



GAMBLING AND PROBLEM GAMBLING IN NORTH DAKOTA: 2024

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2024 Survey Final Report

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Table of Contents

EXECUTIVE SUMMARY	v
INTRODUCTION	8
OVERVIEW OF METHODS	18
Attitudes Toward Gambling in North Dakota	23
Gambling in North Dakota	26
Problem Gambling in North Dakota	37
Comparing Recreational, At-Risk, and Problem Gamblers	46
Awareness of Problem Gambling Services in North Dakota	59
DISCUSSION	62
WORKS CITED	69
APPENDIX A: SURVEY QUESTIONNAIRE	74
APPENDIX B: ADDITIONAL TABLES	91

Figures

Figure 1 Number of E-tabs, Charitable Organizations and Gaming Sites, 2018-2024	12
Figure 2 Adjusted Gross Proceeds, 2015-2024 (in millions)	13
Figure 3 Opinions about legalized gambling.....	23
Figure 4 Beliefs about gambling benefits and harms	24
Figure 5 Beliefs about gambling availability	25
Figure 6: Proportion of reported expenditures on different gambling activities.....	34
Figure 7 Reasons for gambling among past-year gamblers	35
Figure 8 Demographics of recreational, at-risk, and problem gamblers.....	47
Figure 9 Proportion of reported expenditures by gambler group	50
Figure 10 Reasons for gambling by gambler group	52

Tables

Table 1 Comparing Adult Gambling Prevalence Surveys in North Dakota	16
Table 2 Demographics of North Dakota Survey sample	21
Table 3 Percentage of past-year gambling participation by gambling activity	27
Table 4 Significant differences among raffle players.....	28
Table 5 Significant differences among lottery players.....	29
Table 6 Significant differences among charitable gamblers	29
Table 7 Significant differences among E-tab players	30
Table 8 Significant differences among casino table game players.....	30
Table 9 Significant differences among sports bettors	31
Table 10 Significant differences among bingo players	31
Table 11 Significant differences among private bettors	32
Table 12 Significant differences among online gamblers	32
Table 13 Basis for classifying respondents using the PGM.....	39
Table 14 Classification of respondents on the PGM	40
Table 15 Differences in prevalence by type of gambling.....	42
Table 16 Recent U.S. adult problem gambling prevalence studies	44
Table 17 Past-year gambling participation by gambling group	49
Table 18 Importance of gambling as a recreational activity.....	53
Table 19 Differences in physical and mental health by gambling group	54
Table 20 Tobacco, alcohol and drug use by gambling group.....	55
Table 21: Demographic groups with higher levels of past-year gambling participation	63
Table 22 Proportion meeting LRGs by gambling group	68
Table 23 Numbers of E-tab Organizations, Sites and Devices, 2018-2024	92
Table 24 E-tab and Other Charitable Gambling Adjusted Gross Proceeds	92
Table 25 Opinions about legalized gambling	93
Table 26 Beliefs about gambling benefits and harms.....	95
Table 27 Beliefs about gambling availability.....	97
Table 28 Overall Gambling Participation in North Dakota by Region	99
Table 29 Any raffles by demographics.....	100
Table 30 Lottery by demographics.....	101
Table 31 Any charitable gambling by demographics	102
Table 32 Any E-tabs by demographics	103
Table 33 Any EGMs by demographics	104
Table 34 Any casino table games by demographics.....	105
Table 35 Percentage of Time Spent Gambling In Person at ND Casinos by Casino Gamblers	106
Table 36 Casinos in ND Patronized the Most by Casino Gamblers	106
Table 37 Non-Gambling Expenditures at ND Casinos by Casino Gamblers	106
Table 38 Any sports betting by demographics	107
Table 39 Type of sports betting.....	108
Table 40 Sports betting (where).....	108
Table 41 Any bingo by demographics.....	109

Table 42 Any private wagering by demographics	110
Table 43 Any horse racing by demographics.....	111
Table 44 Most Frequented Horse Tracks	112
Table 45 Any online by demographics.....	113
Table 46 Types of Online Gambling	114
Table 47 Any financial speculation by demographics	115
Table 48 Number and types of activities in which past-year gamblers participated.....	116
Table 49 Reported expenditures on different gambling activities in the past year.....	117
Table 50 Reasons for gambling among past-year gamblers	118
Table 51 Demographics of recreational, at-risk and problem gamblers	120
Table 52 Gambling expenditures by gambler group	122
Table 53 Largest amount lost in a single day by gambler group	122
Table 54 Reasons for gambling by gambler group.....	123
Table 55 Proportion of friends and family that gamble regularly	125
Table 56 Views of problem gambling	126
Table 57 How much of a problem is PG in North Dakota?	128
Table 58 Awareness of prevention efforts in North Dakota.....	129

EXECUTIVE SUMMARY

Background

In January 2024, the North Dakota Department of Health and Human Services (NDHHS) awarded a contract to Gemini Research to carry out and report on a statewide gambling prevalence survey. The reason was that state-specific gambling data had not been collected in North Dakota since 2016, before the legalization of electronic pull tab devices in 2018. NDHHS wished to obtain data identifying the prevalence of gambling and gambling problems in the state to allow for data-driven strategic planning for effective and efficient implementation of problem gambling prevention and treatment services.

This report describes the results of a survey of the prevalence of gambling behavior and gambling problems in the North Dakota adult population and provides data to support the implementation of data-driven services in problem gambling prevention, community education, and treatment. While the study maintains continuity with a large body of existing research on gambling behavior, it also positions North Dakota at the forefront of the field of gambling studies.

Methods

The North Dakota Recreation Activity Survey was completed in several stages. In the first stage of the project, the Gemini Research team and staff from the Social and Economic Sciences Research Center (SESRC) at Washington State University in Pullman, WA worked with staff at NDHHS to finalize the questionnaire and sampling frame. Ethical approval for the study was obtained from the Washington State University Institutional Review Board. SESRC programmed the questionnaire for computer-assisted web interviewing as well as creating a self-administered paper-and-pencil questionnaire and advance materials including letters and postcards. In the second stage of the project, the surveys were completed by 3,030 North Dakota adults aged 18 and over in July-October, 2024. The third stage of the project involved data cleaning and weighting to increase confidence in generalizing results to the adult population of North Dakota. The final stage of the project entailed drafting and finalizing this report.

Notable Findings

What are the beliefs and attitudes towards gambling in North Dakota?

There was a range of opinion among North Dakota adults concerning the availability of legalized gambling in the state. The majority of North Dakota adults (64.1%) believed that some forms of gambling should be legal and some forms should be illegal. North Dakota adults also had mixed opinions about the balance of benefits and harms of legalized gambling although the majority (61.1%) believed that the harms of gambling outweighed the benefits. One in four North Dakota adults (28.4%) believed that the benefits and harms of legalized gambling were about equal while one in ten North Dakota adults (10.4%) felt that the benefits of legalized gambling outweighed the harms. The majority of North Dakota adults (68.0%) felt that the current availability of gambling in the state was acceptable. The proportion of North Dakota adults that felt gambling was too widely

available (19.5%) was slightly larger than the proportion that felt gambling was not available enough (12.5%).

What is the current prevalence of gambling among adults in North Dakota?

In 2024, nearly three-quarters of North Dakota adults (73.7%) acknowledged participating in one or more gambling activities in the past year. Past-year participation was highest for raffles (48.0%) and the lottery (40.2%). Three additional types of gambling, including charitable gambling at bars and restaurants excluding E-tabs, E-tabs, and casino EGMs, had past-year participation rates of one-quarter to one-third of the adult population (35.7%, 30.2% and 23.4% respectively). One in ten North Dakota adults had gambled in the past year on casino table games (12.2%), sports betting (12.1%), bingo (11.7%) and private wagering (11.6%). Past-year participation rates for online gambling and horse race betting were even lower (4.2% and 3.1% respectively).

What is the current prevalence of problem gambling in North Dakota?

Based on the survey, the prevalence of problem gambling among all adults in North Dakota is 1.4%; this represents approximately 8,400 individuals or between 4,900 and 12,300 North Dakota adults experiencing gambling problems. An additional 3.96% of North Dakota adults were classified as high or very high at-risk gamblers, representing between 17,800 and 30,000 individuals. Between 28% and 43% of high and very high at-risk gamblers are likely to transition to problem gambling within 12 months of the survey; this represents between 6,400 and 9,800 adult North Dakotans.

What is the demographic pattern of problem gambling in North Dakota?

In contrast to many other jurisdictions, the rate of problem gambling in North Dakota was not significantly higher among men compared with women. However, those at risk of experiencing gambling problems (whether moderate or high risk) were significantly more likely than recreational gamblers to be male (63.8% and 68.9% compared to 48.5% of each gambler group). With respect to age, moderate at-risk gamblers were significantly more likely than recreational gamblers to be aged 18 to 34 (44.6% compared to 27.2% of each group). Moderate at-risk gamblers were also significantly more likely than recreational gamblers to be non-White (14.7% compared to 6.6% of each group). Recreational gamblers were more likely to be retired compared to moderate and high at-risk gamblers (20.8% compared to 13.7% and 14.4% respectively) and less likely to be employed (70.5% compared to 78.8% and 72.2% respectively). Finally, high and very high at-risk gamblers were more likely than recreational gamblers to have annual household incomes over \$150,000 (34.9% compared to 17.5% of each group).

What types of gambling are most strongly related to problem gambling in North Dakota?

The types of gambling most strongly related to problem gambling in North Dakota included casino EGMs, online gambling, bingo, E-tabs and sports betting. The prevalence of problem gambling among gamblers who participated in these activities in the past year was 170% to 240% higher compared with the prevalence of problem gambling in the entire adult population.

Compared to the adult North Dakota population, rates of high and very high at-risk gambling were between 140% and 370% higher among past-year participants in every type of gambling included in the survey with the exception of raffles, the lottery and charitable gambling excluding E-tabs.

What is the prevalence of co-occurring disorders with problem gambling?

North Dakota adults who experienced gambling problems as well as those at high or very high risk of gambling problems were the gambler groups in North Dakota most likely to have used tobacco daily, engaged in binge drinking and consumed cannabis or other drugs. Those experiencing gambling problems were most likely to acknowledge having problems with alcohol or drugs in the past 12 months. Those at high or very high risk of gambling problems were most likely to have consumed alcohol in the past 12 months.

What is the level of awareness of problem gambling services in North Dakota?

Overall, approximately two in five North Dakota adults (43.2%) had seen or heard media campaigns to prevent problem gambling in the past year. Awareness of non-media campaigns in schools, workplaces or communities to prevent problem gambling in North Dakota was much lower (from 12.0% to 30.5%). There was a substantial level of awareness of the problem gambling helpline among all of the gambler groups in North Dakota (37.9% among recreational gamblers and 65.3% among problem gamblers). Rates of awareness of the Gambler Healing online course in North Dakota were much lower than for the helpline.

Best Practices Recommendations

To support the development of problem gambling prevention, treatment and recovery services in an effective and efficient manner, we have provided a review of international best practices in problem gambling prevention, treatment and harm minimization. Problem gambling services in North Dakota include a helpline (877-702-7848) and information, educational materials, and remote and self-help interventions through the [GamblerND](#) website. Availability of outpatient counseling in North Dakota is limited and there is no provision for residential treatment in North Dakota for those with gambling problems.

We also examined what proportion of North Dakota adults were gambling at levels associated with minimum risk of generating gambling harms. The Lower Risk Gambling Guidelines (LRGGs) are a set of evidence-based limits on gambling expenditure, frequency and variety that reduce the risk of experiencing gambling-related harm if all three guidelines are followed. We found that 39% of recreational gamblers in North Dakota were gambling within these limits while over 90% of gamblers at high or very high risk of harm and all of those classified as problem gamblers were gambling above these limits.

We concluded that recreational gamblers and moderate at-risk gamblers could be encouraged to adopt responsible gambling measures such as deposit and time limits, should these become available in North Dakota. More intensive efforts will be needed to influence the behavior of high and very high at-risk gamblers as well as problem gamblers. Indicated prevention efforts such as Personalized Normative Feedback and motivational interventions are needed as are greatly expanded outpatient treatment, some form of residential treatment, training for healthcare providers in how to screen for gambling behavior and make referrals when warranted and training for staff of gambling operators in North Dakota in recognizing and assisting individuals experiencing gambling problems in venues around the state.

INTRODUCTION

Background

In January 2024, the North Dakota Department of Health and Human Services (NDHHS) issued a Request for Proposals to carry out and report on a statewide gambling prevalence survey. The reason for the solicitation was that state-specific gambling data had not been collected in North Dakota since 2016, before the legalization of electronic pull tab devices in 2018. With over 4,700 electronic pull tab devices operating in North Dakota at the end of 2023, NDHHS wished to obtain data identifying the prevalence of gambling and Gambling Disorder in the state to allow for data-driven strategic planning targeting gambling prevention activities, community education, and problem gambling treatment services. In February 2024, a notice of intent to award the contract for the study was issued to Gemini Research, Inc.

The purpose of this report is to describe the results of a study of the prevalence of gambling behavior and gambling problems in the North Dakota adult population and provide new data to support the implementation of data-driven services in problem gambling prevention, community education, and treatment. While the study maintains continuity with a large body of existing research on gambling behavior, it also positions North Dakota at the forefront of the field of gambling studies.

Defining Gambling and Gambling Problems

There are many definitions and assumptions related to gambling and gambling problems within the gambling studies field and more broadly. For clarity, we provide several definitions that we have adopted in this report.

Gambling is a broad concept that includes diverse activities, undertaken in a wide variety of settings, appealing to different types of people, and perceived in various ways. Internationally, gambling is defined as “staking money or something of material value on an event with an uncertain outcome in the hope of winning additional money and/or material goods” (Williams, Volberg, Stevens, Williams, & Arthur, 2017). This definition includes activities that are widely identified as gambling (i.e., electronic gambling machines, casino table games, sports betting, private wagering, bingo, horse race betting) as well as activities about which there is less public consensus (i.e., raffles, lottery tickets, financial speculation).

Problem gambling typically refers to individuals who experience difficulties limiting money and/or time spent on gambling along with negative consequences arising from this impaired control (Neal, Delfabbro, & O'Neil, 2005; Williams, Volberg, & Stevens, 2012). From a public health perspective, individuals who are at moderate or even low risk for problem gambling are of as much concern as gamblers who meet criteria for Gambling Disorder. This is because they represent a much larger proportion of the population than those at highest risk for Gambling Disorder. These individuals are also of interest because of the possibility that their gambling-related difficulties may become more severe over time. Another important consideration is that the gambling behavior of people who are

at risk for developing problems may be more easily influenced by changes in social attitudes and public awareness compared with those already experiencing problems (Shinogle et al., 2011).

Gambling Disorder (previously called ‘pathological gambling’) has been recognized as a psychiatric condition since 1980 when it was included in the third edition of the *Diagnostic and Statistical Manual* (DSM-III) (American Psychiatric Association, 1980). In 2013, with the publication of the fifth edition of the manual, changes were made to the placement of the disorder within the manual as well as to the diagnostic criteria in recognition of the shared genetic, physiological and psychological similarities between Gambling Disorder and substance use disorders (American Psychiatric Association, 2013; Rash, Weinstock, & Van Patten, 2016).

In epidemiological research, individuals are generally classified as at-risk, problem, or pathological (now ‘disordered’) gamblers on the basis of their score on one of the many instruments developed to identify individuals with gambling-related difficulties (Abbott & Volberg, 2006; Stinchfield, Govoni, & Frisch, 2007; Williams & Volberg, 2014). Because these instruments were developed at different times and are based on different clinical criteria, they use different terms to classify individuals. To limit confusion about these terms, we use ‘problem gambling’ throughout this report as an umbrella term that encompasses the full range of loss of control as well as gambling harms and consequences that an individual may experience.

Overview of Legal Gambling in North Dakota

Legal gambling in North Dakota includes parimutuel wagering on horse and dog races, a state lottery, tribal casinos, and charitable gambling. Outside of the state to the north, the Canadian provinces of Manitoba and Saskatchewan offer residents of North Dakota a range of gambling opportunities including charitable casinos, large-scale bingo halls and a range of lottery products including sports, bingo, and keno games. To the south, video poker machines operated by the South Dakota Lottery are widely available at bars, taverns, and restaurants along with several tribal casinos. To the east, Minnesota is home to a mature state lottery as well as numerous tribal casinos while, to the west, Montana offers video gaming machines similar to those in South Dakota as well as parimutuel and charitable gambling. Although not legal, other types of gambling available to North Dakota residents include remote gambling by telephone, on mobile devices, and online. In this section, we provide background on legal forms of gambling in North Dakota.

Horse and Dog Racing

Parimutuel wagering involves betting among a pool of players rather than betting against the house, as happens at a casino (Tidwell, Welte, Barnes, & Dayanim, 2015). Parimutuel wagering on horse and dog races was legalized in North Dakota in 1977. Live horse racing takes place in North Dakota at Chippewa Downs in Belcourt and the North Dakota Horse Park in Fargo although only a few days of each year. Parimutuel betting is also permitted at four brick-and-mortar locations (i.e., Belcourt, Fargo, Grand Forks and Williston) and on four online websites. The horse racing industry, including live and simulcast wagering, is regulated by the North Dakota Racing Commission.¹ In 2021, the North Dakota State Auditor reported that total revenues from racing taxes in the state were \$1.7

¹ <https://www.racingcommission.nd.gov/>

million and expenditures were \$1.5 million.² The legal age to participate in parimutuel wagering in North Dakota is 18.

Lottery

The North Dakota Lottery was created in 2003 and launched in March 2004 under the purview of the Office of the Attorney General. The Lottery is permitted to offer multi-state games including Powerball, Lucky For Life, Mega Millions, Lotto America, and 2by2. The Lottery licenses 450 retailers who sell lottery tickets at locations including convenience stores, grocery stores, truck stops, and gas stations. Just over half of lottery ticket sales (51%) is returned in prizes, retailers receive 5% of sales in commissions, the state's General Fund receives 22% of sales, and the Compulsive Gambling Prevention and Treatment Fund receives 1% of sales (<https://www.lottery.nd.gov>). In FY 2024, the Lottery contributed \$8.6 million to the General Fund and \$320,000 to the Compulsive Gambling Prevention and Treatment Fund.³ The legal age to purchase lottery products in North Dakota is 18.

Casinos

Casino gambling in North Dakota is operated under the aegis of tribal-state compacts with five tribes, including the Sisseton-Wahpeton Sioux Tribe, the Spirit Lake Tribe, the Standing Rock Sioux, the Three Affiliated Tribes (Mandan, Hidatsa and Arikara), and the Turtle Mountain Band of Chippewa Indians. All of the compacts went into effect in 2013; amended compacts were approved by the U.S. Department of the Interior in 2022 and can be automatically renewed for 10-year terms after the initial 10-year term ends in 2033. The compacts allow for Class III gaming, including electronic games of chance, blackjack, poker, parimutuel wagering, sports and Calcutta pools, pull tabs, raffles, keno, punchboards, paddlewheels, craps and roulette. Tribal councils license and regulate gambling activities and tribal gaming commissions are responsible for day-to-day regulation of tribal gambling activities.⁴

There are 13 tribal casinos in North Dakota although three of the five properties owned by the Turtle Mountain Band of Chippewa Indians offer only Class II gaming (i.e., bingo). The Three Affiliated Tribes operate four casinos of which one is a resort-style property. The Standing Rock Sioux operate two resort-style casinos and the Sisseton-Wahpeton Sioux Tribe operates one resort-style casino.⁵ The state plays a limited role in the regulation of tribal gaming and the tribes do not share gambling revenues with the state.

Based on the most recent available information, gross gaming revenue from the tribal casinos was \$243.8 million in 2016 and the casinos supported approximately 3,400 jobs. The legal age to gamble at a tribal casino in North Dakota is 19.

Sports Betting

The tribes became the only entities allowed to offer sports betting in North Dakota when the compacts were renewed in 2022. Retail sports betting is available at the tribal casinos while mobile

² <https://www.nd.gov/auditor/2021-racing-commission>

³ <https://drgnews.com/2024/07/25/237930/>

⁴ <https://www.americangaming.org/state/north-dakota/>

⁵ https://www.500nations.com/North_Dakota_Casinos.asp#tribes

sports betting is permitted within the physical boundaries of the reservations. The tribes are permitted to offer bets on professional sporting events only. The legal age to gamble on sports in North Dakota is 19.

Charitable Gambling

Charitable gambling in the form of bingo games and raffles was legalized in North Dakota in 1976. Numerous other games played for charitable purposes are currently permitted in the state and these games represent the primary way in which North Dakota charities raise funds. Charitable gambling in North Dakota is regulated by the Office of the Attorney General's Gaming Division and is available permanently at 22 locations around the state.⁶

Raffles are games in which a prize is won by a player who bought a ticket or square on a raffle board. Winners are determined by drawing a ticket or number from a receptacle or other fair method approved by the AG. There is no minimum age to participate in raffles in North Dakota.

Bingo is a game of chance generally conducted by licensed charitable organizations and local permit and charity local permit holders in North Dakota. North Dakota also permits **electronic bingo** which is played on portable hand-held devices utilizing electronic bingo cards. The legal age to gamble on bingo in North Dakota is 18 unless a minor is accompanied by an adult.

Poker is a card game conducted at a table with multiple stations. Licensed charitable organizations are permitted to conduct poker tournaments twice per year. These tournaments must be conducted at an authorized site. Charitable organizations can charge entry fees but prizes cannot exceed 90% of the gross proceeds. The legal age to play poker in North Dakota is 21.

A **paddlewheel** is a wheel marked with numbers and with a pointer that indicates the winning number when the wheel is spun. The size or value of the prize is predetermined based on the amount bet and must be paid in cash. The legal age to play a paddlewheel in North Dakota is 21.

Sports pools are comprised of wagers paid by players for a line or square that will determine which player wins. The maximum cost per line or square is \$25 and only cash prizes can be awarded. The legal age to play sports pools in North Dakota is 21.

Twenty-one is a card game in which a player tries to obtain a higher total card count than a dealer without exceeding 21. No side bets are permitted and the legal age to play this game in North Dakota is 21.

Pull tabs are folded or banded tickets, cards with break-open tabs, or tickets with a latex covering. Pull tabs are sold in numerous locations around the state. The maximum cash prize for a winning symbol or number on a pull tab is \$500 and the legal age to purchase pull tabs in North Dakota is 21.

Other charitable games include prize boards, club specials, punchboards, seal boards, tip boards, Calcutta pools, and prize board dispensing devices.

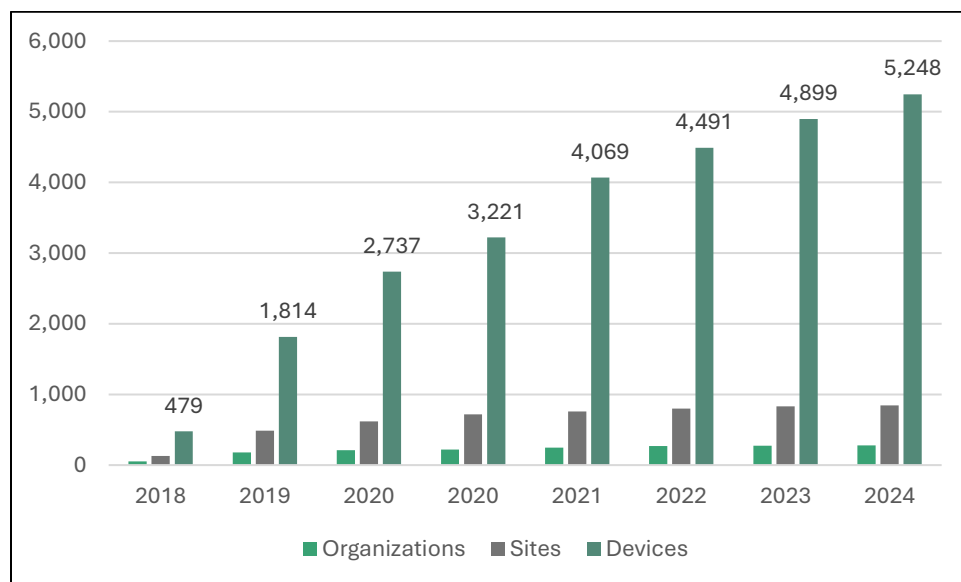
⁶ <https://attorneygeneral.nd.gov/licensing-and-gaming/gaming/gaming-laws-rules-and-publications/>;
<https://attorneygeneral.nd.gov/licensing-and-gaming/gaming/>

Electronic Pull Tabs (E-tabs)

In 2017, the North Dakota Legislature legalized electronic pull tabs (E- tabs) which are devices that electronically display pull tab results in an enhanced way that looks and sounds like a slot machine but actually operates like a lottery ticket rather than a random number generator. The practical effect is that once the large winning ticket or tickets from a specific machine have been won, no additional large prizes are available until the device is reset (which occurs four times annually).

Beginning in 2018, these devices proliferated rapidly; as Figure 1 shows, there were 5,248 machines at 846 locations around the state as of December 2024 (data from the Gaming Division of the North Dakota Attorney General’s Office). This represents a nearly 1,000% increase over the number in 2018 when the machines were legalized. Figure 1 also shows growth in the number of locations where E-tabs are located (550%) and in the number of organizations receiving funds from charitable gambling in North Dakota (420%).

Figure 1 Number of E-tabs, Charitable Organizations and Gaming Sites, 2018-2024

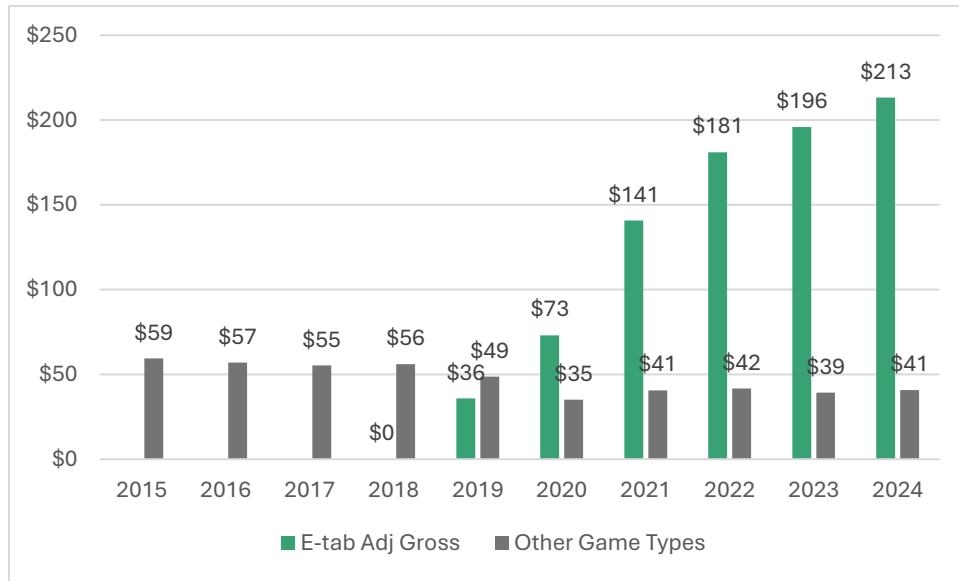


Note: Table 23 in Appendix B presents this information in detail.

Revenues to the state, to charitable organizations and to businesses where the machines are located also increased dramatically.⁷ Figure 2 presents information on adjusted gross proceeds generated by E-tabs as well as other types of charitable gambling in North Dakota between 2015 and 2024 (data from the Gaming Division of the North Dakota Attorney General’s Office). Figure 2 shows that adjusted gross proceeds from E-tabs increased from zero in 2018 to \$213 million in 2024, representing a nearly 500% increase. In contrast, adjusted gross proceeds from other types of charitable gambling decreased by 31% between 2015 and 2024.

⁷ Revenues from E-tabs are distributed as follows: 90% paid in prizes, 1% state gaming tax, 9% to charitable organizations which are required to allocate 40% of their revenues to their charitable cause. The remaining 60% can be used by charitable organizations to cover internal costs, purchase E-tab machines, and pay distributors to host the machines at brick-and-mortar locations (https://ndlegis.gov/files/committees/66-2019/21_5052_03000appendixm.pdf).

Figure 2 Adjusted Gross Proceeds, 2015-2024 (in millions)



Note: Table 24 in Appendix B presents this information in detail.

While E-tabs have generated substantial revenues, the machines have also caused considerable consternation among the tribes, whose casino revenues have been affected (Dura, 2023), charitable organizations that offer other games of chance, the North Dakota Gaming Commission which is concerned about money laundering and fraud (Achterling, 2024), and experts concerned about gambling addiction.

Some steps have been taken to address concerns caused by the rapid expansion of E-tabs in North Dakota. Legislation passed in 2021 required charitable organizations in North Dakota to jointly contribute \$40,000 annually to problem gambling treatment programs that had previously been funded by the North Dakota Lottery and the tribes (Macpherson, 2021).⁸ In 2023, the Legislature approved limits to E-tabs to restrict where the machines could be located and how many machines could be located per site (Dura, 2023). The bill prohibited E-tabs from grocery stores, convenience stores, liquor stores, and gas stations and required that no more than 10 machines could be located in a designated area of a business establishment where only those aged 21 and older could enter. The bill also raised the amount that charities were required to pay for E-tabs to be located at a business establishment. The bill included funding for a mandatory study to evaluate the economic impacts of E-tabs as well as the machines' impact on addiction treatment services and tax revenues. The legal age to gamble on E-tabs in North Dakota is 21.

⁸ Until 2022, the North Dakota Lottery transferred \$320,000 annually and the North Dakota tribes contributed \$125,000 annually to Lutheran Social Services to support problem gambling services. In 2022, Lutheran Social Services closed and problem gambling services were moved to the North Dakota Department of Human Services, Behavioral Health Division. That same year, the tribes ended their contribution in the wake of compact renegotiations.

Overview of Gambling Prevalence Research

The gambling studies field has changed considerably over the last four decades. In the 1980s and early 1990s, when the first statewide surveys of gambling and problem gambling were carried out, policy makers were simply interested in how many people were experiencing gambling problems in order to design and fund treatment services. Since then, the goals for gambling prevalence research have become more complex and of interest to many more audiences (Volberg & Williams, 2014).

Population surveys have become an essential component in the establishment and surveillance of legal gambling (SEIGMA Research Team, 2018; Volberg, 2004; Volberg & Wray, 2013). Results of these surveys can help shape public awareness campaigns to prompt changes in attitudes and behavior in vulnerable subgroups in the population. Population surveys can also inform the development of treatment services through identification of the number and characteristics of individuals likely to seek help. Population surveys have the potential to improve how gambling problems are identified and how communities respond. Finally, population surveys have value in advancing understanding of the risk factors associated with gambling problems—information needed in the development of evidence-based gambling regulations and policies.

