

# Economic Impact Analysis of FY2022 North Dakota Charitable Gaming

August  
2023

**Prepared for:**

**Charitable Gaming Association of North Dakota**

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<sup>1</sup> The views expressed in this report represent those of the author and do not reflect those of the University of North Dakota or the State of North Dakota.

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# 1. INTRODUCTION

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## 1-1 EXECUTIVE SUMMARY

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Dr. Cullen Goenner has been retained by the Charitable Gaming Association of North Dakota to perform an economic analysis of the impact of North Dakota’s charitable gaming industry on the state of North Dakota’s economy.

In fiscal year 2022 (ending June 30) the adjusted gross revenues in North Dakota from charitable gaming totaled more than 222 million dollars, which resulted in the state of North Dakota collecting 19.9 million dollars in gaming taxes, and state charities receiving 73.9 million dollars in contributions. Based on industry averages, charitable gaming directly contributes to the creation of 2,106 jobs and 71 million dollars in labor income in the State of North Dakota.

The total impact charitable gaming has on North Dakota’s economy though is much larger in magnitude than the direct effects indicated above due to the multiplier effect. Charitable gaming operations require the use of additional inputs from their suppliers and service providers, which has an *indirect effect* on the state’s economy. In addition, the increase in household incomes tied to individuals who are employed either directly or indirectly in charitable gaming results in an increase in consumption expenditures in our state due to this *induced effect*. An input-output model is used here to quantify the multiplier effect and determine the total effect charitable gaming has on employment, labor income, and business sales (revenues) in the State of North Dakota.

The impact analysis finds that charitable gaming in North Dakota in fiscal year 2022 has a significant and positive economic benefit on the state’s economy. In total, charitable gaming supports the creation of 3,065 full and part-time jobs, 108 million dollars in labor income, and 330 million dollars in total business sales here in the state of North Dakota.

<b>Economic Impact of ND Charitable Gaming (FY 2022)</b>				
	Direct	Indirect	Induced	Total
Employment	2,106	503	455	3,065
Labor Income (\$ millions)	71	21	16	108
Business Sales (\$ millions)	223	57	51	330

## 1-2 BACKGROUND

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Charitable gaming in North Dakota is operated by a number of independent, non-profit, organizations that offer games of chance licensed by the state, which include electronic pull tabs, pull tabs, bingo, raffles, and twenty-one.

According to data provided by the ND Office of the Attorney General, the adjusted gross proceeds from charitable gaming in North Dakota in fiscal year 2022 totaled \$222,527,028. Adjusted gross proceeds from charitable gaming is equal to the sum of gaming sales and wagers minus prizes paid to patrons.

## 1-3 INDUSTRY DESCRIPTION

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Charitable gaming operations in North Dakota offer several games of chance (e.g. electronic pull tabs, pull tabs, bingo, raffles, pull tabs, and twenty-one). The North American Industry Classification System (NAICS) sector closest to describing these operations is **7132 – Gambling Industries**.

### **Gambling Industries – NAICS sector 7132**

This industry sector comprises establishments primarily engaged in operating gambling facilities, such as casinos, bingo halls, and video gaming terminals, or in the provision of gambling services, such as lotteries and off-track betting. This sector does not include casinos with hotels, which are part of sector 7211 (Traveler Accommodation).

The table below uses data from the Bureau of Economic Analysis to describe at the 3-digit NAICS level the gaming industry's (Sector 713) contributions to the economies' of North Dakota and the United States. The amusement, gambling, and recreation industry in North Dakota employs 4,389 people and generates 110 million dollars in employee compensation, which equals \$25,063 per worker.

### **Output and Compensation Comparison (2021)**

#### **Amusement, Gambling, and Recreation Industries NAICS Sector 713**

	<i>ND</i>	<i>USA</i>
Employment (full and part-time workers)	4,389	1,471,000
Employee Compensation (\$ millions)	\$110	\$57,464
Compensation per worker	\$25,063	\$39,065

Source: Bureau of Economic Analysis

The number of private-sector jobs in North Dakota in 2021 is equal to 338,863, according to data from the Bureau of Economic Analysis. Of these jobs, 2,106 are estimated to be directly engaged in charitable gaming operations. The contributions of charitable gaming to the creation of jobs in North Dakota’s is similar in importance to several types of manufacturing, as indicated in the table below.

