>a</sup>	28	8.5 <sup>a</sup>	15	100.0	177
Total	8.7	135	35.7	554	25.5	396	17.0	263	9.7	150	3.4	53	100.0	1,551

a. Significantly higher proportion in identified age group ( $p < .001$ )

b. Significantly lower proportion in identified age group ( $p < .001$ )

Overall, players with a past or present history of self-exclusion placed an average of more than 44,000 bets in 2019, with players in Group 3 placing an average of about 83,000 bets, and one player who was new to self-exclusion in 2019 (Group 2) betting more than \$21.5 million (Table 34). From an RG perspective, a major issue surrounding self-exclusion is whether shorter terms of one year or five years are effective in decreasing harm over time. Using new self-excluders (Group 2) as a reference, findings from this data suggest that the average player who self-excludes but returns to gambling returns to pre-exclusion levels of play. Whether players were

new to self-exclusion or had a history of prior self-exclusion(s), they wagered on an average of about four sites and a median of three sites. Average total bets placed ranged from a low of nearly 38,000 among new self-excluders (Group 2) to a high of about 83,000 in Group 3, those with a history of self-exclusion that ended prior to 2019. Similarly, Group 3 also posted the highest number of average betting days, 116 days (median=80), followed by those coming off self-exclusion in 2019 (Group 1), with an average of 75 betting days (median=54). An important takeaway from these findings is that betting across all these groups – whether new to self-exclusion, newly off self-exclusion, or a prior self-excluder – was not significantly different: all were betting well above normal levels. These findings suggests that, for those who are truly problem gamblers, lifetime self-exclusion should be the preferred and most widely advertised option to minimize future harm.

**Table 34. Play Patterns of Self-Exclusion Groups (N=1,551)**

Play Patterns	Group 1 ( <i>n</i> =100)			
	Max	Mean	Std.	Median
#Sites Wagered	17.0	4.4	3.6	3.0
Total Betting Days	314.0	74.7	74.7	54.0
Min. Wager (\$)	20.00	0.36	2.03	0.01
Max. Wager (\$)	6,000.00	334.30	784.08	73.50
Avg. single Wager (\$)	140.30	14.25	25.24	4.52
Total Yearly Wager (\$)	4,220,413.98	240,003.64	503,007.27	83,595.65
Total Number of Yearly Bets	442,053.0	55,025.7	85,766.6	14,369.0
Play Patterns	Group 2 ( <i>n</i> = 1,274)			
	Max	Mean	Std	Median
#Sites Wagered	16.0	3.7	2.9	3.0
Total Betting Days	353.0	53.1	61.9	30.0
Min. Wager (\$)	500.00	1.43	16.83	0.01
Max. Wager (\$)	30,000.00	495.91	1,454.45	104.09
Avg. single Wager (\$)	2,439.41	32.64	105.42	6.26
Total Yearly Wager (\$)	21,524,258.00	340,931.11	1,180,560.80	62,208.86
Total Number of Yearly Bets	800,104.0	37,988.0	75,469.8	8,063.5
Play Patterns	Group 3 ( <i>n</i> = 177)			
	Max	Mean	Std	Median
#Sites Wagered	15.0	4.6	3.5	3.0
Total Betting Days	365.0	116.3 <sup>a</sup>	106.0	80.0
Min. Wager (\$)	90.00	0.86	7.13	0.01
Max. Wager (\$)	5,000.00	292.57	588.06	71.00
Avg. single Wager (\$)	172.43	13.90	29.56	2.50
Total Yearly Wager (\$)	2,532,016.77	262,226.53	437,031.57	75,807.05
Total Number of Yearly Bets	1,015,288.0	82,901.0 <sup>b</sup>	146,136.2	24,520.0

