

ANALYSIS OF THE CASINO SURVEY

Report to the
National Gambling Impact Study Commission

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Submitted by

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HIGHLIGHTS

This report analyzes data from 143 responses to an organizational survey mailed to 544 Chief Executive Officers of licensed casinos in the United States. The data were analyzed for three types of casinos: The top 25 revenue casinos (nontribal), other nontribal casinos, and tribal casinos. The results of the analysis indicate that:

- Salaries at the largest casinos averaged nearly \$26,000, compared to average salaries of about \$20,500 in the smaller nontribal casinos and \$18,000 in the tribal casinos.
- The largest casinos averaged five times as much gambling revenue as the smaller casinos and twice as much as the tribal casinos.
- More than 80% of the casinos posted warning notices about problem gambling, usually including referral telephone numbers.
- The largest casinos were more likely than the smaller nontribal or tribal casinos to provide gambling treatment coverage to their employees (96% vs. 60%). However, the tribal casinos were more likely than the largest casinos to refer customers or employees to treatment.
- All three types of casinos estimated that most of their revenue was from patrons whose gambling losses were less than \$500 per year.
- The largest casinos reported that more than 90% of their patrons traveled more than 50 miles to the casinos; the corresponding percentages for the smaller nontribal and tribal casinos were 57% and 56%, respectively.
- Almost all of the largest casinos issued house credit or credit lines to customers (96%), while only about half of the smaller nontribal casinos and one out of seven of the tribal casinos extended credit to customers.

INTRODUCTION

This report analyzes statistical data from 143 responses to an organizational survey sent to approximately 544 Chief Executive Officers of licensed casinos in the continental United States. The survey was developed by the National Gambling Impact Study Commission's Research Subcommittee between June 1998 and January 1999, and it was implemented by the Commission staff between January and April 1999.

The casino CEO survey was originally designed as a letter requesting detailed information concerning casino characteristics, revenues, and tax payments; staffing and compensation; player profiles; problem gambling detection and response policies; and provision-of-credit policies. NORC was asked by the Research Subcommittee and staff to comment on the formatting of the data request and to conduct statistical analyses of the data. Based on the Commission's schedule and resource availability, we recommended that the data request be reformatted as a more conventional survey questionnaire incorporating a series of well defined quantitative items and close-ended categorical questions. This advice was incorporated into the design, although open-ended requests were retained in a number of areas. The final questionnaire is reproduced in Appendix 1.

NORC contracted in February 1999 to receive the completed questionnaires from the Commission, to key the quantitative and close-ended survey items into a computer data base, and to provide a report which includes statistical tabulations and a narrative discussion in the areas of

- The number and characteristics of employees and contract personnel, including overall payroll, salary and wage rates, and health and retirement benefits;
- Casino characteristics, including years in service, game types, revenues, numbers of visitors, and taxes paid;
- Comparisons of gambler receipts by distance with localized job and tax receipts;
- Player profile information, including numbers tracked, expenditure patterns, and demographic data; and
- House credit policies, including amounts issued, collection of debt, and use of ATMs and credit lines.

The development of the casino CEO questionnaire did not include an extensive period of pretesting or a pilot study to determine and resolve response problems. These would include, for example, items that could be interpreted differently by respondents than the designers intend, or that assume uniformities of context that are not necessarily appropriate, or present other issues that might result in poor item response or other data quality losses. In reviewing the questionnaires during the data entry phase, we identified a number of ways in which the survey responses were clearly problematic. Where feasible, we made careful use of logical imputation to correct problems. However, in several instances we were forced to remove data that suffered from obvious reporting bias.

Of the 544 questionnaires mailed out by Commission staff, 146 were returned with usable data. However, three cases were duplicates, so the final set of usable questionnaires numbered 143. The overall response rate was therefore 26%.

In the tables presented below, we distinguish three sets of casinos: the top 25 revenue generating casinos (excluding tribal casinos), other nontribal casinos ($n=93$), and tribal casinos ($n=25$). Due to varying patterns of missing values, the findings are based on a variable number of cases; several of the findings are based on only a handful of cases. Those results that are based on fewer than 10 cases are identified with an asterisk in the data tables. We caution the reader that such results may be misleading.

