



**Public Affairs
Research Council
of Alabama**

Analysis of Potential Gaming Revenue

Presented to

**The Governor's Study Commission on Gambling
The Honorable Todd Strange, Chair**

May 22, 2020

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Executive Summary

At the request of the Governor’s Study Group on Gambling Policy, the Public Affairs Research Council of Alabama (PARCA) presents the following revenue projections. These projections are mathematical models based on publicly available data from the U.S. Census Bureau, other states, and national associations. The models do not account for variance in income, employment, earnings, or broader economic or demographic trends.

The research below suggests Alabama could generate approximately \$745 million in annual state revenue. This reflects the sum of the midpoint of the numbers below.

Lottery:	\$270 to \$386 million
Casino Gaming:	\$398 to \$423 million ¹
Electronic Gaming:	\$233 to \$290 million ²
Sports Betting:	\$6 million
Total:	\$676 to \$815 million

The project numbers are not start-up or year-one projections. The numbers reflect fully operational and relatively mature gaming.

Likewise, this does not mean the state would have \$745 million in new revenue. As much as \$130 million would replace sales tax revenue that would have been generated from the sale of other goods instead of gambling. Likewise, the state will likely devote some revenue to address problem gambling—every state with gambling makes such an allocation. There are also other new costs to be incurred, as well as benefits.

PARCA recommends a full economic impact study to include all known direct and indirect costs.

Examinations of the social costs and the relative efficiency of gambling as a generator of state revenue are also recommended.

¹ Inclusive of electronic gaming

² Not included in the total gaming amount

Introduction

At the request of the Governor’s Study Group on Gambling Policy, the Public Affairs Research Council of Alabama presents the following revenue projections. These projections are mathematical models based on publicly available data from the U.S. Census Bureau, other states, and national associations. The models do not account for variance in income, employment, earnings, or broader economic or demographic trends. Data are not available for every state and every year. No data from tribal casinos are included.

This study does not consider indirect revenue nor direct or indirect costs. Likewise, the study does not consider the social cost of gambling in Alabama. A complete economic impact study, including all known direct and indirect costs, is warranted. Examinations of the social costs and the relative efficiency of gambling as a generator of state revenue are recommended.

States vary widely in types of gaming permitted, where allowed, who may play, and how taxes apply. The numbers below are general ranges designed to give policymakers broad ideas. More accurate projections could be created as key questions are answered. Likewise, sophisticated models can be built to simulate different scenarios.

The research below suggests Alabama could generate approximately \$749 million in annual state revenue.

Projected Revenues, PARCA, Alabama Department of Revenue

	PARCA Projection	Department of Revenue Projection	PARCA Variance from ADR Midpoint
Lottery	\$270 to 386 million Midpoint: \$328 million	\$354 to 438 million Midpoint: \$396 million	-17.7%
Casino Gaming	\$398 to 423 million Midpoint: \$410 million	\$311 to 421 million Midpoint: \$366 million	+12%
Electronic Gaming	\$233 to 290 million Midpoint: \$261 million	\$230 to 287 million Midpoint: \$258 million	+11%
Sports Betting	\$6 million	\$10 million	-40%
Total	\$676 to 815 million Midpoint: \$745 million	\$905 million to \$1,156 million Midpoint: \$1,030 million	-27.6%

Note that Alabamians, or those visiting, would need to spend an estimated \$3.25 billion on direct gambling costs to generate revenue in these ranges.

Presumably, dollars spent on gambling would otherwise be spent on other consumable goods and taxed at 4%. Thus, an estimated \$130 million of gambling revenue, 17%, would be replacement, rather than new, revenue.

Methodology

PARCA used data sources cited throughout the document to calculate per capita gross revenue and states' net revenue amounts. In some instances, current dollars are displayed, but all dollar figures are converted to constant 2018 dollars to account for inflation. Multiple years of lottery and casino data are averaged. With less than two years of data, and some states with only a few months, sports betting data is annualized.

Population numbers from the 2010 U.S Census and 2018 American Community Survey are used. The analysis provided by the Alabama Department of Revenue used 2010 Census numbers and noted that analyses with more recent population numbers would likely show different revenues. This is evident in the numbers below.

In some instances, a legal age is referenced. In these cases, population inputs from the states are either the 18+ or 21+ populations, depending on the legal age of gambling in that state. Likewise, some outputs for Alabama are offered for both 18+ and 21+ populations.

As noted above, there are many variables in projected gambling revenues. A small adjustment in one variable can have significant impact in gross and net revenues.

State Lottery

At present, 45 states allow lotteries. In addition to Alabama, Alaska, Hawaii, Nevada, and Utah do not presently allow lotteries, although Alaska is exploring a lottery. Most states began their lotteries before 1995, the year the Census Bureau first began reporting lottery financials. Table 1 lists the states which have begun lotteries since 1995.

Table 1. States Beginning Lotteries Since 1995

State	Year Lottery Began
New Mexico	1997
South Carolina	2002
North Dakota	2004
Tennessee	2004
North Carolina	2006
Oklahoma	2006
Arkansas	2010
Wyoming	2014
Mississippi	2019

Mississippi introduced a lottery in November 2019. Due to the lack of sufficient data, the state is not included in the analysis.

State lotteries vary in legal structure, organization, retail incentives, and games offered.

The data below consider lottery revenue since 2010, as reported by the U.S. Census Bureau's Annual Survey of Government Finances.³

Between 2010 and 2018, states have generated \$618 billion in constant (2018) dollars. See Table 2.

³ <https://www.census.gov/programs-surveys/state.html>

Table 2. Total Lottery Sales by Year, All States—Current and Constant Dollars

	Sales, Current Dollars	Sales, Constant Dollars
2010	\$53,095,974,000	\$61,284,089,092
2011	\$54,803,529,000	\$61,321,915,460
2012	\$59,314,155,000	\$64,992,496,772
2013	\$61,999,118,000	\$66,942,755,701
2014	\$64,170,741,000	\$68,133,740,250
2015	\$66,268,085,000	\$70,239,611,676
2016	\$72,223,750,000	\$75,577,433,468
2017	\$71,803,923,000	\$73,556,256,966
2018	\$76,362,627,000	\$76,364,691,971
Grand Total	\$580,041,902,000	\$618,412,991,356

Table 3 lists total and average lottery sales by state between 2010 and 2018. New York leads the nation in both categories, averaging \$8.3 billion and totaling \$74.87 billion. Wyoming, establishing a lottery only in 2014, trails with an average of \$626 million and a total of \$5.6 billion. The national average is \$1.56 billion.