<b>North Dakota Employment by Industry (2021)</b>	
	<b>Jobs</b>
Machinery manufacturing	6154
Food manufacturing	5054
Oil and gas extraction	2421
Fabricated metal product manufacturing	2175
Wood product manufacturing	2153
Charitable gaming	2106
Mining (except oil and gas)	1985
Plastics and rubber products manufacturing	1568
Nonmetallic mineral product manufacturing	1228
Computer and electronic product manufacturing	1224
Furniture and related product manufacturing	805

Source: Bureau of Economic Analysis

## 2. ECONOMIC IMPACT MODEL

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An input-output model developed by IMPLAN is used here to quantify the effects charitable gaming has on the state of North Dakota's economy.

### 2-1 INPUT-OUTPUT MODEL

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The total economic impact an industry contributes to the economy is determined by using an input-output model, which links the direct effects from an industry's operations to the changes in the state's economy that are attributable to this activity. There are three components that comprise the total impact, which is equal to the sum of the direct, indirect, and induced effects.

- **Direct effects:** When an individual decides to visit a charitable gaming casino in order to play bingo (e.g. Southgate Casino, Bar, and Grill operated by the North Dakota Association for the Disabled), their gaming expenditures during their visit have a direct effect on the economy by supporting business sales, employment, and labor income from Southgate's operations. This initial change in final demand is referred to as the direct effect.
- **Indirect effects:** Operating a charitable gaming casino requires the use of intermediate inputs purchased from suppliers who provide goods and services to support Southgate's operations (e.g. professional services, gaming equipment, food and beverages, and utilities). The impact on these suppliers from charitable gaming's operation is referred to as the indirect effect.
- **Induced effects:** The employees associated with charitable gaming and the industry's suppliers receive labor income, which is spent locally on things like groceries, housing, entertainment, and utilities. This increase in local consumption has an additional impact on the economy that is referred to as the induced effect.

### 2-2 IMPLAN MODEL

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The analysis conducted here uses IMPLAN's Input-Output model of North Dakota, which has been further customized with data provided by the ND Office of the Attorney General, member organizations of the Charitable Gaming Association of North Dakota, and data from the US Census Bureau, Bureau of Labor Statistics, and the Bureau of Economic Analysis. The model quantifies the direct, indirect, and induced effects of charitable gaming on employment, labor income, and business sales.

### 3. ECONOMIC IMPACT RESULTS

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The analysis below highlights the economic impact charitable gaming operations have on the state of North Dakota’s economy in terms of employment, labor income, and business sales.

The effect on employment is measured by the number of jobs created, which includes both full-time and part-time employees based on industry averages from the Bureau of Economic Analysis. Labor income consists of both employee compensation (salaries and benefits) and proprietor income (self-employed and unincorporated businesses) received by individuals. Business sales are equal to an industry’s revenues for industries that do not hold inventory, such as service industries like charitable gaming.

Charitable gaming in North Dakota directly generates 222 million dollars in sales (adjusted gross proceeds) and employs 2,106 workers in the state of North Dakota, who earn 71 million dollars in labor income. Employee compensation per worker is equal to \$33,669, which is in line with the industry (Amusement, Gambling, and Recreation) average reported by the Bureau of Economic Analysis for North Dakota of \$25,063 and the United States \$39,065.

#### 3-1 IMPACT ON EMPLOYMENT, LABOR INCOME, AND BUSINESS SALES

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The table below summarizes the total economic impact from charitable gaming operations on employment, labor income, and business sales. Charitable gaming contributes directly to the creation of 2,106 jobs, which results in the creation of an additional 503 jobs among firms that are suppliers to the industry (indirect effect) and another 455 jobs that are tied to the increase in household incomes (induced effect). Charitable gaming therefore contributes, in total, to the creation of 3,065 jobs in North Dakota. Similarly, the industry contributes, in total, 108 million dollars in labor income and 330 million dollars in business sales.

<b>Economic Impact of ND Charitable Gaming (FY 2022)</b>				
	Direct	Indirect	Induced	Total
Employment	2,106	503	455	3,065
Labor income (\$ millions)	71	21	16	108
Business sales (\$ millions)	223	57	51	330

### 3-2 IMPACT ON INDUSTRIES IN NORTH DAKOTA

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The economic impacts of charitable gaming affects more than just the gaming industry, as it also affects their suppliers (indirect effect) and household spending (induced effect) due to the linkages between sectors in the economy. The table below summarizes how the total economic impact on business sales in North Dakota is split across different industry sectors (2 digit NAICS classifications).