RESULTS

Number of casino employees, pay and benefits

Table 1 shows that the 25 largest casino sites employed, on average, about three times as many staff as the tribal and smaller nontribal casinos, but all three types employed predominantly on a full-time basis, with about 10% part-time and only a small number of contract staff. Annual salaries were highest in the largest casinos, averaging nearly \$26,000; they were lower in the smaller and the tribal casinos, where the respective averages of \$20,500 and \$18,000 may reflect sampling variability or differences in urbanicity of location. Other compensation in the form of employer health and retirement contributions¹ also appeared higher in the large casinos, averaging about \$2600, versus about \$2250 and \$2400, respectively, in the smaller nontribal and the tribal casinos. Employees of the large casinos also paid about twice as much of their salaries (almost \$1000 annually) into retirement accounts as did employees of the other types of casinos. This may partly reflect their higher average salaries.

Revenue, payroll, taxes and physical characteristics of casinos

Table 2 shows that the largest casino sites averaged about \$280,000,000 in annual gambling revenue, about 5 times as much as the smaller casinos but only about twice as much as the average tribal casino.² Annual tribal and smaller casino employee payrolls were quite similar at around \$25 million, compared with \$100,000,000 at the largest nontribal casinos; these totals correspond proportionately to reports of overall revenues at about \$100,000,000 at the tribal and smaller nontribal casinos, and \$400,000,000 at the largest casinos (see Table 3). Local taxes and other expenditures paid by casinos were about 9% of their gambling revenues at the larger and

¹A substantial number of respondents indicated that they were reporting retirement benefit information only for non-union employees, thus suggesting different compensation packages for union members.

²A discrepancy between the total annual gambling revenue and the gambling revenue from tracked and non-tracked players for the tribal casinos is due to substantially different patterns of missing values. Only about half of the respondents from the tribal casinos reported total revenue information, while only about 8 reported revenue from tracked and non-tracked players.

smaller nontribal casinos and 7% at the tribal casinos. However, the data from the tribal casinos were based on a very small number of cases.

The large casinos estimated that about 80% of their revenues were from patrons who traveled more than 50 miles to the casinos, whereas the smaller nontribal and tribal casinos estimated that a much smaller portion of revenues came from these types of patrons.

Table 3 indicates that the total taxes—which include all general taxes and government required expenditures—paid by the casinos were about 13% of total revenues at the larger and smaller nontribal casinos and 18% at the tribal casinos. Much of this higher percentage among the tribal casinos may be due to payments to tribal units.

Responsible gaming policies and procedures

Table 4 shows that more than 80% of all the casinos posted warning notices about problem gambling, usually including referral phone numbers, on casino premises, although this was less common in the tribal casinos than in the others. The largest casinos were more likely than the others (about 96% versus about 60%; see question 8) to provide gambling treatment coverage to their employees and use professionals to train staff in identifying such problems. However, the tribal casinos were the most likely to have referred customers or employees to treatment (see question 9) and to deny gambling privileges due to gambling problems (see question 4). Less than half (about 40%) of the casinos of each type had formulated criteria to help staff identify problem or pathological gamblers and refer them to treatment or counseling.

Among the casinos that had formulated criteria to help staff to identify problem and pathological gamblers, several offered some of their guidelines. These included the following statements provided in the questionnaires:

All employees are provided with a list of "symptoms." "Help" phones are posted at key points.

All employees are taught how to respond when a customer asks for help or has questions concerning problem/responsible gaming.

Warning signs or "red flags" of problem/compulsive gamblers are discussed thoroughly, highlighted with video examples and emphasized in workbooks.

The questionnaire also asked about procedures to educate customers about treatment or counseling for problem or pathological gambling. The responses included:

Patrons [who] approach the company about assistance with problem gambling [are] provided a private area to discuss the matter with one of the company's security advisors. During that meeting a packet of information is presented to the individual that includes brochures and business cards...including...the business card of the local provider of gambling treatment counseling.

We refer them to the help line connection, which is an 800 number that is provided...and posted on the casino gaming floor.