Table 3. Total and Average Sales by State, 2010–18, Constant Dollars

State	Total Income-Constant Dollars	Average Sales
New York	\$74,875,924,581	\$8,319,547,176
Florida	\$47,542,123,026	\$5,282,458,114
California	\$47,496,662,427	\$5,277,406,936
Massachusetts	\$45,705,953,502	\$5,078,439,278
Texas	\$41,126,922,715	\$4,569,658,079
Georgia	\$34,498,319,947	\$3,833,146,661
Pennsylvania	\$32,969,571,771	\$3,663,285,752
New Jersey	\$26,702,960,231	\$2,966,995,581
Illinois	\$25,866,323,625	\$2,874,035,958
Ohio	\$25,423,126,447	\$2,824,791,827
Michigan	\$24,222,263,365	\$2,691,362,596
Maryland	\$17,284,566,151	\$1,920,507,350
North Carolina	\$17,185,583,974	\$1,909,509,330
Virginia	\$16,105,209,880	\$1,789,467,764
South Carolina	\$11,874,952,272	\$1,319,439,141
Tennessee	\$11,824,410,013	\$1,313,823,335
Missouri	\$10,854,551,614	\$1,206,061,290
Connecticut	\$10,271,799,722	\$1,141,311,080
Indiana	\$8,988,328,208	\$998,703,134
Oregon	\$8,705,348,320	\$967,260,924
Kentucky	\$7,743,313,645	\$860,368,183
Arizona	\$6,596,333,040	\$732,925,893
West Virginia	\$6,529,159,984	\$725,462,220
Washington	\$5,638,359,490	\$626,484,388
Wisconsin	\$5,412,563,475	\$601,395,942
Rhode Island	\$5,103,687,001	\$567,076,333
Colorado	\$4,921,712,084	\$546,856,898
Minnesota	\$4,900,680,585	\$544,520,065
Delaware	\$4,162,285,089	\$462,476,121
Arkansas	\$4,020,080,258	\$446,675,584
Louisiana	\$4,019,764,256	\$446,640,473
Iowa	\$3,081,358,614	\$342,373,179
New Hampshire	\$2,555,208,308	\$283,912,034
Kansas	\$2,263,596,358	\$251,510,706
Maine	\$2,200,730,183	\$244,525,576
Oklahoma	\$1,891,498,429	\$210,166,492
Idaho	\$1,772,069,583	\$196,896,620
Nebraska	\$1,492,961,343	\$165,884,594
South Dakota	\$1,435,773,244	\$159,530,360
New Mexico	\$1,293,540,581	\$143,726,731
Vermont	\$991,634,332	\$110,181,592
Montana	\$519,926,533	\$57,769,615
North Dakota	\$247,878,737	\$27,542,082
Wyoming	\$93,974,411	\$23,493,603
Average	\$14,054,840,713	\$1,561,945,604

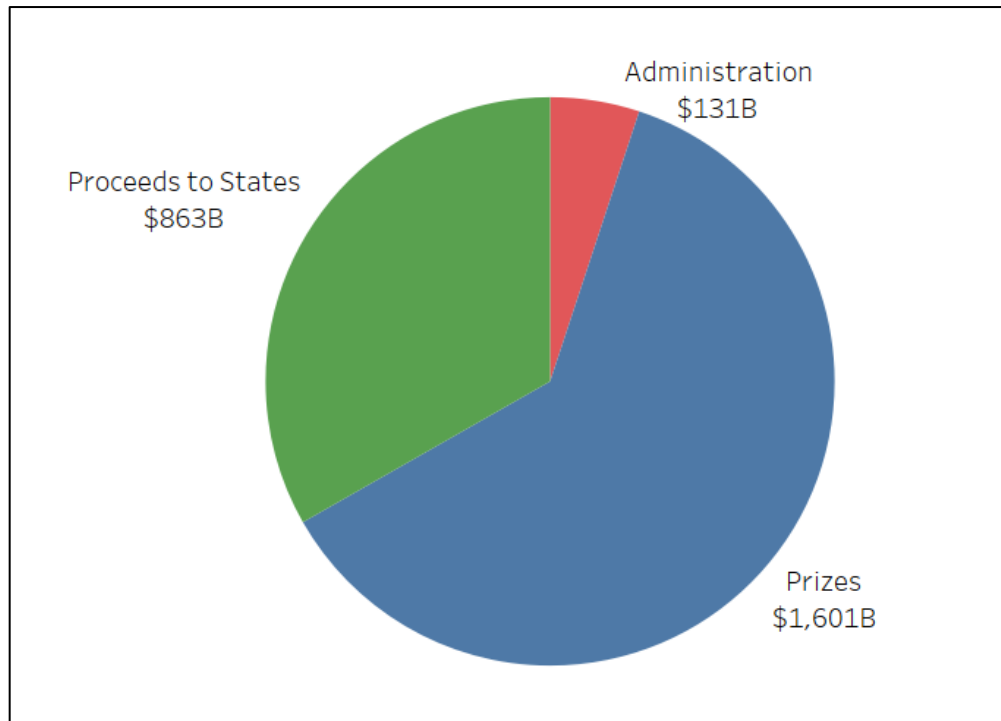
Table 4 lists average administrative costs, prizes distributed, and net government proceeds, all in constant (2018) dollars.

Table 4. Average Distribution of Lottery Revenue, Constant Dollars

	Admiministration- Constant Dollars	Prizes- Constant Dollars	State Reveneues-Constant Dollars
2010	\$68,700,451	\$879,987,901	\$476,510,137
2011	\$68,683,799	\$878,479,667	\$478,914,640
2012	\$71,464,442	\$944,975,206	\$495,000,380
2013	\$74,232,914	\$975,957,077	\$506,604,582
2014	\$75,800,692	\$996,981,453	\$511,709,654
2015	\$74,618,676	\$1,024,456,664	\$508,834,443
2016	\$77,315,395	\$1,097,409,463	\$542,929,332
2017	\$77,392,521	\$1,077,111,786	\$517,215,308
2018	\$78,287,776	\$1,120,562,437	\$536,696,477
Average	\$74,055,185	\$999,546,851	\$508,268,328

Over the nine years between 2010 and 2018, states average 5% of gross revenue on administration and 62% of gross revenue on prizes, leaving 33% for the state. See Figure 1.

Figure 1. Average Distribution of Lottery Proceeds



The Census Bureau’s Annual Survey of State Government Finances also reports net proceeds available to states. PARCA took the net proceeds available to state governments every year between 2010 and 2018 and divided by the three population measures for each state: the 2010 Census, and the One-Year American Community Survey (ACS) Population Estimate⁴ of the total population and the One-Year ACS population of those legal to buy lottery tickets in each state.⁵

These calculations result in an average per capita yield between \$80.90 and \$101.74, depending on the population variable. Rhode Island leads the nation, and North Dakota trails at \$79.11 and \$10.01, respectively, based on the total 2018 ACS population.