The five most impacted industries, other than gaming (i.e. Arts, Entertainment, and Recreation), include: Finance and Insurance (\$13,016,410), Real Estate and Rental (\$12,574,451), Professional, Scientific and Technical Services (\$11,212,242), Health and Social Services (\$9,725,047), and Information (\$9,658,671).

#### **Total Impact on Sales by Industry Classification**

<b>Industry Group</b>	
Agriculture, Forestry, Fishing	\$644,857
Mining	\$47,327
Utilities	\$6,180,256
Construction	\$2,384,771
Manufacturing	\$3,236,564
Wholesale Trade	\$4,383,178
Transportation & Warehousing	\$6,246,149
Retail Trade	\$3,388,525
Information	\$9,658,671
Finance & Insurance	\$13,016,410
Real Estate & Rental	\$12,574,451
Professional, Scientific & Tech. Services	\$11,212,242
Management of Companies	\$3,857,770
Administrative & Waste Services	\$5,686,597
Educational Services	\$498,682
Health & Social Services	\$9,725,047
Arts, Entertainment & Recreation	\$224,153,242
Accommodation & Food Services	\$5,782,276
Other Services	\$5,197,184
Government	\$2,625,219
<b>Total</b>	<b>\$330,499,418</b>



### 3-2 IMPACT ON COUNTIES IN NORTH DAKOTA

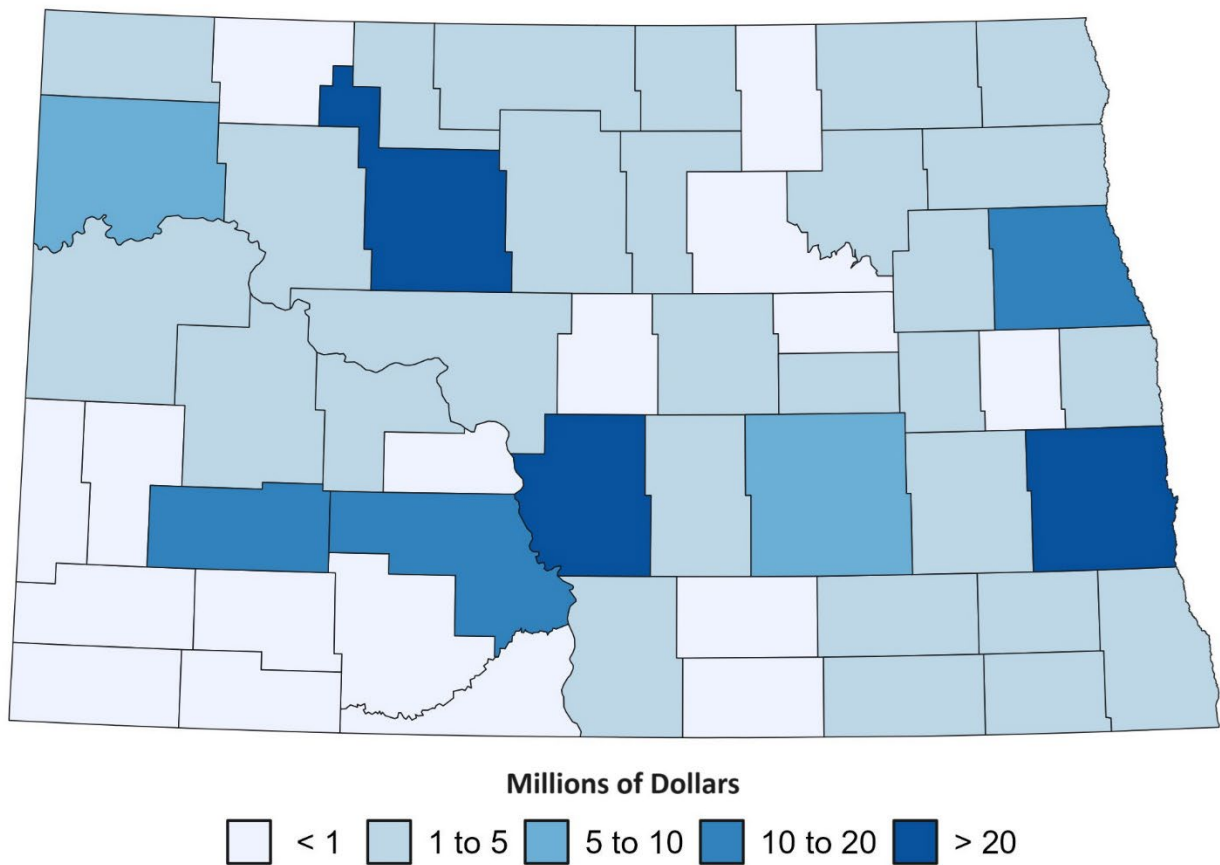
Charitable gaming takes place in each of North Dakota’s 53 counties, based on data from the ND Office for the Attorney General. The table below indicates the sales (i.e. adjusted gross proceeds) generated in each county directly that is directly attributed to charitable gaming. The largest effects in dollar terms are not surprisingly in the most populous counties (Cass, Burleigh, Ward, Grand Forks, Morton, Stark). However, counties with small populations benefited more on a per capita basis. For example, Kidder county with a population of 2,395 (2020 Census) generated \$597 in additional sales per person in the county, relative to the \$225 per person in Cass county (population 184,525).