Play Patterns	Total (n = 1,551)			
	Max	Mean	Std	Median
#Sites Wagered	17.0	3.9	3.1	3.0
Total Betting Days	365.0	61.5	71.2	35.0
Min. Wager (\$)	500.00	1.44	18.23	0.01
Max. Wager (\$)	30,000.00	455.88	1,274.96	100.00
Avg. single Wager (\$)	2,439.41	30.04	102.95	5.28
Total Yearly Wager (\$)	21,524,258.00	317,908.65	1,035,030.72	63,461.76
Total Number of Yearly Bets	1,182,696.0	44,144.3	88,833.8	10,165.5

<sup>a</sup>Significantly higher than all other groups ( $p < .001$ )

<sup>b</sup>Significantly higher than group 2 ( $p < .001$ )

## VII. Summary and Recommendations

Consistent with the prior years, rates of online gambling in New Jersey continued to increase in 2019, but a higher proportion of those betting in New Jersey lived elsewhere. The proportion of men gambling increased as well, in contrast to increases among women in previous reports. Notably, the proportion of players ages 21 to 34 increased to nearly half of the sample, while participation among those 45 and older declined. A majority of players, nearly 52%, gambled on one site only, however, the proportion of those playing on two to three sites increased from from 25% in 2018 to 34% in 2019; about 9% bet on four to five sites, and 6%, on six to 18 sites.

There were notable increases in wagers in 2019, with more than three billion bets placed, almost double the number in 2018; the total amount wagered tripled. In addition, the number of bets placed in every time category increased by at least 60%, and the average bet size increased by 50% across all time periods as well. Those escalations in play were driven primarily by women, who placed 48% of all bets despite representing less than 27% of all bettors, and young bettors (i.e., 21 to 34), who placed twice as many bets as they did the prior year. Overall, the data suggests that online gamblers are getting younger and slightly more male, and that a small but significant proportion are gambling across a larger number of platforms. In addition, they are placing more bets and wagering more money per bet compared to prior years. Increases in bet size were largest among the two youngest age groups and lowest in the oldest age categories.

Research suggests that emerging adults, ages 21 to 24 years, are more likely than older adults to bet impulsively<sup>1</sup> and have higher rates of problem gambling.<sup>2</sup> Therefore, the increase in betting among emerging (21 to 24) and young (25 to 34) adults is an important finding with implications for prevention and harm reduction, particularly in a state with 24/7 online gambling and live-in game betting opportunities. The focus of this year's recommendations, then, is to consider optimal protections for younger players who are more likely to report higher levels of problem gambling.

<sup>1</sup> Marchica, L. A., Mills, D. J., Keough, M. T., Montreuil, T. C., & Derevensky, J. L. (2019). Emotion regulation in emerging adult gamblers and its mediating role with depressive symptomology. *Journal of affective disorders*, 258, 74-82.

<sup>2</sup> Wong, G., Zane, N., Saw, A., & Chan, A. K. K. (2013). Examining gender differences for gambling engagement and gambling problems among emerging adults. *Journal of gambling studies*, 29(2), 171-189.

In 2019, emerging adults made up 7.2% of players using one or more RG feature. While those rates remain comparatively modest, young adult gamblers (ages 25 to 34) made up the largest proportion of those using RG features, with about one third of players in that age group setting some kind of limit. In addition to setting deposit limits — the most popular RG feature across all players — emerging and young adults have the highest rates of invoking a cool-off and self-excluding. For that reason, focusing on the preference among younger gamblers to "take a break" from gambling altogether, is an important consideration to reduce gambling-related harm.