⁴ <https://www.census.gov/programs-surveys/acs>

⁵ 21 in Arizona, Iowa, Louisiana, and Mississippi, 18 in all other states

Table 5. Per Capita Tax Yields, 2010–18, Constant Dollars

State	Per Capita State Revenue -2010 Census Population	Per Capita Revenue-2018 ACS Population	Per Capita Tax Revenue-ACS Legal Population
Arizona	\$29.58	\$27.96	\$39.04
Arkansas	\$31.34	\$30.80	\$40.47
California	\$46.54	\$44.75	\$58.59
Colorado	\$27.01	\$25.32	\$33.01
Connecticut	\$97.53	\$97.22	\$123.98
Delaware	\$325.31	\$314.05	\$402.63
Florida	\$83.62	\$78.55	\$98.73
Georgia	\$108.21	\$103.59	\$137.60
Idaho	\$30.02	\$28.65	\$38.91
Illinois	\$59.10	\$59.05	\$77.01
Indiana	\$38.30	\$37.64	\$49.52
Iowa	\$27.91	\$27.38	\$38.05
Kansas	\$26.19	\$25.82	\$34.34
Kentucky	\$57.71	\$56.77	\$73.75
Louisiana	\$36.92	\$36.12	\$50.44
Maine	\$44.35	\$44.27	\$55.04
Maryland	\$110.24	\$107.01	\$138.32
Massachusetts	\$182.51	\$177.21	\$223.20
Michigan	\$82.78	\$82.49	\$106.44
Minnesota	\$25.93	\$25.19	\$32.96
Missouri	\$55.18	\$54.49	\$70.80
Montana	\$17.48	\$16.84	\$21.59
Nebraska	\$26.25	\$25.46	\$33.87
New Hampshire	\$62.37	\$61.67	\$77.23
New Jersey	\$114.28	\$112.86	\$145.76
New Mexico	\$21.49	\$21.24	\$28.00
New York	\$169.16	\$166.88	\$212.44
North Carolina	\$59.21	\$56.56	\$73.42
North Dakota	\$10.79	\$10.01	\$12.92
Ohio	\$73.03	\$72.65	\$94.11
Oklahoma	\$21.44	\$20.88	\$27.68
Oregon	\$168.13	\$161.05	\$205.55
Pennsylvania	\$86.64	\$86.14	\$109.30
Rhode Island	\$374.16	\$373.64	\$468.34
South Carolina	\$76.99	\$73.25	\$94.45
South Dakota	\$146.50	\$140.50	\$186.27
Tennessee	\$61.48	\$59.55	\$77.20
Texas	\$52.21	\$48.62	\$66.13
Vermont	\$42.08	\$42.08	\$52.27
Virginia	\$69.42	\$66.88	\$86.23
Washington	\$25.76	\$24.39	\$31.54
West Virginia	\$307.81	\$309.55	\$390.06
Wisconsin	\$35.11	\$34.71	\$44.87
Wyoming	\$11.41	\$11.08	\$14.51
Average	\$80.90	\$79.11	\$101.74

Excluding all but Southeastern states reduces the average to \$61.90. See Table 6.

Table 6. Average Per Capita Lottery Proceeds to Southeastern States, 2010–18, Constant Dollars

State	Per Capita State Revenue -2010 Census Population	Per Capita Revenue- 2018 ACS Population	Per Capita Tax Revenue-ACS Legal Population
Georgia	\$108.21	\$103.59	\$137.60
Florida	\$83.62	\$78.55	\$98.73
South Carolina	\$76.99	\$73.25	\$94.45
Tennessee	\$61.48	\$59.55	\$77.20
North Carolina	\$59.21	\$56.56	\$73.42
Kentucky	\$57.71	\$56.77	\$73.75
Louisiana	\$36.92	\$36.12	\$50.44
Arkansas	\$31.34	\$30.80	\$40.47
Average	\$64.43	\$61.90	\$80.76

By considering Southeastern states with the greatest political, economic, and cultural similarity to Alabama, the average per capita drops to \$55.39. See Table 7.

Table 7. Average Per Capita Lottery Proceeds to Selected States, 2010–18, Constant Dollars

State	Per Capita State Revenue -2010 Census Population	Per Capita Revenue- 2018 ACS Population	Per Capita Tax Revenue-ACS Legal Population
South Carolina	\$76.99	\$73.25	\$94.45
Tennessee	\$61.48	\$59.55	\$77.20
North Carolina	\$59.21	\$56.56	\$73.42
Kentucky	\$57.71	\$56.77	\$73.75
Arkansas	\$31.34	\$30.80	\$40.47
Average	\$57.35	\$55.39	\$71.86

We can now apply these various per capita amounts to Alabama population measures. First, however, we compare these projections to those of the Alabama Department of Revenue. The Department applied to 2018 revenue figures 2010 Census population figures to project \$354 to 438 million.

Using just 2018 financial data reported by the Census Bureau divided by 2010 Census numbers and different collection of states, PARCA projects between \$302 and \$389 million. See Table 8.

Table 8. Lottery Projections Based on 2018 Revenue and 2010 Population

Comparison	Per Capita	Projected
		Alabama Revenue
All States	\$81.50	\$389,580,188
Southeast States	\$71.79	\$343,165,174
Selected States	\$63.14	\$301,817,093

We also applied the nine-year constant dollar averages and 2018 ACS total population figures. See Table 9.

Table 9. Projected Lottery Revenues Based on 2018 ACS Total Population

Comparison	Per Capita	Projected
		Alabama Revenue
All States	\$79.11	\$386,679,475
Southeast States	\$61.90	\$302,559,215
Selected States	\$55.39	\$270,739,175

Based on this analysis, we project lottery revenue between \$270 and \$386 million.

Anecdotal projections have suggested an Alabama lottery could generate \$1 billion in sales. Between 2010 and 2018, state revenues averaged 32% of total retail sales. Based on this percentage, retail sales of \$1 billion would generate \$320 million for Alabama.

For comparison, see Table 10, detailing South Carolina lottery finances between 2010 and 2018.

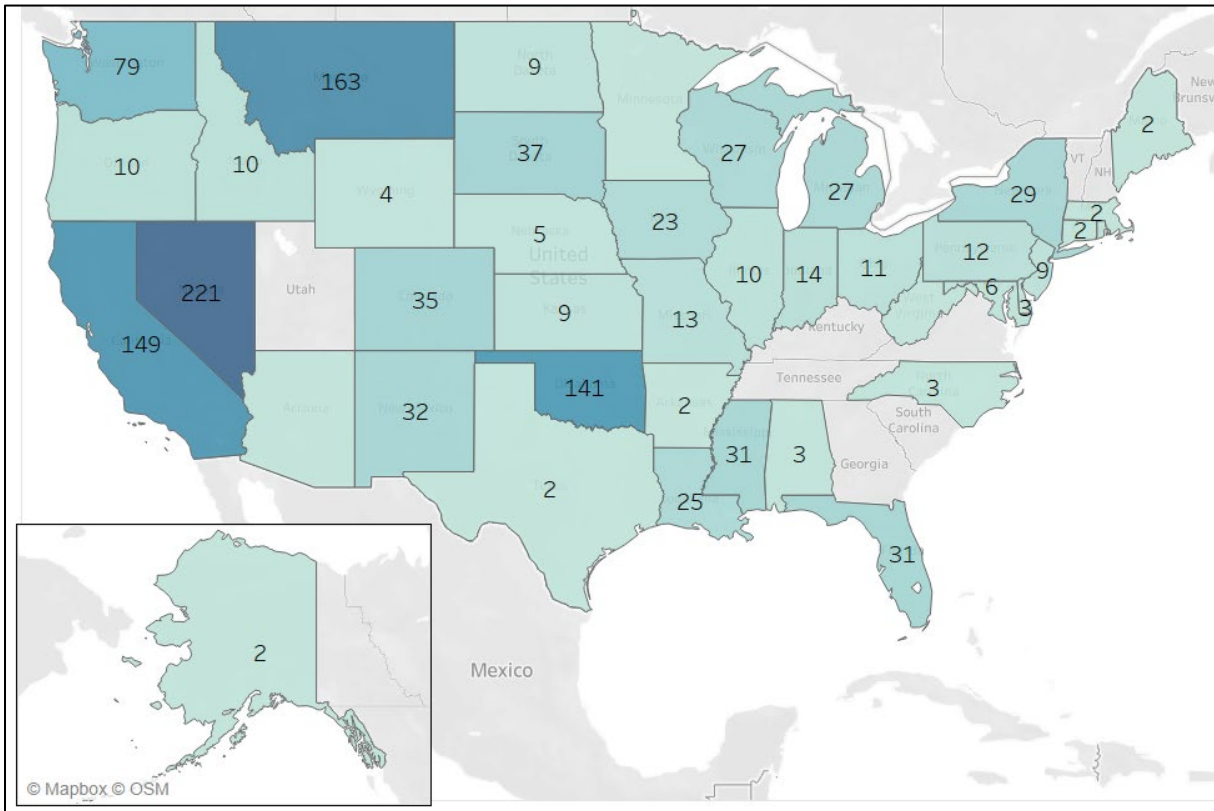
Table 10. South Carolina Lottery, 2010–18, Constant Dollars