<b>Direct Impact on Sales by County</b>					
<b>County</b>	<b>Sales</b>	<b>Sales per Capita</b>	<b>County</b>	<b>Sales</b>	<b>Sales per Capita</b>
Adams	\$557,900	\$254	McLean	\$4,754,073	\$487
Barnes	\$4,333,805	\$400	Mercer	\$3,898,674	\$467
Benson	\$930,870	\$156	Morton	\$12,564,043	\$377
Billings	\$261,364	\$277	Mountrail	\$1,562,517	\$159
Bottineau	\$2,644,247	\$415	Nelson	\$1,489,742	\$494
Bowman	\$666,310	\$222	Oliver	\$294,983	\$157
Burke	\$856,579	\$387	Pembina	\$2,674,610	\$391
Burleigh	\$25,070,630	\$255	Pierce	\$1,713,589	\$430
Cass	\$41,453,672	\$225	Ramsey	\$4,749,532	\$409
Cavalier	\$1,823,122	\$492	Ransom	\$2,001,038	\$351
Dickey	\$1,401,626	\$280	Renville	\$1,327,682	\$582
Divide	\$1,049,694	\$477	Richland	\$4,186,722	\$253
Dunn	\$1,685,188	\$411	Rolette	\$1,959,532	\$161
Eddy	\$901,100	\$385	Sargent	\$1,459,559	\$378
Emmons	\$1,279,115	\$387	Sheridan	\$177,108	\$139
Foster	\$1,729,382	\$509	Sioux	\$94,316	\$24
Golden Valley	\$276,749	\$160	Slope	\$66,337	\$95
Grand Forks	\$19,081,816	\$261	Stark	\$10,405,925	\$309
Grant	\$716,216	\$311	Steele	\$755,624	\$423
Griggs	\$1,086,482	\$471	Stutsman	\$7,889,333	\$365
Hettinger	\$838,962	\$338	Towner	\$936,187	\$433
Kidder	\$1,430,849	\$597	Traill	\$2,096,009	\$262
LaMoure	\$2,151,374	\$526	Walsh	\$4,005,635	\$379
Logan	\$776,032	\$413	Ward	\$21,528,752	\$308
McHenry	\$2,828,907	\$531	Wells	\$1,570,468	\$394
McIntosh	\$789,001	\$312	Williams	\$8,551,333	\$209
McKenzie	\$3,192,712	\$217	<b>TOTAL</b>	<b>\$222,527,028</b>	<b>\$330,499,418</b>

What this also then implies is that the direct effect on labor income is also larger on a per capita basis in smaller counties. Labor income generated from gaming is approximately equal to 1/3 of gaming revenues, which suggests charitable gaming operations directly contribute an additional \$200 per capita in labor income in Kidder county, relative to an additional \$75 per capita in Cass county. The point is that charitable gaming contributes to employment and labor income in important ways to counties with both large and small populations.

### IMPACT ON TOTAL SALES BY COUNTY

The figure below, highlights how the size of the direct impact on sales varies geographically across the state by county.