Characteristics of casino customers

Table 5 provides information on casino customers, including estimated drop, handle and length of play. Although several casinos based their responses on their own survey data, a majority used their best judgment to estimate these numbers. The largest casinos estimated more players, higher drop, and higher handle by their tracked players compared with tracked players from the smaller nontribal and the tribal casinos. However, the largest casinos also reported fewer days gambled annually among their tracked and nontracked players. This may reflect a greater proportion of local customers who patronized the tribal and the smaller nontribal casinos.

All three types of casinos estimated that more than a third of their gambling revenue was generated by players whose gambling losses were less than \$100 annually, with more than half of revenues from players whose gambling losses amounted to less than \$500 annually.

Table 6 suggests that a majority of casino patrons were between 31 and 64 years old, white, or traveled more than 50 miles to the casino. The estimated percentage who traveled more than 50 miles was about 91% in the largest casinos. The percentage of male and female patrons was similar in all three types of casinos.

Credit information and gambling debts

Table 7 shows that the largest casinos were more likely than the smaller nontribal casinos or the tribal casinos to issue house credit or lines of credit to customers. Not surprisingly, the largest casinos averaged almost 19,000 customers who had been issued a line of credit, a much higher figure than among the smaller or the tribal casinos. Most of the casinos were in states in which gambling debts were enforceable in state courts. Of those that are not in these states, the average amount that had gone uncollected was \$157,287 distributed across an average of about 84 customers (almost \$1,900 per customer).

Table 1 Average number of employees, pay, and benefits among U.S. casinos, by type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>Average number of employees</i>				
Total	3,876.6	1,197.2	1,301.4	1,711.1
Full-time	3,450.4	951.1	1,175.1	1,452.1
Part-time	364.7	125.5	106.2	166.5
Contractor	13.2	5.5	19.6	9.3
<i>Average annual pay</i>	\$25,851	\$20,589	\$17,835	\$21,119
<i>Average employer contribution to employee health plan</i>				
Per casino	\$8,951,384	\$2,466,231	\$3,843,410	\$3,912,529
Per employee	\$2,242	\$1,944	\$2,059	\$2,020
<i>Employer provided retirement benefits</i>				
Percent providing	100.0%	83.9%	91.3%	88.1%
<i>Average employer contribution</i>				
Per casino	\$1,658,204	\$456,446	\$369,389	\$701,800
Per employee	\$398	\$301	\$320	\$326
<i>Average employee contribution</i>				
Per casino	\$3,955,387	\$651,040	\$1,064,871	\$1,444,946
Per employee	\$968	\$543	\$465	\$622

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 114-135.

Table 2 Average annual gambling revenue, and payroll, local tax, and local required expenditure amounts reported by U.S. casinos, by type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>Average annual gambling revenue</i>				
Total	\$282,421,368	\$57,009,103	\$133,827,203	\$110,695,183
Tracked players	\$187,227,436	\$34,046,404	\$11,153,305*	\$73,008,640
Non-tracked players	\$97,158,129	\$30,332,753	\$17,073,375*	\$42,980,657
<i>Average amount of gambling revenue retained, by player's distance traveled to casino</i>				
Within a 50 mile radius	\$36,613,038	\$19,248,743	\$4,754,863*	\$22,314,072
Outside a 50 mile radius	\$200,490,589*	\$27,130,359	\$3,305,655*	\$65,118,095
<i>Average annual payroll amount (includes reported tips, excludes benefits)</i>				
	\$100,098,368	\$23,795,674	\$26,473,409	\$38,362,174
<i>Average amount of local taxes paid¹</i>				
Tribal	N/A	N/A	\$743,046	\$743,046
County	\$7,282,706	\$1,516,762	\$946,506*	\$2,479,864
City	\$9,470,169*	\$317,002	\$83,519*	\$2,018,628
<i>Average required local expenditures other than general taxes¹</i>				
Tribal	N/A	N/A	\$6,000,123*	\$6,000,123*
County	\$2,224,103*	\$870,923	\$109,485*	\$994,410
City	\$8,267,598*	\$2,074,900	\$1,240,181*	\$3,106,114

* Based on data from fewer than 10 casinos.