Population prevalence studies of gambling serve several important purposes. They establish the current prevalence of overall gambling participation, the prevalence of participation in each form of gambling, and the prevalence of problem gambling. This information, in turn, is useful in understanding the overall recreational value of gambling to society, the negative social impacts of providing legalized gambling, the number of individuals with gambling problems who would benefit from treatment, and the types of gambling most strongly associated with problem gambling. Changes in the prevalence of problem gambling from one time period to the next provide important information about the potential effectiveness of policies implemented to mitigate gambling harms (Volberg, 2007; Williams & Volberg, 2012).

Previous Research in North Dakota

North Dakota has funded several gambling prevalence surveys since the 1990s. The first survey was carried out in 1992 using telephone interviews with a random selection of adults aged 18 and over. The study achieved a sample size of 1,517 and a response rate of 65%. As there were few differences between the achieved sample and the North Dakota population, no sample weights were employed. Problem gambling was assessed using the South Oaks Gambling Screen (SOGS) lifetime and past-year measures. The overall rate of past-year gambling in North Dakota in 1992 was 73% and the prevalence of past-year problem gambling (SOGS-PY 3+) was 2.0% (Volberg & Silver, 1993). Individuals experiencing gambling problems in North Dakota in 1992 were more likely than others in the population to be under 30, more likely to be non-White, and less likely to earn \$25,000 or more annually. The survey was carried out prior to the establishment of casinos in North Dakota and the main types of gambling associated with gambling problems were pull tabs and bingo.

One of the few gambling prevalence surveys among Native Americans was carried out in North Dakota contemporaneously with the 1992 general population survey. Funding from the North

Dakota government for this survey was supplemented with funding from the North Dakota Tribes⁹ and with experiential assistance from key informants to tailor the questionnaire appropriately. A total of 400 Native Americans residing in the four counties with the highest proportion of Native American residents in the state were interviewed by Native American interviewers by telephone or in person. Problem gambling was assessed using the South Oaks Gambling Screen (SOGS) lifetime and past-year assessments. The overall rate of past-year gambling among Native Americans in North Dakota was 85% and the prevalence of past-year problem gambling (SOGS-PY 3+) was 12.3% (Volberg & Precision Marketing, 1993). Native American individuals experiencing gambling problems in North Dakota were significantly less likely than other Native Americans to be male, less likely to have finished high school, and more likely to have annual household incomes under \$25,000. Bingo, slot machines and pull tabs were the types of gambling associated with gambling problems among Native Americans in North Dakota in this study.

A replication of the 1992 gambling survey was carried out in North Dakota in 2000 using telephone interviews with a random selection of adults aged 18. This study achieved a sample size of 5,002 and a response rate of 71%. The data were weighted to adjust for differential non-response by region, age, and gender. Problem gambling was assessed using the SOGS and the NODS, a DSM-IV instrument developed for the 1999 U.S. Gambling Impact and Behavior Study (Gerstein, Volberg, Harwood, & Christiansen, 1999). In 2000, the overall rate of past-year gambling in North Dakota was 70% and the prevalence of past-year problem gambling (SOGS-PY 3+) was 2.1% (Volberg, 2001). Individuals experiencing gambling problems in North Dakota in 2000 were more likely than others in the population to be aged 18 to 24, male, Native American, not married, to have less than a high school education, and to be disabled or unemployed. The main types of gambling associated with gambling problems in North Dakota in 2000 were horse race betting, casino table games, pull tabs and electronic gambling machines (EGMs).

The most recent gambling prevalence survey was carried out in North Dakota in 2016 (Kopel & Tran, 2017). This survey was conducted using telephone (landline and mobile) interviews with a random selection of 500 adults aged 18 and over residing in North Dakota. In 2016, the overall rate of past-year gambling was 36%, which is substantially lower than gambling participation rates in earlier surveys. Problem gambling was assessed using a DSM-5 screen and the Problem Gambling Severity Index (PGSI) which is the most widely used international population measure of problem gambling (Ferris & Wynne, 2001; Williams et al., 2012). Based on the DSM-5 measure, the prevalence of past-year Gambling Disorder in North Dakota in 2016 was 0.6%¹⁰ and demographic correlates of problem gambling included being male, Native American, experiencing problems with alcohol and tobacco and experiencing depression.

Table 1 provides a comparison of results from the general population gambling surveys conducted in North Dakota. It is notable that few changes were identified between 1992 and 2000, when directly comparable surveys were carried out. In contrast, the 2016 survey included a smaller sample of North Dakotans than the two earlier surveys and identified a substantially lower rate of past-year gambling as well as problem gambling. In 1992, the types of gambling most closely

⁹ J. Kurt Luger, now the Executive Director of the Great Plains Indian Gaming Association, was instrumental in obtaining the additional funding.

¹⁰ This compares to a DSM-IV prevalence rate of 0.3% in 2000.

associated with gambling problems in the North Dakota general population were pull tabs and bingo. In 2000, the types of gambling most associated with gambling problems were horse race betting, casino table games, pull tabs and casino EGMs.

Table 1 Comparing Adult Gambling Prevalence Surveys in North Dakota

Year	1992	2000	2016
Modality	RDD telephone	RDD telephone	RDD telephone
Sample size	1,517	5,002	500
Response rate	65%	71%	Not reported
Survey description	Gambling	Gambling	Recreation
Weighting	No	Yes	Yes
Past year gambling	73%	70%	36% (single item)
PG instrument	SOGS-L SOGS-PY	SOGS-PY NODS (PY)	DSM-5
Past year PG rate	2.0% (3+)	2.1% (3+) 1.2% (3+)	0.6% (4+)
PG characteristics	Under 30 Non-White HH income <\$25K	Male Aged 18-24 Native American Not married Less than HS Disabled/unemployed	Male Native American Problems w/alcohol, tobacco, depression
Year	1992		
Modality	Face-to-face		
Sample size	400		
Response rate	60%		
Survey description	Gambling		
Weighting	No		
Past year gambling	85%		
PG instrument	SOGS-L SOGS-PY		
Past year PG rate	12.3% (3+)		
PG characteristics	Female No HS HH income <\$25K		

The most recent information about gambling in North Dakota comes from state-level results from the National Survey on Gambling Attitudes and Gambling Experiences (NGAGE 1.0) (<https://www.ncpgsurvey.org/north-dakota/>). NGAGE 1.0 was carried out by the National Council on Problem Gambling in 2018, at the beginning of the current expansion of sports betting in the U.S. The sample size was boosted to ensure that at least 500 adults from each state were included. This survey was completed by members of online survey panels that are known to include large proportions of heavy gamblers (Mazar, Zorn, Becker, & Volberg, 2020; Volberg, Evans, Zorn, & Williams, 2022). A validated problem gambling measure was not employed in this survey so it is not possible to determine the prevalence of problem gambling in North Dakota in 2018. The past-year gambling participation rate in North Dakota, based on these data, was 78%.

Problem Gambling Services in North Dakota

Problem gambling services have been funded in North Dakota since 1997 when the legislature established a gambling disorder prevention and treatment fund; and assigned the Department of Health and Human Services (NDHHS) to administer the fund. This fund supported media and public awareness efforts, a problem gambling helpline, and outpatient treatment (Marotta, Bahan, Reynolds, Vander Linden, & Whyte, 2014). In 2015, legislation established annual funding of \$320,000 for problem gambling services in North Dakota. These funds were transferred from the North Dakota Lottery to the gambling disorder prevention and treatment fund, which is administered by NDHHS. The department contracted with Lutheran Social Services to manage the Gamblers Choice program, the sole provider of accredited counseling services for problem gamblers and their families in the state. In 2016, Gamblers Choice had two locations, in Fargo and Minot, and supported three accredited counselors who provided outpatient treatment including individual and group counseling services (Marotta et al., 2017).

In 2021, Lutheran Social Services which managed accredited counseling services for problem gamblers and their families in North Dakota, closed due to bankruptcy and the Gamblers Choice program was folded into the NDHHS Behavioral Health Division. As of 2025, the Behavioral Health Division's Gambling Disorder Prevention and Treatment team is comprised of three certified problem gambling counselors who provide outpatient treatment including individual and group counseling services in Fargo and Minot. Additionally, the NDHHS Behavioral Health Division operates an online resource for individuals and professionals concerned about problem gambling, [GamblerND](#).

According to legislative testimony in 2023 by Lisa Vig-Johnson, NDHHS Gambling Disorder Clinical Lead,¹¹ 75 individuals were treated for gambling problems in North Dakota in FY2022. In the fourth quarter of CY2022, Vig-Johnson reported that 1,556 individuals visited the GamblerND website and 19 individuals created accounts to access an online tool. There is no financial support for residential treatment for problem gambling in North Dakota and the closest residential treatment facility that admits problem gamblers is in Granite Falls, Minnesota. In 2023, the legislature passed a one-time increase in the charitable gambling donation for problem gambling services that became the primary source of funding for the North Dakota Recreation Activity Survey.

¹¹ [2023 North Dakota House Finance and Taxation HB 1524](#)

OVERVIEW OF METHODS

The North Dakota Recreation Activity Survey was completed in several stages. In the first stage of the project, the Gemini Research team and staff from the Social and Economic Sciences Research Center (SESRC) at Washington State University in Pullman, WA worked with staff at the NDHHS Behavioral Health Division to finalize the questionnaire and sampling frame. Ethical approval for the study was obtained from the Washington State University Institutional Review Board. SESRC programmed the questionnaire for computer-assisted web interviewing as well as creating a self-administered paper-and-pencil questionnaire and advance materials including letters and postcards. In the second stage of the project, the surveys were completed by 3,030 North Dakota adults aged 18 and over between July 8, 2024 and October 21, 2024. The third stage of the project involved data cleaning and weighting to increase confidence in generalizing results to the adult population of North Dakota. The final stage of the project entailed drafting and finalizing this report.

In this section, we present an overview of the research methods used in the study.

Ethical and Peer Review

The research protocol for the survey was reviewed by the Washington State University Institutional Review Board (IRB). All materials that respondents were expected to see (letters, postcards, and questionnaire) were submitted for review. This review ensured that the selection of respondents was appropriate, privacy was protected, informed consent was obtained, and safeguards were in place to protect the data. The IRB approved the study protocol on May 28, 2024.

Questionnaire Development and Description

The research team began developing the questionnaire for the survey in March, 2024. The questionnaire was based on questionnaires used in gambling prevalence surveys directed by Dr. Volberg in other states. The questionnaire was reviewed by NDHHS including upper management and by SESRC. Some changes were made to reflect the availability of specific types of gambling in North Dakota and to allow for comparisons with the last gambling survey carried out in North Dakota (Kopel & Tran, 2017). Once the questionnaire was finalized, it was converted to a self-administered online format and a self-administered paper-and-pencil format.

The North Dakota survey was introduced to potential participants as a survey of ‘recreation,’ to ensure that all adults contacted (both those who participated in gambling and those who did not) would be equally likely to complete the survey (Williams & Volberg, 2009). To increase the number of survey responses, the survey could be completed in either of two modes. First, the contacted adult was asked to complete the survey online using a unique identifier provided in the invitation letter. If the survey was not completed online, a paper-and-pencil copy of the survey was sent to the household.

Questionnaire Content

The questionnaire included sections on recreation, gambling attitudes, gambling behavior, importance of gambling as a recreational activity, awareness of problem gambling services,

gambling-related problems, help-seeking, physical and mental health, alcohol and drug use, and demographics. A copy of the questionnaire is included in Appendix A.

The Problem Gambling Measure (PGM) (Gooding, Williams, & Volberg, 2024; Williams & Volberg, 2010, 2014) was used to assess problem gambling in the North Dakota survey rather than the Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) that was used in the last gambling survey in North Dakota (Kopel & Tran, 2017). The PGM is a relatively new instrument that has superior sensitivity, positive predictive power, diagnostic efficiency, and overall classification accuracy compared to other problem gambling instruments (Christensen, Williams, & Ofori-Dei, 2019; Molander & Wennberg, 2022; Williams & Volberg, 2010, 2014). The PGM has recently been revised to improve its ability to assess the risk of future gambling-related harm and gambling problems as well as to predict cases in which gambling problems persist (chronicity) (Gooding et al., 2024). To enable comparison of the problem gambling prevalence rates in 2017 and 2024, the research team employed a post hoc standardization approach that adjusts results based on the PGSI to the PGM by accounting for critical survey methodology differences (Williams et al., 2012).

Sampling Strategy

To obtain a probability sample of North Dakota adults, Address Based Sampling (ABS) was used to ensure that all North Dakota households had a positive probability of selection into the sample regardless of telephone ownership (landline, cell phone, or no telephone). Within each sampled dwelling unit, the adult with the most recent birthday was selected as the survey respondent.

The original sample for the survey included 17,000 housing units with a targeted yield of approximately 18% or 3,000 completes. The sample was stratified by region to ensure that all eight of the North Dakota Human Health Service Regions had adequate representation in the final sample. The number of addresses selected was based on the anticipated proportion of addresses that could be resolved (the resolution rate), the proportion of resolved addresses that were eligible residential addresses (screening rate), and the anticipated contact and completion rates such that the expected completed responses would total 3,000.

Data Collection Procedures

The survey launched in July 2024 and concluded in October 2024. A sequence of contacts was followed with each sampled address until a completed survey was obtained, or some other final status (e.g., non-residential address, unscreened likely household, ineligible, partial interview) was determined. Mailings were scheduled approximately two weeks apart to give respondents enough time to receive and complete the questionnaire so that SESRC could remove completed cases from follow-up mailings.

All respondents were contacted through up to five mailings. The initial letter invited eligible respondents to participate in the survey online. Two weeks later, the first paper questionnaire packet was mailed to all respondents as an alternative to completing the survey. After two weeks, a reminder postcard was mailed to non-respondents. A second questionnaire packet was mailed after another two weeks to encourage non-respondents to participate in the survey either online or by returning the completed paper questionnaire. Finally, non-respondents were sent a reminder letter to inform them about the approaching survey closing data.

Sample Response Rate

A survey's response rate refers to the proportion of eligible individuals in the sample who actually complete a survey. The response rate is an important indicator of the potential for bias in surveys because it is possible that individuals who choose not to complete a survey may differ from those who do in meaningful ways. The response rate for the North Dakota survey was 20.8% (AAPOR Standard Definition 3). The response rate varied across the eight Human Health Service Zones; the South Central zone had the highest response rate at 25.6% while the Northwest zone had the lowest response rate at 13.2%.

In total, 53.5% of the questionnaires were self-administered online and 46.5% were completed using the self-administered paper-and-pencil format.

Data Cleaning, Weighting and Statistical Analysis

SESRC delivered the data to Gemini Research via a secure file transfer protocol (SFTP). The dataset contained 3,217 records and included both complete and incomplete questionnaire responses. After review, 26 ineligible surveys (due to not living in North Dakota for the last 12 months or not being aged 18 and over) were removed from the dataset. Further review for completeness identified another 161 surveys where respondents had not responded to 5 or more questions about participation in specific gambling activities and were separated from the completed surveys. A dataset of complete surveys (n=3,030) was created, carefully reviewed and cleaned. Several constructed variables were then created and added to the final dataset.

The ultimate goal of a survey is to generate unbiased estimates of behaviors in the target population. We followed a standard approach to weight the data to align the sample more closely with the adult population of North Dakota. Initially we assigned equal weights to each subject as if the North Dakota sample was a simple random sample of the North Dakota population of persons 18+ years old in 2023. Three additional steps were taken to create final weights. First, 2023 Census estimates of the ND 18+ population from Public Use Microdata Sample (PUMS) data were used to form raking variables. An iterative raking process was used until marginal weights converged to PUMS totals. Finally, the impact of trimming the weight range was evaluated based on the accuracy of estimates of key variables. Weights were trimmed so that the minimum weight was 1/8th the average weight, and the maximum weight was 8 times the average weight.

Table 2 compares key demographic characteristics of the sample, both weighted and unweighted, along with information about the North Dakota adult population. This is helpful to understand the impact of weighting on the results of the survey. A comparison of percentages in the weighted column and the PUMS 2023 column in the table shows a close match for gender and ethnicity. This is to be expected because these variables were used in the weighting. The percentages in columns for age, ethnicity and education are not as close, because the number of age, ethnicity and education groups used in weighting the sample was smaller than the number of groups displayed.¹²

¹² Four age categories (18-34, 35-49, 50-64, 65+), two ethnicity categories (White and non-White) and three education categories were used in the weighting procedure (high school or less, some college/college graduate, some postgraduate education).

Table 2 Demographics of North Dakota Survey sample

		Sample						PUMS 2023 ³	
		Unweighted ¹			Weighted ²				
		N ¹	%	SE	N ²	%	SE	%	SE
Gender	Male	1,124	39.3	0.01	306,854	51.8	0.001	51.6	0.001
	Female	1,717	60.1	0.01	280,357	47.3	0.001	48.4	0.001
	Other	16	0.6	0.02	5,694	1.0	0.001	--	--
Age	18-20	18	0.7	0.02	16,633	2.9	0.001	5.9	0.001
	21-24	46	1.7	0.02	30,680	5.3	0.001	8.2	0.001
	25-34	262	9.5	0.02	142,183	24.4	0.001	18.8	0.001
	35-54	787	28.5	0.02	183,499	31.5	0.001	30.7	0.001
	55-64	510	18.5	0.02	92,526	15.9	0.001	14.1	0.001
	65-79	895	32.4	0.02	89,603	15.4	0.001	17.1	0.001
	80+	246	8.9	0.02	28,174	4.8	0.001	5.2	0.001
Ethnicity	Native American	58	2.0	0.02	24,468	4.2	0.001	0.5	0.001
	White	2,669	93.9	0.00	503,467	85.5	<0.001	84.6	0.001
	Non-White	116	4.1	0.02	60,946	10.3	0.001	15.0	0.001
Education	Less than high school	41	1.5	0.02	18,819	3.2	0.001	6.0	0.001
	HS or GED	416	14.7	0.02	160,446	27.2	0.001	24.9	0.001
	Some college	1,014	35.9	0.02	162,825	27.6	0.001	37.8	0.001
	BA	885	31.3	0.02	168,614	28.6	0.001	21.9	0.001
	Graduate or professional degree	377	13.3	0.02	63,495	10.8	0.001	7.9	0.001
	PHD	93	3.3	0.02	15,445	2.6	0.001	1.5	0.001
Income	Less than \$15,000	92	3.3	0.02	22,120	3.8	0.001	5.6	0.001
	\$15,000 - <\$30,000	226	8.2	0.02	44,352	7.6	0.001	7.0	0.001
	\$30,000 - <\$50,000	316	11.4	0.02	76,294	13.1	0.001	12.6	0.001
	\$50,000 - <\$100,000	773	27.9	0.02	167,416	28.8	0.001	29.1	0.001
	\$100,000 -<\$150,000	553	20.0	0.02	118,635	20.4	0.001	22.6	0.001
	\$150,000 or more	430	15.5	0.02	88,801	15.3	0.001	23.1	0.001
	Prefer Not to Answer	379	13.7	0.02	62,900	10.8	0.001	--	--

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Source: U.S. Census Bureau, 2023 American Community Survey Public Use Microdata Sample (PUMS).

Item non-response was not a major issue in either of the data collection modes. Respondents were allowed to refuse to answer any question or to give a ‘don’t know’ response. The percentage of complete responses was extremely high for nearly all items.

Chi-square analysis and other nonparametric techniques were used to test for statistical significance in the sections of this report addressing gambling behavior, problem gambling prevalence and correlates of problem gambling. Statistically significant differences were determined based on non-overlapping confidence intervals and/or p-values at or below 0.05%. Descriptive statistics across the survey are presented in the sections of the report that follow.

Reporting

In reporting results, we have adopted several conventions to make the interpretation of the results easier. For example, we chose to suppress values in any cells that contained five or fewer respondents to prevent the potential identification of individuals who participated in the survey. We also chose to present many of our results in graphic form. We have not included the categories of “Don’t Know,” “Refused,” and “Other” in these graphs to make them easier to read. We have included all of the data in tables in Appendix B of the report for readers who prefer a tabular format.

In the body of the report, we have focused on five major demographic groups (i.e., gender, age, race/ethnicity, employment, annual household income). Tables in the appendices include additional demographic groups (educational status, marital status). Finally, we identify differences between groups only when the overall test for group differences is statistically significant based on a chi-square or t-test with an alpha of 0.05%. The p-values for these tests are included in the tables accompanying the text and in the appendix. Tables in the body of the report include information about the size of unweighted groups to aid comprehension; all tables in the appendices include the sizes of weighted and unweighted groups.

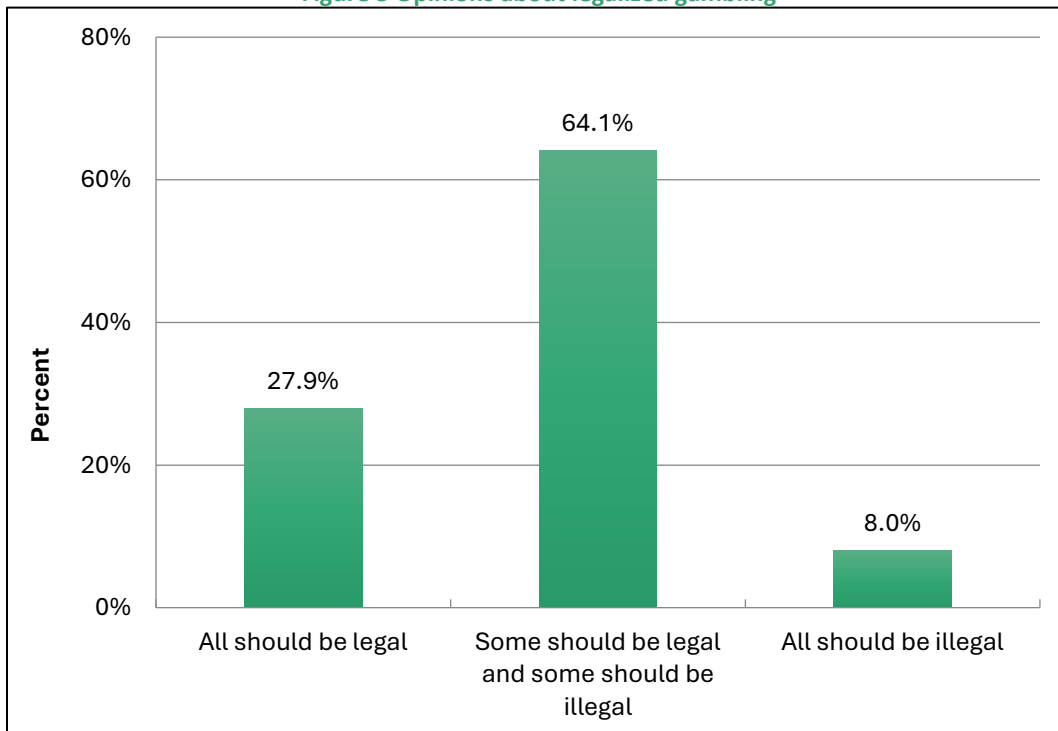
Attitudes Toward Gambling in North Dakota

Before examining gambling participation in the North Dakota population, it is helpful to consider differences in attitudes toward gambling in the state. Respondents were asked several questions about their views of gambling. Questions assessed respondents' beliefs about legalized gambling in general, the availability of gambling in North Dakota, and the overall benefit or harm of gambling in North Dakota. As noted above, statistically significant differences were determined based on non-overlapping confidence intervals and/or p-values at or below 0.05%.

Opinions about Legalized Gambling

All respondents were asked the following question: “Which best describes your opinion about legalized gambling?” with possible responses that all types of gambling should be legal, all types should be illegal, or that some types should be legal and some should be illegal. As shown below, the majority of North Dakota adults (64.1%) believed that some forms of gambling should be legal and some should be illegal, with only a minority reporting that all forms should be illegal (8.0%) but over one-quarter believing that all forms should be legal (27.9%).

Figure 3 Opinions about legalized gambling



Note: Table 25 in Appendix B presents this information in detail.

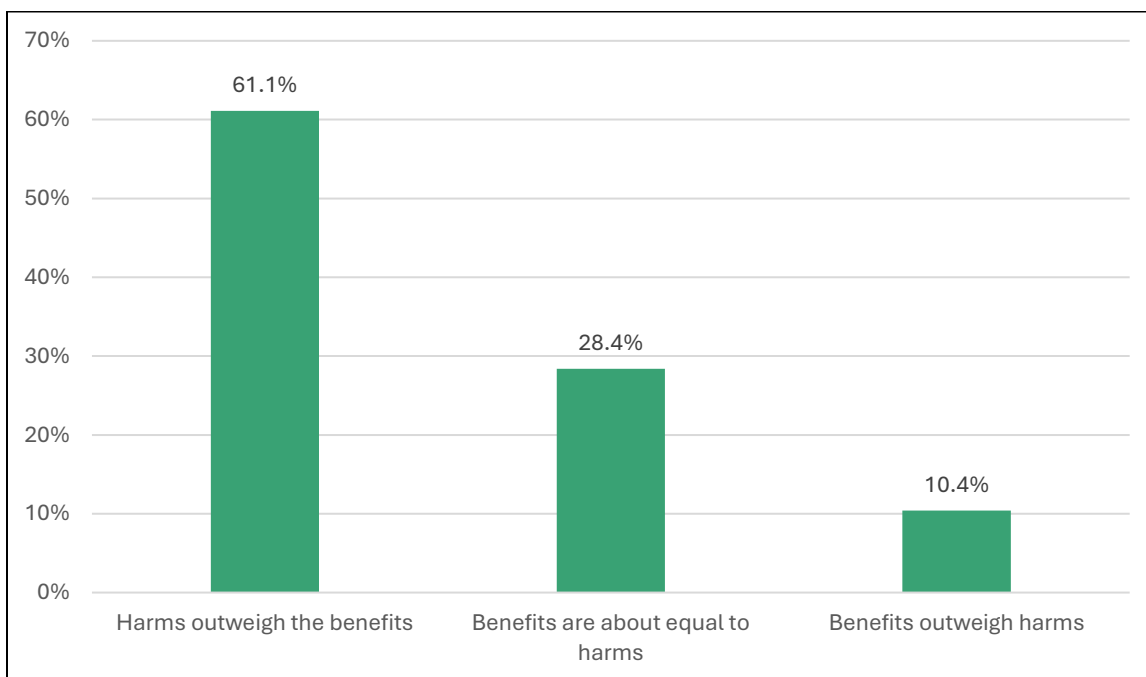
As shown in Table 25 in Appendix B, attitudes toward legalized gambling differed across important subgroups in the North Dakota adult population. Women in North Dakota were significantly less

likely than men to believe that all forms of gambling should be legal and more likely to believe that some forms should be legal and some should be illegal. Adults aged 55 and over were significantly less likely than younger adults to believe that all forms of gambling should be legal and more likely to believe that all forms should be illegal. Employed adults in North Dakota were significantly more likely than retired individuals to believe that all forms of gambling should be legal and significantly less likely to believe that all forms of gambling should be illegal. Those with annual household incomes under \$50,000 were significantly more likely than those with incomes between \$100,000 and \$150,000 to believe that all forms of gambling should be illegal.

Attitudes about Gambling Harm

Respondents were all asked: “Which best describes your belief about the benefit or harm that gambling has for society?” with possible responses that the benefits somewhat or far outweigh the harm, the benefits are about equal to the harm, and the harm somewhat or far outweighs the benefits. As seen below, there was a range of opinion in North Dakota concerning the relative harm versus benefit of gambling to society. That said, it is clear that many more people believed the harms outweigh the benefits (61.1%) than believed the benefits outweigh the harms (10.4%). Furthermore, this largely negative sentiment was universal across all demographic groups (i.e., gender, age, race/ethnicity, employment, income, marital status). Detailed information on differences in attitudes about gambling harm among different demographic groups is presented in Table 26 in Appendix B.

Figure 4 Beliefs about gambling benefits and harms

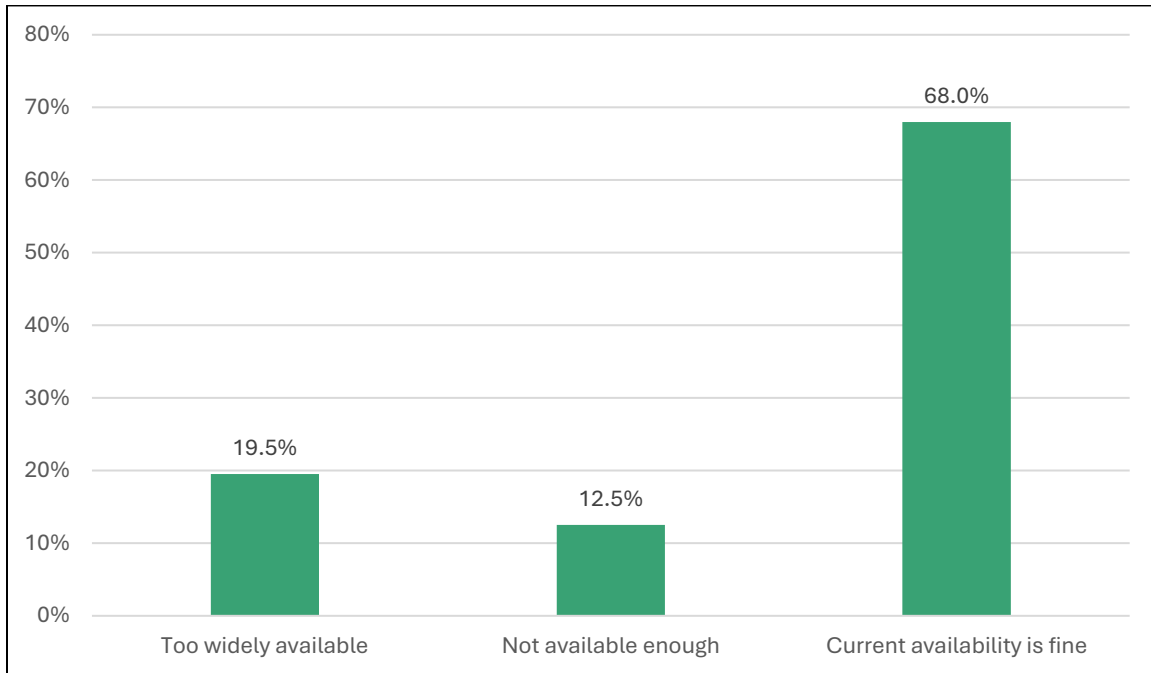


Note: Table 26 in Appendix B presents this information in detail.

Attitudes about Gambling Availability

Finally, all respondents were asked: “Which of the following best describes your opinion about gambling opportunities in North Dakota?” with possible responses being that gambling is too widely available, gambling is not available enough, and the current availability is fine. As shown below, the majority of North Dakota residents (68.0%) believed that the current availability of gambling in North Dakota was fine, with 12.5% reporting that it was not available enough, and 19.5% reporting that it was too widely available.