### 3-4 IMPACT ON TAX REVENUE

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The table below highlights the contributions the charitable gaming industry in North Dakota make to State/Local and Federal tax revenues. In fiscal year 2022, state-licensed charitable gaming operators paid \$19,856,122 in gaming taxes to the state of North Dakota.

Charitable gaming operations also contributed to the collection of other taxes (e.g. income, sales, property, etc.) that resulted from the increases in household income, consumption, and business activity, which were estimated using the IMPLAN input-output model.

In total, charitable gaming contributed 34.5 million dollars to tax revenues in the state of North Dakota and more than 19 million dollars to Federal tax revenues.

<b>Impact on Tax Revenue</b>	
	<b>FY 2022</b>
State and Local Taxes	\$34,533,799
ND Gaming Taxes	\$19,856,122
Personal Income	\$916,877.00
Sales tax	\$8,624,819.00
Property	\$5,135,981.00
Federal Taxes	\$19,264,617
Personal Income	\$6,151,495
Indirect Business Tax	\$1,306,673
Social Security (FICA)	\$11,806,449
<b>Total Taxes</b>	<b>\$53,798,416</b>

The state of North Dakota collected \$19,856,122 in gaming taxes from charitable gaming operations in fiscal year 2022. Of this total, 5.0% (\$992,806) is set aside to be redistributed to cities and counties based on their share of the adjusted gross proceeds from gaming. The table below shows the approximate amount of the gaming tax that is redistributed to each county based on their charitable gaming.

<b>Gaming Tax Redistribution by County</b>			
<b>County</b>		<b>County</b>	
Adams	\$2,489	McLean	\$21,210
Barnes	\$19,335	Mercer	\$17,394
Benson	\$4,153	Morton	\$56,055
Billings	\$1,166	Mountrail	\$6,971
Bottineau	\$11,797	Nelson	\$6,646
Bowman	\$2,973	Oliver	\$1,316
Burke	\$3,822	Pembina	\$11,933
Burleigh	\$111,853	Pierce	\$7,645
Cass	\$184,946	Ramsey	\$21,190
Cavalier	\$8,134	Ransom	\$8,928
Dickey	\$6,253	Renville	\$5,923
Divide	\$4,683	Richland	\$18,679
Dunn	\$7,518	Rolette	\$8,742
Eddy	\$4,020	Sargent	\$6,512
Emmons	\$5,707	Sheridan	\$790
Foster	\$7,716	Sioux	\$421
Golden Valley	\$1,235	Slope	\$296
Grand Forks	\$85,134	Stark	\$46,426
Grant	\$3,195	Steele	\$3,371
Griggs	\$4,847	Stutsman	\$35,198
Hettinger	\$3,743	Towner	\$4,177
Kidder	\$6,384	Traill	\$9,351
LaMoure	\$9,598	Walsh	\$17,871
Logan	\$3,462	Ward	\$96,051
McHenry	\$12,621	Wells	\$7,007
McIntosh	\$3,520	Williams	\$38,152
McKenzie	\$14,244	<b>TOTAL</b>	<b>\$992,806</b>

## **4. ABOUT US**

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### **4-1 CHARITABLE GAMING ASSOCIATION OF NORTH DAKOTA**

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The Charitable Gaming Association of North Dakota (CGAND) is composed of small and large organizations across the state of North Dakota who are dedicated to the preservation of gaming as a funding source for charitable purposes. CGAND, a 501(c)(4), is the only organization in North Dakota devoted solely to keeping charitable gaming both charitable and profitable. CGAND provides expert representation at the North Dakota State Capitol on legislative matters, and to the North Dakota Gaming Commission regarding the regulatory process and gaming regulations.

### **4-2 CULLEN GOENNER PHD**

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Dr. Cullen Goenner is a Professor in the Department of Economics & Finance at the Nistler College of Business and Public Administration at the University of North Dakota. Professor Goenner received his PhD in Economics from the University of Wisconsin –Madison in 2001 and his MS in Business (Quantitative Math of Finance) in 1999.

During his time at UND, he has worked as a consultant for the North Dakota Departments of Transportation and Commerce, the University of North Dakota, and the Grand Forks Department of Health, along with a number of private clients. In addition, he previously served as a principal for the UND Center for Innovation's – North Dakota/Northwest Minnesota EB-5 Regional Center, where he conducted economic impact studies.