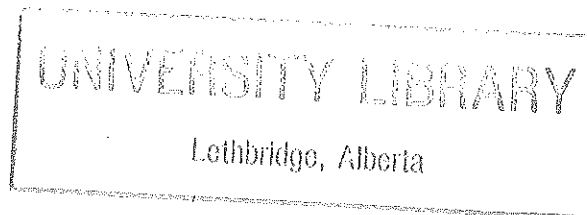


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**GAMBLING AND PROBLEM GAMBLING
AMONG NATIVE AMERICANS
IN NORTH DAKOTA**

Report to the
North Dakota Department of Human Services
Division of Mental Health

ALBERTA ALCOHOL AND DRUG ABUSE COMMISSION LIBRARY

by

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The Native American respondents¹ who were interviewed in this survey provided the State of North Dakota and the United States an invaluable service in giving their time and contributing to our understanding of gambling and gambling-related problems among Native Americans. The Native American interviewers who worked on this project and gathered sensitive information from their own people must also be acknowledged.

We would like to thank the North Dakota Department of Human Services, Division of Mental Health for funding this study. We would also like to thank Mr. Mark Winkelman and the staff of Precision Marketing who conducted the telephone and personal interviews for this study as well as for the survey in the general population.

EXECUTIVE SUMMARY

A sample of 400 Native Americans living in North Dakota counties with significant proportions of Native American residents was interviewed regarding their gambling involvement and problematic gambling behaviors. Data from this Native American sample are directly comparable to data from the general population of North Dakota as well as to data from gambling surveys completed elsewhere in the United States. This is the first time that information on Native American gambling involvement and problem gambling has been collected.

Key Findings

- ▶ Among Native Americans respondents in North Dakota, 85% of the respondents had participated in one or more gambling activities. Among the general population of North Dakota, 82% of the respondents said that they had participated in one or more gambling activities.
- ▶ Native American respondents under the age of 30 and those with less than a high school education were somewhat more likely than other respondents to have ever gambled. Among the general population of North Dakota, respondents who had ever gambled were more likely than other respondents to be male, under the age of 30, and to have graduated high school.
- ▶ Lifetime prevalence rates of problem and probable pathological gambling range from 1.7% in Iowa to 6.3% in Connecticut. The lifetime prevalence rate of problem and probable pathological gambling among Native Americans in North Dakota is 14.5% compared to a lifetime prevalence rate of 3.5% in the general population.
- ▶ Native American respondents who score as lifetime problem or probable pathological gamblers are more likely to be female than the larger sample of Native Americans. Native American lifetime problem and probable pathological gamblers are also more likely to be female than problem and probable pathological gamblers in the general population.
- ▶ Native American problem and probable pathological gamblers are somewhat less likely to have graduated from high school and somewhat more likely to be unmarried and to have annual household incomes under \$25,000 than problem and probable pathological gamblers in the general population.
- ▶ The current prevalence rate of problem and probable pathological gambling among Native Americans in North Dakota is 12.3% of the population. This compares to a combined current prevalence rate of 2.0% in the general population.

- ▶ Based on weekly involvement and reported monthly expenditures, the types of gambling in North Dakota most closely associated with problem and pathological gambling among Native Americans are live bingo and pulltabs. These are the same types of gambling most closely associated with problem and pathological gambling in the North Dakota general population.
- ▶ Research shows that continuous forms of gambling, with rapid cycles of stake, play and determination, are more likely to lead to problematic involvement than non-continuous forms of gambling. Pulltabs and bingo are both continuous forms of gambling.
- ▶ Information about the relationship between problem gambling and different types of gambling among Native Americans will be useful in guiding regulatory efforts in the implementation of new types of Native American gambling in North Dakota.
- ▶ The extreme poverty in Native American communities has contributed to high rates of alcoholism, depression and suicide. The Indian Health Service and other agencies engaged in providing services to Native Americans in North Dakota must move toward addressing the issue of problem gambling, particularly in light of the imminent establishment of casino gaming operations in the Standing Rock, Turtle Mountain and Fort Berthold reservations.

Future Directions

The results of this survey show that, at a minimum, 1,400 Native American adults in North Dakota are currently experiencing moderate to severe problems related to their involvement in gambling. Problem and pathological gamblers suffer from a treatable disorder whose costs go far beyond individual monetary losses. The results of this survey indicate that there is a need for efforts to address the personal, financial and legal costs associated with gambling problems among Native Americans in North Dakota.

The data presented here provide a benchmark for future assessments of gambling involvement and problem and pathological gambling among Native Americans in North Dakota. These data also provide a foundation for policy making and planning for services for Native Americans who experience difficulties related to their involvement in gambling. Consideration must now be given to educating Native Americans about the potential problems associated with gambling, to providing treatment services for those individuals who experience problems related to their gambling, and to ensuring that adequate and continuing funds for such efforts are made available.