Figure 5 Beliefs about gambling availability



Note: Table 27 in Appendix B presents this information in detail.

As shown in Table 27 in the Appendix B, beliefs about the availability of gambling in North Dakota also differed significantly across subgroups in the North Dakota population. Women were more likely than men to believe that gambling was too widely available in North Dakota and less likely to believe that gambling was not available enough. Adults aged 55 and over were more likely than younger adults to believe that gambling was too widely available and less likely to believe that gambling was not available enough. Retired individuals were more likely than employed individuals to believe gambling was too widely available while employed individuals were more likely than retired individuals to believe that gambling was not available enough in North Dakota.

Summary

This section of the report presented information about attitudes toward gambling in North Dakota. Taken together, these results paint an incongruous picture of gambling attitudes in the state; although most people support legalization of some types of gambling, the majority also believe that the harms of gambling outweigh the benefits. The majority of North Dakota adults also believe that the current availability of gambling in the state is fine.

Gambling in North Dakota

This section of the report examines gambling participation among adults in North Dakota. To assess the full range of gambling available to North Dakota residents, the survey included questions about 12 different activities. At the beginning of the survey, all respondents were given the same definition of gambling. Respondents were told:

We define gambling as betting money or material goods on an event with an uncertain outcome in the hopes of winning additional money or material goods. It includes things such as lottery tickets, pull tabs, bingo, betting against a friend on a game of skill or chance, betting on horse racing or sports, investing in high risk stocks, etc.

Respondents were then asked detailed questions about their participation in specific gambling activities, including whether they had:

- Purchased lottery tickets such as MegaMillions, Powerball, Lucky for Life, Lotto America or 2BY2
- Purchased raffle tickets
- Bet money on sports (including social betting, fantasy sports, and e-sports)
- Bet money on electronic pull tab machines (Etabs) at bars or restaurants
- Bet money on charitable gambling at bars or restaurants (excluding Etabs)
- Bet money on bingo at a location besides a bar or restaurant
- Bet money on casino electronic gambling machines in person
- Bet money on any casino table game such as poker, blackjack, baccarat, roulette, craps, or bingo in person
- Bet on a horse race either at a racetrack or an off-track site
- Bet money against other people on things such as card games, golf, pool, darts, bowling, video games, board games, or poker outside of a casino
- Gambled online (including playing poker, buying lottery tickets, bingo, slots or casino table games for money, or playing interactive games for money)
- Engaged in any speculative financial market activities

Questions about each activity covered frequency of past-year participation and amount spent in a typical month. In assessing participation in sports betting, additional questions assessed what types of sports betting respondents had done as well as where and how they bet on sports. In assessing casino gambling, additional questions assessed whether respondents spent money on non-gambling activities and what North Dakota casino they went to most often. In assessing horse race betting, respondents were asked where they most often went to bet on horse races. Only past-year participation and typical monthly spending on online gambling were assessed; information was not obtained regarding frequency of participation in online gambling.

Gambling Participation

The results of the survey show that nearly three-quarters of North Dakota adults (73.7%) had participated in one or more gambling activities in the past year. This does not include financial speculation which is not universally viewed as a form of gambling. North Dakota adults who participated in one or more types of gambling in the past year were significantly more likely to be employed (rather than classified as ‘Other Employment Status’) and to have annual household incomes over \$100,000 (rather than lower incomes).

Table 3 presents past-year participation for all of the types of gambling included in the North Dakota survey. The table shows that past-year participation among North Dakota adults was highest for raffles and lottery games. Nearly half of North Dakota adults (48.0%) had purchased raffle tickets in the past year and two in five (40.2%) had purchased lottery tickets. Just over one-third of North Dakota adults engaged in charitable gambling at bars or restaurants excluding E-tabs (35.7%) and three in ten (30.2%) had gambled on E-tabs in the past year. About one-quarter of North Dakota adults had gambled on slot machines at casinos in the past year (23.4%). Past-year participation rates for casino table games, sports betting, bingo, private wagering, horserace betting and online gambling were all under 15%.

Table 3 Percentage of past-year gambling participation by gambling activity

	Unweighted N ¹	Weighted N ²	Past Year Participation	
			% ³	95% ³ CI
All gambling	2,221	434,880	73.7	(71.43, 76.00)
Raffles	1,563	287,243	48.0	(45.44, 50.62)
Lottery	1,244	240,958	40.2	(37.68, 42.77)
Charitable gambling at bars or restaurants (excluding E-tabs)	1,034	214,072	35.7	(33.22, 38.20)
Electronic pull tab machines (E-tabs)	864	181,097	30.2	(27.81, 32.58)
Casino electronic gambling machines (EGMs)	686	140,903	23.4	(21.24, 25.63)
Casino table games	290	73,258	12.2	(10.53, 13.93)
Sports betting	308	72,449	12.1	(10.40, 13.78)
Bingo	377	70,407	11.7	(11.6, 11.8)
Private wagering	288	69,875	11.6	(9.98, 13.31)
Online	92	25,088	4.2	(3.17, 5.26)
Horse racing	97	18,697	3.1	(2.23, 4.04)
Financial speculation	256	77,740	13.0	(11.26, 14.77)

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

The overall rate of past-year gambling participation in North Dakota in 2024 was much higher than the rate of past-year participation identified in North Dakota in the last gambling prevalence survey conducted in the state (Kopel & Tran, 2017). In 2016, researchers found that 36% of all adults in North Dakota had gambled in the past 12 months with raffles, slot machines and pull tabs having the highest past-year participation rates (16%, 13% and 13%, respectively). There are two possible

explanations for the much lower past-year gambling participation rate in North Dakota in 2016 compared to 2024. One contributing factor is that the 2016 survey was conducted by telephone rather than self-administered which is known to result in lower gambling participation rates due to social desirability bias (Williams & Volberg, 2010, 2014).¹³ Another contributing factor is that respondents were only asked detailed participation questions if they answered ‘yes’ to the question: “In the past 12 months, have you played or bet on any activities?” This method of assessing gambling participation produces significantly lower gambling participation rates than asking respondents about specific activities individually.

It is also interesting to compare overall gambling participation across regions in North Dakota. As shown in Table 28 in Appendix B, the highest rate of past-year gambling participation was in the Badlands (80.5%) and the lowest rate was in the North Central region (67.6%). Other regional differences in past-year participation were identified for E-tabs where the highest rate was in the Badlands (33.9%) and the lowest rate was in the Northeast region (23.7%) and for casino gambling machines where the highest rate was in the Northwest region (35.5%) and the lowest rate was in the Badlands (21.7%). Other regional differences in past-year participation rates were not statistically significant.

Demographics of Specific Gambling Activities

There were important differences in the demographic characteristics of individuals who engaged in specific gambling activities in the past year. This section of the report summarizes information presented in detail in Tables 29-46 in Appendix B. For easier interpretation, demographic differences are presented for each gambling activity in tabular form. Only statistically significant differences are shown in the tables summarizing differences in player characteristics in this section of the report. In some instances, these differences relate to demographic subgroups rather than to the group as a whole. As noted previously, statistically significant differences were determined based on non-overlapping confidence intervals and/or p-values at or below 0.05%.

Raffles

The table below shows that there were significant differences by age, race/ethnicity, employment status and household income among individuals who had purchased raffle tickets in the past year compared to those who had not engaged in this activity. In contrast to many other gambling activities, there was no gender difference in raffle participation in the past year.

Table 4 Significant differences among raffle players

More likely	Less likely
35 and older	Under 35
White	Non-white
Employed	Retired, Other
HH income over \$50K	HH income less than \$50K

Note: Table 29 in Appendix B presents this information in detail.

¹³ Social desirability bias refers to the tendency of survey respondents to answer questions in ways that will be viewed favorably by others and generally results in under-reporting undesirable attitudes and behaviors and over-reporting more desirable attributes.

Respondents who purchased raffle tickets in the past year participated in an average of 2.7 other gambling activities (see Table 48 in Appendix B). The gambling activities that past-year raffle players were most likely to have engaged in included playing the lottery (55.0%), charitable gambling excluding E-tabs (50.9%), E-tabs (41.4%) and EGMs (30.7%).

Lottery

The table below shows that there were significant differences by gender, age and income among past-year lottery players compared to those who had not purchased lottery tickets in the past year.

Table 5 Significant differences among lottery players

More likely	Less likely
Men	Women
35 and older	Under 35
HH income over \$150K	HH income less than \$50K

Note: Table 30 in Appendix B presents this information in detail.

Respondents who had played the lottery in the past year participated in an average of 2.8 other gambling activities (see Table 48 in Appendix B). The gambling activities that lottery players were most likely to have done in the past year included purchasing raffle tickets (69.1%), charitable gambling excluding E-tabs (50.4%), E-tabs (44.5%) and EGMs (34.9%).

Charitable Gambling excluding E-tabs

The table below shows that there were significant differences by age, race/ethnicity, employment status and household income among individuals who had engaged in charitable gambling apart from E-tabs in the past year.

Table 6 Significant differences among charitable gamblers

More likely	Less likely
Under 55	55 and older
White	Non-white
Employed	Retired, Other
HH income over \$150K	HH income less than \$100K

Note: Table 31 in Appendix B presents this information in detail.

Past-year charitable gamblers participated in an average of 3.6 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year charitable gamblers were most likely to have done included raffles (76.9%), E-tabs (66.2%), playing the lottery (60.6%) and EGMs (47.1%).

Electronic Pull Tabs (E-tabs)

The table below shows that there were significant differences by age, race/ethnicity, employment status and household income among individuals who had played E-tabs in the past year.

Table 7 Significant differences among E-tab players

More likely	Less likely
35-54	55 and older
White	Non-white
Employed	Retired, Other
HH income over \$100K	HH income less than \$50K

Note: Table 32 in Appendix B presents this information in detail.

Past-year E-tab players participated in an average of 3.8 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year E-tab players were most likely to have done included charitable gambling excluding E-tabs (79.3%), raffles (74.9%), playing the lottery (64.1%) and EGMs (55.4%).

Casino Electronic Gambling Machines (EGMs)

While those aged 18 to 34 and those with annual household incomes of \$150,000 and over were the groups most likely to have bet on EGMs in casinos in the past year, the differences from other groups in the population were not statistically significant. Table 33 in Appendix B presents this information in detail.

Past-year casino EGM players participated in an average of 4.1 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year casino EGM players were most likely to have done included charitable gambling excluding E-tabs (71.0%), raffles (70.0%), E-tabs (69.8%) and playing the lottery (62.5%).

Casino Table Games

The table below shows that there were significant differences by gender, age, employment status and household income among individuals who had played casino table games in the past year.

Table 8 Significant differences among casino table game players

More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired, Other
HH income over \$150K	HH income less than \$50K

Note: Table 34 in Appendix B presents this information in detail.

Past-year casino table game players participated in an average of 5.0 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year table game players were most likely to have done included charitable gambling excluding E-tabs (84.1%), raffles (78.6%), E-tabs (68.6%), playing the lottery (67.9%) and EGMs (67.9%).

Respondents who had played casino EGMs or casino table games in the past year were asked additional questions about their casino gambling. These respondents were asked what percentage of their time spent gambling at casinos in person was at North Dakota casinos and, if the percentage was greater than zero, which North Dakota casino they were most likely to patronize. These respondents were also asked about the amount of money they spent at North Dakota casinos on activities other than gambling since non-gambling spending can be a significant economic benefit of regional casinos.

Among respondents who had gambled at casinos in the past year, 31.0% had not gambled at a casino in North Dakota. An almost identical proportion of these respondents (31.5%) had only gambled at North Dakota casinos and another 26.2% had gambled at North Dakota casinos more than 50% of the time. Respondents who had gambled at North Dakota casinos in the past year were most likely to have patronized Dakota Magic Casino (44.8%) followed by Prairie Knights Casino (23.5%) and Four Bears Casino (22.7%). The majority (76.2%) of respondents who gambled at North Dakota casinos in the past year spent under \$200 on non-gambling amenities, including food and beverages, lodging and entertainment.

Sports Betting

The table below shows that there were significant differences by gender, age, employment status and household income among individuals who had bet on sports in the past year.

Table 9 Significant differences among sports bettors

More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired
HH income over \$150K	HH income less than \$100K

Note: Table 38 in Appendix B presents this information in detail.

Past-year sports bettors participated in an average of 4.3 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year sports bettors were most likely to have done included raffles (78.2%), charitable gambling excluding E-tabs (69.8%), playing the lottery (60.7%) and E-tabs (58.1%).

Respondents who gambled on sports in the past year were asked about the type of sports betting they engaged in as well as where and how they bet on sports. Two-thirds of sports bettors (67.6%) indicated that they had bet on sports in office pools or with friends and family. About half of all sports bettors indicated that they had bet on professional sporting events (55.5%) and fantasy sports betting (47.6%). Just over one-quarter of sports bettors (29.8%) indicated that they had bet on sports pools and on online sportsbooks outside of North Dakota (28.8%). Finally, 20.1% of sports bettors said they had bet on sports at legal land-based sportsbooks outside of North Dakota.

Bingo

The table below shows the only significant difference between individuals who had played bingo in the past year and those who had not was gender. Bingo was the only form of gambling that was more popular among women than men.

Table 10 Significant differences among bingo players

More likely	Less likely
Women	Men

Note: Table 41 in Appendix B presents this information in detail.

Past-year bingo players participated in an average of 4.0 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year bingo players were most likely to

have done included raffles (71.6%), charitable gambling excluding E-tabs (69.0%), E-tabs (57.8%) and playing the lottery (56.2%).

Private Wagering

The table below shows that there were significant differences by gender, age, employment status and household income among individuals who had gambled or bet money against other people in the past year.

Table 11 Significant differences among private bettors

More likely	Less likely
Men	Women
18-34	55 and older
Employed	Retired
HH income over \$150K	HH income \$50K - \$150K

Note: Table 42 in Appendix B presents this information in detail.

Past-year private bettors participated in an average of 4.1 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year private bettors were most likely to have done included raffles (75.3%), charitable gambling excluding E-tabs (70.5%), playing the lottery (59.0%) and E-tabs (58.0%).

Horse Racing

While those with annual household incomes of \$150,000 and over were most likely to have bet on horse races in the past year, the differences from other income groups were not statistically significant. Table 43 in Appendix B presents this information in detail.

Past-year horserace bettors participated in an average of 5.5 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year horserace bettors were most likely to have done included playing the raffles (78.4%), charitable gambling excluding E-tabs (76.3%), lottery (71.1%), Etabs (59.8%), EGMs (56.7%) and casino table games (41.2%).

Respondents who bet on horseraces in the past year were asked where they went most often to bet. Nearly half of past-year horserace bettors (46.4%) identified the North Dakota Horse Park in Fargo as the place they went most often to bet followed by off-track betting sites elsewhere in the state (29.9%). Only 3.1% of horserace bettors identified racetracks apart from North Dakota Horse Park as the place they went most often to bet.

Online Gambling

The table below shows that there were significant differences by age and employment status among individuals who had bet online in the past year.

Table 12 Significant differences among online gamblers

More likely	Less likely
18-34	55 and older
Employed, Other	Retired

Note: Table 45 in Appendix B presents this information in detail.

Past-year online gamblers participated in an average of 4.6 other gambling activities in the past year (see Table 48 in Appendix B). The gambling activities that past-year online gamblers were most likely to have done included playing the lottery (72.8%), E-tabs (62.0%), raffles (56.5%), EGMs (53.3%) and charitable gambling excluding Etags (52.2%).

Respondents who gambled online in the past year were asked to identify the main type of online gambling they engaged in. About one-third of online gamblers (35.5%) identified Lotto draw games as their main type of online gambling. Another 14.6% identified their main type of online gambling as slot machines or other EGMs and 12.1% identified bingo as their main type of online gambling.

Gambling Expenditures

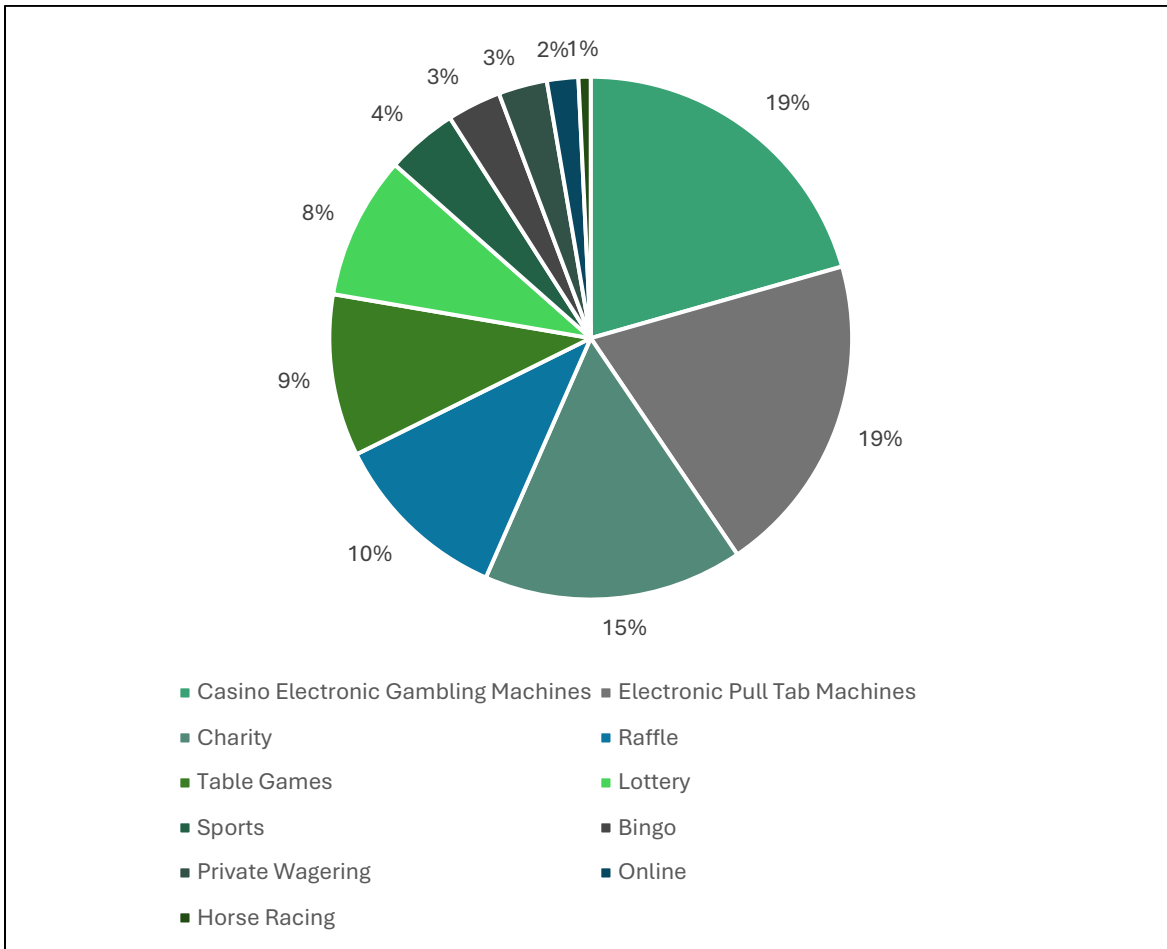
Expenditures on gambling are an important measure of gambling participation. However, surveys have consistently obtained significant mismatches between self-reports of gambling expenditures and actual gambling revenues (Volberg, Gerstein, Christiansen, & Baldridge, 2001; Williams & Wood, 2007; Wood & Williams, 2007). There are several reasons for this lack of correspondence between reported expenditures and actual revenues, including the way in which expenditure questions are asked, respondents' desire to appear socially acceptable, and faulty perceptions of wins and losses (Blaszczynski, Dumlao, & Lange, 1997; Volberg et al., 2001; Williams, Belanger, & Arthur, 2011; Wood & Williams, 2007). Despite these limitations, research has shown that there are certain ways of asking gambling expenditure questions that produce a better match to actual revenues (Williams et al., 2017; Wood & Williams, 2007). This is the approach used in the North Dakota survey.

Assessing Gambling Expenditures in North Dakota

To assess gambling expenditures in North Dakota, respondents who reported participating in specific types of gambling in the past year were asked "In the past 12 months, how much money do you estimate you have spent on [gambling activity] in a typical month?" Respondents were required to answer in categories of spending rather than provide specific amounts. Respondents were also given the option to check a box indicating "I won more than I lost in the past 12 months on [gambling activity]" if they felt that they were an overall winner in a typical month. Our analysis entailed determining the proportion of total reported expenditures accounted for by each of the gambling activities included in the survey. Figure 6 presents the proportion of total reported expenditures derived from each type of gambling.

Figure 6 shows that relative to other gambling activities, respondents reported spending the largest proportion (19.1%) on casino EGMs followed closely by E-tabs (18.5%) and other forms of charitable gambling (14.9%). Other types of gambling accounted for much smaller proportions of total reported expenditures, ranging from 10.3% for raffles and 9.3% for casino table games to 1.8% for online gambling and less than 1% for horserace betting. Taken together, this figure illustrates that relative to other forms of gambling, casino EGMs and E-tabs were the gambling activities with which respondents were most engaged, followed by other charitable gambling, raffles and casino table games.

Figure 6: Proportion of reported expenditures on different gambling activities



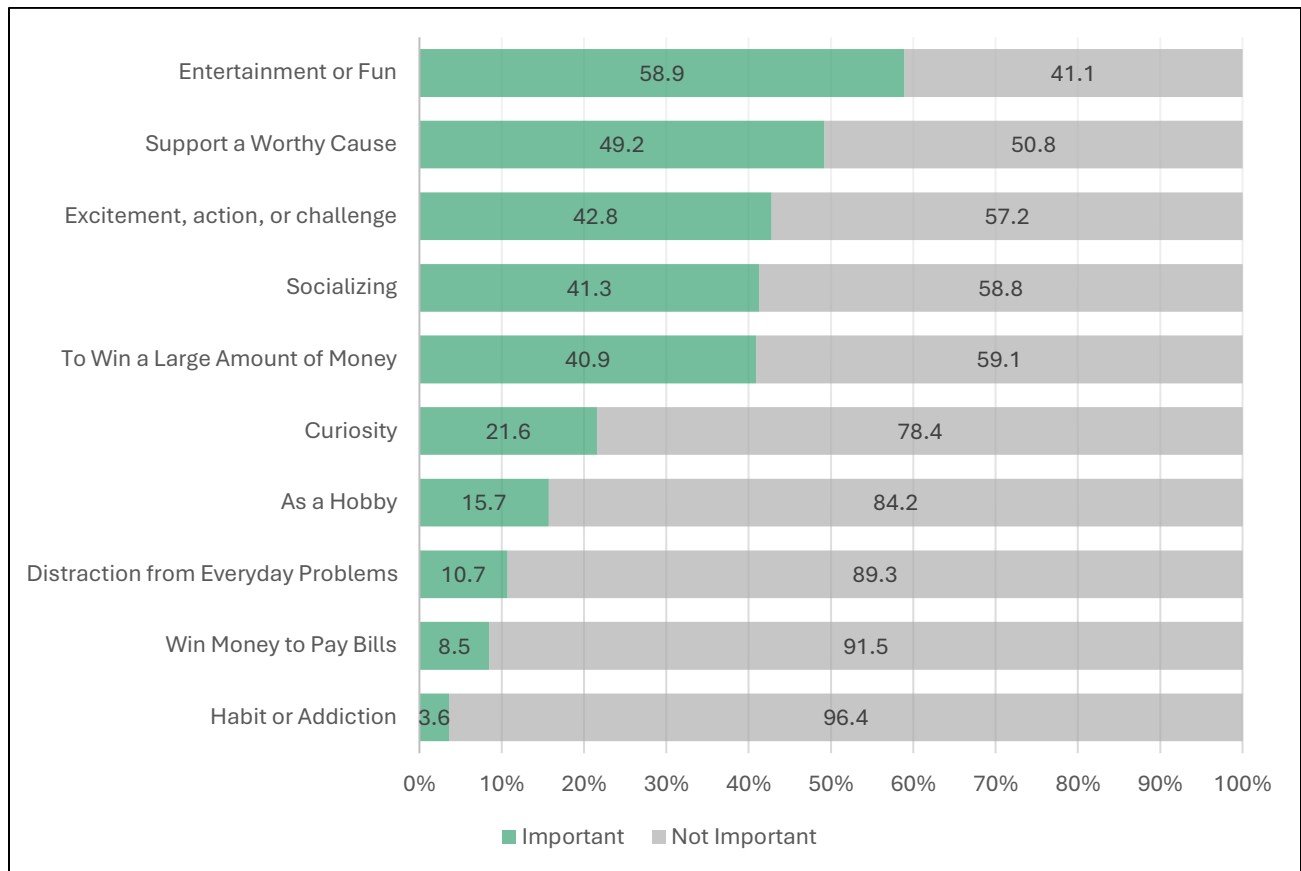
Note: Table 49 presents this information in detail.

Gambling expenditure data was collected differently in the 2016 North Dakota survey compared to the 2024 survey. In 2016, annual frequency of play for each gambling activity was multiplied by the amount that respondents spent each time they engaged in that activity to derive annual expenditures per activity per respondent (Kopel & Tran, 2017). Annual gambling expenditures on specific types of gambling in North Dakota in 2016 were highest for casino EGMs (as was the case in 2024), casino table games and poker.

Reasons for Gambling

An important question in studies of gambling is why people choose to gamble. Respondents who gambled in the past year were asked “How important are each of the following reasons as to why you gamble?” Figure 7 presents information about the importance of different reasons for gambling among past-year gamblers in North Dakota.

Figure 7 Reasons for gambling among past-year gamblers



Note: Table 50 in Appendix B presents this information in detail.

Figure 7 shows that the most important reason for gambling among past-year gamblers in North Dakota was entertainment or fun followed by supporting worthy causes. Other important reasons for gambling among past-year gamblers in North Dakota included excitement, action or a challenge, socializing, and winning a large amount of money. Less important reasons included curiosity, as a hobby, as a distraction from everyday problems, to win money to pay bills and out of habit.

Summary

In this section of the report, we have examined gambling behavior among North Dakota adults in 2024 along with the demographic characteristics associated with participation in gambling overall and specific types of gambling. The most popular forms of gambling in North Dakota in 2024 included raffles, playing the lottery, charitable gambling at bars or restaurants and E-tabs. We noted that the rate of past-year gambling participation in North Dakota was much higher in 2024 compared with the last gambling prevalence survey carried out in 2016. Reported expenditures on gambling in North Dakota were highest for casino EGMs, E-tabs and other forms of charitable gambling. This compares to casino EGMs, casino table games and poker in 2016.

Turning to specific types of gambling, we identified differences in the demographic characteristics of North Dakota adults who gambled on specific types of gambling in the past year. Finally, we noted that the importance of reasons for gambling among past-year gamblers. In the next section of the report, we present detailed information about problem gambling in North Dakota.

Problem Gambling in North Dakota

One of the main negative impacts of expanded gambling availability tends to be an increase in problem gambling (Williams, Rehm, & Stevens, 2011). In this section of the report, we discuss how problem gambling was measured in the North Dakota survey and present information about the prevalence of problem gambling and the number of problem gamblers in North Dakota. We then provide information about the demographic distribution of at-risk and problem gambling in North Dakota as well as differences in problem gambling prevalence among people who have participated in specific types of gambling. In the next section of the report, we discuss differences between recreational, at-risk, and problem gamblers in North Dakota including demographics, game preferences, gambling expenditures, and comorbid conditions.

Measuring Problem Gambling

Many instruments exist for the population assessment of problem gambling. Worldwide, the most commonly used instruments are the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987), the Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) and various scales based on the DSM diagnostic criteria for pathological (now disordered) gambling (e.g., Fisher, 2000; Gerstein et al., 1999; Kessler et al., 2008; Petry, Stinson, & Grant, 2005).¹⁴ One or more of these instruments have been used in 95% of adult problem gambling prevalence surveys carried out internationally since 1975 (Williams et al., 2012).

Measuring Problem Gambling in North Dakota

Historically, the use of different assessment instruments has made it difficult to compare problem gambling prevalence rates over time or across jurisdictions. The few studies that have directly compared these instruments within the same sample generally favor the Problem and Pathological Gambling Measure (PPGM) (Christensen et al., 2019; Molander & Wennberg, 2022; Williams & Volberg, 2014). Relative to other instruments, the PPGM varies less as a function of gender, age and ethnicity, is better suited to capture the multidimensional nature of problem gambling (PG) and is better able to differentiate between levels of severity.

The unique scoring system of the PPGM is part of the reason behind its better performance. Unlike other instruments which use a total score threshold to designate problem gambling status, the PPGM requires a particular pattern of item endorsement consistent with the key elements defining problem gambling: individuals must report experiencing **both** impaired control and experiences of harm to receive a PG designation. Additionally, the PPGM aims to improve classification accuracy by limiting false positives and false negatives. The former is accomplished by requiring individuals to have gambled monthly or more often in the past year to receive a past-year PG designation. The latter is achieved by classifying individuals as having PG if they report sub-threshold

¹⁴ In 2013, the American Psychiatric Association (2013) changed the name of the clinical disorder of 'pathological gambling' to 'disordered gambling,' redefined it as a behavioral addiction and updated the diagnostic criteria.

symptomatology but have gambling frequency and expenditures equivalent to individuals unambiguously identified as having PG.

Despite its better performance in the assessment of PG, other categories of the PPGM have lacked such rigor until recently. This is particularly true of the ‘at-risk’ category, which like other problem gambling instruments is operationalized as levels of symptomatology below the PG threshold. While the label ‘at-risk’ implies the possibility of developing more serious problems, it is also the case that endorsing low levels of symptomatology may be a ‘wake-up call’ for individuals to reduce their gambling involvement. This view is supported by several longitudinal studies of gambling conducted internationally, which have found the ‘at-risk’ category of both the PGSI and the PPGM to be poorly predictive of future problem gambling (e.g., Billi, Stone, Marden, & Yeung, 2014; el-Guebaly et al., 2015; MAGIC Research Team, 2021).

A related issue is a recent shift internationally from a narrow focus on problem gambling to a broader concern with gambling-related harm. This shift represents a change from a strictly addiction-based model toward a public health model focused on populations and emphasizing a continuum of gambling harms and/or problems (Korn & Shaffer, 1999). Studies show that while those with PG experience higher levels of individual harm, the majority of harm in the population actually occurs in lower-risk groups (Browne, Volberg, Rockloff, & Salonen, 2020; Canale, Vieno, & Griffiths, 2016; Raisamo, Mäkelä, Salonen, & Lintonen, 2015; Volberg, Zorn, Williams, & Evans, 2021). This new focus is also evidenced in the newly developed Lower Risk Gambling Guidelines (LRGG; Hodgins et al., 2022; Young et al., 2021, 2024) which identify risk factors for gambling-related harm rather than problem gambling.