	Sales	Administration	Prizes	State Revenue	State Revenue Per Capita, 2018 ACS Total Population
2010	\$1,057,253,779	\$44,654,211	\$725,237,346	\$287,354,452	\$61.98
2011	\$1,088,744,138	\$41,736,499	\$747,046,411	\$299,953,116	\$64.10
2012	\$1,156,323,004	\$41,011,107	\$790,440,112	\$324,863,000	\$68.77
2013	\$1,203,269,962	\$39,145,873	\$837,285,471	\$326,829,780	\$68.45
2014	\$1,247,783,321	\$39,175,652	\$861,143,410	\$347,454,864	\$71.90
2015	\$1,380,904,882	\$41,153,949	\$979,521,651	\$360,219,541	\$73.57
2016	\$1,556,512,919	\$41,333,122	\$1,095,836,814	\$419,331,644	\$84.52
2017	\$1,557,411,278	\$40,181,239	\$1,112,708,094	\$404,511,006	\$80.51
2018	\$1,626,748,989	\$42,436,148	\$1,149,817,092	\$434,484,000	\$85.46
Average	\$1,319,439,141	\$41,203,089	\$922,115,156	\$356,111,267	\$73.25

Casino Gambling

Casinos provide perhaps the most complex array of gambling options. At the end of 2018, 1,265 casinos or card rooms operated in 40 states.⁶ See Figure 2.

Figure 2. Casinos by State, All Types

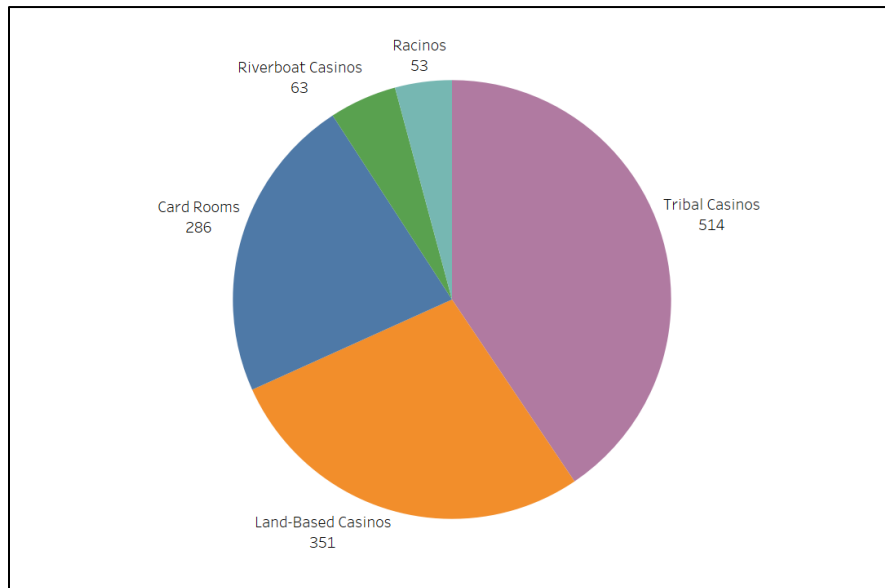


In addition to physical structures, seven states (Illinois, Louisiana, Montana, Nevada, Oregon, South Dakota, and West Virginia) allow electronic gaming machines in retail outlets outside traditional casinos. These states are home to 14,646 such outlets. Note this is the number of establishments offering electronic gaming, not the number of machines themselves.

Of the 1,265 casinos, 467 are so-called corporate casinos, and 514 are tribal casinos. See Figure 3.

⁶ https://www.americangaming.org/wp-content/uploads/2019/06/AGA-2019-State-of-the-States_FINAL.pdf

Figure 3. Casinos by Type



Corporate casinos report Gross Gaming Revenue (GGR) and government proceeds to state regulatory agencies. These data are collected and published by the American Gaming Association (AGA). The data in this section represent these corporate casinos, as reported by the AGA. Accurate and accessible revenue from tribal casinos is difficult, if not impossible, to obtain.

According to published reports by the AGA,⁷ corporate casinos generated \$187.44 billion between 2014 and 2018 and provided \$45.36 billion in direct tax revenue to state and local governments.⁸ See Table 11.

⁷ Ibid.
⁸ Ibid.

Table 11. Average Gross Gaming Revenue and Tax Yields by State 2014-18, Current Dollars

State	Average Gross Revenue	Average State and Local Tax Revenue
Nevada	\$9,375,726,600	\$877,800,952
Pennsylvania	\$3,294,906,815	\$1,423,169,762
New Jersey	\$2,694,042,220	\$251,092,906
Louisiana	\$2,556,266,122	\$607,692,536
Indiana	\$2,228,945,623	\$606,110,060
New York	\$2,160,656,625	\$959,290,835
Mississippi	\$2,102,279,692	\$252,319,242
Missouri	\$1,713,823,557	\$443,324,762
Ohio	\$1,686,747,271	\$562,258,409
Iowa	\$1,439,283,198	\$330,670,808
Illinois	\$1,419,185,795	\$480,850,615
Michigan	\$1,387,847,293	\$328,539,042
Maryland	\$1,318,614,133	\$527,801,121
Colorado	\$803,475,766	\$116,793,745
West Virginia	\$662,392,861	\$303,767,051
Rhode Island	\$625,481,994	\$323,894,100
Florida	\$539,936,535	\$188,976,187
Delaware	\$414,808,351	\$171,542,226
Kansas	\$376,774,862	\$97,402,285
New Mexico	\$237,834,458	\$74,190,702
Massachusetts	\$170,282,204	\$77,348,728
Maine	\$134,128,438	\$53,898,179
Oklahoma	\$120,460,011	\$29,889,928
South Dakota	\$105,770,451	\$15,494,192
Average	\$1,565,402,953	\$379,338,266

Table 12. Average Gross Gaming Revenue and Tax Yields by State 2014-18, Constant Dollars