This preference inspired the addition of new analyses, intended to examine and compare the play patterns of three groups of self-excluders, those who: 1) came off self-exclusion in 2019 and returned to betting; 2) self-excluded for the first time in 2019 or 3) were active bettors with one or more prior self-exclusions that ended prior to 2019. Notably, players who returned to gambling after self-excluding returned to betting and spending with an intensity similar to pre-exclusion levels of play. This finding, while preliminary, would suggest that shorter terms of self-exclusion like one year are likely ineffective as a long-term harm-reduction strategy for a significant proportion of gamblers. Longer terms and a lifetime option should be promoted to players at parity with these shorter options, and equally accessible. Future studies will investigate the speed at which patrons who self-excluded are actually excluded from gambling and whether there are escalations in play that occur between sign-up and removal. Our findings also support the current DGE practice of requiring that individuals seeking removal from the self-exclusion list be required to file a petition for removal, which must be approved by the DGE to take effect. Additional steps that raise player awareness could, in some instances, mitigate against returning to play at higher levels of intensity. Finally, findings from this year's analyses underscore the need to establish one standardized longitudinal data set of self-excluders, including play behavior before and after any applications for removal from the list. This and other findings of our exploration into self-exclusion form the basis for our recommendations this year:

#### **Finding 1: Disproportionate Responsibility**

Typically, a majority of the gambling revenue comes from a small proportion of the players. In 2019, 5% of online players made 75% of the bets and wagered 65% of the money on gambling websites. Self-excluders are generally among high-intensity bettors; barring them from play will typically result in a significant loss of revenue for operators so there is little incentive to enact or police a self-ban absent regulatory consequences.

The instructions preceding the contract for self-exclusion state, in part:

***It is your responsibility to refrain from gaming activities. The Division, the casinos and the Internet gaming license permit holders, are not liable for any acts or omissions in processing or enforcing your request for self-exclusion, including the failure to withhold your gaming privileges. However, if you are caught gambling on an Internet gaming site, you will be subject to forfeiture of any winnings, including any chips, tokens, or electronic gaming device credits in your possession, and you will be removed from the Internet gaming site.***

This language essentially exculpates operators from all liability if players continue to gamble and places the responsibility for breaching exclusively on the individual who has a gambling problem. To suggest that someone who acknowledges they have lost control over their gambling, which may arise to the level of a mental disorder, is solely responsible for refraining from gambling is not only counterintuitive but also completely contrary to what we know about the disease of addiction. In addition, self-excluded individuals who receive marketing materials or find they are not blocked from wagering may be reticent to disclose because they fear they will have to repay winnings or be charged with a crime for breach.

***Recommendation 1.1: Revisions to the Instructions/Contract Language***

We recommend that instructions and contract language across all platforms be standardized to conform with the provisions on the DGE website. In addition, we strongly urge the Division to consider publishing and enforcing those provisions to emphasize the reciprocal responsibility between players and operators to enact and enforce self-exclusion. The player has the responsibility to refrain from gambling and, if caught gambling, the current instructions state they will be subject to forfeiture of any winnings, including any chips, tokens, or electronic gaming device credits in their possession; they will also be removed from the Internet gaming site. We believe the contract also should specify that the operators: 1) are responsible for processing and enforcing self-exclusion applications; 2) discontinuing all marketing or other communication with the player within 24 hours; 3) ensuring the player remains blocked from the site(s) for life or until they successfully apply for removal; and 4) flagging the player's information to alert to potential breaches (e.g., opening a new account, playing on a spouse's account etc.); failure to do so will result in a fine as well as forfeiture of any player losses to the DGE.

***Recommendation 1.2: Fines and Forfeitures***

Given the disproportionate revenue from high-intensity players, it is important to provide a disincentive for failing to initiate or enforce self-exclusion or discontinue targeted marketing. As outlined in the provisions above, we would also urge the DGE to consider imposing significant fines as well as requiring operators to forfeit to the DGE losses received from players who were gambling while on the self-exclusion list. By way of example, in the UK, the Gambling Commission recently levied a £1.17m fine against an operator for sending promotional emails to customers who had self-excluded or opted out of receiving marketing materials.<sup>3</sup> Fines for operators who fail to block players who have opted for self-exclusion or continue to market to them should be sufficiently punitive as to outweigh the potential revenue from those players, as this negligence could be seen as a predatory practice on an individual with a self-identified mental health condition.