Gooding, Williams and Volberg (2024) used data from a recent Canadian longitudinal study of gambling to revise the PPGM and test the possibility of better discriminators for ‘at-risk’ gamblers who would be most likely to develop more severe gambling problems. The resulting instrument includes the original 14 items that make up the PPGM and one new item measuring perception of gambling problems and was renamed the Problem Gambling Measure (PGM). The study identified five robust predictors of future gambling harm and problem gambling which allow for distinctions between ‘moderate’ at-risk gambling (only 13.1% of people classified in this way will be classified as problem gamblers one year later) and ‘high’ or ‘very high’ at-risk gambling (28.1% and 42.9% of people classified in this way will be classified as problem gamblers one year later). The study also identified that a score of 7 and higher on the PGM was predictive of continued problem gambling one year later (i.e., chronicity).

For the North Dakota survey, we used the Problem Gambling Measure (PGM) to assess gambling problems and harms. Table 13 presents the PGM typology and the criteria required for classification across these groups.

Table 13 Basis for classifying respondents using the PGM

Category	Classification criteria
Non-Gambling	Has not gambled in the past 12 months
Recreational Gambling	Has gambled in past 12 months Total score 0
At-Risk Gambling	Does not meet criteria for Problem Gambling Total score 1+ Total PGM score: 0 = 0; 1-2 = 2; 3+ = 5 Score on PGM15: 0 = 0; 1 = 2 Number of types of gambling monthly: 0-2 = 0; 3-4 = 1; 5+ = 4 Largest amount lost in single day: <\$200 = 0; \$200-\$499 = 1; \$500+ = 3 Importance of gambling as recreational activity: not very important = 0; somewhat important = 1; quite/very important = 2
Moderate At-Risk	Total score 1+
High At-Risk	Total score 4+
Very High At-Risk	Total score 8+
Problem Gambling	Has gambled at least once a month in past 12 months Impaired Control score 1+ Problems score 1+ Total score of 2+ with score of 7+ predictive of continued PG in next 12 months OR Total score 3+ Gambling frequency and expenditure ≥ PG median

Problem Gambling Prevalence

In epidemiological research, prevalence is a measure of the number of individuals in the population with a disorder at one point in time. In epidemiology, **prevalence** differs from **incidence**, which is a measure of the number of new cases that arise over a specific period of time. Problem gambling prevalence refers to the proportion of individuals in the population who meet the criteria for problem gambling within the past 12 months. In problem gambling prevalence surveys, individuals are classified on the basis of their responses to a valid and reliable problem gambling instrument such as the PGM.

Prevalence rates are based on samples rather than the entire population. Even when a sample is representative of the population from which it is drawn, an identified value—such as the prevalence rate—is still an estimate and can be different, even if only slightly, from the ‘true’ value. One important source of uncertainty in generalizing from a sample to the population—sampling error—is generally presented as a measure of the uncertainty around the identified value. This measure is called the confidence interval and it is a gauge of how certain we are that the result we have identified is accurate. The conventional size of the confidence interval is 95% which means that, if a researcher drew 100 samples from the same population, the identified value would fall between the lowest and highest values of the confidence interval 95 times.

Generally speaking, narrower confidence intervals are considered more reliable because the identified value will not be very different in other samples drawn from the same population. As sample size increases, confidence intervals typically narrow. Conversely, as sample size decreases, confidence intervals widen. While the overall size of the sample for the North Dakota survey is large, there are some groups in the sample that are quite small. In particular, because the overall prevalence of problem gambling tends to be low, readers are urged to treat estimates based on particularly small groups with caution and to pay attention to the confidence intervals surrounding these estimates.

Table 14 presents information about the distribution of the North Dakota sample across the PGM typology. The table shows that 53.75% of North Dakota adults were recreational gamblers who gambled in the past year without any difficulties; 14.59% of North Dakota adults were engaged in moderately risky gambling behavior; 3.96% were engaged in high or very high risky gambling behavior; and 1.42% of North Dakota adults were classified as problem gamblers.

Table 14 Classification of respondents on the PGM

	Sample Size			
	Unweighted N ¹	Weighted N ²	Percent ³	95% CI ³
Non-gambler	752	155,068	26.29	(24.00, 28.57)
Recreational gambler	1,728	317,081	53.75	(51.16, 56.34)
At-risk gambler (moderate)	360	86,049	14.59	(12.75, 16.42)
At-risk gambler (high/very high)	95	23,366	3.96	(2.95, 4.97)
Problem gambler	38	8,382	1.42	(0.81, 2.04)

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

Population Estimates

According to the most recent estimate, the adult population of North Dakota (18+) in 2023 was 603,608 (U.S. Census Bureau, 2024). Based on the point estimates and confidence intervals presented in Table 14, we estimate that between 4,900 (0.81%) and 12,300 (2.04%) North Dakota adults were problem gamblers in 2024. An additional 17,800 (2.95%) to 30,000 (4.97%) North Dakota adults were high or very high at-risk gamblers while between 77,000 (12.75%) and 99,100 (16.42%) were moderate at-risk gamblers.

As a reminder, approximately 15% of moderate at-risk gamblers are likely to transition to problem gambling in 2025;¹⁵ this represents approximately 12,900 adult North Dakotans. Between 28% and 43% of high and very high at-risk gamblers are likely to transition to problem gambling in 2025; this represents between 6,400 and 9,800 adult North Dakotans. Furthermore, if we consider that each problem gambler and at-risk gambler is the source of social and economic impacts that ripple out to their families, friends, employers, and communities, the proportion of the North Dakota population affected by gambling-related problems is even higher.

¹⁵ While the PGM validation study established that 13.1% of moderate at-risk gamblers transitioned to problem gambling status in the following year, additional research is needed to determine how precise this estimate is across different jurisdictions and at different points in time.

Prevalence by Type of Gambling

Another way to understand the relationship between gambling involvement and gambling-related problems is to examine the prevalence of problem gambling among individuals who participate in specific types of gambling. Table 15 shows the prevalence of at-risk and problem gambling among respondents who participated in the past year in specific types of gambling.

Table 15 shows that while the prevalence of problem gambling was 1.4% in the entire adult North Dakota population and 1.9% among past-year gamblers in North Dakota, the prevalence of problem gambling was 4.8% among past-year casino EGM players, 4.5% among past-year online gamblers, 4.1% among past-year bingo players, 4.0% among past-year E-tab players and 3.8% among past-year sports bettors. The table also shows that rates of at-risk gambling were higher among respondents who participated in specific types of gambling compared to the adult population of North Dakota and among those who gambled in the past year. Compared to the adult North Dakota population, rates of high and very high at-risk gambling were between 140% and 370% higher among past-year participants in every type of gambling included in the survey with the exception of raffles, the lottery and charitable gambling excluding E-tabs.

Table 15 Differences in prevalence by type of gambling

	Unweighted N ¹	Weighted N ²	% ³	At risk gambling (moderate) 95% CI ³	At risk gambling (high/very high) % ³ 95% CI ³	Problem gambling % ³ 95% CI ³
Total sample/ population	2,973	589,946	14.6	(12.75,16.42)	4.0 (3.0, 5.0)	1.4 (0.81, 2.04)
All gambling	2,221	434,880	19.8	(17.4,22.1)	5.4 (4.0,6.7)	1.9 (1.1,2.7)
Raffles	1,563	287,243	19.6	(16.9,22.3)	6.1 (4.5,7.7)	1.7 (0.8, 2.6)
Lottery	1,244	240,958	22.0	(18.8,25.3)	7.5 (5.5,9.6)	2.0 (0.9,3.1)
Private wagering	288	69,875	30.7	(23.3,38.2)	16.6 (10.6,22.6)	2.5 (0,5.0)
Horse racing	97	18,697	34.5	(22.1,46.9)	16.2 (6.6,25.8)	2.7 (0, 6.9)
Casino table games	290	73,258	36.2	(28.5,44.0)	17.2 (11.1,23.3)	2.8 (0.1,5.5)
Charitable gambling at bars or restaurants (excluding E- tabs)	1,034	214,072	26.9	(23.3,30.6)	9.4 (7.0,11.9)	2.9 (1.5,4.3)
Sports betting	308	72,449	36.7	(29.2,44.3)	13.8 (8.4,19.2)	3.8 (0.8,6.8)
Electronic pull tab machines (E-tabs)	864	181,097	29.2	(25.1,33.3)	10.6 (7.8,13.4)	4.0 (2.2,5.8)
Bingo	377	70,407	25.9	(19.6,32.1)	11.9 (7.3,16.6)	4.1 (1.3,7.0)
Online	92	25,088	42.3	(27.7,56.9)	18.3 (6.8,29.7)	4.5 (0, 10.5)
Casino EGMs	686	140,903	34.9	(29.8,40.0)	14.1 (10.4,17.8)	4.8 (4.7, 4.9)
Financial speculation	256	77,740	27.0	(19.3,34.7)	14.1 (8.0,20.1)	2.3 (0, 5.0)

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

Comparing North Dakota in 2016 and 2024

One consideration is how the problem gambling prevalence rate in North Dakota in 2024 compares to the prevalence rate identified in North Dakota in 2016. A study by Williams, Volberg, and Stevens (2012) identified the main methodological differences across all of the 202 prevalence surveys conducted internationally and developed weights that could be applied to obtain ‘standardized’ prevalence rates for nearly all existing problem gambling prevalence studies. This approach can be used to compare the results from North Dakota in 2024 to the 2016 North Dakota survey.

The 2016 problem gambling prevalence survey in North Dakota was conducted by telephone (landline and cell phones) and included the DSM-5 as well as the PGSI to assess gambling problems. The survey was described to potential respondents as a ‘recreation activity’ survey and the achieved sample was approximately 500. Post-hoc weights were applied to improve the alignment of the sample with the North Dakota adult population. Based on the limited information in the report, the survey response rate appears to have been low (less than 5%). While the DSM-5 was the primary method used to categorize respondents, Figure 7 in the report provides a comparison of the DSM-5 and the PGSI and shows that the prevalence of moderate risk and problem gambling based on the PGSI (3+) in North Dakota in 2016 was 0.8%.

Standardizing the 2016 PGSI 3+ prevalence rate to the PGM requires adjusting for the different instruments used in 2016 and 2024, for the use of telephone interviewers, and for a response rate less than 45%. The adjustment for use of the PGSI 3+ is 0.58 while the adjustment for telephone administration and a low response rate is 2.18. The standardized problem gambling prevalence rate for North Dakota in 2016 is therefore 1.0% which is not significantly different from the rate of 1.4% identified in 2024.

$$0.8\% \times 0.58 \times 2.18 = 1.0\%$$

Comparing North Dakota to Other States

A final consideration concerns how the problem gambling prevalence rate in North Dakota in 2024 compares to prevalence rates identified in other U.S. states. Table 16 shows key details of the 13 problem gambling surveys that have been conducted in U.S. states since 2015. The standardization approach described above was used to generate prevalence rates in these states that can be compared to the North Dakota prevalence rate in 2024.

Table 16 Recent U.S. adult problem gambling prevalence studies

Year	State	Administration Modality	Response Rate	Sample Size	Past Year Gambling Prevalence	Problem Gambling (PG) Instrument	PG Rate	Survey Description	Standardized Problem Gambling Rate
2015	New Jersey	Telephone interview (cell + landline)	5.3%	1,500	69.8%	PGSI 8+ ¹	0.6%	health and recreation	$0.6 * 2.17 * 2.18 * 1.0 = \mathbf{2.8\%}$
2017	Maryland	Telephone interview (cell + landline)	6.6%	3,761	87.0%	NODS 3+	1.9%	views on gambling	$1.9 * 1.19 * 2.18 * 0.51 = \mathbf{2.5\%}$
2017	Kansas	ABS: self-administered paper or online	Not reported	1,755	48.0% (monthly)	Mix of 8 PGSI & NODS items	2.7% high risk	Kansas gambling survey	Cannot be calculated
2018	Iowa	Telephone interview (cell + landline)	26.3%	1,761	73.8%	PGSI 8+	0.8%	public attitudes and behaviors toward gambling	$0.8 * 2.17 * 2.18 * 0.51 = \mathbf{1.9\%}$
2019	Minnesota	ABS: self-administered paper or online	25.0%	8,512	67.0%	PPGM	1.3%	recreation and well-being	$1.3 * 1.0 * 1.0 * 1.0 = \mathbf{1.3\%}$
2020	New York	ABS: self-administered paper or online	27.9%	3,845	29.4%	PPGM	0.7%	health and recreation	$0.7 * 1.0 * 1.0 * 1.0 = \mathbf{0.7\%}$
2021	Illinois	ABS: self-administered online (85.7%); phone interview (14.3%)	4.1%	2,029	68.4%	PPGM	3.8%	Illinois survey of gambling	$3.8 * 1.0 * 1.1 * 0.51 = \mathbf{2.1\%}$
2021	Washington State	ABS: self-administered paper or online	19.2%	9,413	43.5%	PGSI 5+	1.5%	health and recreation	$1.5 * 1.0 * 1.0 * 1.0 = \mathbf{1.5\%}$
2021/2022	Massachusetts	ABS: self-administered paper or online (98.3%); phone interview (1.7%)	27.5%	6,293	60.2%	PPGM	1.4%	health and recreation	$1.4 * 1.0 * 1.0 * 1.0 = \mathbf{1.4\%}$
2022	Indiana	ABS: self-administered paper or online	19.6%	855	89.3%	NODS 5+ PGSI 8+ DSM-5 4+ ²	1.6% 1.3% 2.3%	Unclear: "invitation letter provided a description of the study"	$1.6 * 2.60 * 1.0 * 0.51 = \mathbf{2.1\%}$ $1.3 * 2.17 * 1.0 * 0.51 = \mathbf{1.4\%}$
2022	Oklahoma	Unspecified mix of multimodal ABS + online panel + social media recruitment	N/A because of inclusion of convenience samples	4,035	57.9%	DSM-5 4+ (derived from PPGM questions) ²	6.3%	"recreation and leisure activities, including betting and gambling"	Cannot be calculated
2022	Missouri			3,259	63.9%		4.1%		
2023	Connecticut	ABS: self-administered online	11.8%	5,259	69.2%	NODS 3+ PPGM	1.4% 1.8%	health and recreation	$1.4 * 1.19 * 1.0 * 1.0 = \mathbf{1.7\%}$ $1.8 * 1.0 * 1.0 * 1.0 = \mathbf{1.8\%}$

¹ The PGSI is the Problem Gambling Severity Index (Ferris & Wynne, 2001)

² Conversion factors have not been developed for the DSM-5 criteria

Using these standardized rates, it is possible to compare the problem gambling prevalence rate obtained in North Dakota in 2024 with rates from 11 other U.S. jurisdictions.¹⁶ For purposes of this comparison, no adjustment is needed to the prevalence rate obtained in North Dakota in 2024 because the survey conformed to best practices in gambling prevalence surveys, including not describing the survey as about ‘gambling,’ ensuring that all data was obtained through self-administered means, eschewing the use of telephone interviewing, and including a valid and reliable problem gambling instrument.

As shown, the North Dakota problem gambling prevalence rate of 1.4% is mid-range between the 2.8% rate obtained in New Jersey in 2015 and the 0.7% rate obtained in New York in 2020. The New York rate is anomalously low because the survey was conducted in July-December 2020, in the midst of the COVID-19 pandemic. The anomalously high unstandardized Oklahoma and Missouri problem gambling prevalence rates are likely attributable to the inclusion of online panelists and people recruited via social media in the samples, as well as identifying the survey as a ‘gambling study.’

Summary

In this section of the report, we have provided an overview of how problem gambling was measured in the North Dakota survey as well as information about the prevalence of problem gambling and the number of problem gamblers in North Dakota in 2024. We examined problem gambling prevalence among North Dakota adults in 2024 with a focus on the overall prevalence of problem gambling as well as among past-year participants in specific types of gambling. A key finding is that approximately 8,400 North Dakota adults were classified as problem gamblers and an additional 22,800 North Dakota adults were classified as high or very high at-risk gamblers. We also found that problem gambling prevalence was especially elevated among past-year casino EGM players, online gamblers, and bingo players. Problem gambling prevalence was also elevated among past-year E-tab players and sports bettors. Rates of high and very high at-risk gambling were substantially higher among past-year participants in every type of gambling in North Dakota with the exception of raffles, lottery and charitable gambling excluding E-tabs. Finally, we established that problem gambling prevalence in North Dakota in 2024 is mid-range compared to other states where gambling prevalence surveys have been conducted in the past 10 years.

In the next section of the report, we focus on differences between individuals who gamble, with and without problems, in order to identify subgroups in the population that are at greatest risk of experiencing gambling-related harms.

¹⁶ Weights were developed to adjust for (1) the higher prevalence rates that are obtained when describing the survey as a ‘gambling’ survey, (2) the lower prevalence rates that are obtained when conducting a survey by telephone rather than using self-administered methods, and (3) the different prevalence rates that are obtained using different assessment instruments.

Comparing Recreational, At-Risk, and Problem Gamblers

In considering how best to develop and refine policies and programs for those experiencing gambling problems, it is important to direct these efforts in an effective and efficient way. The most effective efforts at prevention, outreach, and treatment are targeted at individuals who are at greatest risk of experiencing gambling problems. Our focus in this section of the report is on differences between individuals who gamble, with and without problems, rather than on the entire sample of North Dakota adults. As a reminder, statistically significant differences were determined based on non-overlapping confidence intervals and/or p-values at or below 0.05%.

As noted previously, recreational and at-risk gamblers far outnumber individuals in the population who experience gambling problems. Given the much greater size of the recreational and at-risk groups, some may argue that these individuals need not be examined as closely as individuals who are classified as problem gamblers. However, there is empirical evidence that some recreational and at-risk gamblers, on occasion, experience a loss of control over their gambling involvement or harm related to their gambling without developing more serious problems. There is also evidence that impaired control and subsequent problem development are a common and predictable consequence of regular, high-intensity gambling rather than something confined to a small minority of constitutionally predisposed or mentally disordered gamblers (el-Guebaly et al., 2015; MAGIC Research Team, 2021; Williams et al., 2015; Williams & Williams, 2025).

For precisely these reasons—the size of the recreational and at-risk groups and the common experience of loss of control and harm—we believe that particular attention should be paid to these groups. This is important both to better understand characteristics common among the majority of people who gamble without developing problems and to understand characteristics common among individuals experiencing gambling harms. Identifying common characteristics among these groups is a critical first step in understanding factors that might place a person at greater risk of, or protect a person from developing, a gambling problem.

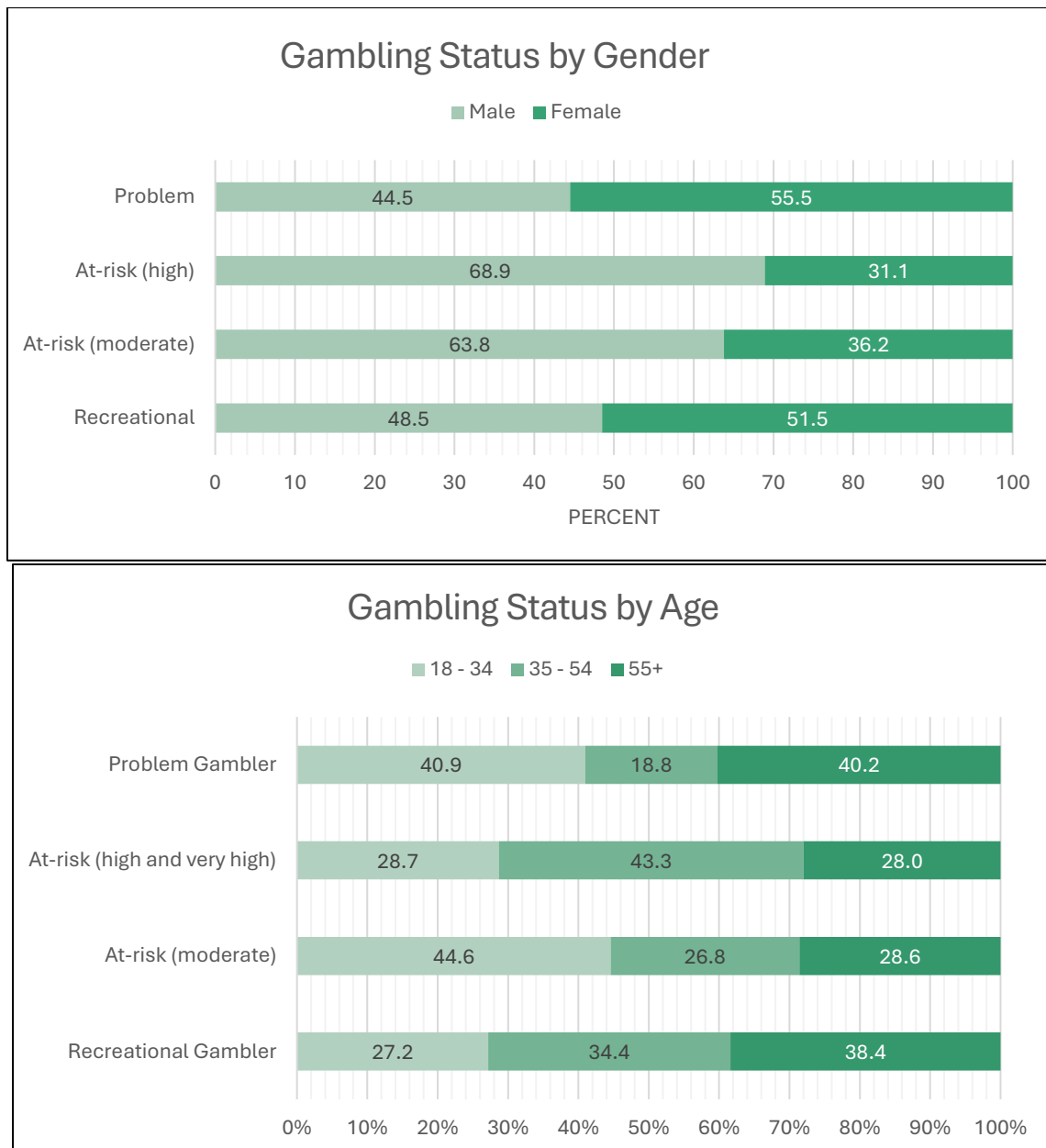
As noted in the previous section, the PGM served as the primary measure of recreational, at-risk, and problem gambling in North Dakota. In this section, we examine differences between groups of respondents who scored at increasing levels of severity on the PGM in terms of demographics, gambling participation, and other important correlates of problem gambling. We have elected to collapse individuals classified as high or very high risk and problem gamblers into one group to align with PGM conventions and to reduce the number of groups for comparison.

Demographics

There is a substantial research literature that has found that gambling problems are more likely to occur among men than women and among younger adults compared with older adults (Allami et al., 2021; Tran et al., 2024; Venne, Mazar, & Volberg, 2020). Figure 8 shows that, in contrast to many other jurisdictions, individuals experiencing gambling problems in North Dakota were just as likely as recreational gamblers to be female. Another observation is that individuals at risk of

experiencing gambling problems (whether moderate risk or high risk) were significantly more likely than recreational gamblers to be male. With respect to age, moderate at-risk gamblers were significantly more likely than recreational gamblers to be aged 18 to 34. Finally, high and very high at-risk gamblers were more likely than recreational gamblers to have annual household incomes over \$150,000 (see Table 51 in Appendix B for additional information about the demographics of gambler groups in North Dakota).

Figure 8 Demographics of recreational, at-risk, and problem gamblers



Note: Table 51 in Appendix B presents this information in detail.

Gambling Participation

Information about the behavioral correlates of problem gambling can help professionals design appropriate prevention and treatment measures, effectively identify vulnerable individuals, and establish accessible services.

Past-Year Gambling

Table 17 compares past-year gambling participation among recreational, at-risk, and problem gamblers in North Dakota. The table shows that recreational gamblers were less likely than moderate at-risk gamblers and high and very high at-risk gamblers to have participated in the past year in all of the types of gambling included in the survey with the exception of raffles. Recreational gamblers were less likely than problem gamblers to have participated in the past year in E-tabs, charitable gambling apart from E-tabs, sports betting, and casino EGMs.

The past-year participation rate in raffles among moderate at-risk gamblers was similar to that of recreational gamblers. Past-year participation rates among moderate at-risk gamblers were higher compared to recreational gamblers for all other types of gambling included in the survey. Moderate at-risk gamblers were less likely than those experiencing problems to have gambled on E-tabs in the past year.

High and very high at-risk gamblers were the most heavily engaged gamblers across all of the gambling groups including those experiencing problems. High and very high at-risk gamblers had the highest past-year participation rates for every type of gambling included in the survey with the exception of E-tabs. This type of gambling was the only activity in the survey for which past-year participation was higher for those experiencing problems compared to other gambling groups.

In addition to past-year participation, It is helpful to understand differences between recreational, at-risk, and problem gamblers in their overall gambling involvement. Recreational gamblers participated in an average of 2.6 gambling activities in the past year. Moderate at-risk gamblers participated in an average of 4.4 gambling activities and high and very high at-risk gamblers participated in 6.2 gambling activities in the past year. Those classified as problem gamblers participated in an average of 4.9 gambling activities in the past year, a possible indication that they had concerns about the extent of their gambling involvement and were trying to reduce that involvement.

Table 17 Past-year gambling participation by gambling group

	Recreational gamblers		At-risk gamblers (Moderate)		At-Risk Gamblers (High and Very High)		Problem gamblers		p-value ³
	% ²	95% CI ²	% ²	95% CI ²	% ²	95%CI ²	% ²	95% CI ²	
Unweighted N¹	1,728		360		95		38		
Weighted N	317,081		86,049		23,366		8382		
Lottery	52.1	(48.78, 55.37)	61.8	(54.56, 68.98)	78.2	(66.86, 89.62)	58.0	(37.44, 78.56)	<0.0001
Raffles	65.9	(62.82, 69.07)	65.5	(58.41, 72.52)	75.4	(63.48, 87.24)	61.1	(40.35, 81.86)	0.1654
E-tabs	32.3	(29.19, 35.37)	61.5	(54.28, 68.73)	82.3	(71.82, 92.78)	86.2	(71.90, 100.59)	<0.0001
Charitable gambling (not E-tabs)	41.1	(37.89, 44.38)	67.7	(60.77, 74.68)	86.5	(77.17, 95.90)	75.2	(56.94, 93.54)	<0.0001
Casino EGMs	20.6	(17.97, 23.31)	57.3	(49.95, 64.67)	86.1	(76.49, 95.66)	80.1	(63.45, 96.72)	<0.0001
Casino table games	10.2	(8.20, 12.21)	31.2	(24.26, 38.04)	54.2	(40.47, 67.88)	24.4	(6.51, 42.29)	<0.0001
Private wagering	11.1	(9.06, 13.22)	25.0	(18.60, 31.49)	49.8	(36.05, 63.56)	21.1	(4.08, 38.06)	<0.0001
Sports betting	10.5	(8.45, 12.50)	31.0	(24.10, 37.82)	43.0	(29.39, 56.69)	32.7	(13.14, 52.22)	<0.0001
Bingo	12.9	(9.10, 15.14)	21.2	(15.11, 27.24)	35.9	(22.75, 49.08)	34.5	(14.68, 54.27)	<0.0001
Horse racing	2.8	(1.69, 3.87)	7.5	(3.61, 11.48)	13.0	(3.74, 22.23)	5.9	(0, 15.80)	<0.0001
Online	2.8	(1.70, 3.87)	12.6	(7.65, 17.45)	20.5	(9.14, 31.76)	18.5	(3.33, 33.76)	<0.0001
Financial speculation	9.5	(7.57, 11.47)	24.7	(18.24, 31.10)	48.4	(34.44, 62.32)	21.7	(4.51, 38.84)	<0.0001

Unweighted N refers to the total number of respondents who selected this category for this question

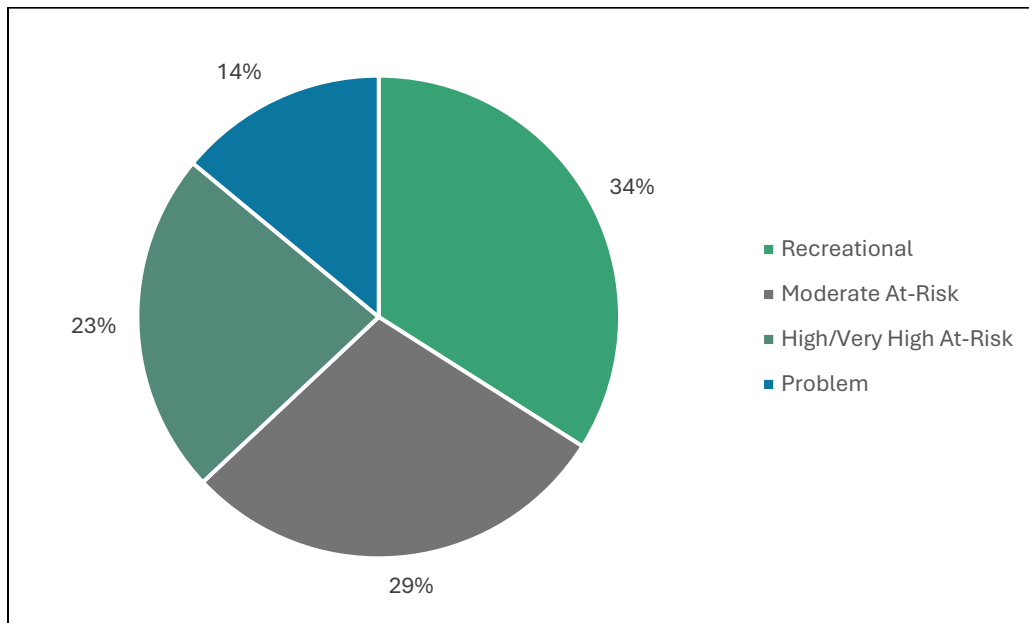
Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Gambling Expenditures by Gambler Group

Beyond participation, spending on different gambling activities is another important measure of gambling involvement as these numbers can shed light on the proportion of gambling revenue derived from recreational, at-risk, and problem gamblers. This issue is important to researchers and the general public alike, many of whom argue that the legitimacy of gambling and its continued expansion depends in part on the extent to which gambling revenues are derived from vulnerable individuals (Eadington, 2009; Orford, Wardle, & Griffiths, 2013; Rose, 1986; Williams & Wood, 2004). However, as mentioned previously, accurate expenditure data can be difficult to obtain. Despite its limitations, self-reported expenditure data provide a valuable lens into the **relative** proportion of gambling expenditures by recreational, at-risk, and problem gamblers. In this section, we briefly review the methods used to analyze expenditure data in the North Dakota survey and discuss the proportion of expenditures contributed to the total by each group of past-year gamblers.