State	Average Gross Revenue, Constant	Average Tax Revenue, Constant
Nevada	\$9,686,003,730	\$911,922,171
Pennsylvania	\$3,422,848,268	\$1,477,310,475
New Jersey	\$2,795,720,273	\$260,503,293
Louisiana	\$2,654,560,280	\$631,117,260
Indiana	\$2,314,537,532	\$629,561,471
New York	\$2,237,640,877	\$994,124,358
Mississippi	\$2,182,796,699	\$261,960,498
Missouri	\$1,779,097,107	\$460,326,959
Ohio	\$1,748,802,306	\$582,912,293
Iowa	\$1,494,132,471	\$343,245,265
Illinois	\$1,474,458,838	\$499,632,187
Michigan	\$1,440,477,491	\$340,808,434
Maryland	\$1,362,302,054	\$545,634,353
Colorado	\$833,717,739	\$121,147,814
West Virginia	\$688,656,866	\$315,700,221
Rhode Island	\$649,196,521	\$336,461,237
Florida	\$560,291,083	\$196,100,188
Delaware	\$430,581,331	\$177,802,523
Kansas	\$390,826,801	\$100,953,988
New Mexico	\$196,600,660	\$61,014,363
Massachusetts	\$174,406,451	\$79,369,573
Maine	\$139,156,889	\$55,919,211
Oklahoma	\$124,850,889	\$30,704,320
South Dakota	\$109,838,826	\$16,099,394
Average	\$1,620,479,249	\$392,930,494

Of course, neither gross revenues nor tax revenues are distributed equally.

Of the 24 states with casinos between 2014 and 2018, Nevada captured 25% of average gross revenue. The next largest state was Pennsylvania with 8.79%. The bottom ten states all fell below 2%. See Table 13.

Table 13. Total Gross Revenue by State, Share of Revenue, 2014–18, Constant Dollars

State	Total Revenue	Percent of Total Revenue
Nevada	\$48,430,018,652	24.9%
Pennsylvania	\$17,114,241,342	8.8%
New Jersey	\$13,978,601,363	7.2%
Louisiana	\$13,272,801,398	6.8%
Indiana	\$11,572,687,662	6.0%
New York	\$11,188,204,385	5.8%
Mississippi	\$10,913,983,496	5.6%
Missouri	\$8,895,485,535	4.6%
Ohio	\$8,744,011,528	4.5%
Iowa	\$7,470,662,353	3.8%
Illinois	\$7,372,294,190	3.8%
Michigan	\$7,202,387,454	3.7%
Maryland	\$6,811,510,272	3.5%
Colorado	\$4,168,588,694	2.1%
West Virginia	\$3,443,284,332	1.8%
Rhode Island	\$3,245,982,603	1.7%
Florida	\$2,801,455,417	1.4%
Delaware	\$2,152,906,655	1.1%
Kansas	\$1,954,134,005	1.0%
New Mexico	\$983,003,298	0.5%
Massachusetts	\$697,625,804	0.4%
Maine	\$695,784,444	0.4%
Oklahoma	\$624,254,443	0.3%
South Dakota	\$549,194,131	0.3%

State	Gross Gaming Revenue	Percent of Gross Gaming Revenue
Nevada	\$46,879M	25.01%
Pennsylvania	\$16,475M	8.79%
New Jersey	\$13,470M	7.19%
Louisiana	\$12,781M	6.82%
Indiana	\$11,145M	5.95%
New York	\$10,803M	5.76%
Mississippi	\$10,511M	5.61%
Missouri	\$8,569M	4.57%
Ohio	\$8,434M	4.50%
Iowa	\$7,196M	3.84%
Illinois	\$7,096M	3.79%
Michigan	\$6,939M	3.70%
Maryland	\$6,593M	3.52%
Colorado	\$4,017M	2.14%
West Virginia	\$3,312M	1.77%
Rhode Island	\$3,127M	1.67%
Florida	\$2,700M	1.44%
Delaware	\$2,074M	1.11%
Kansas	\$1,884M	1.01%
New Mexico	\$951M	0.51%
Massachusetts	\$681M	0.36%
Maine	\$671M	0.36%
Oklahoma	\$602M	0.32%
South Dakota	\$529M	0.28%
Grand Total	\$187,440M	100.00%

To calculate potential tax revenue, we divide the average yields (constant dollars) in Table 13 by the applicable states' populations. We chose to use the 2010 Census numbers (as did the Alabama Department of Revenue) and the American Community Survey (ACS) One-Year Population Estimates for both the total population and the 21+ population. The results are provided in Table 14.

Table 14. Average and Per Capita Tax Yields

State	Average Tax Revenue, Constant	Average Tax Yield Per Capita, 2010 Census Population	Average Tax Yield Per Capita, 2018 ACS Total Population	Average Tax Yield Per Capita, 2018 ACS 21+
Pennsylvania	\$1,477,310,475	\$116.30	\$115.44	\$154.09
New York	\$994,124,358	\$51.30	\$50.38	\$67.33
Nevada	\$911,922,171	\$337.66	\$310.56	\$423.04
Louisiana	\$631,117,260	\$139.21	\$135.16	\$187.87
Indiana	\$629,561,471	\$97.09	\$94.81	\$131.96
Ohio	\$582,912,293	\$50.53	\$50.10	\$68.20
Maryland	\$545,634,353	\$94.50	\$90.60	\$122.77
Illinois	\$499,632,187	\$38.94	\$38.98	\$53.29
Missouri	\$460,326,959	\$76.86	\$75.52	\$103.38
Iowa	\$343,245,265	\$112.66	\$109.54	\$151.86
Michigan	\$340,808,434	\$34.48	\$34.28	\$46.52
Rhode Island	\$336,461,237	\$319.54	\$318.34	\$423.62
West Virginia	\$315,700,221	\$170.37	\$172.49	\$228.63
Mississippi	\$261,960,498	\$88.26	\$87.64	\$123.39
New Jersey	\$260,503,293	\$29.63	\$29.11	\$39.27
Florida	\$196,100,188	\$10.43	\$9.52	\$12.50
Delaware	\$177,802,523	\$198.01	\$186.60	\$250.68
Colorado	\$121,147,814	\$24.09	\$21.90	\$29.89
Kansas	\$100,953,988	\$35.38	\$34.70	\$48.90
Massachusetts	\$79,369,573	\$12.12	\$11.58	\$15.36
New Mexico	\$61,014,363	\$29.63	\$29.21	\$40.36
Maine	\$55,919,211	\$42.10	\$41.95	\$54.34
Oklahoma	\$30,704,320	\$8.18	\$7.82	\$10.99
South Dakota	\$16,099,394	\$19.77	\$18.61	\$26.19
Average	\$392,930,494	\$89.04	\$86.45	\$117.27

These per capita amounts are applied to the same Alabama population metrics: the 2010 Census and the One-Year ACS Population Estimates for the total population and the 21+ population. Table 15 lists these figures based on each state and the average. In other words, if Alabama casinos generated revenue similar to that of the other 24 states with commercial casinos and taxed them at similar rates, Alabama could anticipate generating \$423.8 million in tax revenue per year.