**Finding 2: Lack of Standardized Offerings**

Investigating the online information available to players about self-exclusion yielded inconsistent findings. Although New Jersey offers one-year, five-year, and lifetime self-exclusion terms, some

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<sup>3</sup> <https://www.gamblingcommission.gov.uk/news/article/gbp1-17m-fine-for-marketing-to-vulnerable-consumers>

operators only inform players about the shorter terms and omit lifetime from their information altogether.

A review of gambling websites at the time of this report, found that:

- Three sites made no mention of self-exclusion at all among the listed RG features;
- Three sites offered no information on self-exclusion terms;
- Three sites listed only one-year and five-year terms of self-exclusion as options;
- Four sites referenced “a minimum of 12 months” but no specific terms of self-exclusion;
- One site referenced “active indefinitely, but additionally a minimum duration (e.g. 1 or 3 years)”

In addition, when exploring self-exclusion options across all websites, we were surprised by pop-ups on the RG pages of four websites: 1) one promised “guaranteed prizes,” “win a Rolls Royce,” a \$500,000 leaderboard and a \$10 million golden race; 2) another featured a prize wheel where players are asked to complete registration for a chance to win \$3 million; 3) a third made a “limited time offer” to maximize winning with up to \$150 free on first deposit; and 4) the fourth offered a \$30 bonus for a \$10 deposit on bingo. Notably, we were not signed in to any of the websites when we received those messages, so it is possible that these enticements were designed to recruit signups from visitors to the site and may or may not be visible to registered players. However, we can see no legitimate reason why these types of pop-ups should ever be on RG pages, irrespective of the audience. Theoretically, an individual who is concerned about developing or worsening a gambling problem could summon the RG page to review the limit-setting available before signing up for an account; in that case, they could be met with pop-up enticements, which should not be permitted. In addition, we also found that a Google search of “New Jersey self-exclusion” leads to the DGE self-exclusion page, where the “removal request” box is larger than the box to register for self-exclusion. The introductory “self-exclusion registration” instructions on the DGE website further mention only the minimum one-year and five-year terms but make no mention of a lifetime option or how to access it.

### ***Recommendation 2.1: Development of a Single, Centralized Platform***

Ideally, there would be one centralized platform for self-exclusion, managed by an independent third-party provider who could perform random compliance checks, keep centralized historical records of self-exclusions and removals, and communicate new sign-ups and removals in a uniform fashion across providers. However, we realize such a change would require legislation. In the absence of legislation, we would recommend alternatively that the DGE provide the single-source platform for self-exclusion signups in New Jersey, requiring providers to redirect potential applicants to a self-exclusion platform through the DGE website. That platform would explain and introduce each self-exclusion term option; outline the process to self-exclude as well as the potential benefits and penalties; detail player and operator responsibilities; and present instructions for self-excluding for all terms, including lifetime. Such a single-source platform would serve as a data repository for all self-exclusions and reinstatements and facilitate random fidelity checks with operators. The use of a centralized platform would facilitate scheduling and video conferencing to complete the process of lifetime self-exclusion online. It would also provide

longitudinal data on self-excluders, including repeat self-excluders, with specific start and end dates for each term.

***Recommendation 2.2: Standardized Operator Interface with Centralized Platform***

We would further recommend that all self-exclusion be accomplished via one standardized platform managed by the DGE. Under this recommendation, all operator websites would provide standardized language regarding self-exclusion but then link to the DGE self-exclusion website for initiation of self-exclusion; in this way, there would be uniformity in information across sites but only one place for individuals to self-exclude, via the DGE website. The DGE would then report new self-exclusion data to operators to take effect. We would emphasize that this recommendation is meant as a minimum standard for all operators to follow but acknowledge that some operators will opt to do more to protect players.

***Recommendation 2.3 Penalties for Predatory Advertising/Marketing***

We would recommend that the DGE consider strict and significant penalties for any form of predatory advertising/marketing, including pop-up enticements on the RG page, which is specifically designed as a resource page for individuals experiencing problems with their gambling.