Figure 9 Proportion of reported expenditures by gambler group



Note: Table 52 in Appendix B presents this information in detail.

As noted previously, we elected to eliminate extreme and improbable outliers in these expenditure data. We then assessed the proportion of expenditures that each gambling group reported spending annually on gambling. Because self-reported expenditure data rarely matches gross gaming revenues reported to governments, we looked at total spending by each gambling group to determine the proportion of the total accounted for by each group. Overall, recreational gamblers spent a total of \$418 million, moderate at-risk gamblers spent a total of \$356 million, high and very high at-risk gamblers spent a total of \$282 million and problem gamblers spent a total of \$180 million. Figure 9 shows that recreational gamblers accounted for 34% of total expenditures, moderate at-risk gamblers accounted for 29% of total expenditures, high and very high at-risk

gamblers accounted for 23% of total expenditures and problem gamblers accounted for 14% of total expenditures.

It is interesting to compare the proportion of expenditures shown in the figure above with the proportion of each gambler group in the survey. For example, although recreational gamblers constituted nearly 54% of the sample, they accounted for only 34% of reported expenditures. This disparity is even more noticeable for at-risk and problem gamblers; although moderate at-risk gamblers constituted 15% of our sample, they accounted for 29% of reported expenditures, high and very high at-risk gamblers constituted 4% of our sample but accounted for 23% of reported expenditures and although problem gamblers constituted only 1.4% of our sample, they accounted for 14% of reported expenditures.

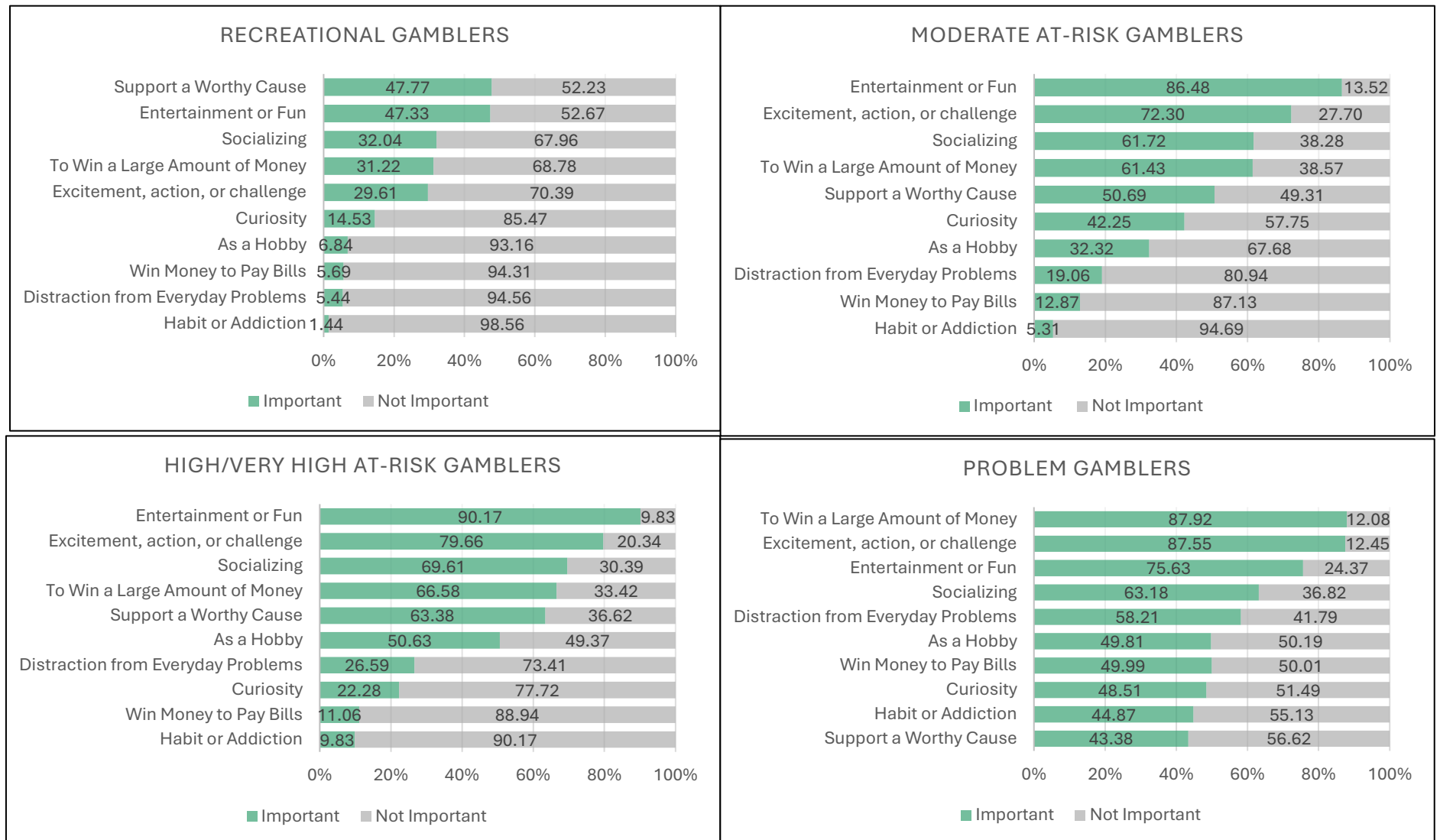
These findings have relevance for developing strategies to prevent at-risk gamblers from developing gambling problems over time. The two at-risk groups accounted for over half (52%) of reported gambling expenditures which indicates a need to create prevention campaigns and programs that target at-risk gamblers. Similarly, because problem gamblers accounted for a large share of self-reported expenditures relative to the size of this group in the sample, there may be a need to develop specialized strategies in treatment to address the issue of gambling expenditures.

Another issue related to gambling expenditures is the largest amount that gamblers say they have lost in a single day. Again, these data are not precise but are an important indicator of gambling intensity. Among recreational gamblers, 29.4% indicated that their largest loss in a single day was zero and the remaining 70.6% of this group indicated that their largest loss was between \$1 and \$199. The proportion of moderate at-risk gamblers, high and very high at-risk gamblers and problem gamblers whose largest single day losses were in this range was significantly lower. There were no significant differences in the proportion of each gambler group reporting that their largest loss in a single day was between \$200 and \$499. Moderate at-risk gamblers were significantly less likely than more severe gambler groups to have lost between \$500 and \$999. High and very high at-risk gamblers were more likely than problem gamblers to report having lost \$1,000 or more in a single day but the difference was not significant. Table 53 in Appendix B presents this information in tabular form.

Reasons for Gambling

Recreational, at-risk and problem gamblers tend to gamble for different reasons. Figure 10 shows the reasons for gambling deemed very important or somewhat important across the different gambler groups. Among recreational gamblers, supporting a worthy cause and entertainment or fun were the two most important reasons for gambling followed by socializing and winning a large amount of money. Among moderate at-risk gamblers, entertainment or fun and excitement, action or challenge were the two most important reasons for gambling followed by winning a large amount of money and socializing. Similarly, among high and very high at-risk gamblers, entertainment or fun and excitement, action or challenge were the two most important reasons for gambling followed by socializing and winning a large amount of money. Among problem gamblers, winning a large amount of money and excitement, action or challenge were the two most important reasons for gambling followed by entertainment or fun.

Figure 10 Reasons for gambling by gambler group



Note: Table 54 in Appendix B presents this information in detail.

It is also clear from Figure 10 that problem gamblers endorse more reasons to gamble as somewhat or very important compared to recreational gamblers.

These results can be compared with the 2016 survey in North Dakota since the question was asked in the same way (Kopel & Tran, 2017). As in 2024, social gamblers in 2016 generally found all reasons to gamble less important than sub-clinical gamblers or those with a gambling disorder. The top three reasons for gambling among recreational gamblers in 2016 (supporting a worthy cause, entertainment, socializing) were the same top three reasons among recreational gamblers in 2024. Sub-clinical gamblers in 2016 felt winning a large amount of money was the most important reason for gambling; among moderate at-risk gamblers in 2024, this was the fourth most important reason for gambling while high and very high at-risk gamblers also deemed this to be the fourth most important reason for gambling.

Other Correlates of Problem Gambling

In this section, we present information about the physical and mental health correlates of problem gambling in North Dakota, including use of tobacco, alcohol, and illicit drugs. We begin by examining the difference between recreational, at-risk and problem gamblers regarding the importance to them of gambling as a recreational activity and the proportion of people in their social networks who gamble regularly. The latter is important because a key research finding is that the gambling involvement of family and friends is highly correlated with recreational, at-risk and problem gambling (Mazar, Williams, Stanek, Zorn, & Volberg, 2018).

Table 18 Importance of gambling as a recreational activity

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N ¹	1,728		360		95		38		
Weighted N ²	317,081		86,049		23,366		8,382		
Very important	0		5.6	(2.2, 9.1)	33.5	(20.5, 46.5)	NSI	---	<0.0001
Somewhat important	0		35.5	(28.4, 42.6)	36.3	(23.1, 49.5)	15.3	(0.3, 30.3)	
Not very important	27.9	(24.9, 30.9)	38.4	(31.2, 45.7)	24.2	(12.5, 35.95)	56.7	(36.1, 77.3)	
Not at all important	72.1	(69.1, 75.1)	20.4	(14.4, 26.4)	NSI	---	19.2	(2.8, 35.6)	

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 18 shows differences in how recreational, at-risk and problem gamblers rate the importance of gambling to them as a recreational activity. Nearly three-quarters of recreational gamblers (72.1%) responded that gambling was not at all important to them as a recreational activity. In contrast, 41.1% of moderate at-risk gamblers and 69.8% of high and very high at-risk gamblers responded that gambling was somewhat or very important to them as a recreational activity. It is interesting but unclear why 75.9% of those experiencing gambling problems answered that gambling was not very important or not at all important to them as a recreational activity.

In the North Dakota survey, 1.7% of recreational gamblers and 7.0% of moderate at-risk indicated that most or all of their friends and family members gambled regularly. In contrast, 26.7% of high and very high at-risk gamblers and 17.0% of problem gamblers indicated that most or all of their close friends and family members gambled regularly (see **Error! Reference source not found.**59 in Appendix B).

Physical and Mental Health

Table 19 presents differences between recreational, at-risk, and problem gamblers on several health-related dimensions. The table shows that problem gamblers were significantly more likely than recreational gamblers in North Dakota to have experienced mental health problems in the past 12 months (47.5% compared to between 14.0% and 21.9%). The table also shows that problem gamblers were significantly more likely than other gamblers in North Dakota to rate their overall level of stress as moderate, high or very high (95.9% compared to between 59.9% and 69.2%).

Table 19 Differences in physical and mental health by gambling group

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		
	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	p-value ⁴
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
General health (fair to poor)	7.5	(5.7, 9.2)	13.2	(8.10, 18.31)	12.6	(3.24, 21.88)	NSI	--	<0.0001
Level of stress (moderate to very high)	65.7	(62.54, 68.93)	69.2	(62.25, 76.17)	59.9	(46.16, 73.72)	95.9	(87.62, 100)	0.0002
Mental health problem (past 12 months)	14.0	(11.70, 16.37)	21.9	(15.61, 28.09)	15.2	(5.08, 25.32)	47.5	(26.58, 68.43)	<0.0001
Sought help (among those w/MH problem)	63.5	(54.3, 72.6)	49.7	(30.7, 68.65)	38.6	(0.9, 76.25)	NSI	---	<0.0464

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Tobacco, Alcohol, and Illicit Drugs

Table 20 presents information about tobacco, alcohol, and illicit drug use among recreational, at-risk, and problem gamblers in North Dakota. The table shows that recreational gamblers were significantly less likely than high/very high at-risk gamblers or those experiencing problems using tobacco on a daily basis (11.0% compared to between 18.3% and 41.4%).

Table 20 Tobacco, alcohol and drug use by gambling group

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
Tobacco use (every day)	11.0	(8.91, 13.11)	18.3	(12.47, 24.15)	37.8	(24.12, 51.40)	41.4	(20.80, 62.08)	<0.0001
Alcohol (past 12 months)	76.2	(73.30, 79.08)	83.8	(78.16, 89.37)	92.4	(84.83, 99.96)	75.9	(57.93, 93.79)	<0.0001
Binge drinking (past 30 days)	48.1	(44.08, 52.12)	63.7	(55.32, 72.01)	75.3	(61.91, 88.65)	85.1	(66.22, 100)	<0.0001
Cannabis use (past 12 months)	15.1	(12.65, 17.46)	23.6 5	(17.21, 30.09)	28.04	(15.54, 40.54)	41.3	(20.52, 62.02)	<0.0001
Other drug use (past 12 months)	1.8	(0.91, 2.70)	9.5	(5.06, 13.91)	NSI	---	NSI	---	<0.0001
Problem with alcohol or drugs (past 12 months)	1.4	(0.59, 2.15)	5.3	(1.94, 8.74)	NSI	---	NSI	---	<0.0001
Sought help (among those w/alcohol or drug problem)	53.5	(30.23, 76.78)	NSI		0		NSI		0.0301

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Recreational gamblers were also significantly less likely than at-risk or problem gamblers to have engaged in binge drinking¹⁷ in the past 30 days (48.1% compared to between 63.7% and 85.1%) and to have consumed cannabis in the past 12 months (15.1% compared to between 23.6% and 41.3%). High and very high at-risk gamblers were significantly more likely than recreational gamblers to have consumed alcohol in the past 12 months (92.4% compared to 76.2%).

Questions about tobacco, alcohol and illicit drug use were included in the 2016 survey in North Dakota. However, respondents were asked about these behaviors in the past 30 days rather than in the past 12 months. Additionally, the behaviors in the 2016 survey were characterized as “smoked cigarettes,” “drank alcohol to excess (more than you wanted to)” and “abused drugs.” There were too few respondents classified as having Gambling Disorder in the 2016 survey to be able to identify significant differences between this group and other groups in the study. Cigarette smoking and excessive alcohol consumption were significantly higher in the Sub-Clinical group compared with Social Gamblers. The results of the 2016 survey in North Dakota related to daily tobacco use and binge drinking were similar to those in 2024.

Views on Gambling Problems

All respondents who had gambled in the past year were asked whether they agreed or disagreed with several statements about gambling problems. These statements included:

- People with a gambling problem are addicted and are not able to control their gambling activity.
- Problem gambling is a health issue that affects people of all ages, races, ethnic and economic backgrounds.
- As long as the state benefits from legal gambling, it should fund prevention and treatment programs.

Responses to these statements differed only slightly by gambling group (see Table 56 in Appendix B for detailed information). The proportion of recreational gamblers, moderate at-risk gamblers, high and very high at-risk gamblers and problem gamblers who agreed that people with a gambling problem are addicted was over 80% in each group with the highest rate among problem gamblers (98.3%) and the lowest rate among high and very high at-risk gamblers (84.3%). The proportion of gamblers who agreed that problem gambling is a health issue that affects people of all groups was also over 80%, with the highest rate among recreational gamblers (90.6%) and the lowest rate among high and very high at-risk gamblers (82.2%). Finally, the proportion of gamblers who agreed that the state should fund problem gambling prevention and treatment programs was over 80% in every gambling group, with almost no differences across the groups (85% to 87.9%).

¹⁷ Binge drinking refers to heavy consumption of alcohol over a short period of time. According to the National Institute on Alcohol Abuse and Alcoholism, binge drinking is defined as having 5 or more drinks on one occasion for men and 4 or more drinks on one occasion by women (<https://www.niaaa.nih.gov/alcohols-effects-health/alcohol-drinking-patterns>). Question 80 in the survey collected this information separately for men and women.

Respondents in the 2016 survey were asked about their level of agreement with these same statements. In 2016, the majority of North Dakota adults (over 80%, regardless of problem gambling status) agreed that problem gambling is a health issue that affects people of all races, ages, ethnic and economic backgrounds and that as long as the state was benefiting from legal gambling, it had an obligation to fund problem gambling prevention and treatment services. The majority of North Dakota adults also agreed that people with a gambling problem were addicted and unable to control their gambling involvement (more than 80% of respondents).

Help-seeking Among Gamblers

All respondents who had gambled in the past year were asked questions about seeking help for a gambling problem. Respondents were asked whether they had wanted help for gambling problems in the past 12 months, whether they had sought help for a gambling problem in the past 12 months, whether they had faced barriers to accessing treatment in the past 12 months, and whether they had enrolled in a self-exclusion agreement with any casino or other gambling establishment in the past 12 months. The number of respondents who indicated that they wanted help, sought help, or faced barriers in accessing help was too small to report. Only six respondents indicated that they had enrolled in a self-exclusion agreement in the past 12 months; this number of respondents is too small to allow us to report on where these respondents had entered agreements, how useful the agreements were in reducing their gambling, and whether they had breached the agreement.

Summary

In this section of the report, we have presented information about differences between recreational gamblers, gamblers at risk of problems and those experiencing problems with regard to demographics, participation in specific types of gambling, expenditures on gambling, reasons for gambling, and other correlates of problem gambling in the North Dakota adult population. One finding was that those experiencing gambling problems were almost equally likely to be female as male (see Figure 8). Moderate at-risk gamblers differed from recreational gamblers in terms of gender and age; these gamblers were younger and more likely to be male than recreational gamblers. High and very high at-risk gamblers were more likely than recreational gamblers to be employed (rather than retired) and more likely to have annual household incomes over \$150,000.

With respect to gambling participation, at-risk gamblers were more likely than recreational gamblers to have participated in every type of gambling except raffles (see Table 17). Problem gamblers were more likely than recreational gamblers to have participated in E-tabs, charitable gambling apart from E-tabs, casino EGMs and horse racing in the past year. With the exception of past-year participation in E-tabs, high and very high at-risk gamblers were the most heavily engaged gamblers across all of the gambler groups. Problem gamblers were the group most likely to have gambled on E-tabs in the past year. Approximately one-third (37%) of self-reported expenditures on gambling in the past year came from high and very high at-risk gamblers and problem gamblers; groups that represent just under 5% of the adult population of North Dakota.

The gambler groups in North Dakota endorsed somewhat different reasons for gambling as important (see Figure 9). Recreational gamblers were most likely to say that supporting worthy causes was an important reason while moderate at-risk gamblers were most likely to say that

entertainment or fun was an important reason for gambling. High and very high at-risk gamblers were also most likely to say that entertainment or fun was an important reason for gambling. Problem gamblers were most likely to say that winning a large amount of money was an important reason for gambling.

When it comes to correlates of gambling problems, the majority of those experiencing gambling problems nevertheless felt that gambling was not an important recreational activity for them. The majority of high and very high at-risk gamblers felt that gambling was somewhat or very important to them as a recreational activity. More at-risk gamblers and problem gamblers indicated that most or all of their close friends and family members gambled regularly compared to recreational gamblers. There were significant differences across the gambling groups in general health status, level of stress and mental health problems in the past 12 months (see Table 19 and Table 20). There were also significant differences across the gambler groups in their use of tobacco, alcohol and drug use, binge drinking and problems with alcohol or drugs in the past 12 months. There were too few respondents who desired or sought help for a gambling problem to report on this topic.

Awareness of Problem Gambling Services in North Dakota

One goal of the North Dakota survey was to collect information about the public's knowledge of available resources for addressing gambling problems in the state. In previous sections of this report, we presented information about specific subgroups in the population who were at risk of, or already experiencing problems related to their gambling. In this section, we present information about awareness of problem gambling services in the adult population of North Dakota. This information is important in the design of general and targeted awareness and prevention programs and in the development of strategies to provide help to groups harmed by gambling in North Dakota.

Views of Problem Gambling

All of the respondents in the survey were asked how much of a problem they thought problem gambling was in North Dakota. Overall, the majority of North Dakota adults agreed that gambling addiction was a minor, moderate or serious problem in the state with high and very high at-risk gamblers least likely to endorse this view (74.6%) and problem gamblers most likely to do so (92.9%) (see Table 57 in Appendix B for detailed information). In 2016, 78% of North Dakota adults believed that gambling addiction was a minor, moderate or serious problem in North Dakota (Kopel & Tran, 2017, p. 26).

Awareness of Problem Gambling Prevention Efforts

All of the respondents in the survey were asked whether they had seen or heard any media campaigns to prevent problem gambling in North Dakota in the past 12 months. Respondents were also asked whether they were aware of any programs to prevent problem gambling offered in their schools, workplaces, or communities in the past 12 months.

Overall, 43.2% of North Dakota adults agreed that they had seen or heard media campaigns to prevent problem gambling in the state in the past 12 months. Among recreational gamblers, 34.7% said they were aware of media campaigns to prevent problem gambling compared to 37.6% of moderate at-risk gamblers, 49.3% of high and very high at-risk gamblers and 33.6% of problem gamblers. Awareness of programs to prevent problem gambling offered in schools, workplaces or communities in the past 12 months was much lower, among recreational gamblers (12.0%) and moderate at-risk gamblers (19.5%). Awareness of prevention programs in schools, workplaces or communities was higher among high and very high at-risk gamblers (30.5%) and among problem gamblers (24.5%) (see Table 58 in Appendix B for detailed information).

All of the respondents in the survey were asked if they were aware of the North Dakota Problem Gambling Helpline and the free online Gambler Healing course offered in North Dakota. There was substantial awareness of the Problem Gambling Helpline with 37.9% of recreational gamblers, 55.9% of moderate at-risk gamblers, 60.5% of high and very high at-risk gamblers and 65.3% of

problem gamblers in North Dakota indicating that they were aware of this service. Awareness of the Gambler Healing course was much lower than awareness of the helpline with 12.0% of recreational gamblers, 24.0% of moderate at-risk gamblers and 31.0% of high and very high at-risk gamblers indicating that they were aware of this course. The number of problem gamblers indicating awareness of this course was too small to report.

How Many Problem Gamblers to Plan For?

Accessing treatment for problem gambling is an important impact of gambling that merits consideration. Helpline calls and treatment numbers at government-funded agencies provide some idea of the magnitude of this impact, although these numbers usually reflect only the ‘tip of the iceberg,’ as most problem gamblers do not seek formal treatment, and when they do, it is often not with these types of agencies.

Although questions about wanting and seeking help for gambling problems were included in the North Dakota survey, the number of individuals endorsing either of these questions was too small to report (cell sizes of five or less). Recent survey data from Connecticut (which included questions very similar to those in the North Dakota survey) provide some useful comparison points: in 2022, 24.9% of Connecticut adults who were classified as problem gamblers indicated that they had wanted help for gambling problems in the past year and 20.7% indicated that they had sought help. The large majority of Connecticut problem gamblers did not want external help, preferring to try curbing their gambling on their own, although a minority were deterred from seeking help because of stigma, perceived costs, or being unaware of where to get help. Among the people who did seek help in Connecticut, self-help materials, voluntary self-exclusion, and support from family and/or friends were the most commonly accessed sources rather than state-funded treatment services. Although help-seeking was low in Connecticut, the majority of people who did seek help found this assistance somewhat, quite or very helpful in controlling their gambling (Gemini Research, 2023).

In calculating the number of problem gamblers who might seek treatment in North Dakota, we focused on the group of individuals who scored as problem gamblers in the North Dakota survey (i.e., the approximately 8,400 individuals represented by the point estimate for problem gambling in the survey) along with estimates of treatment-seeking from other jurisdictions where prevalence surveys have been conducted in recent years. Using this approach, we estimate that the number of individuals who might seek treatment for a gambling problem on an annual basis in North Dakota is between 250 and 840 (or between 3% and 10% of those classified as problem gamblers in the survey).

Summary

In this section of the report, we have presented information about awareness of problem gambling services in North Dakota. As in 2016, the majority of North Dakota adults in 2024 agreed that gambling was an issue in the state. Awareness of media campaigns to prevent problem gambling in North Dakota was relatively high overall but awareness of programs to prevent problem gambling offered in schools, workplaces or communities was much lower. As with media campaigns, there was substantial awareness of the state’s Problem Gambling Helpline among North Dakota adults but much lower awareness of the Gambler Healing course offered online. Based on information

from other jurisdictions, we estimate that between 3% and 10% of problem gamblers in North Dakota (i.e., 250 to 840 individuals) would seek treatment if services were available.

DISCUSSION

The main purpose of the 2024 North Dakota Recreation Activity Survey was to establish current levels of gambling participation and problem gambling prevalence in North Dakota. A second goal was to assess participation in emerging forms of online gambling to inform future efforts in North Dakota related to these technological developments. A third goal was to obtain information about the public's knowledge of available resources for addressing gambling problems. This information will be valuable in developing approaches to enhance and improve existing problem gambling prevention and treatment services in North Dakota.

Notable Findings

What are the beliefs and attitudes towards gambling in North Dakota?

There was a range of opinion among North Dakota adults concerning the availability of legalized gambling in the state. The majority of North Dakota adults (64.1%) believed that some forms of gambling should be legal and some forms should be illegal. North Dakota adults also had mixed opinions about the balance of benefits and harms of legalized gambling although the majority (61.1%) believed that the harms of gambling outweighed the benefits. One in four North Dakota adults (28.4%) believed that the benefits and harms of legalized gambling were about equal and only one in ten North Dakota adults (10.4%) felt that the benefits of legalized gambling outweighed the harms. The majority of North Dakota adults (68.0%) felt that the current availability of gambling in the state was acceptable. The proportion of North Dakota adults that felt gambling was too widely available (19.5%) was slightly larger than the proportion that felt gambling was not available enough (12.5%).

What is the current prevalence of gambling among adults in North Dakota?

In 2024, nearly three-quarters of North Dakota adults (73.7%) acknowledged participating in one or more gambling activities in the past year. This rate of gambling participation is higher than past-year participation rates in recent gambling studies in the United States and likely reflects people's willingness and ability to return to gambling at brick-and-mortar venues following the pandemic. Past-year participation was highest for raffles (48.0%) and the lottery (40.2%). Three additional types of gambling, including charitable gambling at bars and restaurants excluding E-tabs, E-tabs, and casino EGMs, had past-year participation rates of one-quarter to one-third of the adult population (35.7%, 30.2% and 23.4% respectively). One in ten North Dakota adults had gambled in the past year on casino table games (12.2%), sports betting (12.1%), bingo (11.7%) and private wagering (11.6%). Past-year participation rates for online gambling and horse race betting were even lower (4.2% and 3.1% respectively).

What is the demographic pattern of gambling in North Dakota?

Table 21 presents information about the demographic characteristics of people who participated in specific gambling activities in North Dakota. The table shows that there were significant differences in the demographics of those who participated in different types of gambling, including gender, age, employment status and household income.

Table 21: Demographic groups with higher levels of past-year gambling participation

Gambling Activity	Demographic Group
Any gambling	• Employed • HH income over \$100K
Raffles	• Aged 35 and over • White • Employed • HH income over \$50K
Lottery	• Men • Aged 35 and over • HH income over \$150K
Charitable excluding E-tabs	• Under 55 • White • Employed • HH income over \$150K
E-tabs	• Aged 35 to 54 • White • Employed • HH income over \$100K
Casino table games	• Men • Aged 18 to 34 • Employed • HH income over \$150K
Sports betting	• Men • Aged 18 to 34 • Employed • HH income over \$150K
Bingo	• Women
Private wagering	• Men • Aged 18 to 34 • Employed • HH income over \$150K
Horse racing	• HH income over \$150K
Online	• Aged 18 to 34 • Not retired

What is the current prevalence of problem gambling in North Dakota?

Based on the survey, the prevalence of problem gambling among all adults in North Dakota is 1.4%; this represents approximately 8,400 individuals or between 4,900 and 12,300 North Dakota adults experiencing gambling problems. An additional 3.96% of North Dakota adults were classified as high or very high at-risk gamblers, representing between 17,800 and 30,000 individuals. Between 28% and 43% of high and very high at-risk gamblers are likely to transition to problem gambling within 12 months of the survey; this represents between 6,400 and 9,800 adult North Dakotans.

What is the demographic pattern of problem gambling in North Dakota?

In contrast to many other jurisdictions, the rate of problem gambling in North Dakota was not significantly higher among men compared with women. However, those at risk of experiencing gambling problems (whether moderate or high risk) were significantly more likely than recreational gamblers to be male (63.8% and 68.9% compared to 48.5% of each gambler group). With respect to age, moderate at-risk gamblers were significantly more likely than recreational gamblers to be aged 18 to 34 (44.6% compared to 27.2% of each group). Moderate at-risk gamblers were also significantly more likely than recreational gamblers to be non-White (14.7% compared to 6.6% of each group). Recreational gamblers were more likely to be retired compared to moderate and high at-risk gamblers (20.8% compared to 13.7% and 14.4% respectively) and less likely to be employed (70.5% compared to 78.8% and 72.2% respectively). Finally, high and very high at-risk gamblers were more likely than recreational gamblers to have annual household incomes over \$150,000 (34.9% compared to 17.5% of each group).

What types of gambling are most strongly related to problem gambling in North Dakota?

The types of gambling most strongly related to problem gambling in North Dakota included casino EGMs, online gambling, bingo, E-tabs and sports betting. The prevalence of problem gambling among gamblers who participated in these activities in the past year was 170% to 240% higher compared with the prevalence of problem gambling in the entire adult population.

Compared to the adult North Dakota population, rates of high and very high at-risk gambling were between 140% and 370% higher among past-year participants in every type of gambling included in the survey with the exception of raffles, the lottery and charitable gambling excluding E-tabs.

What is the prevalence of co-occurring disorders with problem gambling?

North Dakota adults who experienced gambling problems as well as those at high or very high risk of gambling problems were the groups most likely to have used tobacco daily, engaged in binge drinking and consumed cannabis or other drugs. Those experiencing gambling problems were most likely to acknowledge having problems with alcohol or drugs in the past 12 months. Those at high or very high risk of gambling problems were most likely to have consumed alcohol in the past 12 months.

What is the level of awareness of problem gambling services in North Dakota?

Overall, approximately two in five North Dakota adults (43.2%) had seen or heard media campaigns to prevent problem gambling in the past year. Awareness of non-media campaigns in schools, workplaces or communities to prevent problem gambling in North Dakota was much lower (from 12.0% to 30.5%). There was also a substantial level of awareness of the problem gambling helpline among all of the gambler groups in North Dakota (37.9% among recreational gamblers and 65.3% among problem gamblers). Rates of awareness of the Gambler Healing online course in North Dakota were much lower than for the helpline.

Strengths and Limitations of the Study

Strengths

A primary concern when designing the North Dakota Recreation Activity Survey was that the data needed to be representative of the state of North Dakota. The introduction of a multimode survey approach as well as the Address Based Sampling (ABS) design allowed for a more inclusive sample comprising households without a telephone or who only own a cell phone and households without access to a computer or the Internet. In this respect, the North Dakota survey had considerably higher coverage of the population than a telephone-only survey.