Table 15. Per Capita Yields Applied to Alabama

State	Avg. Projected Alabama Tax Yield- 2010 Census	Avg. Projected Alabama Tax Yield- ACS Total Population	Avg. Projected Alabama Tax Yield- ACS 21+
Pennsylvania	\$555,870,852.2745	\$564,254,001	\$552,822,061
New York	\$245,206,763.9919	\$246,265,389	\$241,552,723
Nevada	\$1,613,946,143.8472	\$1,517,973,553	\$1,517,745,930
Louisiana	\$665,398,155.3024	\$660,661,779	\$674,024,364
Indiana	\$464,082,967.1376	\$463,409,277	\$473,430,065
Ohio	\$241,503,597.5673	\$244,865,348	\$244,678,541
Maryland	\$451,694,009.1508	\$442,820,260	\$440,471,655
Illinois	\$186,112,032.9577	\$190,506,518	\$191,196,757
Missouri	\$367,383,487.3804	\$369,118,869	\$370,885,872
Iowa	\$538,461,178.6814	\$535,426,668	\$544,831,977
Michigan	\$164,807,286.9693	\$167,554,927	\$166,904,255
Rhode Island	\$1,527,303,770.2081	\$1,556,013,411	\$1,519,803,530
West Virginia	\$814,327,606.8735	\$843,110,832	\$820,271,653
Mississippi	\$421,848,781.4969	\$428,354,665	\$442,670,351
New Jersey	\$141,621,938.2895	\$142,269,442	\$140,898,680
Florida	\$49,844,661.4491	\$46,512,736	\$44,829,288
Delaware	\$946,446,264.1789	\$912,092,618	\$899,355,593
Colorado	\$115,135,780.2003	\$107,027,024	\$107,237,520
Kansas	\$169,124,644.0280	\$169,588,727	\$175,451,961
Massachusetts	\$57,938,005.8100	\$56,612,572	\$55,116,633
New Mexico	\$141,624,266.6707	\$142,795,445	\$144,793,200
Maine	\$201,210,114.9753	\$205,031,226	\$194,961,156
Oklahoma	\$39,119,108.5946	\$38,242,564	\$39,438,299
South Dakota	\$94,511,230.6735	\$90,949,034	\$93,953,444
Average	\$428,694,749.8969	\$425,635,898	\$423,794,209

If we focus exclusively on states like Alabama, this figure drops to \$398 million. See Table 16.

Table 16. Projected Casino Tax Yields

State	Avg. Projected Alabama Tax Yield- 2010 Census	Avg. Projected Alabama Tax Yield- ACS Total Population	Avg. Projected Alabama Tax Yield- ACS 21+
Louisiana	\$665,398,155.3024	\$660,661,779	\$674,024,364
Missouri	\$367,383,487.3804	\$369,118,869	\$370,885,872
West Virginia	\$814,327,606.8735	\$843,110,832	\$820,271,653
Mississippi	\$421,848,781.4969	\$428,354,665	\$442,670,351
Florida	\$49,844,661.4491	\$46,512,736	\$44,829,288
Oklahoma	\$39,119,108.5946	\$38,242,564	\$39,438,299
Average	\$392,986,966.8495	\$397,666,908	\$398,686,638

There are two major caveats with these numbers. For Alabama to generate similar casino revenues, there should be similar access to gaming.

Nevada is home to 244 casinos. The other 23 states with commercial casinos average 11 casinos each, excluding tribal casinos—one per every 811,000 residents over age 21. Notice that Mississippi is home to 28 commercial casinos (now 29)—one per every 76,000 people over age 21.

Considering casinos per residents 21 and over, Alabama would need 4.3 casinos to

match the average of one casino for every 811,000 and 46.8 to match Mississippi's rate of one per 76,000. These calculations do not take in into account relative size or number of games available at casinos.

Table 17. Casinos per State

State	Commerical Casinos	Avg. Residents 21+ Per Casino	Casinos Per 100,000 People 21+
Colorado	34	120,498	0.832
Mississippi	28	75,896	1.318
South Dakota	26	24,021	4.170
Louisiana	20	168,228	0.594
Iowa	19	119,201	0.839
Missouri	13	343,328	0.291
Indiana	13	368,203	0.272
Pennsylvania	12	799,976	0.125
Ohio	11	778,353	0.128
New York	11	1,413,435	0.073
Illinois	10	937,863	0.107
Florida	8	1,982,018	0.050
New Jersey	8	866,953	0.117
Maryland	6	778,988	0.129
West Virginia	5	275,554	0.363
New Mexico	5	301,937	0.331
Kansas	4	602,362	0.169
Michigan	3	2,446,922	0.041
Delaware	3	237,910	0.420
Rhode Island	2	398,081	0.251
Oklahoma	2	1,397,263	0.072
Maine	2	515,392	0.194
Massachusetts	1	4,500,950	0.024
Average	11	845,797	0.474

Second, tax structures vary widely. Casinos offer a complex array of electronic and table games, each with their own regulations and, often, tax structures. Taxes on casino gaming varies by the nature of the game, the location (land, online, or water), and the relative profit already generated in a year. For example, Oklahoma taxes gambling revenue on a sliding scale starting at 35% for revenue up to \$10 million and up to 50% for revenue greater than \$70 million. Tax rates range from 6.75% in

Nevada up to 61% on some gaming revenue in Maryland.

Between 2014 and 2018, effective tax rates on casino gaming ranged from 9.3% in New Jersey to 51.8% in Rhode Island. State and local tax revenues averaged \$392.9 million, with a high of \$1.4 billion in Pennsylvania and a low of \$16 million South Dakota (current dollars). See Table 18.

The projected tax yield for Alabama based on data from all states, \$423.97 million, is based on an effective tax rate of 30.6%. See Table 18. The projection based on selected states, \$398.6 million, is based on an effective tax rate of 27%. See Table 19.

Table 18. Gross Revenue, Effective Taxes, and Tax Revenue, All States, 2014-18

State	Average Gross Revenue, Constant	Effective Tax Rate	Average Tax Revenue, Constant
Pennsylvania	\$3,422,848,268	43.4%	\$1,477,310,475
New York	\$2,237,640,877	44.6%	\$994,124,358
Nevada	\$9,686,003,730	22.1%	\$911,922,171
Louisiana	\$2,654,560,280	23.8%	\$631,117,260
Indiana	\$2,314,537,532	27.2%	\$629,561,471
Ohio	\$1,748,802,306	33.3%	\$582,912,293
Maryland	\$1,362,302,054	40.5%	\$545,634,353
Illinois	\$1,474,458,838	33.9%	\$499,632,187
Missouri	\$1,779,097,107	25.9%	\$460,326,959
Iowa	\$1,494,132,471	23.0%	\$343,245,265
Michigan	\$1,440,477,491	23.7%	\$340,808,434
Rhode Island	\$649,196,521	51.8%	\$336,461,237
West Virginia	\$688,656,866	45.9%	\$315,700,221
Mississippi	\$2,182,796,699	12.0%	\$261,960,498
New Jersey	\$2,795,720,273	9.3%	\$260,503,293
Florida	\$560,291,083	35.0%	\$196,100,188
Delaware	\$430,581,331	41.3%	\$177,802,523
Colorado	\$833,717,739	14.5%	\$121,147,814
Kansas	\$390,826,801	25.8%	\$100,953,988
Massachusetts	\$174,406,451	46.8%	\$79,369,573
New Mexico	\$196,600,660	31.2%	\$61,014,363
Maine	\$139,156,889	40.2%	\$55,919,211
Oklahoma	\$124,850,889	24.0%	\$30,704,320
South Dakota	\$109,838,826	14.7%	\$16,099,394
Average	\$1,620,479,249	30.6%	\$392,930,494