INTRODUCTION

Anthropological research shows that gambling has long played an important role in the lives of Native Americans. In the Northeast, gambling was documented among the Iroquois, the Onondaga, the Narragansett and the Huron peoples. In the West, gambling was documented among the Chumash, the Yakima, the Mohave, the Mandan, the Yurok and the Pawnee peoples (Longstreet 1977; Lesieur & Browne 1993).

In the 1970s and 1980s, with high unemployment, few options for economic development, and declining revenues from the federal government, many tribal governments began to look to gambling as a tool for economic independence. The issue gained momentum in 1979 when the Seminole Tribe in Florida won the right to operate high-stakes bingo games free from government control (Rose 1989). In 1988, federal Indian Gaming Regulatory Act provided a framework for the development of Indian gaming and the results have been explosive. There are now approximately 150 Native American gaming operations throughout the United States which generate more than \$700 million in gross revenues annually (Connor 1993).

Given the history and experience of Native Americans with alcoholism, as well as the high rates of depression and suicide that exist on many reservations, we must wonder whether gambling will prove equally devastating to Native American peoples. This report presents, for the first time, information on gambling involvement and gambling-related problems among Native Americans in North Dakota. This report will be of interest to tribal governments, Indian Health Service personnel and the operators and regulators of Native American gaming operations in North Dakota as well as throughout the United States.

Defining Problem and Pathological Gambling

A variety of terms have been used to describe people whose gambling causes problems in their personal and vocational lives. The term typically employed by lay audiences is *compulsive gambling*. However, the term *compulsive* implies that the individual is engaged in an activity that is not enjoyable. Since, at least initially, gambling can be quite enjoyable even for those who later develop problems, this term is considered something of a misnomer.

The term *problem gambling* is used by many lay and professional audiences to indicate all of the patterns of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits and is intended to include *pathological gambling* as one end of a continuum of gambling involvement (Lesieur & Rosenthal 1991). Psychiatrists and other mental health professionals prefer the term *pathological gambling* (American Psychiatric Association 1980). This term incorporates several assumptions basic to the medical model, including the notion that pathological gambling is a chronic and progressive disorder as well as the assumption that there are clear distinctions between pathological and social gamblers.

The Costs of Problem and Pathological Gambling

Until the mid-1980s, research on problem and pathological gamblers was limited to individuals entering self-help or professional treatment programs. While the costs of gambling-related problems

among individuals seeking treatment are probably higher than the costs of such problems among individuals who do not seek treatment, the domains affected by problematic involvement in gambling are similar. It is therefore helpful to consider some of the impacts on individuals, families and communities engendered by gambling-related problems among those who do seek help.

Personal Costs

The personal costs of problematic involvement in gambling range from physical stress reactions to severe psychiatric disorders. Many pathological gamblers seek help for physical or non-gambling psychiatric disorders prior to recognition of their gambling problem (Custer & Custer 1978; Lesieur & Blume 1991; Nora 1984). Pathological gamblers have been found to experience withdrawal symptoms, including irritability, restlessness, depressed mood, obsessional thoughts, poor concentration, anxiety and sleep disturbance (Lorenz & Yaffee 1986; Wray & Dickerson 1981).

The prevalence of psychiatric disorders among pathological gamblers entering treatment has been explored thoroughly. Major affective disorders and schizoaffective disorders have been found among pathological gamblers in a Veterans Administration inpatient treatment program (McCormick, Russo, Ramirez & Taber 1984). Among male members of Gamblers Anonymous, major depressive disorders and panic disorders are common (Linden, Pope & Jonas 1986). Significant rates of suicide attempts were identified among pathological gamblers entering inpatient treatment programs as well as Gamblers Anonymous (Custer & Custer 1978; Livingston 1974; McCormick et al 1984; Moran 1970).

There is solid evidence of multiple addictions among pathological gamblers in professional treatment programs and in Gamblers Anonymous (Custer & Custer 1978; Linden et al 1986; Ramirez, McCormick, Russo & Taber 1983). Researchers have recently begun to address the issue of overlaps between pathological gambling and other addictive disorders. Common personality traits and similar criminal behavior patterns have been identified among pathological gamblers and heroin addicts in Australia and Great Britain (Blaszczynski, Buhrich & McConaghy 1985; Brown 1987). There is good evidence from the United States that significant numbers of individuals in treatment for alcohol and drug dependence may also suffer from problems related to gambling (Haberman 1969; Lesieur & Heineman 1988; Lesieur, Blume & Zoppa 1986).

Costs to the Family

The effects of pathological gambling on the family are significant. An early survey of wives of members of Gamblers Anonymous found significant financial and interpersonal problems among these women, including physical and psychological abuse as well physical stress reactions (Lorenz 1981). More recent surveys show that many have had to obtain loans to buy family essentials, separated from and divorced their gambling spouses, experienced harassment and threats from bill collectors. In addition, many experience physiological symptoms of stress including chronic or severe headaches, gastrointestinal disturbances, asthma, depression and suicide attempts (Lorenz & Yaffee 1988, 1989).