Use of standardized methods of data collection, including address-based sampling, multiple modes of data collection, and a highly-structured instrument reduced potential bias and enhanced the validity of the results. Strenuous efforts were made to recruit a fully representative sample of North Dakota residents into the survey, including several mailings of advance letters and postcard reminders.

Limitations

There are some limitations to the North Dakota survey as there are with every survey. One potential limitation is the response rate attained in the survey. Survey response rates internationally have fallen precipitously in recent years; this increases the likelihood that respondents differ from non-respondents in some important and systematic way, making the sample non-representative. Although this does not always occur (Curtin, 2000; Groves et al., 2006; Keeter, Miller, Kohut, Groves, & Presser, 2000), the risk is always present and tends to increase as a function of the degree of non-response. We attempted to minimize systematic bias by introducing the study as a survey of ‘recreation’ but the response rate for the North Dakota survey was lower than desirable and, as a consequence, generalization of the results should be undertaken with care.

Another limitation is that the survey was restricted to adults living in households—the sample did not include adults living in group quarters, incarcerated individuals, or homeless individuals. Although rates of problem gambling tend to be very high in these groups, they represent only small proportions of the total population and research has shown that their inclusion is unlikely to affect the overall prevalence rate (Abbott & Volberg, 2006; Williams & Volberg, 2010).

A third limitation relates to the small size of several subgroups in the sample such that the prevalence rates of problem gambling in these groups are associated with large confidence intervals. These estimates should be viewed with caution because they may be unreliable. Finally, it is important to emphasize that, like other prevalence surveys, the North Dakota survey is a cross-sectional ‘snapshot’ of gambling and problem gambling at a single point in time. This limits our ability to draw any causal conclusions from associations reported between gambling participation, gambling problems, and other variables in North Dakota.

Best Practice Recommendations

In 2020 and 2021, Greo Evidence Insights produced comprehensive reviews of best practices in problem gambling prevention, treatment and responsible gambling initiatives as part of its work to support the recent British national strategic assessment and Gambling Act review (see Greo, 2020;

Hilbrecht, 2021). The results of these reviews are helpful in assessing how problem gambling services in North Dakota compare to international best practices and can be used to prioritize resources as services for at-risk gamblers and problem gamblers evolve in North Dakota.

The terminology associated with public health prevention can be confusing with terms such as ‘primary,’ ‘secondary’ and ‘tertiary’ prevention sometimes used interchangeably with terms such as ‘universal,’ ‘selective’ and ‘indicated’ prevention. The first set of terms is generally used when considering the progress of a condition or disease within an individual or population while the second set of terms is used when considering the audience for a particular initiative. Another important caveat is that the term ‘prevention’ refers to a broad scope of services that include regulatory measures, on one end, and shade into treatment, on the other end of the continuum, as would be the case with a helpline or brief interventions.

Best practices in **universal prevention** (aimed at the whole population) include:

- Regulatory restrictions on products and advertising
- Mandatory pre-commitment
- Safer gambling messaging for the general population and for those who gamble
- Restricting cash payment of winnings
- Bans on some forms of gambling

Best practices in **selective prevention** (aimed at specific groups in the population) include:

- School-based prevention and education programs
- Involvement of families in school-based prevention programs
- Focus on young adults that includes those not pursuing higher education as well as college and university students
- Self-exclusion programs

Best practices in **indicated prevention** (aimed at individuals already experiencing gambling problems) include:

- Personalized Normative Feedback (effective with all age groups and at universal, selective and indicated levels)
- Motivational interventions
- Helplines
- Remote and self-help interventions

With respect to **treatment** of gambling problems, best practices include:

- Cognitive Behavioral Therapy (CBT) continues to be the most effective treatment
- Residential treatment options are needed for those with more complex diagnoses and comorbidities

Finally, with respect to **responsible gambling** efforts by the gambling industry, best practices include:

- Training programs for staff
- Messaging and promotions to gamblers encouraging uptake of responsible gambling tools
- Behavioral tracking tools

- Self-exclusion
- Restricting game features that encourage dissociation and lengthy times on device

Lower Risk Gambling Guidelines in North Dakota

The Lower Risk Gambling Guidelines (LRGGs) are a set of evidence-based limits on gambling expenditure, frequency and variety that reduce the risk of experiencing gambling-related harm if all three guidelines are followed. Identifying the proportion of individuals in the population that are gambling above the recommended guidelines provides an estimate of the proportion of the population that is at risk of experiencing gambling harms and can serve as a useful supplement to problem gambling measures typically reported in prevalence studies (Young et al., 2021, 2024). The North Dakota Department of Health and Human Services features information about the LRGGs on the GamblerND website.

The LRGG recommendations include (1) spending no more than 1% of gross household income per month or annually on gambling, (2) gambling no more than 4 days per month, and (3) regularly participating in no more than 2 types of gambling at a time. We used items from the North Dakota survey to calculate respondents' expenditures on gambling compared to household income. Household income was collected as brackets rather than exact amounts; we used the median value for each bracket except the highest and lowest where we used \$15,000 for the lowest bracket and \$150,000 for the highest bracket. We used total annual gambling expenditures reported by respondents and assessed whether this was above or below the recommended limit. Frequency of gambling was calculated as the highest frequency of participation for any of the types of gambling endorsed by respondents. Participation was determined based on the number of gambling activities that respondents had done in the past year.

Table 22 shows the proportion of each gambling group participating in gambling within and outside of the LRGG recommendations.

Table 22 Proportion meeting LRGs by gambling group

PGM	Group	Unweighted N	Weighted N	%	95%CI	p-value
						<0.0001
Recreational Gambler						
	Yes	578	112,320	38.8	(35.38, 42.22)	
	No	930	177,144	61.2	(57.78, 64.62)	
At-Risk (Moderate)						
	Yes	16	4,886	5.8	(2.27, 9.25)	
	No	336	80,000	94.2	(90.75, 97.73)	
At-Risk (High and Very High)						
	Yes	NSI	--	--	--	
	No	94	23,032	98.6	(95.31, 101.83)	
Problem Gambler						
	Yes	NSI	--	--	--	
	No	37	7,702	100.0	(100.0, 100.0)	

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

This table shows that approximately two in five recreational gamblers in North Dakota gambled at levels recommended by the LRGs in the prior year. This was the only gambler group with a substantial proportion that did not exceed the LRGs. Over 90% of the moderate at-risk and high and very high at-risk gambled above the LRGs as did all of those experiencing gambling problems.

While a plurality of recreational gamblers in North Dakota are abiding by the LRGs, these guidelines could be more widely promoted as a universal prevention measure aimed at the entire population as well as a selected prevention measure aimed at moderate at-risk gamblers. Recreational gamblers and moderate at-risk gamblers could also be encouraged to adopt responsible gambling measures such as deposit and time limits, should these become available in North Dakota.

While broad dissemination of the LRGs would be most helpful for recreational gamblers and moderate at-risk gamblers, more intensive efforts will be needed to influence the behavior of high and very high at-risk gamblers as well as problem gamblers. Indicated prevention efforts such as Personalized Normative Feedback and motivational interventions are needed in North Dakota as are greatly expanded outpatient treatment, some form of residential treatment, training for healthcare providers in how to screen for gambling behavior and make referrals when warranted and training for staff of gambling operators in North Dakota in recognizing and assisting individuals experiencing gambling problems in venues around the state.

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APPENDIX A: SURVEY QUESTIONNAIRE



North Dakota Recreation Activity Survey

NORTH
Dakota | Health & Human Services
Be Legendary.

Please have **the adult** in your household (18 years or older) **who had the most recent birthday complete this survey**. We do not mean the oldest person. We mean the person who had a birthday last. This survey is voluntary and all responses will be kept confidential. You can skip any questions that make you uncomfortable and/or that you prefer not to answer. Each question should be answered only about yourself, not anyone else in your household. Most people will be able to finish the survey within 10 to 15 minutes.

Let's Get Started!

1 Yes → Continue with **QB**

2 No → This survey is for those who have resided in North Dakota in the past 12 months or longer. If there is a person who currently lives at this address and has resided in North Dakota in the past 12 months or longer, please give this survey to that person; otherwise, please return this questionnaire in the envelope provided

QB. Are you age 18 or older? Please mark your response.

1 Yes, I am 18 or older → Go to **Survey Instructions** on page 2.

2 No, I am 17 or younger → This survey is for those who are 18 years or older. Please give this questionnaire to an adult in your household. If there is no adult in your household, please return this questionnaire in the envelope provided

Survey Instructions

For some questions, you answer the question by checking a box (☐ Traveling), by filling in one number per box () , or by selecting one answer and marking inside the numbered circle like this 

For some questions, you will be instructed to skip one or more questions. For example, like this one below, if you answer "No", you skip to question 2 on page 2; otherwise, you continue with the next question.

- 1 Yes
- 2 No ➔ **Go to 2 on page 2**

General Recreation Activity

1. Which of the following is your preferred recreational activity? *Please check all that apply.*

- | | | |
|--|--|--|
| ☐ Watching TV and/or streaming services | ☐ Traveling | ☐ Arts/crafts |
| ☐ Walking, hiking, or biking | ☐ Gambling | ☐ Music |
| ☐ Gardening | ☐ Hunting and fishing | ☐ Dancing |
| ☐ Camping/spending time outdoors | ☐ Reading | ☐ Other, <i>specify</i> : _____ |
| ☐ Socializing with friends or family | ☐ Swimming | |

Gambling Attitudes

Now, the primary recreational activity we have chosen to ask you about is gambling.

We define gambling as betting money or material goods on an event with an uncertain outcome in the hopes of winning additional money or material goods. It includes things such as lottery tickets, pull tabs, bingo, betting against a friend on a game of skill or chance, betting on horse racing or sports, investing in high risk stocks, etc.

2. Which best describes your belief about the benefit or harm that gambling has for society?

- 1 The harm far outweighs the benefits
- 2 The harm somewhat outweighs the benefits
- 3 The benefits are about equal to the harm
- 4 The benefits somewhat outweigh the harm
- 5 The benefits far outweigh the harm

3. Which of the following best describes your opinion about legalized gambling?

- 1 All types of gambling should be legal
- 2 Some types of gambling should be legal and some should be illegal
- 3 All types of gambling should be illegal

4. Which of the following best describes your opinion about gambling opportunities in North Dakota?

- 1 Gambling is too widely available
- 2 Gambling is not available enough
- 3 The current availability of gambling is fine

Gambling Behavior in the Past Year

5. In the past 12 months, how often have you purchased lottery tickets such as MegaMillions, Powerball, Lucky for Life, Lotto America or 2BY2?

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all ➔ **Go to 7 on page 3**

6. In the past 12 months, how much money do you estimate you have spent on lottery tickets in a typical month? Select one OR check the box if you won more than you lost.

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐

I won more than I lost in the past 12 months on lottery tickets

7. In the past 12 months, how often have you purchased raffle tickets? Raffles are a type of contest in which you buy a ticket for a chance to win a prize. Raffles are different from lotteries because there is a winner in each contest and prizes do not carry forward to other contests.

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 9**

8. In the past 12 months, how much money do you estimate you have spent on raffle tickets in a

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐

I won more than I lost in the past 12 months on raffle tickets

9. In the past 12 months, how often have you bet money or gambled on sports (i.e., sports betting)?

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 13 on page 4**

10. In the past 12 months, how much money do you estimate you have spent on sports betting in a typical month? Select one OR check the box if you won more than you lost.

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐

I won more than I lost in the past 12 months on sports betting

11. (In the past 12 months) what type of sports betting did you engage in? Please check all that apply.

- ☐ Betting on professional sporting events (i.e., football, basketball, baseball, hockey, boxing, mixed martial arts, motor racing, horse racing, e-sports (professional video game competitions))
- ☐ Sports pools/lotteries (i.e., betting on the outcomes of several different professional sporting matches)
- ☐ Fantasy sports betting
- ☐ Prop (or proposition) betting
- ☐ Betting on sports that you participated in yourself (e.g., golf, pool, bowling, darts, foosball)

12. (In the past 12 months) where and how did you bet on sports? Please check all that apply.

- ☐ Office sports pools or social betting against friends or family.
- ☐ Placing bets with a legal land-based sportsbook* (i.e., casinos) outside of North Dakota
- ☐ Placing bets with a legal land-based casino sportsbook in North Dakota
- ☐ Placing bets with an illegal/underground land-based sportsbook or bookmaker**
- ☐ Placing bets on sporting events with an online sportsbook outside of North Dakota

**A sportsbook is a venue where someone can place a bet on a sporting event.*

13. In the past 12 months, how often have you spent money or gambled on electronic pull tab

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 15**

14. In the past 12 months, how much money do you estimate you have spent on electronic pull tab machines (Etabs) at bars or restaurants in a typical month? Select one OR check the box if you won more than you lost.

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____
- ☐ I won more than I lost in the past 12 months on **Etabs at bars or restaurants**

15. In the past 12 months, how often have you spent money or gambled on charitable gambling at bars or restaurants (excluding Etabs) (e.g., paper pull tabs, blackjack, poker, pigwheel, punchboards, bingo, raffles)?

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 17 on page 5**

16. In the past 12 months, how much money do you estimate you have spent on charitable gambling at bars or restaurants (excluding Etabs) in a typical month? Select one OR check the box if you won more than you lost.

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐ I won more than I lost in the past 12 months on **charitable gambling at bars or restaurants (excluding Etabs)**

17. In the past 12 months, how often have you spent money or gambled on bingo at a location besides a bar or restaurant?

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 19**

18. In the past 12 months, how much money do you estimate you have spent on bingo at a location besides a bar or restaurant in a typical month? Select one OR check the box if you won more than you lost.

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐ I won more than I lost in the past 12 months on **bingo at a location besides a bar or restaurant**

19. In the past 12 months, how often have you spent money on casino electronic gambling machines (i.e., slot machines, video lottery terminals, electronic casino table games) in person? This does NOT include electronic gambling machines that you played online.

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 21 on page 6**

20. In the past 12 months, how much money do you estimate you have spent on casino electronic

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐

Even more than listed in the past 12 months on casino electronic gambling machines

21. In the past 12 months, how often have you bet money on any casino table game such as poker, blackjack, baccarat, roulette, craps, or bingo in person? *This does NOT include automated electronic versions of these games or games that you played online.*

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all

→ **If you indicate “not at all” for both 19 and 21, go to 26 on page 7;
if you indicate “not at all” for 21 but not 19, go to 23 on this page.**

22. In the past 12 months, how much money do you estimate you have spent on casino table game

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, specify \$ _____

☐

Even more than listed in the past 12 months on casino table game

23. In the past 12 months, what percentage of your time spent gambling at casinos in person was at

Percentages should add up to 100%

a. North Dakota casinos	_____ %
b. Out-of-state casinos	_____ %
Total	100 %

**If zero for North Dakota casinos, go to 26.
If more than zero, continue with 23a-1.**

23a-1. Which North Dakota casino do you

patronize the most? Select one.

- 1 Prairie Knights Casino
- 2 Four Bears Casino
- 3 Dakota Magic Casino

24. In the past 12 months, how much money do you estimate you have spent at North Dakota

- 1 \$0-\$49
- 2 \$50-\$99
- 3 \$100-\$199
- 4 \$200-\$499
- 5 \$500-\$999
- 6 \$1,000-\$1,999
- 7 \$2,000 or more, specify \$ _____

25. Since sports betting became legal in North Dakota (2021), have you changed how often you visit North Dakota casinos?

- 1 Yes, I now visit the casino more frequently
- 2 Yes, I now visit the casino less frequently
- 3 No, my frequency of visits has not changed

26. In the past 12 months, how often have you bet on a horse race at either a horse racetrack or an off-track site (e.g., restaurant, pub, bar, or casino)? *Do NOT include betting on horse races online.*

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 29**

27. In the past 12 months, how much money do you estimate you have spent on horse racing in a typical month? *Select one OR check the box if you won more than you lost.*

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, *specify* \$ _____

☐

I won more than I lost in the past 12 months on horse racing

28. Where do you most often go to bet on horse racing?

- 1 Chippewa Downs
- 2 North Dakota Horse Park
- 3 Off-track sites (including restaurants, bars, pubs, or casinos)
- 4 Other, *specify*: _____

29. In the past 12 months, how often have you gambled or bet money against other people on things such as card games; golf, pool, darts, bowling; video games; board games, or poker outside of a casino? *Do NOT include poker played in a casino and games played online.*

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all → **Go to 31**

30. In the past 12 months, how much money do you estimate you have spent on betting money

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, *specify* \$ _____

☐

I won more than I lost in the past 12 months on betting money against other people

31. In the past 12 months, how often have you purchased or engaged in any speculative financial market activities? *This refers to things such as day trading, cryptocurrencies, penny stocks, shorting, or purchase of options or futures.*

- | | |
|--------------------------|--------------------------------|
| 1 4 or more times a week | 5 Once a month |
| 2 2-3 times a week | 6 Less than once a month |
| 3 Once a week | 7 Not at all → Go to 33 |
| 4 2-3 times a month | |

32. In the past 12 months, how much money do you estimate you are currently ahead or behind

- 1 Behind by more than \$10,000, *specify* \$ _____
- 2 Behind by between \$5,000 - \$9,999
- 3 Behind by between \$1 - \$4,999
- 4 Neither behind or ahead
- 5 Ahead by between \$1 - \$4,999
- 6 Ahead by between \$5,000 - \$9,999
- 7 Ahead by more than \$10,000, *specify* \$ _____

33. In the past 12 months, have you gambled online? *This includes online activities such as playing*

poker, buying lottery tickets, bingo, slots or casino table games for money, or playing interactive games for money.

- 2 No → **Go to 36**

34. (In the past 12 months) how much money do you estimate you have spent on online gambling

- 1 \$0-\$9
- 2 \$10-\$19
- 3 \$20-\$49
- 4 \$50-\$99
- 5 \$100-\$199
- 6 \$200-\$499
- 7 \$500-\$999
- 8 \$1,000 or more, *specify* \$ _____

☐

Have you ever lost more than \$1,000 in the past 12 months to an online gambling loss?

35. (In the past 12 months) what is the main type of online gambling you engage in? *Select one.*

- 1 Lotto draw games
- 2 Instant win ticket
- 3 Bingo
- 4 Slot machines or other electronic gambling machines
- 5 Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.)
- 6 Games against other people (e.g., poker, pool, etc.)
- 7 Horse race betting
- 8 High risk stocks, options, futures, or day trading
- 9 Social media games
- 0 Other, *specify*: _____

36. Considering all types of gambling combined, what is the largest amount of money you have lost to gambling on any single day in the past 12 months?

- | | |
|---------------|--------------------|
| 1 \$0 | 5 \$1,000-\$1,999 |
| 2 \$1-\$199 | 6 \$2,000-\$4,999 |
| 3 \$200-\$499 | 7 \$5,000-\$9,999 |
| 4 \$500-\$999 | 8 \$10,000 or more |

Gambling Recreation/Entertainment

37. How important is gambling to you as a recreational activity?

- | | |
|----------------------|------------------------|
| 1 Very important | 3 Not very important |
| 2 Somewhat important | 4 Not at all important |

38. What portion of your close friends and family members are regular gamblers?

- | | |
|----------------|----------------|
| 1 None of them | 3 Most of them |
| 2 Some of them | 4 All of them |

Prevention Awareness

39. What portion of your close friends and family members have a gambling problem?

- 1 None of them
- 2 Some of them
- 3 Most of them
- 4 All of them

40. In your opinion, how much of a problem do you think problem gambling is in North Dakota?

- 1 Not a problem
- 2 Minor problem
- 3 Moderate problem
- 4 Serious problem
- 5 Don't know

41. In the past 12 months, have you seen or heard any media campaigns to prevent problem gambling in North Dakota?

- 1 Yes
- 2 No

42. In the past 12 months, have you been aware of any programs to prevent problem gambling (other than media campaigns) offered at your school, your place of work, in your community, or elsewhere?

- 1 Yes
- 2 No

43. Are you aware of the North Dakota Problem Gambling Helpline?

- 1 Yes
- 2 No →

If you would like information about problem gambling, please contact the North Dakota Problem Gambling Helpline at 1-877-702-7848 or visit the North Dakota Problem Gambling Resource Site: Gambler ND at <https://www.gamblernd.com>

44. Are you aware of the free online Gambler Healing course offered in North Dakota?

- 1 Yes
- 2 No →

If you would like information regarding the free Gambler Healing course, visit <https://gamblerhealing.com>

The following questions (45 through 73) are for those who have gambling experience in the past 12 months, please follow the instruction to continue:

Refer to your answers to “Gambling Behavior in the Past Year” questions on pages 2 through 8.

If you indicated Not at all or No on every one of the following questions (5, 7, 9, 13, 15, 17, 19, 21, 26, 29, 31, and 33) and do not gamble at all, please go to 74 on page 13. Otherwise, please continue with 45 on page 10.

45. How important are each of the following reasons as to why you gamble? Please mark your response for each row.

	Very	Somewhat Important	Somewhat Unimportant	Not at all Important
a. Entertainment or fun	1	2	3	4
b. Excitement, action or challenge	1	2	3	4
c. Habit or addiction	1	2	3	4
d. Socializing	1	2	3	4
e. Support a worthy cause	1	2	3	4
f. To win a large amount of money	1	2	3	4
g. As a hobby	1	2	3	4
h. Curiosity	1	2	3	4
i. Win money to pay bills	1	2	3	4
j. Distraction from everyday problems	1	2	3	4

Gambling Harms

The following questions (46 through 73) are about gambling harms. Please mark your response for each question.

	Yes	No
46. Has your involvement in gambling caused significant financial problems for you or someone close to you in the past 12 months?	1	2
47. Has your involvement in gambling caused significant mental stress in the form of guilt, anxiety, or depression for you or someone close to you in the past 12 months?	1	2
48. Has your involvement in gambling caused serious problems in your relationship with your spouse/partner, or important friends or family or caused you to repeatedly neglect your children in the past 12 months? <i>Family is whomever you define as "family."</i>	1	2
49. Has your involvement in gambling resulted in significant health problems or injury for you or someone close to you in the past 12 months?	1	2
50. Has your involvement in gambling caused significant work or school problems for you or someone close to you in the past 12 months or caused you to miss a significant amount of time off work or school?	1	2
51. Has your involvement in gambling caused you or someone close to you to write bad checks, take money that didn't belong to you, or commit other illegal acts to support your gambling in the past 12 months?	1	2
52. Is there anyone else who would say that your involvement in gambling in the past 12 months has caused any significant problems regardless of whether you agree with them or not?	1	2
53. In the past 12 months, have you often gambled longer, with more money or more frequently than you intended to?	1	2
54. In the past 12 months, have you often gone back to try and win back the money you lost?	1	2
55. In the past 12 months, have you made any unsuccessful attempts to reduce, control or stop your gambling?	1	2

(Questions continued on next page ...)

Questions continued from previous page. Mark your response to each question.

	Yes	No
56. In the past 12 months, is there anyone else who would say that you have had difficulty controlling your gambling, regardless of whether you agreed with them or not?	1	2
57. In the past 12 months, would you say you have been preoccupied with gambling?	1	2
58. In the past 12 months, did you find you needed to gamble with larger and larger amounts of money to achieve the same level of excitement?	1	2
59. In the past 12 months, when you were not gambling did you often experience irritability, restlessness, or strong cravings for it?	1	2
60. In the past 12 months, have you ever felt like you might have a problem with gambling?	1	2

61. Are there particular types of gambling that have contributed to your problems more than others?

- 1 Yes
2 No → **Go to 63**

62. Which types of gambling have contributed to your problems? Please check all that apply.

- | | |
|--|---|
| ☐ Lottery | ☐ Horse racing |
| ☐ Bingo | ☐ Sports betting |
| ☐ Casino slot machines | ☐ Speculative financial activities |
| ☐ Video poker machines | ☐ Online gambling |
| ☐ Casino table games (i.e., blackjack, baccarat, roulette, craps, etc.) | ☐ Electronic pull tabs (Etabs) |
| ☐ Poker | ☐ Other, specify: _____ |

63. Have you wanted help for gambling problems in the past 12 months?

- 1 Yes
2 No → **Go to 68 on page 12**

64. Have you sought help for gambling problems in the past 12 months?

- 1 Yes
2 No → **Go to 68 on page 12**

65. Where did you seek help from? Please check all that apply.

- ☐ Friends or family
- ☐ Gamblers Anonymous
- ☐ Gam-Anon (this is a support group for friends/family of problem gamblers)
- ☐ Family doctor
- ☐ Private psychologist/psychiatrist/counselor
- ☐ Problem gambling treatment center/clinic
- ☐ Pastor/minister/priest/etc.
- ☐ Telephone help/hotline
- ☐ Online help
- ☐ Other, specify: _____

66. Have you faced barriers to accessing treatment in the past 12 months?

- 1 Yes
2 No → **Go to 68**

67. What barriers to access treatment did you face? Check all that apply.

- ☐ Accessibility (not close to you)
☐ Finances (could not afford services)
☐ Knowledge of treatment facilities and services available
☐ Language and communication (ability to understand information provided)
☐ Mistrust (credibility of provider)
☐ Personal choice not to seek treatment

68. Have you entered into a self-exclusion agreement with any casino or other gambling establishment in the past 12 months?

- 1 Yes
2 No → **Go to 73**

69. In which state? Please check all that apply.

- ☐ North Dakota ☐ Montana
☐ Minnesota ☐ Nevada
☐ South Dakota ☐ Other, specify: _____

70. How useful was the casino self-exclusion agreement in reducing your gambling?

- 1 Very useful
2 Somewhat useful
3 Not at all useful

71. Did you nonetheless re-enter a casino or other gambling establishment that you had been banned from during your self-exclusion period?

- 1 No → **Go to 73**
2 Yes, a few times
3 Yes, many times

72. Were you ever detected?

- 1 No
2 Yes

73. To what extent do you agree or disagree with the following statements? Please rate your level of agreement for each statement.

	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree
People with a gambling problem are addicted and are not able to control their gambling activity.	1	2	3	4
Problem gambling is a health issue that affects people of all ages, races, ethnic and economic backgrounds.	1	2	3	4
As long as the state benefits from legal gambling, it should fund prevention and treatment programs.	1	2	3	4

74. In the past 12 months, how has your health been in general?

- 1 Excellent
- 2 Very good
- 3 Good
- 4 Fair
- 5 Poor

75. In the past 12 months, how would you rate your overall level of stress?

- 1 Very high
- 2 High
- 3 Moderate
- 4 Low
- 5 Very low

76. Do you currently smoke cigarettes, cigars, pipe tobacco, or hookah tobacco (shisha); use dipping tobacco (including snus), chewing tobacco, or snuff; or use e-cigarettes or other electronic “vaping” products every day, some days, or not at all?

- 1 Every day
- 2 Some days
- 3 Not at all

77. In the past 12 months, have you used alcohol?

- 1 Yes
- 2 No → **Go to 81 on page 14**

78. During the past 30 days, how many days per week or per month did you have at least one drink of any alcohol beverage such as beer, wine, a malt beverage, or liquor? Please enter the number of days per week or days per month.

Days per week OR Days per month

79. During the past 30 days, on the days when you drank, about how many drinks did you drink on average? One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or one shot of liquor. Enter 0 if no drinks in the past 30 days.

Number of drinks

80. Considering all types of alcoholic beverages, how many times during the past 30 days did you

If you are male: 5 or more drinks on an occasion

Number of times

If you are female: 4 or more drinks on an occasion

Number of times

81. In the past 12 months, how often have you used cannabis (e.g., marijuana, hashish, hash oil, CBD oil, etc.)?

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all

82. In the past 12 months, how often have you used any cocaine, methamphetamine, heroin, fentanyl, opiates, hallucinogens (such as LSD, mushrooms, or PCP), or any other drugs not intended for medical use? *“Non-medical” drug use means using it to get high or experience pleasurable effects, see what the effects are like, or use it with friends.*

- 1 4 or more times a week
- 2 2-3 times a week
- 3 Once a week
- 4 2-3 times a month
- 5 Once a month
- 6 Less than once a month
- 7 Not at all

83. In the past 12 months, have you had any problems with drugs or alcohol? *By this, we mean difficulties in controlling their use that have led to negative consequences for you or other people.*

- 1 Yes
- 2 No → **Go to 85**

84. In the past 12 months, have you sought help for your use of alcohol or drugs?

- 1 Yes
- 2 No

If you would like more information regarding treatment resources, please contact the North Dakota Drug Addiction & Substance Abuse Hotline at 866-210-1303 or the Drug & Alcohol Treatment Hotline (National) at 800-662-HELP

85. In the past 12 months, have you had any serious problems with depression, anxiety, or other mental health problems? *By serious, we mean any condition that significantly interferes with your daily functioning, relationships, or overall well-being.*

- 1 Yes
- 2 No → **Go to 87 on page 15**

86. In the past 12 months, have you sought treatment for a mental health problem?

- 1 Yes
- 2 No

If you would like more information regarding treatment resources, please contact the National Alliance on Mental Illness (NAMI) at 1-800-950-NAMI (6264), Samaritans at 877-870-4673, or Suicide and Crisis Lifeline at 988.

Demographics

The last few questions are about your background so we can keep track of the characteristics of people who respond to the survey.

87. Are you male, female, or other gender?

- 1 Male
- 2 Female
- 3 Non-binary/other

88. In what year were you born?

----------------------	----------------------	----------------------	----------------------

 Year

89. At present, are you ...?

- 1 Married
- 2 Living with your partner
- 3 Separated, but still legally married
- 4 Divorced
- 5 Widowed
- 6 Never been married

90. How many members of your household, including yourself, are 18 years of age or older?

- 1 1
- 2 2
- 3 3
- 4 4
- 5 5 or more

91. How many children under 18 years old

- 1 0
- 2 1
- 3 2
- 4 3
- 5 4
- 6 5 or more

92. What is the highest degree or level of school you have completed?

- 1 Less than high school
- 2 Regular high school diploma or GED
- 3 Some college credit, but less than 1 year of college credit
- 4 1 or more years of college credit, but no degree
- 5 Associate degree
- 6 Bachelor's degree
- 7 Master's, doctorate, or professional degree beyond bachelor's
- 8 Doctorate degree

93. Are you currently ...?

- 1 Employed for wages
- 2 Self-employed
- 3 Out of work for more than 1 year
- 4 Out of work for less than 1 year
- 5 A homemaker
- 6 A student
- 7 Retired
- 8 Unable to work

94. Have you ever served on active duty in the U.S. Armed Forces, military Reserves, or National Guard? *Active duty does NOT include training for the Reserves or National Guard but DOES include activation, for example, for the Persian Gulf War.*

- 1 Yes, now on active duty
- 2 Yes, on active duty in the past, but not during the last 12 months
- 3 No, training for Reserves or National Guard only
- 4 No, never served in the military

(Questions continued on the back ...)