¹ For each category, the calculation includes only those casinos that reported non-zero expenditures.

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 3-135.

Table 3 Profile of main casino characteristics among U.S. casinos, by type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>Average opening year</i>	1984	1986	1991	1987
<i>Game types and gambling area</i>				
Average space allocated to table games (square feet)	23,851.9	5,407	19,174.3	11,168.5
Average number of seats for tables games	717.1	242.5	193.7	318.6
Average space allocated to slot machines (square feet)	68,391.7	35,602.4	24,710.7	39,899.4
Average number of seats for slot machines	2,366.1	1,043.2	1,071.0	1,289.3
Average current overall hold percentage for slot machine	7.0%	8.8%	7.6%	8.3%
Average space allocated to race, sports, bingo, keno or other games (square feet)	12,228.3	3,350.5	10,700.0	6,213.3
Average number of seats for race, sports, bingo, keno or other games	174.9	128.9	436.2	189.6
<i>Average total revenue¹</i>	\$395,396,566	\$90,687,672	\$101,132,869	\$148,390,001
<i>Average total taxes²</i>	\$54,072,424	\$12,194,961	\$17,875,353	\$20,749,013
<i>Average number of daily visitors of legal gambling age</i>	15,514	4,839	5,479	6,787
<i>Average number of tracked players in 1998</i>	361,636	219,426	100,641	232,930

¹ Revenues include those generated from gambling activity, hotels, non-gambling entertainment, food and beverage, fees, rental income, and other income directly from ATM, credit and debit card machines on the property, and other revenue.

² Taxes include all general taxes and government (including tribal) required expenditures.

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 110-137.

Table 4 Responsible gambling policies and procedures among U.S. casinos, by type of casino, 1998

Percent answering yes to the following questions:	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>(1) Do you employ or contract with professional personnel qualified to train your management or staff in identifying problem or pathological gambling among your customers or employees?</i>	61.9	44.9	42.9	47.3
<i>(2) Have you formulated any criteria to help staff identify problem or pathological gambling among employees or customers so a referral for counseling or treatment may be made?</i>	44.0	39.1	40.0	40.2
<i>(3) Do you use in-house and/or bank/credit agency data to help identify problem or pathological gamblers?</i>	16.0	18.2	6.3	16.3
<i>(4) Did you refuse gambling privileges to anyone in 1998 based on your judgment or the player's request that he or she was a problem or pathological gambler?</i>	60.0	52.9	76.2	57.9
<i>(5) Do you place any warnings on your machines or in the casino area regarding problem or pathological gambling?</i>	92.0	84.3	68.2	83.1
<i>(6) Do posted warnings include phone numbers of help lines offering counseling or treatment for problem or pathological gamblers?</i>	91.7	89.5	85.0	89.2
<i>(7) Did your company or tribal government contribute in 1998 to any programs or organizations supporting research on or treatment for problem or pathological gambling?</i>	80.0	56.8	71.4	63.4
<i>(8) Does your company offer insurance coverage for the cost of treating problem or pathological gambling among employees?</i>	95.8	60.3	61.9	67.8
<i>(9) How many times during 1998 did your organization formally refer employees or customers to someone qualified to provide options for professional treatment? (Average number)</i>	3.8	8.6	15.8	8.7
Average number of affirmative responses to questions 1-8	64.0	52.9	51.1	54.6

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 110-138. The questions as they actually appeared in the questionnaire are in Appendix 1, section 9.