Table 19. Gross Revenue, Effective Taxes, and Tax Revenue, Southeast States

State	Average Gross Revenue, Constant	Effective Tax Rate	Average Tax Revenue, Constant
Louisiana	\$2,654,560,280	23.8%	\$631,117,260
Missouri	\$1,779,097,107	25.9%	\$460,326,959
West Virginia	\$688,656,866	45.9%	\$315,700,221
Mississippi	\$2,182,796,699	12.0%	\$261,960,498
Florida	\$560,291,083	35.0%	\$196,100,188
Oklahoma	\$124,850,889	24.0%	\$30,704,320
Average	\$1,331,708,821	27.8%	\$315,984,908

Electronic Gaming

Alabama could consider legalizing slot machines and other types of electronic gaming. Projecting this revenue is particularly difficult. Strictly speaking, traditional slot machines are considered Class III gaming. However, some machines functionally meet the Class II definition, and casino operators have succeeded in efforts to legally declare Class III machines as Class II machines. Some states tax different games at different rates, and not all states report gaming revenue by type.

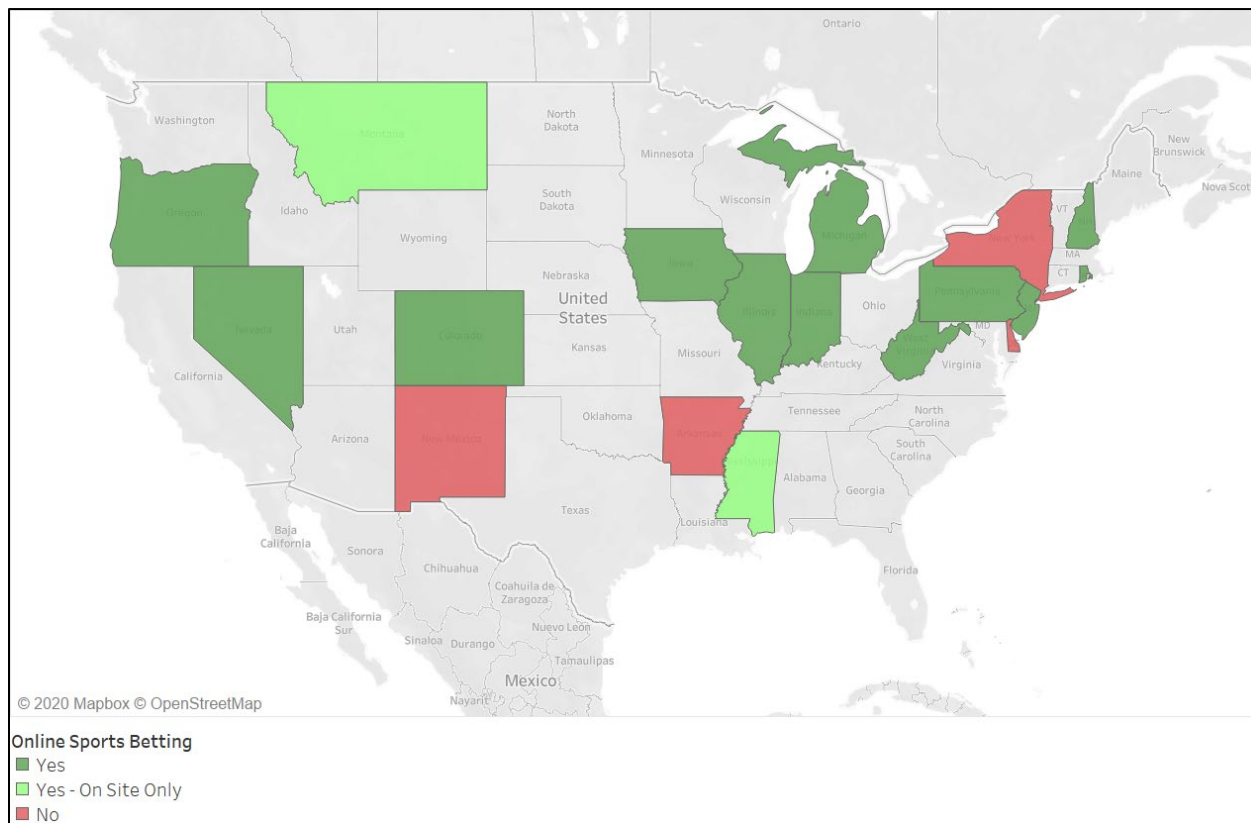
With those caveats, the 73.9% revenue estimate calculated the Alabama Department of Revenue is consistent with other data. Applying that rate to the casino revenues projected above suggests revenue between \$233.6 and \$290.275 million.

The same caveats that apply to casinos, generally, apply to electronic gaming also.

Sports Betting

Compared to other forms of gambling, there are fewer sports gambling data available. Before the U.S. Supreme Court's May 2018 ruling in *Murphy v. National Collegiate Athletic Association*, sports betting was only legal in Nevada. Since the *Murphy* decision, 21 additional states have legalized sports betting, though not all states that have legalized sports betting have implemented sports betting. See Figure 4.

Figure 5. Legal Status of Online Sports Betting, May 2020



College Sports

States treat college sports differently. Per the Murphy ruling, betting on college sports is allowed. However, most states also carve out local market teams. Thus, while betting on college sports is allowed where sports betting is allowed, betting on local college teams is generally prohibited. Currently, only Mississippi, Nevada, Pennsylvania, and West Virginia allow betting on in-state college athletics. Oregon allows betting on college sports at tribal casinos but not through the sports betting site run by the Oregon State Lottery.