95. Do you own the place where you currently live, pay rent, or something else?

- 1 Own
- 2 Rent
- 3 Something else, *specify*: _____

96. What is your approximate annual household income from all sources?

- 1 Less than \$15,000
- 2 \$15,000 - \$29,999
- 3 \$30,000 - \$49,999
- 4 \$50,000 - \$69,999
- 5 \$70,000 - \$99,999
- 6 \$100,000 - \$124,999
- 7 \$125,000 - \$149,999
- 8 \$150,000 or more
- 9 Prefer not to answer

97. Were you born in the United States?

- 1 No
- 2 Yes

98. Are you Hispanic or Latino?

- 1 No
- 2 Yes

99. Which one or more of the following would you say is your race? Please check all that apply.

- | | |
|--|--|
| ☐ White or Caucasian | ☐ Native Hawaiian or Other Pacific Islander |
| ☐ Black or African American | ☐ Native American or Alaskan Native |
| ☐ Asian | ☐ Some other race, <i>specify</i> : _____ |

Thank you very much for completing this survey. Is there anything else you would like to tell us?

Please return the survey in the envelope provided to:

Social and Economic Sciences Research Center, Washington State University
PO Box 641801

Pullman, WA 99164-1801

Thank You

APPENDIX B: ADDITIONAL TABLES

Table 23 Numbers of E-tab Organizations, Sites and Devices, 2018-2024

Year	Organizations	Sites	Devices
2018	53	130	479
2019	178	488	1,814
2020	211	618	2,737
2020	220	718	3,221
2021	247	758	4,069
2022	268	798	4,491
2023	273	830	4,899
2024	277	846	5,248

Table 24 E-tab and Other Charitable Gambling Adjusted Gross Proceeds

Year	E-tab Adj Gross	Other Game Types	Total Adj Gross
2015		59,462,454	59,462,454
2016		57,035,873	57,035,873
2017		55,239,677	55,239,677
2018	0	55,973,442	55,973,442
2019	35,860,663	48,741,369	84,602,032
2020	73,062,241	35,061,855	108,124,096
2021	140,780,517	40,671,052	181,451,569
2022	180,984,371	41,676,066	222,660,437
2023	195,591,181	39,192,584	234,783,765
2024	213,256,355	40,776,187	254,032,542

Table 25 Opinions about legalized gambling

		Unweight	Weighted N	All Should be Legal		Some Legal and		All Should be Illegal		p-value
				%	95% CI	%	95% CI	%	95% CI	
Overall		2,943	587,011	27.9	(25.51, 30.20)	64.1	(61.61, 66.63)	8.0	(6.60, 9.44)	
Missing		87	16,596							
Gender										<0.0001
	Male	1,100	299,691	33.8	(29.95, 37.61)	58.4	(54.36, 62.34)	7.9	(5.69, 10.05)	
	Female/ Other	1,673	276,785	21.5	(18.76, 24.31)	70.3	(67.23, 73.40)	8.2	(6.30, 10.00)	
	Missing	170	10,534							
Age										<0.0001
	18-34	321	185,188	30.1	(24.40, 35.88)	65.2	(59.28, 71.20)	4.6	(1.99, 7.24)	
	35-54	776	179,697	33.4	(29.30, 37.50)	60.5	(56.29, 64.78)	6.1	(3.99, 8.14)	
	55+	1,596	203,049	21.6	(19.12, 24.09)	65.7	(62.84, 68.58)	12.7	(10.67, 14.70)	
	Missing	250	19,076							
Ethnicity										0.0009
	Native American	56	23,659	35.8	(19.70, 51.91)	48.5	(31.73, 65.31)	15.7	(3.46, 27.88)	
	White	110	55,901	24.1	(14.40, 33.89)	67.1	(56.43, 77.82)	8.7	(2.31, 15.16)	
	Non-White	2,594	493,040	28.1	(25.69, 30.53)	64.6	(61.97, 67.13)	7.3	(5.94, 8.74)	
	Missing	183	14,410							
Employment										<0.0001
	Employed	1,509	391,119	30.3	(27.17, 33.37)	64.0	(60.71, 67.19)	5.8	(4.20, 7.35)	
	Retired	1,023	112,249	20.6	(17.49, 23.75)	65.5	(61.82, 69.18)	13.9	(11.20, 16.55)	
	Other	198	62,680	22.4	(14.55, 30.22)	67.4	(58.57, 76.20)	10.2	(4.53, 15.92)	
	Missing	213	20,962							
Income										<0.0001
	<\$50,000	609	136,655	25.3	(20.05, 30.53)	62.7	(56.85, 68.52)	12.0	(8.10, 15.95)	
	\$50,000 - <\$100,000	755	163,646	27.1	(22.52, 31.69)	65.1	(60.15, 69.99)	7.8	(5.05, 10.60)	
	\$100,000 - <\$150,000	546	117,783	30.7	(25.58, 35.90)	64.6	(59.30, 69.99)	4.6	(2.27, 6.96)	

		Unweight	Weighted N	All Should be Legal		Some Legal and		All Should be Illegal		p-value
				%	95% CI	%	95% CI	%	95% CI	
Marital status	\$150,000+	428	88,303	36.3	(30.49, 42.20)	58.2	(52.19, 64.20)	5.5	(2.70, 8.23)	0.0005
	Prefer not to	362	59,764	21.6	(15.33, 27.81)	69.9	(62.89, 76.82)	8.6	(4.33, 12.83)	
	Missing	243	20,858							
	Married	1,604	298,949	26.9	(23.98, 29.82)	65.9	(62.75, 68.99)	7.2	(5.53, 8.94)	
	Living with Partner	144	48,431	34.3	(24.09, 44.48)	61.6	(51.16, 72.05)	4.1	(0, 8.37)	
	Separated or Divorced	351	6,1297	30.2	(23.48, 36.99)	61.4	(54.23, 68.55)	8.4	(4.30, 12.45)	
	Widowed	313	3,8200	21.9	(15.81, 27.99)	62.7	(55.57, 69.81)	15.4	(10.09, 20.72)	
	Never Married	338	124,723	29.9	(23.33, 36.43)	61.8	(54.81, 68.72)	8.4	(4.40, 12.32)	
	Missing	193	15,408							

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

The % missing is calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 26 Beliefs about gambling benefits and harms

		Unweighted N	Weighted N	Harms Outweigh Benefits		Benefits are about Equal to Harms		Benefits Outweigh Harms		p-value
				%	95% CI	%	95% CI	%	95% CI	
Overall		2,949	586,394	61.2	(58.63, 63.71)	28.4	(26.04, 30.74)	10.4	(8.85, 12.03)	
Missing		81	17,213							
Gender										0.0004
	Male	1,100	299,449	58.9	(54.95, 62.92)	28.5	(24.85, 32.16)	12.6	(9.87, 15.24)	
	Female/ Other	1,680	276,466	64.0	(60.75, 67.16)	27.9	(24.87, 30.87)	8.2	(6.34, 10.01)	
	Missing	169	10,477							
Age										0.0015
	18-34	320	183,025	63.2	(57.12, 69.20)	28.3	(22.66, 33.95)	8.5	(5.03, 12.03)	
	35-54	781	181,174	56.2	(51.91, 60.52)	31.8	(27.76, 35.84)	12.0	(9.17, 14.80)	
	55+	1,599	203,339	64.1	(61.25, 67.04)	25.1	(22.52, 27.76)	10.7	(8.85, 12.58)	
	Missing	249	18,855							
Ethnicity										0.1077
	Native American	56	23,659	52.3	(35.56, 69.11)	34.5	(18.57, 50.52)	13.1	(1.78, 24.46)	
	White	2,601	493,151	61.5	(58.87, 64.10)	28.7	(26.25, 31.11)	9.8	(8.24, 11.44)	
	Non-White	109	55,288	65.6	(54.80, 76.42)	23.4	(13.79, 33.07)	11.0	(3.85, 18.07)	
	Missing	183	14,294							
Employment										0.2193
	Employed	1,514	391,614	60.1	(56.76, 63.36)	29.1	(26.06, 32.18)	10.8	(8.72, 12.91)	
	Retired	1,026	112,327	65.7	(62.02, 69.35)	24.6	(21.28, 27.93)	9.7	(7.42, 12.00)	
	Other	198	61,634	61.1	(51.99, 70.20)	28.4	(19.98, 36.82)	10.5	(4.78, 16.23)	
	Missing	211	20,818							
Income										<0.0001
	<\$50,000	614	137,744	63.8	(58.05, 69.61)	28.5	(23.09, 33.95)	7.6	(4.45, 10.84)	
	\$50,000 - <\$100,000	755	163,958	60.8	(55.78, 65.84)	27.7	(23.11, 32.34)	11.5	(8.18, 14.75)	
	\$100,000 - <\$150,000	549	117,990	60.7	(55.22, 66.13)	30.4	(25.25, 35.52)	8.9	(5.75, 12.13)	
	\$150,000+	428	88,303	54.9	(48.82, 60.94)	28.7	(23.21, 34.22)	16.4	(11.90, 20.92)	

		Unweighted N	Weighted N	Harms Outweigh Benefits		Benefits are about Equal to Harms		Benefits Outweigh Harms		p-value
				%	95% CI	%	95% CI	%	95% CI	
	Prefer not to	362	57,529	68.5	(61.74, 75.33)	24.9	(18.59, 31.25)	6.5	(2.93, 10.17)	
	Missing	241	20,868							
Marital status										0.0479
	Married	1,611	300,752	60.1	(56.85, 63.29)	28.4	(25.39, 31.32)	11.6	(9.47, 13.67)	
	Living with Partner	144	48,431	65.4	(55.20, 75.63)	25.5	(16.14, 34.87)	9.1	(2.91, 15.25)	
	Separated or Divorced	351	61,359	61.3	(54.15, 68.47)	29.7	(22.95, 36.38)	9.0	(4.81, 13.23)	
	Widowed	314	38,302	71.5	(64.88, 78.15)	18.9	(13.16, 24.67)	9.6	(5.25, 13.90)	
	Never Married	337	122,195	60.3	(53.27, 67.30)	30.5	(23.92, 37.12)	9.2	(5.05, 13.34)	
	Missing	192	15,351							

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

The % missing is calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 27 Beliefs about gambling availability

		Unweighted N	Weighted N	Too widely available		Not available enough		Current availability is fine		p-value
				%	95% CI	%	95% CI	%	95% CI	
Overall		2,860	56,9898	19.5	(17.41, 21.60)	12.5	(10.79, 14.29)	68.0	(65.49, 70.43)	
Missing		170	33,709							
Gender										<0.0001
	Male	1,064	289,816	15.8	(12.82, 18.84)	15.7	(12.67, 18.66)	68.5	(64.68, 72.34)	
	Female/ Other	1,628	269,661	23.5	(20.59, 26.34)	9.1	(7.19, 11.10)	67.4	(64.21, 70.58)	
	Missing	168	10,420							
Age										<0.0001
	18-34	318	181,959	15.6	(11.01, 20.12)	15.6	(11.06, 20.20)	68.8	(62.98, 74.63)	
	35-54	767	175,923	15.6	(12.44, 18.76)	15.2	(12.05, 18.31)	69.2	(65.20, 73.24)	
	55+	1,530	193,427	26.0	(23.35, 28.74)	7.6	(5.96, 9.21)	66.4	(63.47, 69.27)	
	Missing	245	18,588							
Ethnicity										0.0112
	Native American	52	22,545	23.7	(8.85, 38.51)	14.9	(2.49, 27.36)	61.4	(44.40, 78.38)	
	White	2,524	480,667	19.3	(17.12, 21.41)	11.8	(10.07, 13.58)	68.9	(66.39, 71.43)	
	Non-White	103	52,389	19.6	(10.21, 28.93)	18.9	(9.64, 28.10)	61.6	(50.08, 73.03)	
	Missing	181	14,295							
Employment										<0.0001
	Employed	1,479	381,087	16.7	(14.17, 19.24)	13.2	(10.93, 15.54)	70.1	(66.94, 73.17)	
	Retired	977	105,791	27.4	(23.94, 30.96)	6.2	(4.31, 8.10)	66.3	(62.63, 70.06)	
	Other	195	62,530	23.2	(15.22, 31.13)	15.8	(8.95, 22.72)	61.0	(51.80, 70.19)	
	Missing	209	20,488							
Income										<0.0001
	<\$50,000	583	132,345	22.0	(16.85, 27.08)	14.2	(9.89, 18.52)	63.8	(57.89, 69.76)	
	\$50,000 - <\$100,000	735	157,893	19.7	(15.43, 23.70)	11.5	(8.17, 14.82)	68.9	(64.12, 73.77)	
	\$100,000 - <\$150,000	533	115,606	15.7	(11.57, 19.81)	10.6	(7.09, 14.06)	73.7	(68.75, 78.72)	
	\$150,000+	417	85,843	15.1	(10.69, 19.52)	20.5	(15.48, 25.44)	64.4	(58.53, 70.34)	
	Prefer not to	355	57,587	27.0	(20.41, 33.67)	5.7	(2.22, 9.13)	67.3	(60.28, 74.28)	

		Unweighted N	Weighted N	Too widely available		Not available enough		Current availability is fine		p-value
				%	95% CI	%	95% CI	%	95% CI	
Missing		237	20,622							
Marital status										<0.0001
	Married	1,569	293,131	18.1	(15.56, 20.70)	12.2	(9.98, 14.33)	69.7	(66.65, 72.77)	
	Living with Partner	142	47,230	14.6	(6.96, 22.24)	17.1	(8.98, 25.28)	68.3	(58.19, 78.33)	
	Separated or Divorced	337	58,552	22.5	(16.20, 28.70)	12.0	(7.12, 16.85)	65.6	(58.45, 72.68)	
	Widowed	297	35,190	31.2	(24.40, 38.06)	4.5	(1.45, 7.57)	64.3	(57.20, 71.33)	
	Never Married	324	120,196	19.5	(13.77, 25.30)	14.7	(9.58, 19.89)	65.7	(58.83, 72.63)	
	Missing	191	15,598							

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the MA population

Percentages and 95% CI are calculated using the weighted N

The % missing is calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 28 Overall Gambling Participation in North Dakota by Region

	Unweighted N	Weighted N	%	95%CI	p- value
Any Gambling					0.0374
North Dakota	2,221	43,4880	73.7	(71.43, 76.00)	
Northwest	91	23,416	73.0	(61.53, 84.57)	
North Central	215	39,903	67.6	(59.80, 75.48)	
Lake Region	88	15,952	76.0	(64.77, 87.22)	
Northeast	252	54,217	78.2	(71.80, 84.52)	
Southeast	723	143,655	72.6	(68.64, 76.63)	
South Central	204	33,110	76.0	(68.67, 83.37)	
West Central	530	97,830	73.0	(68.31, 77.79)	
Badlands	118	26,797	80.5	(71.77, 89.23)	
Any E-Tabs					0.0218
North Dakota	864	181,097	30.2	(27.81, 32.58)	
Northwest	36	9,449	29.2	(17.50, 40.92)	
North Central	82	16,527	27.7	(20.22, 35.09)	
Lake Region	38	7,548	36.0	(23.35, 48.57)	
Northeast	87	17,136	23.7	(17.17, 30.16)	
Southeast	273	57,929	29.2	(25.14, 33.27)	
South Central	79	14,663	33.4	(25.36, 41.52)	
West Central	223	46,066	33.6	(28.51, 38.60)	
Badlands	46	11,779	33.9	(23.01, 44.76)	
Any Electronic Gambling Machine					0.0101
North Dakota	686	140,903	23.4	(21.24, 25.63)	
Northwest	42	11,480	35.5	(23.17, 47.81)	
North Central	62	12,228	20.4	(13.74, 27.14)	
Lake Region	33	6,049	28.0	(16.21, 39.69)	
Northeast	71	15,250	20.9	(14.71, 27.07)	
Southeast	223	46,660	23.5	(19.71, 27.27)	
South Central	60	11,114	25.3	(17.89, 32.79)	
West Central	164	30,542	22.3	(17.84, 26.75)	
Badlands	31	7,580	21.7	(12.28, 31.15)	

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

The % missing is calculated using the weighted N

Table 29 Any raffles by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	1,563	287,243	48.0	(45.44, 50.62)	
Gender					0.3036
Male	581	149,148	48.9	(44.85, 52.90)	
Female/Other	890	132,524	46.9	(43.62, 50.27)	
Age					<0.0001
18 – 34	138	72,887	38.9	(32.79, 44.97)	
35 – 54	482	102,642	56.7	(52.39, 60.96)	
55+	807	101,040	48.2	(45.26, 51.22)	
Ethnicity					<0.0001
Native American	29	8,754	35.8	(20.00, 51.36)	
White	1,400	252,790	50.5	(47.83, 53.15)	
Non-White	39	20,404	34.4	(23.66, 45.11)	
Employment					<0.0001
Employed	898	208,869	52.6	(49.23, 55.97)	<0.0001
Retired	486	49,947	42.9	(39.20, 46.69)	
Other	69	18,928	29.8	(21.45, 38.25)	
Income					<0.0001
<\$50,000	206	41,763	29.5	(24.04, 34.92)	
\$50,000 - <\$100,000	392	75,621	45.6	(40.47, 50.65)	
\$100,000 - <\$150,000	355	70,517	59.8	(54.38, 65.32)	
\$150,000+	307	63,256	71.8	(66.29, 77.27)	
Prefer Not to Answer	172	25,582	41.6	(34.26, 48.88)	
Marital status					<0.0001
Married	972	174,141	57.0	(53.72, 60.26)	
Living With Partner	72	21,737	45.2	(34.44, 55.87)	
Separated or Divorced	171	27,940	44.6	(37.38, 51.79)	
Widowed	129	14,836	36.7	(29.89, 43.56)	
Never Married	120	42,135	33.6	(26.89, 40.27)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 30 Lottery by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	1,244	240,958	40.2	(37.68, 42.77)	
Gender					<0.0001
Male	518	133,589	43.9	(39.88, 47.87)	
Female/Other	649	102,826	36.2	(33.01, 39.44)	
Age					<0.0001
18-34	94	56,250	29.7	(24.00, 35.37)	
35-54	354	81,877	45.3	(40.95, 49.57)	
55+	688	94,319	45.2	(42.28, 48.21)	
Ethnicity					0.3614
Native American	28	8,886	37.6	(21.29, 53.82)	
White	1,091	204,713	40.9	(38.27, 43.51)	
Non-White	44	22,205	37.0	(26.18, 47.78)	
Employment					0.4353
Employed	675	161,193	40.6	(37.27, 43.89)	
Retired	401	47,561	41.1	(37.36, 44.82)	
Other	73	23,894	36.9	(28.06, 45.84)	
Income					<0.0001
<\$50,000	210	48,487	34.5	(28.81, 40.22)	
\$50,000 - <\$100,000	303	63,782	38.5	(33.49, 43.45)	
\$100,000 - <\$150,000	250	50,150	42.3	(36.83, 47.83)	
\$150,000+	219	43,726	49.3	(43.27, 55.42)	
Prefer not to Answer	150	24,911	39.7	(32.34, 47.14)	
Marital status					<0.0001
Married	738	139,717	45.7	(42.38, 48.95)	
Living with partner	57	14,578	30.1	(20.25, 39.95)	
Separated or Divorced	144	22,937	36.8	(29.82, 43.87)	
Widowed	101	14,672	36.4	(29.58, 43.26)	
Never Married	120	43,533	34.5	(27.76, 41.26)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 31 Any charitable gambling by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	1,034	214,072	35.7	(33.22, 38.20)	
Gender					0.6194
Male	360	107,293	35.2	(31.39, 39.09)	
Female/Other	614	102,759	36.1	(32.92, 39.35)	
Age					<0.0001
18 – 34	141	74,370	39.3	(33.25, 45.43)	
35 – 54	345	71,472	39.0	(34.76, 43.21)	
55+	465	61,090	29.5	(26.78, 32.19)	
Ethnicity					<0.0001
Native American	18	5,661	24.1	(9.67, 38.55)	
White	936	192,803	38.4	(35.83, 41.01)	
Non-White	19	10,841	18.2	(9.51, 26.93)	
Employment					<0.0001
Employed	634	158,668	39.7	(36.44, 43.04)	
Retired	279	31,301	27.2	(23.89, 30.58)	
Other	49	16,775	26.1	(17.97, 34.22)	
Income					<0.0001
<\$50,000	161	35,198	24.9	(19.75, 30.13)	
\$50,000 - <\$100,000	266	59,669	35.9	(30.96, 40.78)	
\$100,000 - <\$150,000	224	52,330	44.3	(38.75, 49.81)	
\$150,000+	211	44,980	50.8	(44.68, 56.83)	
Prefer Not to Answer	93	15,732	25.3	(18.69, 31.90)	
Marital status					<0.0001
Married	603	117,591	38.2	(34.99, 41.42)	
Living With Partner	72	24,569	51.2	(40.38, 61.96)	
Separated or Divorced	112	17,892	28.8	(22.28, 35.36)	
Widowed	83	11,120	27.5	(21.20, 33.87)	
Never Married	100	37,970	30.3	(23.73, 36.85)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 32 Any E-tabs by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	864	181,097	30.2	(27.81, 32.58)	
Gender					0.2816
Male	294	88,629	29.1	(25.41, 32.74)	
Female/Other	500	87,903	30.9	(27.83, 34.02)	
Age					0.0001
18 – 34	115	59,586	31.5	(25.73, 37.31)	
35 – 54	287	62,594	34.1	(30.03, 38.25)	
55+	373	51,809	25.0	(22.42, 27.58)	
Ethnicity					<0.0001
Native American	14	4,118	17.5	(4.70, 30.38)	
White	764	163,107	32.6	(30.05, 35.05)	
Non-White	19	8,810	14.6	(6.68, 22.45)	
Employment					<0.0001
Employed	526	133,766	33.5	(30.33, 36.69)	
Retired	220	25,691	22.2	(19.08, 25.39)	
Other	41	14,090	22.0	(14.34, 29.70)	
Income					<0.0001
<\$50,000	150	35,336	25.1	(19.93, 30.36)	
\$50,000 - <\$100,000	219	50,020	29.9	(25.26, 34.63)	
\$100,000 - <\$150,000	181	42,395	35.9	(30.58, 41.28)	
\$150,000+	153	33,996	38.4	(32.45, 44.27)	
Prefer Not to Answer	82	13,637	21.8	(15.57, 28.07)	
Marital status					<0.0001
Married	481	97,416	31.7	(28.59, 34.74)	
Living With Partner	62	20,349	42.3	(31.63, 52.91)	
Separated or Divorced	103	18,610	29.7	(23.09, 36.35)	
Widowed	62	7,807	19.3	(13.73, 24.91)	
Never Married	85	31,641	25.3	(19.09, 31.52)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 33 Any EGMs by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	686	140,903	23.4	(21.24, 25.63)	
Gender					0.9473
Male	242	71,371	23.4	(19.95, 26.76)	
Female/Other	392	66,243	23.2	(20.42, 26.08)	
Age					0.0413
18 – 34	85	49,817	26.4	(20.93, 31.95)	
35 – 54	190	40,163	21.9	(18.32, 25.49)	
55+	348	46,651	22.3	(19.78, 24.74)	
Ethnicity					0.0675
Native American	15	4,397	18.0	(5.33, 30.61)	
White	602	121,509	24.2	(21.96, 26.52)	
Non-White	18	11,872	19.5	(10.67, 28.29)	
Employment					0.0563
Employed	382	97,642	24.5	(21.56, 27.35)	
Retired	209	23,169	20.0	(16.94, 22.98)	
Other	36	13,713	21.2	(13.64, 28.66)	
Income					0.0027
<\$50,000	119	30,645	21.5	(16.61, 26.42)	
\$50,000 - <\$100,000	181	41,439	24.9	(20.50, 29.36)	
\$100,000 - <\$150,000	131	28,763	24.3	(19.50, 29.04)	
\$150,000+	120	25,258	28.5	(23.02, 33.98)	
Prefer Not to Answer	70	10,352	16.6	(10.96, 22.24)	
Marital status					0.0002
Married	378	69,899	22.7	(19.96, 25.50)	
Living With Partner	48	17,092	35.2	(24.95, 45.40)	
Separated or Divorced	88	15,256	24.3	(18.07, 30.47)	
Widowed	55	7,561	18.8	(13.25, 24.34)	
Never Married	64	27,433	21.8	(15.90, 27.62)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 34 Any casino table games by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	290	73,258	12.2	(10.53, 13.93)	
Gender					<0.0001
Male	151	50,183	16.5	(13.48, 19.47)	
Female/Other	121	22,044	7.8	(5.97, 9.56)	
Age					<0.0001
18 – 34	50	32,107	16.9	(12.27, 21.61)	
35 – 55	93	21,157	11.6	(8.81, 14.38)	
55+	123	18,161	8.8	(7.08, 10.46)	
Ethnicity					0.0084
Native American	9	4,390	17.9	(5.31, 30.57)	
White	253	63,115	12.6	(10.85, 14.40)	
Non-White	9	4,587	7.6	(1.68, 13.56)	
Employment					<0.0001
Employed	196	60,204	15.1	(12.68, 17.51)	
Retired	60	6,883	6.0	(4.23, 7.82)	
Other	13	4,747	7.4	(2.54, 12.16)	
Income					<0.0001
<\$50,000	40	10,922	7.8	(4.54, 10.97)	
\$50,000 - <\$100,000	73	22,430	13.5	(10.01, 17.02)	
\$100,000 - <\$150,000	55	15,731	13.3	(9.50, 17.06)	
\$150,000+	80	18,993	21.5	(16.48, 26.48)	
Prefer Not to Answer	19	3,666	5.9	(2.30, 9.42)	
Marital status					<0.0001
Married	148	33,372	10.9	(8.81, 12.94)	
Living With Partner	27	11,779	24.2	(15.06, 33.42)	
Separated or Divorced	40	8,571	13.9	(8.90, 18.96)	
Widowed	23	2,312	5.7	(2.43, 9.04)	
Never Married	34	16,194	12.8	(8.08, 17.60)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 35 Percentage of Time Spent Gambling In Person at ND Casinos by Casino Gamblers

	Unweighted N	Weighted N	%	95%CI
Gambled in Person in Casinos	779	16,3275	27.3	(24.96, 29.59)
0%	191	44,978	31.0	(25.93, 35.99)
1% – 25%	62	12,288	8.5	(5.43, 11.49)
25% - 50%	22	4,278	2.9	(1.11, 4.78)
51% - 75%	79	14,831	10.2	(6.91, 13.50)
76% - 100%	96	23,214	16.0	(11.99, 19.97)
100%	233	45,695	31.5	(26.40, 36.50)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 36 Casinos in ND Patronized the Most by Casino Gamblers

	Unweighted N	Weighted N	%	95%CI
Gambled in Person in ND Casino	492	100,308	69.0	(64.01, 74.07)
Prairie Knights Casino	108	18,407	23.5	(17.75, 29.31)
Four Bears Casino	77	17,768	22.7	(17.00, 28.42)
Dakota Magic Casinos	178	35,044	44.8	(38.02, 51.57)
Sky Dancer Casino	35	7,011	9.0	(5.07, 12.86)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 37 Non-Gambling Expenditures at ND Casinos by Casino Gamblers

	Unweighted N	Weighted N	%	95%CI
Gambled in Person in ND Casino	492	100,308	69.0	(64.01, 74.07)
\$0 - \$49	177	36,267	36.3	(30.25, 42.39)
\$50 - \$99	100	18,014	18.0	(13.19, 22.90)
\$100 - \$199	98	21,855	21.9	(16.67, 27.11)
\$200 - \$499	69	13,986	14.0	(9.63, 18.39)
\$500 - \$999	27	6,653	6.7	(3.52, 9.81)
\$1000 - \$1999	8	1,487	1.5	(0, 3.02)
\$2000+	6	1,578	1.6	(0.01, 3.16)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 38 Any sports betting by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	308	72,449	12.1	(10.40, 13.78)	
Gender					<0.0001
Male	163	52,251	17.1	(14.10, 20.18)	
Female/Other	126	19,121	6.7	(5.06, 8.41)	
Age					0.0001
18 – 34	45	29,171	15.4	(10.93, 19.93)	
35 – 55	108	22,666	12.5	(9.65, 15.38)	
55+	129	18,616	8.9	(7.20, 10.60)	
Ethnicity					0.8572
Native American	NSI	--	--	--	
White	273	61,701	12.3	(10.58, 14.08)	
Non-White	12	7,016	11.8	(4.52, 19.02)	
Employment					<0.0001
Employed	201	56,220	14.2	(11.80, 16.50)	
Retired	71	9,522	8.2	(6.13, 10.29)	
Other	14	5,177	8.0	(3.00, 12.99)	
Income					<0.0001
<\$50,000	51	14,798	10.5	(6.81, 14.13)	
\$50,000 - <\$100,000	66	18,521	11.2	(7.95, 14.40)	
\$100,000 - <\$150,000	61	16,014	13.6	(9.75, 17.39)	
\$150,000+	81	17,060	19.3	(14.48, 24.07)	
Prefer Not to Answer	24	4,509	7.2	(3.29, 11.09)	
Marital status					0.0041
Married	178	36,855	12.0	(9.90, 14.20)	
Living With Partner	22	8,840	18.4	(10.03, 26.70)	
Separated or Divorced	35	7,352	11.7	(7.06, 16.37)	
Widowed	16	2,408	6.0	(2.63, 9.38)	
Never Married	37	15,812	12.5	(7.79, 17.15)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 39 Type of sports betting

	Unweighted N	Weighted N	%	95%CI
Overall	308	72,449	12.1	(10.40, 13.78)
Professional Sporting Events	156	40,182	55.5	(47.70, 63.23)
Sports Pools and Lotteries	105	21,617	29.8	(22.69, 36.99)
Fantasy Sports Betting	115	34,505	47.6	(39.83, 55.43)
Prop Betting	26	8,809	12.2	(7.05, 17.26)
Sports Participated in Yourself	42	9,662	13.3	(8.03, 18.65)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 40 Sports betting (where)