Table 5 Characteristics of players, by type of player and type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>Tracked players</i>				
Average number of players	361,636	232,333	123,865	248,451
Average drop	\$3,154	\$966	\$223	\$1,385
Average handle	\$7,997	\$2,796	\$3,978	\$4,255
Average length of play	2.5 hours	3.7 hours	2.6 hours	3.2 hours
Avg. no. days gambled annually	4.4 days	31.8 days	47.2 days	26.5 days
Total revenue generated	\$187,227,436	\$34,046,404	\$11,153,305	\$73,008,640
<i>Non-tracked players</i>				
Average number of players	2,699,966	778,115	506,014	978,428
Average drop	\$607	\$238	\$171	\$245
Average handle	\$848	\$1,083	\$2711	\$1,288
Average length of play	2.2 hours	2.7 hours	2.6 hours	2.6 hours
Avg. No. days gambled annually	1.7 days	21.0 days	16.6 days	18.9 days
Total revenue generated	\$97,158,129	\$46,268,523	\$17,073,375	\$54,239,625
<i>Top 10% of players</i>				
Avg. no. days gambled annually	18.8 days	63.8 days	96.7 days	55.1 days
Total revenue generated	\$187,748,970	\$23,798,129	\$14,008,710	\$66,430,640
Ratio of daily amount gambled compared to average customer	197:1	18:1	5:1	51:1
Ratio of daily amount gambled compared to tracked players	63:1	14:1	5:1	27:1
<i>Estimated amount gambled annually by players</i>				
Less than \$100	45.8%	47.4%	33.7%	45.3%
\$100-\$500	27.0%	20.4%	21.0%	22.2%
\$500-\$1,000	8.8%	10.4%	16.6%	10.8%
\$1,000-\$5,000	12.5%	12.4%	22.5%	13.7%
\$5,000-\$10,000	2.6%	5.8%	3.0%	4.6%
More than \$10,000	3.2%	3.6%	3.2%	3.4%

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 58-105.

Table 6 Casino customers, by demographic characteristics and type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>Age</i>				
21-30	9.5	10.2	10.4	10.1
31-50	34.6	34.3	30.5	33.8
51-64	31.4	32.6	35.3	32.7
65 and older	24.5	22.9	23.8	23.3
<i>Race¹</i>				
White (non-Hispanic)	65.6	70.0	86.7	72.2
Black (non-Hispanic)	33.0	10.8	2.3	10.2
Hispanic	0.8	11.0	4.6	9.8
Asian/Pacific Islander	0.6	8.3	6.3	7.8
<i>Gender</i>				
Female	50.8	52.3	54.8	52.3
Male	49.2	47.7	45.2	47.7
<i>Proximity to casino</i>				
Within a 50 mile radius	9.0	43.5	44.1	38.4
Outside a 50 mile radius	91.0	56.5	55.9	61.6

¹The questionnaire did not ask about Native American customers.

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 35-92.

Table 7 House credit information, gambling debts, and cash/credit machines on property reported by U.S. casinos, by type of casino, 1998

	Type of Casino			Total
	Largest 25, Non-Tribal	Not Largest 25, Non-Tribal	Tribal	
<i>House Credit</i>				
Percent issuing house credit or lines of credit to customers	96.0%	58.6%	13.4%	57.8%
Average amount of house credit issued in 1996-1998	\$728,768,315	\$38,313,884	\$41,270,182*	\$261,429,259
Average number of customers who were issued lines of credit in 1996-1998	18,902	4,838	1,091*	8407.5
<i>Gambling debts¹</i>				
Percent saying that gambling debts are enforceable in their state courts	100%	92.3%	66.7%*	92.6%
Average number of customers refusing to pay gambling debts, if gambling debts are not enforceable in their state courts	—	105.5*	0.0*	84.4
Average amount uncollected, if gambling debts are not enforceable in their state courts	—	\$105,180*	\$261,500*	\$157,287
<i>Cash/credit machines on the property</i>				
Average number of credit card and ATM machines on the property	16.6	5.7	5.4	7.5

*Based on data from fewer than 10 casinos.

¹ Respondents were first asked, "Are gambling debts enforceable in your state courts?" If the answer was "no," they were asked about the number of customers refusing to pay gambling debts and the amount uncollected. To be consistent, we excluded data from several respondents who answered "yes" to the first question but also provided answers to the following two questions. As a result, estimates for the last two questions were based on a small sample size of 5 and 6, respectively.

Note: These results are based on self-administered questionnaire responses from 143 U.S. casinos. Twenty-five of the top revenue casinos, 93 non-tribal casinos with revenues not in the top 25, and 25 tribal casinos responded to the questionnaire. However, due to lack of responses to several questions, the above data are based on sample sizes ranging from 5-135.