***Recommendation 2.4 Standardized Enforcement Protocol***

We believe it is critical for the DGE to establish an enforcement protocol that includes random checks of self-excluded patrons for gambling activity during a period of self-exclusion. Specifically, we recommend that the DGE: 1) maintain two self-exclusion lists – one for current sign-on/sign-offs and a second that provides a comprehensive historical records of all self-excluded players with their terms and exclusion dates, irrespective of where they registered; 2) perform periodic random checks to ensure self-excluded players are not gambling on their accounts; and 3) initiate significant fines and return of gambling losses when operators fail in their duty of care.

**Finding 3: Technical Challenges and Undue Burden for Choosing Lifetime Exclusion**

As demonstrated by the data in this report, many individuals who self-exclude and return to play resume high-intensity gambling. For that reason, the lifetime self-exclusion option should be promoted for players. However, it appears in New Jersey that accessing lifetime self-exclusion is an unnecessarily arduous and potentially stigmatizing process. Unlike with shorter terms, there is no online option to complete the lifetime self-exclusion process, ostensibly because it is necessary to verify identity and intent in a face-to-face interaction. Calls placed to inquire about the process and options for self-exclusion, likewise, yielded a wide range of inconsistent information. For the phone number listed for the DGE, the call often went to voicemail, which was full, and it took several tries to get a live person on the phone.

To self-exclude for life, players are required to travel to a gambling venue, where they arguably should not go if they have gambling problems, or to the DGE offices, where they complete paperwork and discuss their gambling problems with an employee in the lobby of the building, which is open to public view. Not only does this process potentially stigmatize individuals who



may already be in crisis, but it also may unfairly disadvantage low-income individuals with limited transportation, individuals with disabilities and/or older adults who may have difficulty traveling to one of the locations.

***Recommendation 3.1: Timely Phone Contact Using Standardized Script/Information***

We recommend that the DGE ensure that all offices offering self-exclusion services be required to provide standardized information to players who inquire about self-exclusion, ideally using a standardized script. If phone numbers are provided, they should be answered live or be connected to a working voicemail that provides for a return call in a short period of time. Ideally, the DGE would have a dedicated, direct number assigned and promoted for self-exclusion with a voice mail that provides information and offers a timely call-back from a knowledgeable staff member. We acknowledge that it is impractical for that number to be manned on weekends, but the voice mail should ensure a Monday call-back and provide the crisis line number for individuals in need of immediate help or counseling. We would also recommend that the self-exclusion webpage provide a contact form for assistance or call-back that provides the same access and information. We believe it is important that individuals with an addiction be allowed to take action to reduce harm while they are actively seeking it, as long delays can erode the intention toward self-protection in favor of quelling the addiction.

***Recommendation 3.2: Video Conference Platform for Lifetime Self-Exclusion***

Given the range of online video conference platforms now available, including those that meet strict HIPAA guidelines for health and mental health services, we believe registration for lifetime self-exclusion should be available via video conferencing, through a platform on the DGE website that allows clients to upload applications and identification and select an appointment date and time for face-to-face verification. We recommend that the DGE provide a video conferencing self-exclusion option for a lifetime term.

**Conclusion**

This report summarizes wagering practices and gambling trends online for 2019. Increases in play by younger cohorts of gamblers, combined with general increases in participation, wager amounts and number of bets placed overall, suggest that regulatory efforts to reduce harm should consider play by emerging and young adults under 35. In prior reports, we have recommended strategies for increasing the proportion of players who use RG features by integrating limit-setting into sign-up, providing standardized educational language around each offering, and allowing each player the opportunity to set each type of limit. We renew those recommendations.

The preference among younger players for self-exclusion led us to further examine play patterns of those who self-exclude. We have focused the recommendations in this report on strategies to strengthen self-exclusion offerings and enforce the choice to self-exclude. We believe these measures to be particularly relevant to the objective of reducing harm among problem gamblers in New Jersey.