	Unweighted N	Weighted N	%	95%CI
Overall	308	72,449	12.1	(10.40, 13.78)
Office Sports Pools or Social Betting w/ Friends and Family	216	48,969	67.6	(60.28, 74.90)
Legal Land-Based Sportsbooks outside ND	52	14,593	20.1	(13.88, 26.41)
Legal Land-Based Sportsbooks inside ND	35	8,803	12.2	(7.05, 17.25)
Illegal/Underground Land-	7	2,245	3.1	(0.39, 5.81)
Online Sportsbook Outside ND	60	20,867	28.8	(21.73, 35.88)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 41 Any bingo by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	377	70,407	11.7	(10.04, 13.37)	
Gender					<0.0001
Male	94	26,680	8.7	(6.45, 10.99)	
Female/Other	256	41,783	14.7	(12.30, 17.04)	
Age					0.7542
18 – 34	38	21,336	11.3	(7.34, 15.23)	
35 – 55	116	22,447	12.2	(9.39, 15.07)	
55+	186	23,432	11.2	(9.33, 13.10)	
Ethnicity					0.0039
Native American	13	5,165	21.1	(7.67, 34.54)	
White	327	57,391	11.4	(9.75, 13.14)	
Non-White	11	6,073	10.0	(3.30, 16.63)	
Employment					0.8961
Employed	200	45,568	11.4	(9.26, 13.55)	
Retired	124	13,399	11.5	(9.12, 13.96)	
Other	22	7,984	12.3	(6.27, 18.36)	
Income					0.5719
<\$50,000	79	15,767	11.1	(7.35, 14.86)	
\$50,000 - <\$100,000	101	21,204	12.7	(9.32, 16.16)	
\$100,000 - <\$150,000	71	14,714	12.4	(8.74, 16.07)	
\$150,000+	54	9,708	11.0	(7.16, 14.75)	
Prefer Not to Answer	38	6,002	9.5	(5.11, 13.97)	
Marital status					0.0257
Married	194	33,839	11.0	(8.93, 13.07)	
Living With Partner	22	7,994	16.5	(8.51, 24.39)	
Separated or Divorced	52	8,363	13.3	(8.39, 18.22)	
Widowed	47	5,804	14.4	(9.40, 19.33)	
Never Married	33	11,854	9.4	(5.25, 13.55)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 42 Any private wagering by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	288	69,875	11.6	(9.98, 13.31)	
Gender					<0.0001
Male	146	44,064	14.4	(11.57, 17.22)	
Female/Other	124	24,785	8.7	(6.83, 10.61)	
Age					<0.0001
18 – 34	45	27,329	14.4	(10.05, 18.79)	
35 – 55	109	26,200	14.4	(11.33, 17.42)	
55+	108	14,090	6.7	(5.24, 8.23)	
Ethnicity					0.0373
Native American	NSI	--	--	--	
White	251	58,161	11.6	(9.90, 13.32)	
Non-White	14	8,473	13.9	(6.21, 21.60)	
Employment					0.0017
Employed	168	50,355	12.6	(10.38, 14.85)	
Retired	77	8,544	7.4	(5.39, 9.36)	
Other	23	8,806	13.6	(7.29, 19.90)	
Income					<0.0001
<\$50,000	50	16,316	11.5	(7.70, 15.35)	
\$50,000 - <\$100,000	73	18,751	11.2	(7.98, 14.43)	
\$100,000 - <\$150,000	50	12,633	10.7	(7.22, 14.10)	
\$150,000+	77	17,715	20.0	(15.16, 24.90)	
Prefer Not to Answer	18	3,173	5.1	(1.75, 8.36)	
Marital status					<0.0001
Married	162	33,985	11.1	(8.99, 13.14)	
Living With Partner	26	9,804	20.2	(11.58, 28.77)	
Separated or Divorced	31	7,342	11.7	(7.05, 16.38)	
Widowed	17	1,774	4.4	(1.49, 7.31)	
Never Married	33	14,637	11.6	(7.03, 16.09)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 43 Any horse racing by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	97	18,697	3.1	(2.23, 4.04)	
Gender					0.6362
Male	38	9,913	3.3	(1.84, 4.70)	
Female/Other	52	8,384	3.0	(1.82, 4.10)	
Age					0.8196
18 – 34	11	5,380	2.9	(0.79, 4.95)	
35 – 55	30	5,832	3.2	(1.68, 4.74)	
55+	48	7,027	3.4	(2.29, 4.45)	
Ethnicity					0.4383
Native American	NSI	--	--	--	
White	84	15,591	3.1	(2.19, 4.05)	
Non-White	NSI	--	--	--	
Employment					0.1117
Employed	61	13,525	3.4	(2.17, 4.62)	
Retired	21	2,125	1.8	(0.82, 2.87)	
Other	8	2,646	4.1	(0.44, 7.79)	
Income					0.0016
<\$50,000	20	5,230	3.8	(1.49, 6.06)	
\$50,000 - <\$100,000	18	2,855	1.7	(0.38, 3.03)	
\$100,000 - <\$150,000	21	3,887	3.3	(1.30, 5.28)	
\$150,000+	25	5,032	5.7	(2.88, 8.64)	
Prefer Not to Answer	NSI	--	--	--	
Marital status					0.1563
Married	54	10,809	3.5	(2.31, 4.76)	
Living With Partner	7	2,084	4.3	(0, 8.69)	
Separated or Divorced	12	2,318	3.7	(0.96, 6.46)	
Widowed	7	534	1.3	(0, 2.94)	
Never Married	10	2,551	2.0	(0.04, 4.04)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 44 Most Frequented Horse Tracks

	Unweighted N	Weighted N	%	95%CI
Bet at race tracks	97	18,697	3.1	(2.23, 4.04)
Chippewa Downs	5	1,120	6.0	(0, 12.18)
North Dakota Horse Park	42	8,676	46.4	(33.40, 59.41)
Off-Track Sites	32	5,593	29.9	(17.97, 41.86)
Other	17	3,152	16.9	(7.10, 26.63)

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 45 Any online by demographics

		Unweighted N	Weighted N	%	95% CI	p-value
Overall		92	25088	4.2	(3.17, 5.26)	
Gender						0.0164
	Male	35	15340	5.1	(3.30, 6.83)	
	Female/Other	48	9238	3.3	(2.08, 4.44)	
Age						<0.0001
	18-34	15	11068	5.9	(2.97, 8.86)	
	35-54	34	9215	5.1	(3.19, 7.01)	
	55+	32	4144	2.0	(1.15, 2.81)	
Ethnicity						0.9165
	Native American	NSI	--	--	--	
	White	74	20759	4.2	(3.10, 5.22)	
	Non-White	7	2672	4.5	(0, 9.20)	
Employment						<0.0001
	Employed	61	18316	4.6	(3.20, 6.02)	
	Retired	10	868	0.8	(0.11, 1.40)	
	Other	10	4195	6.6	(2.04, 11.25)	
Income						0.0005
	<\$50,000	22	8492	6.0	(3.18, 8.83)	
	\$50,000 - <\$100,000	22	7952	4.8	(2.62, 7.01)	
	\$100,000 - <\$150,000	14	2724	2.3	(0.65, 3.99)	
	\$150,000+	18	4651	5.3	(2.55, 7.98)	
	Prefer Not to Answer	NSI	--	--	--	
Marital status						0.0050
	Married	46	10644	3.5	(2.26, 4.67)	
	Living With Partner	6	2519	5.3	(0.48, 10.15)	
	Separated or Divorced	14	3309	5.4	(2.13, 8.62)	
	Widowed	NSI	--	--	--	
	Never Married	14	7769	6.1	(2.74, 9.56)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 46 Types of Online Gambling

	Unweighted N	Weighted N	%	95%CI
Gambled Online	92	25,088	4.2	(3.17, 5.26)
Lotto Draw Games	35	8,897	35.5	(21.33, 49.60)
Instant Win Tickets	NSI	--	--	--
Bingo	9	3,026	12.1	(2.44, 21.68)
Slot Machines or Other EGM	18	3,674	14.6	(4.20, 25.09)
Games Against Others	8	1,804	7.2	(0, 14.83)
Horse Race Betting	NSI	--	--	--
High Risk Stocks	NSI	--	--	--
Social Media Games	NSI	---	---	---
Other	NSI	--	--	--

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category for this question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Table 47 Any financial speculation by demographics

	Unweighted N	Weighted N	%	95% CI	p-value
Overall	256	77,740	13.0	(11.26, 14.77)	
Gender					<0.0001
Male	149	56,285	18.5	(15.38, 21.66)	
Female/Other	92	20,598	7.2	(5.51, 8.99)	
Age					<0.0001
18 – 34	55	38,671	20.5	(15.45, 25.51)	
35 – 55	90	24,971	13.7	(10.71, 16.69)	
55+	93	12,750	6.1	(4.70, 7.58)	
Ethnicity					<0.0001
Native American	NSI	--	--	--	
White	217	61,274	12.3	(10.53, 14.04)	
Non-White	20	13,111	21.5	(12.38,30.65)	
Employment					<0.0001
Employed	167	61,545	15.5	(13.03, 17.92)	
Retired	49	5,513	4.8	(3.18, 6.43)	
Other	21	7,990	12.3	(6.28, 18.37)	
Income					<0.0001
<\$50,000	36	15,253	10.9	(7.11, 14.60)	
\$50,000 - <\$100,000	63	23,358	14.0	(10.48, 17.60)	
\$100,000 - <\$150,000	51	16,231	13.7	(9.88, 17.54)	
\$150,000+	65	17,589	20.0	(15.08, 24.82)	
Prefer Not to Answer	19	3,479	5.5	(2.09, 9.00)	
Marital status					<0.0001
Married	139	33,715	11.0	(8.93, 13.08)	
Living With Partner	21	9,453	19.5	(10.98, 27.93)	
Separated or Divorced	25	7,533	12.0	(7.29, 16.70)	
Widowed	16	3,074	7.8	(3.96, 11.69)	
Never Married	39	22,950	18.2	(12.75, 23.74)	

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 48 Number and types of activities in which past-year gamblers participated

	Unweighted N	Weighted N	Average # other gambling activities participated in	Percent also participated in										
				Lottery	Raffles	Sports	ETabs	Charity	Bingo	EGM	Table Games	Horse Racing	Private	Online
Lottery	1,244	240,958	2.8	100.0	69.1	15.0	44.5	50.4	17.0	34.5	15.8	5.5	13.7	5.4
Raffles	1,563	287,243	2.7	55.0	100.0	15.4	41.4	50.9	17.3	30.7	14.6	4.9	13.9	3.3
Sports	308	72,449	4.3	60.7	78.2	100.0	58.1	69.8	24.4	48.7	35.1	14.9	35.4	9.7
ETabs	864	181,097	3.8	64.1	74.9	20.7	100.0	79.3	25.2	55.4	23.0	6.7	19.3	6.6
Charity	1,034	214,072	3.6	60.6	76.9	20.8	66.2	100.0	25.1	47.1	23.6	7.2	19.6	4.6
Bingo	377	70,407	4.0	56.2	71.6	19.9	57.8	69.0	100.0	47.5	23.6	8.2	17.2	5.6
EGM	686	140,903	4.1	62.5	70.0	21.9	69.8	71.0	26.1	100.0	28.7	8.0	19.0	7.1
Table Games	290	73,258	5.0	67.9	78.6	37.2	68.6	84.1	30.7	67.9	100.0	13.8	33.8	10.0
Horse Racing	97	18,697	5.5	71.1	78.4	47.4	59.8	76.3	32.0	56.7	41.2	100.0	34.0	8.2
Private Wagering	288	69,875	4.1	59.0	75.3	37.8	58.0	70.5	22.6	45.1	34.0	11.5	100.0	7.6
Online	92	25,088	4.6	72.8	56.5	32.6	62.0	52.2	22.8	53.3	31.5	8.7	23.0	100.0

Unweighted N refers to the total number of respondents who answered this question

Weighted N is the total number of respondents who answered the question weighted to the ND population

Table 49 Reported expenditures on different gambling activities in the past year

	Expenditures \$million	% of total
All gambling	1,238	100.0
Lottery	101	8.2
Raffle	128	10.3
Sports	50	4.1
Electronic Pull Tab Machines (E-tabs)	228	18.5
Charity	185	14.9
Bingo	38	3.1
Casino Electronic Gambling Machines	237	19.1
Table Games	115	9.3
Horse racing	8	0.7
Private Wagering	34	2.8
Online	21	1.8

Reported in millions of dollars

Table 50 Reasons for gambling among past-year gamblers

		Yearly Gamblers			
		Unweigh ted N	Weighted N	%	95%CI
Entertainment or Fun	Very Important	324	91,287	24.1	(21.31, 26.81)
	Somewhat Important	641	132,073	34.8	(31.75, 37.87)
	Somewhat Unimportant	231	47,040	12.4	(10.28, 14.52)
	Not at all Important	620	109,028	28.7	(25.83, 31.64)
Excitement, Action or Challenge	Very Important	150	48,298	12.9	(10.76, 15.13)
	Somewhat Important	473	111,490	29.9	(26.91, 32.85)
	Somewhat Unimportant	250	51,721	13.9	(11.62, 16.11)
	Not at all Important	901	161,611	43.3	(40.09, 46.53)
Habit or Addiction	Very Important	18	3,646	1.0	(0.34, 1.63)
	Somewhat Important	42	9,560	2.6	(1.54, 3.61)
	Somewhat Unimportant	86	23,389	6.3	(4.72, 7.89)
	Not at all Important	1,616	334,543	90.1	(88.20, 92.08)
Socializing	Very Important	120	36,763	9.9	(7.92, 11.79)
	Somewhat Important	503	117,189	31.4	(28.39, 34.42)
	Somewhat Unimportant	304	61,883	16.6	(14.17, 19.00)
	Not at all Important	849	157,286	42.2	(38.95, 45.36)
Support a Worthy Cause	Very Important	237	49,476	13.3	(11.07, 15.47)
	Somewhat Important	633	133,931	35.9	(32.81, 39.04)
	Somewhat Unimportant	271	61,163	16.4	(14.00, 18.81)
	Not at all Important	636	128,273	34.4	(31.32, 37.49)
To Win a Large Amount of Money	Very Important	151	50,516	13.5	(11.29, 15.72)
	Somewhat Important	431	102,670	27.4	(24.55, 30.34)
	Somewhat Unimportant	287	59,041	15.8	(13.42, 18.15)
	Not at all Important	914	161,848	43.3	(40.05, 46.48)
As a Hobby	Very Important	36	12,498	3.3	(2.18, 4.51)
	Somewhat Important	178	46,459	12.4	(10.29, 14.57)
	Somewhat Unimportant	207	50,784	13.6	(11.36, 15.81)
	Not at all Important	1,354	264,112	70.6	(67.69, 73.60)
Curiosity	Very Important	24	9,408	2.5	(1.51, 3.54)
	Somewhat Important	238	71,099	19.1	(16.53, 21.63)
	Somewhat Unimportant	292	66,662	17.9	(15.40, 20.38)
	Not at all Important	1,214	225,508	60.5	(57.33, 63.69)

Yearly Gamblers					
Win Money to Pay Bills	Very Important	30	8,533	2.3	(1.32, 3.26)
	Somewhat Important	88	22,894	6.2	(4.60, 7.71)
	Somewhat Unimportant	104	26,453	7.1	(5.45, 8.78)
	Not at all Important	1,549	314,057	84.4	(82.09, 86.79)
Distraction from Everyday Problems	Very Important	25	6,726	1.8	(0.94, 2.68)
	Somewhat Important	128	33,003	8.9	(7.02, 10.73)
	Somewhat Unimportant	152	33,067	8.9	(7.04, 10.75)
	Not at all Important	1,460	299,050	80.4	(77.84, 83.01)

Table 51 Demographics of recreational, at-risk and problem gamblers

		Recreational gambler		At-risk Gambler (moderate)		At-Risk Gambler (high)		Problem gambler		p-value
		%	95% CI	%	95% CI	%	95%CI	%	95% CI	
Unweighted N		1728		360		95		38		
Weighted N		317,081		86,049		23,366		8,382		
Gender										<0.0001
	Male	48.5	(45.19, 51.88)	63.8	(56.54, 71.04)	68.9	(56.08, 81.78)	44.5	(23.69, 65.34)	
	Female/Other	51.5	(48.12, 54.81)	36.2	(28.96, 43.46)	31.1	(18.22, 43.92)	55.5	(34.66, 76.31)	
Age										<0.0001
	18-34	27.2	(24.20, 30.24)	44.6	(37.03, 52.15)	28.7	(15.95, 41.51)	40.9	(20.08, 61.81)	
	35-54	34.4	(31.19, 37.64)	26.8	(20.09, 33.57)	43.3	(29.30, 57.28)	NSI	--	
	55+	38.4	(35.06, 41.66)	28.6	(21.71, 35.45)	28.0	(15.30, 40.66)	40.2	(19.41, 61.02)	
Ethnicity										<0.0001
	Native American	3.1	(1.94, 4.26)	5.8	(2.26, 9.30)	NSI	--	NSI	--	
	White	90.3	(88.34, 92.30)	79.5	(73.39, 85.56)	89.0	(80.25, 97.66)	84.7	(69.58, 99.77)	
	Non-White	6.6	(4.92, 8.24)	14.7	(9.40, 20.09)	NSI	--	NSI	--	
Employment										<0.0001
	Employed	70.5	(67.43, 73.58)	78.8	(72.62, 84.97)	72.2	(59.91, 84.55)	54.1	(32.63, 75.64)	
	Retired	20.8	(18.07, 23.54)	13.7	(8.50, 18.89)	14.4	(4.75, 24.07)	18.4	(1.69, 35.14)	
	Other	8.7	(6.79, 10.58)	7.5	(3.53, 11.49)	13.4	(4.00, 22.72)	NSI	--	
Income										<0.0001
	<\$50,000	19.4	(16.68, 22.06)	29.9	(22.93, 36.83)	15.7	(5.53, 25.89)	23.2	(5.51, 40.88)	
	\$50,000 - \$100,000	28.5	(25.42, 31.57)	28.9	(22.02, 35.79)	19.3	(8.23, 30.31)	15.8	(0.54, 31.14)	
	\$100,000 - \$150,000	24.0	(21.11, 26.92)	17.3	(11.52, 23.00)	24.3	(12.29, 36.29)	30.1	(10.91, 49.36)	
	\$150,000+	17.5	(14.87, 20.04)	17.9	(12.09, 23.73)	34.9	(21.53, 48.21)	16.2	(0.76, 31.63)	
	Prefer Not to Answer	10.7	(8.57, 12.77)	6.0	(2.42, 9.65)	5.9	(0, 12.43)	NSI	--	

		Recreational gambler		At-risk Gambler (moderate)		At-Risk Gambler (high)		Problem gambler		p-value
Marital status										<0.0001
	Married	57.9	(54.63, 61.27)	49.6	(42.12, 57.13)	63.5	(50.15, 76.88)	31.1	(11.47, 50.64)	
	Living with partner	7.8	(5.98, 9.59)	13.2	(8.12, 18.27)	5.6	(0, 11.99)	NSI	--	
	Divorced or Separated	9.5	(7.48, 11.42)	9.7	(5.28, 14.18)	12.9	(3.58, 22.19)	NSI	--	
	Widowed	6.7	(5.05, 8.42)	5.0	(1.70, 8.21)	NSI	--	NSI	--	
	Never married	18.1	(15.49, 20.67)	22.5	(16.22, 28.76)	17.3	(6.76, 27.75)	21.3	(3.97, 38.61)	

Unweighted N refers to the total number of respondents who selected this category for this question

Weighted N is the total number of respondents who selected this category weighted to the ND population

Percentages and 95% CI are calculated using the weighted N

The % missing is calculated using the weighted N

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 52 Gambling expenditures by gambler group

	Total	Expenditures - Recreational	% - Recreational	Expenditures - At risk (moderate)	% - At risk (moderate)	Expenditures - At risk (high/v.high)	% - At risk (moderate)	Expenditures - Problem	% - Problem
All Gambling	\$1,236	\$418	33.8%	\$356	28.8%	\$282	22.8%	\$180	14.6%

Reported in millions of dollars

Table 53 Largest amount lost in a single day by gambler group

	Recreational		Moderate		High Very High		Problem		p-value
	%	95%CI	%	95%CI	%	95%CI	%	95%CI	
Unweighted N	1,728		360		95		38		
Weighted N	317,081		86,049		23,366		8,382		
\$0	29.37	(26.34, 32.40)	6.48	(2.82, 10.14)	NSI	---	NSI	---	<0.0001
\$1 - 199	70.63	(67.60, 73.66)	53.24	(45.82, 60.65)	6.72	(0, 13.67)	18.04	(1.93, 34.15)	
\$200 - 499			34.77	(27.70, 41.85)	35.26	(17.72, 48.53)	25.31	(7.09, 43.53)	
\$500 - 999			4.30	(1.28, 7.31)	29.56	(14.08, 38.54)	37.55	(17.25, 57.84)	
\$1000+			NSI		26.31	(14.08, 38.54)	18.42	(2.18, 34.66)	

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 54 Reasons for gambling by gambler group

		Recreational Gamblers				Moderate At-Risk Gamblers				High & Very High At-Risk Gamblers			
		Unweighted N	Weighted N	%	95%CI	Unweighted N	Weighted N	%	95%CI	Unweighted N	Weighted N	%	95%CI
Entertainment or Fun	Important	581	126,622	47.33	(43.66, 50.99)	280	71,500	86.48	(81.24, 91.72)	73	19,561	90.17	(81.59, 98.74)
	Not Important	783	140,927	52.67	(49.01, 56.34)	50	11,178	13.52	(8.28, 18.76)	13	2,133	9.83	(1.26, 18.41)
Excitement, Action or Challenge	Important	326	78,140	29.61	(26.23, 33.00)	212	58,459	72.30	(65.38, 79.22)	60	16,949	79.66	(67.87, 91.45)
	Not Important	1,009	185,721	70.39	(67.00, 73.77)	111	22,396	27.70	(20.78, 34.62)	22	4,327	20.34	(8.55, 32.13)
Habit or Addiction	Important	18	3,775	1.44	(0.55, 2.33)	18	4,306	5.31	(1.85, 8.78)	9	2,059	9.83	(1.01, 18.66)
	Not Important	1,306	258,555	98.56	(97.67, 99.45)	306	76,727	94.69	(91.22, 98.15)	71	18,882	90.17	(81.34, 98.99)
Socializing	Important	367	84,340	32.04	(28.57, 35.50)	180	49,776	61.72	(54.22, 69.23)	54	14,851	69.61	(56.17, 83.04)
	Not Important	964	178,913	67.96	(64.50, 71.43)	145	30,867	38.28	(30.77, 45.78)	29	6,484	30.39	(16.96, 43.83)
Support a Worthy Cause	Important	641	125,963	47.77	(44.07, 51.47)	168	40,915	50.69	(42.95, 58.43)	45	13,267	63.38	(49.10, 77.66)
	Not Important	696	137,708	52.23	(48.53, 55.93)	156	39,805	49.31	(41.57, 57.05)	35	7,666	36.62	(22.34, 50.90)
To Win a Large Amount of Money	Important	335	82,402	31.22	(27.78, 34.65)	162	49,608	61.43	(53.90, 68.96)	55	14,404	66.58	(52.96, 80.20)
	Not Important	1,003	181,581	68.78	(65.35, 72.22)	161	31,147	38.57	(31.04, 46.10)	30	7,231	33.42	(19.80, 47.04)
As a Hobby	Important	77	18,040	6.84	(4.97, 8.72)	88	26,175	32.32	(25.10, 39.55)	37	10,995	50.63	(36.23, 65.03)
	Not Important	1,255	245,594	93.16	(91.28, 95.03)	235	54,806	67.68	(60.45, 74.90)	47	10,722	49.37	(34.97, 63.77)
Curiosity	Important	143	38,302	14.53	(11.92, 17.14)	91	33,893	42.25	(34.60, 49.90)	18	4,823	22.28	(10.19, 34.36)
	Not Important	1,188	225,316	85.47	(82.86, 88.08)	230	46,319	57.75	(50.10, 65.40)	64	16,831	77.72	(65.64, 89.81)
Win Money to Pay Bills	Important	65	14,969	5.69	(3.97, 7.40)	32	10,248	12.87	(7.72, 18.02)	8	2,359	11.06	(1.89, 20.22)
	Not Important	1,266	248,292	94.31	(92.60, 96.03)	289	69,388	87.13	(81.98, 92.28)	74	18,979	88.94	(79.78, 98.11)
Distraction from Everyday Problems	Important	57	14,259	5.44	(3.75, 7.13)	54	15,458	19.06	(13.00, 25.12)	23	5,633	26.59	(13.60, 39.58)
	Not Important	1,267	247,780	94.56	(92.87, 96.25)	270	65,645	80.94	(74.88, 87.00)	58	15,550	73.41	(60.42, 86.40)

Table 54 (continued) Reasons for gambling by gambler group

		Recreational Gamblers			
		Unweighted N	Weighted d N	%	95%CI
Entertainment or Fun	Important	31	5,676	75.63	(57.30, 93.96)
	Not Important	NSI	--	--	--
Excitement, Action or Challenge	Important	25	6,239	87.55	(72.91, 102.19)
	Not Important	9	887	12.45	(0, 27.09)
Habit or Addiction	Important	15	3,065	44.87	(22.77, 66.97)
	Not Important	19	3,766	55.13	(33.03, 77.23)
Socializing	Important	22	4,985	63.18	(42.66, 83.70)
	Not Important	15	2,905	36.82	(16.30, 57.34)
Support a Worthy Cause	Important	16	3,261	43.38	(22.24, 64.52)
	Not Important	20	4,257	56.62	(35.48, 77.76)
To Win a Large Amount of Money	Important	30	6,772	87.92	(74.27, 100.00)
	Not Important	7	930	12.08	(0, 25.73)
As a Hobby	Important	12	3,745	49.81	(28.48, 71.14)
	Not Important	24	3,774	50.19	(28.86, 71.52)
Curiosity	Important	10	3,488	48.51	(26.45, 70.57)
	Not Important	24	3,702	51.49	(29.43, 73.55)
Win Money to Pay Bills	Important	13	3,850	49.99	(29.04, 70.94)
	Not Important	24	3,851	50.01	(29.06, 70.96)
Distraction from Everyday Problems	Important	19	4,377	58.21	(37.17, 79.25)
	Not Important	17	3,142	41.79	(20.75, 62.83)

Table 55 Proportion of friends and family that gamble regularly

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹	1,728		360		95		38		<0.0001
Weighted N²	317,081		86,049		23,366		8,382		
Most/All of Them	1.7	(0.83, 2.54)	7.0	(3.16, 10.85)	26.7	(14.46, 38.99)	17.0	(0.97, 32.99)	
Some of Them	59.1	(55.85, 62.39)	76.9	(70.50, 83.20)	66.8	(53.71, 79.82)	74.41	(55.80, 93.01)	
None of Them	39.2	(35.95, 42.44)	16.2	(10.61, 21.69)	6.5	(0, 13.35)	NSI	--	

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 56 Views of problem gambling

		Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
		% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹		1,728		360		95		38		
Weighted N²		317,081		86,049		23,366		8,382		
People with a gambling problem are addicted and are not able to control gambling										0.0527
	Strongly Agree	31.2	(27.82, 34.55)	33.1	(25.86, 40.24)	29.7	(16.76, 42.72)	58.0	(37.31, 78.67)	
	Somewhat Agree	56.6	(52.99, 60.19)	53.0	(45.38, 60.64)	54.6	(40.49, 68.76)	40.3	(19.73, 60.83)	
	Somewhat Disagree	10.0	(7.83, 12.19)	11.5	(6.61, 16.36)	12.3	(2.95, 21.58)	NSI	---	
	Strongly Disagree	2.2	(1.15, 3.29)	2.5	(0.09, 4.83)	NSI	---	NSI	---	
Problem gambling is a health issue that affects people of all ages, races, ethnic, and economic backgrounds										0.0002
	Strongly Agree	49.9	(46.25, 53.54)	50.7	(43.02, 58.33)	34.9	(21.48, 48.27)	50.1	(29.07, 71.24)	
	Somewhat Agree	40.8	(37.22, 44.38)	35.1	(27.77, 42.39)	47.3	(33.31, 61.38)	40.3	(19.64, 61.01)	
	Somewhat Disagree	6.6	(4.78, 8.40)	10.7	(5.95, 15.40)	7.8	(0.27, 15.35)	NSI	---	
	Strongly Disagree	2.7	(1.53, 3.90)	3.6	(0.73, 6.40)	10.0	(1.55, 18.39)	NSI	---	

		Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
		% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	% ³	95% CI ³	
As long as the state benefits from legal gambling, it should fund prevention and treatment programs										0.1199
	Strongly Agree	50.8	(47.13, 54.42)	52.4	(44.71, 60.03)	48.3	(34.19, 62.37)	50.1	(28.99, 71.16)	
	Somewhat Agree	36.6	(33.09, 40.11)	35.5	(28.19, 42.87)	39.4	(25.64, 53.20)	34.9	(14.83, 55.04)	
	Somewhat Disagree	9.6	(7.46, 11.75)	8.4	(4.12, 12.61)	NSI	---	NSI	---	
	Strongly Disagree	3.0	(1.77, 4.27)	3.7	(0.83, 6.64)	NSI	---	NSI	---	

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell

Table 57 How much of a problem is PG in North Dakota?

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		
	% ³	95% CI ³	% ³	95%CI ³	% ³	95% CI ³	% ³	95% CI ³	p-value ⁴
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
									<0.0001
Not a problem	8.37	(6.5, 10.2)	21.9	(15.7, 28.0)	25.4	(13.4, 37.3)	7.1	(0, 17.7)	
Minor problem	31.9	(28.8, 35.0)	34.7	(27.6, 41.8)	35.5	(22.3, 48.6)	39.8	(19.4, 60.1)	
Moderate problem	30.4	(27.3, 33.4)	21.9	(15.7, 28.0)	16.7	(6.4, 26.9)	37.4	(17.2, 57.6)	
Serious problem	6.5	(4.8, 8.1)	2.3	(0.08, 4.6)	3.4	(0, 8.4)	13.5	(0, 27.7)	

Table 58 Awareness of prevention efforts in North Dakota

	Recreational gambler		At-risk gambler (moderate)		At-risk gambler (high/very high)		Problem gambler		p-value ⁴
	% ³	95% CI ³	% ³	95%CI ³	% ³	95% CI ³	% ³	95% CI ³	
Unweighted N¹	1,728		360		95		38		
Weighted N²	317,081		86,049		23,366		8,382		
Media Campaigns	34.7	(31.49, 37.81)	37.6	(30.36, 44.83)	49.3	(35.55, 63.06)	33.6	(13.78, 53.35)	0.0124
Programs other than Media Campaigns	12.0	(9.85, 14.15)	19.5	(13.56, 25.37)	30.5	(17.77, 43.15)	24.5	(6.62, 42.47)	<0.0001
Awareness of ND PG Helpline	37.9	(34.71, 41.16)	55.9	(48.49, 63.31)	60.5	(46.87, 74.03)	65.3	(45.44, 85.10)	<0.0001
Awareness of Gambler Healing Course in ND	12.0	(9.80, 14.11)	24.0	(17.64, 30.41)	31.0	(18.23, 43.74)	NSI	---	<0.0001

¹ Unweighted N refers to the total number of respondents who answered this question

² Weighted N is the total number of respondents who answered the question weighted to the ND population

³ Percentages and 95% CI are calculated using the weighted N

⁴ P-value from chi-square test for differences across groups

Note: Not Sufficient Information (NSI) indicates five or fewer respondents in a cell