Data Limitations

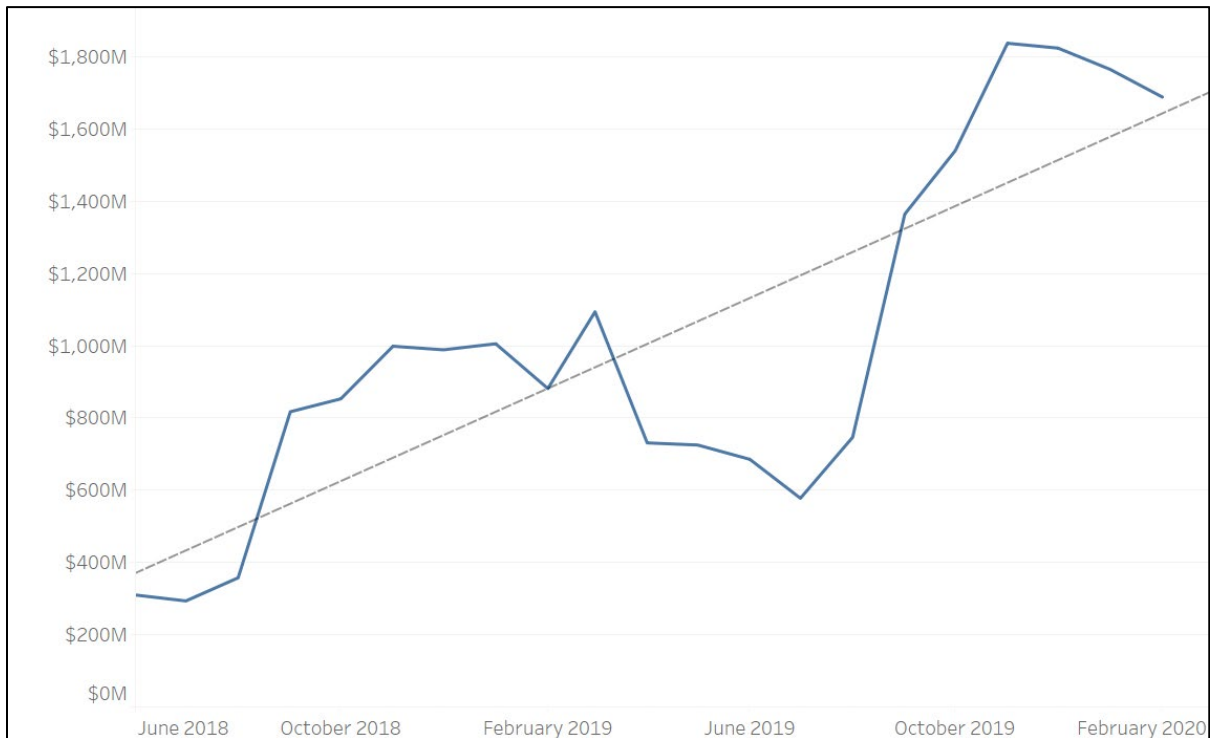
The analysis is constrained by the lack of data. Apart from Nevada, at most, states have allowed sports wagering for 21 months between June 2018 and March 2020. Some states have not reported data. Other states, such as Arkansas, aggregate sports wagering with other casino revenue. Since June 2018, a collective \$21.17 billion has been legally wagered on sports. See Table 20.

Table 20. Gross Sports Wagering, June 2018 to February 2020

State	
Nevada	\$9,332,025,854
New Jersey	\$6,865,133,129
Pennsylvania	\$2,185,902,278
Indiana	\$794,234,116
Mississippi	\$605,966,437
West Virginia	\$356,325,561
Iowa	\$327,337,178
Rhode Island	\$314,669,762
Delaware	\$266,306,906
Oregon	\$87,041,303
New Hampshire	\$38,863,332
Grand Total	\$21,173,805,856

Amounts wagered appear to rise and fall with college and professional football. See Figure 6.

Figure 6. Sports Wagering Trend, June 2018 to February 2020



While states have reported \$21.6 billion in wagers, they have captured \$204.8 million in revenue for state and local governments, averaging \$18.6 million. See Table 21.

Table 21. Total Amount Wagered and Total Government Revenue, June 2018 to February 2020⁹

State	Total Amount Wagered	Total State Revenue
Delaware	\$270,183,974	\$24,284,741
Indiana	\$869,052,918	\$6,731,677
Iowa	\$348,482,660	\$1,659,425
Mississippi	\$616,715,840	\$8,042,333
Nevada	\$9,473,134,055	\$39,328,138
New Hampshire	\$47,632,101	\$1,721,216
New Jersey	\$7,047,041,658	\$62,630,276
New York	\$0	\$982,631
Pennsylvania	\$2,317,232,337	\$43,589,612
Rhode Island	\$323,618,919	\$12,893,840
West Virginia	\$373,996,163	\$2,997,172
Grand Total	\$21,687,090,625	\$18,623,733

State taxes on sports betting range from 6.75% in Nevada to 51% in Rhode Island. The effective tax rate in Mississippi is between 11% and 12%.

Total state revenues reported in Table 21 are annualized and divided by the 2018 ACS population in each state, either 18 or 21, depending on the legal age of sports wagering. These calculations provide the per capita state revenues depicted in Table 22.

Table 22. Average Per Capita Government Revenue

State	Average Per Capita Government Revenue
Delaware	\$18.91
Indiana	\$2.57
Iowa	\$1.18
Mississippi	\$2.36
Nevada	\$10.02
New Hampshire	\$7.67
New Jersey	\$5.24
New York	\$0.11
Pennsylvania	\$3.20
Rhode Island	\$10.95
West Virginia	\$0.44
Grand Total	\$5.70

These per capita figures are applied to Alabama's 18+ and 21+ populations. Based on

⁹ New York reports state revenue but not the total amounts wagered

the average, Alabama could project to generate \$21 million. The full results are reported in Table 23.

Table 23. Projected Alabama Revenues from Sports Wagering Based on All States

State	Annualized Per Capita Revenue	Alabama Per Capita Over 18	Alabama Per Capita Over 21
Delaware	\$18.91	\$71,821,693	\$67,789,524
Indiana	\$2.57	\$9,763,500	\$9,215,364
Iowa	\$1.18	\$4,491,804	\$4,239,627
Mississippi	\$2.36	\$8,952,126	\$8,449,541
Nevada	\$10.02	\$38,080,138	\$35,942,266
New Hampshire	\$7.67	\$29,140,416	\$27,504,432
New Jersey	\$5.24	\$19,916,475	\$18,798,336
New York	\$0.11	\$430,595	\$406,421
Pennsylvania	\$3.20	\$12,155,311	\$11,472,895
Rhode Island	\$10.95	\$41,612,502	\$39,276,318
West Virginia	\$0.44	\$1,688,305	\$1,593,521
Average	\$5.70	\$21,641,169	\$20,426,204

When only states similar to Alabama are considered, the state could anticipate generating \$6 million. See Table 24.

Table 24. Projected Alabama Revenues from Sports Wagering, Selected States

State	Alabama Per Capita Over 18	Alabama Per Capita Over 21
Indiana	\$9,763,500	\$9,215,364
Iowa	\$4,491,804	\$4,239,627
Mississippi	\$8,952,126	\$8,449,541
West Virginia	\$1,688,305	\$1,593,521
Average	\$6,223,934	\$5,874,513

Sports wagering revenue may be lower due to relatively low tax rates and its comparatively limited availability. More likely, sports betting requires extensive infrastructure. States with larger numbers of casinos or robust online lottery systems are expected to generate more revenue. Finally, unlike lotteries and casinos, widespread and substantial illegal sports betting has existed for decades. It is unknown how much of this activity will move into the legal market.

Maximizing Gaming Revenue

Based on the above analysis, there are opportunities to maximize gaming revenue in Alabama. The following are not recommendations or endorsements. Moreover, they are not made with any consideration of other trade-offs or the overall policy cost, gambling, or otherwise.

1. Set robust and progressive taxes.
2. Set gambling age at 18.
3. Allow betting on in-state college athletics.
4. Allow off-site, online sports betting.
5. Ensure that any lottery offerings are as competitive as surrounding states.
6. Locate possible casinos in locations to attract visitors from Florida, Georgia, and Tennessee, states with little casino activity and no sports betting.
7. Promote competition, at least with sports betting vendors.

Again, the above are not recommendations by PARCA and may or may not be good policies generally, but they could be strategies to increase revenue.



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