Although relatively little is known about the children of pathological gamblers, there is evidence that points to serious levels of disturbance. Lorenz (1981) found that gamblers and spouses reported significant levels of physical abuse of their children. Children of pathological gamblers run away from home, use drugs, and become depressed more often than other children (Custer & Milt 1985). In a

study of California high school students, Jacobs (1987) found pathological gambling by parents to be associated with students' abuse of stimulant drugs and overeating. These adolescents were more likely to report an unhappy childhood, to have legal action pending, and to be depressed and suicidal than others in their schools. In New Jersey, Lesieur and Klein (1987) found that students reporting a parental gambling problem were more likely to have a gambling problem of their own.

Costs to the Community

There are numerous costs to communities from pathological gamblers. Job-related costs include lowered efficiency and impaired judgment, lateness and absences from work, and abuse of the telephone in order to place bets and deal with creditors. Other job-related costs include thefts of company property and other illegal acts to obtain money through an employer (Better Government Association 1992). Considerable financial debt is common among pathological gamblers in treatment. Mean levels of gambling-related debt among pathological gamblers in treatment range from \$53,350 in New Jersey to \$92,000 in Maryland (Lesieur 1984; Politzer, Morrow & Leavey 1985).

Costs of pathological gambling to insurance companies are considerable. It has been estimated that pathological gamblers in the United States engage in \$1.3 billion in insurance-related fraud per year (Lesieur 1990). A survey of members of Gamblers Anonymous found that 47% of pathological gamblers in self-help had engaged in insurance-related fraud or in thefts where insurance companies had to pay the victims (Lesieur & Puig 1987). Finally, pathological gamblers in self-help and in professional treatment admit to a wide variety of illegal activities, including check forgery, passing bad checks, employee theft, tax evasion, shoplifting, loan fraud, embezzlement, larceny, bookmaking, hustling, running con games, fencing stolen goods, burglary, armed robbery, pimping, and selling drugs (Brown 1986; Lesieur 1984, 1987; Livingston 1974; Lorenz 1990).

In the wake of the spread of legalized gambling in North Dakota, and with the likelihood of casino-style gambling on North Dakota reservations in the near future, the North Dakota Department of Human Services elected to fund surveys of the prevalence of problem and probable pathological gambling among the general population and among Native Americans in the state. The results of the survey of Native Americans are reported here. The results of the general population survey are reported separately (Volberg & Silver 1993). This report reviews the methods used to collect data among Native Americans in North Dakota, examines the gambling involvement of Native Americans living in North Dakota, identifies the prevalence of problem and probable pathological gambling among these respondents and compares these results with the results of the general population survey in North Dakota.

METHODS

The survey of Native Americans in North Dakota, like the general population survey in North Dakota, was carried out in several stages. In the first stage, Dr. Volberg of Gemini Research and Mr. Winkelman of Precision Marketing, Inc., worked with key informants in North Dakota and the North Dakota Department of Human Services to finalize the questionnaire. In the second stage, staff from Precision Marketing hired and trained Native American interviewers to conduct the personal interviews among a subsample of Native American respondents.

In the third stage, Mr. Winkelman and Dr. Volberg worked with staff from the North Dakota Department of Human Services to develop an appropriate sampling strategy for the Native American sample. Staff from Precision Marketing completed interviews over the telephone and Native American interviewers completed interviews in person with a total of 400 Native American respondents. Precision Marketing provided Dr. Volberg with the cleaned and coded data for the final stage of the project which included analysis of the data and preparation of this report.

Questionnaire Design

The questionnaire for the North Dakota Native American survey was composed of three major sections. The first section included questions about 16 different types of gambling. These types of gambling were included to ensure that involvement in all types of gambling available to North Dakota residents was assessed. For each type of gambling, respondents were asked whether they had ever tried this type of gambling, whether they had tried it in the past year, and whether they participated once a week or more in this type of gambling. The different types of gambling included:

- Raffles, casino nights and other small stakes games
- Live bingo
- Pulltabs
- Blackjack
- Instant lottery games
- Video lottery games
- Other lottery games
- Slot machines or other gaming machines
- Poker
- Card games other than poker played with friends or relatives
- Craps or other dice games
- Card or dice games played at out-of-state casinos
- Outcome of sports or other events with friends or co-workers
- Wagering on sports with a bookmaker
- Horse, dog or mule races
- Speculative investments

The second section of the questionnaire was composed of the lifetime and current South Oaks Gambling Screen items and the final section of the questionnaire included questions about the demographic characteristics of each respondent. A question related to ethnicity was moved to the beginning of the questionnaire in order to permit more rapid screening for qualified respondents.

Copies of the questionnaires used in telephone and face-to-face interviews with Native American respondents in North Dakota are provided in Appendix A.

The South Oaks Gambling Screen is a 20-item scale based on the diagnostic criteria for pathological gambling (American Psychiatric Association 1980). In developing the SOGS, a large pool of variables was subjected to discriminant analysis. The results of this analysis were cross-tabulated with assessments of independent counselors in order to minimize the number of false-negative and false-positive cases. A score of 3 or 4 on the SOGS identifies a respondent as a *problem gambler* while a score of 5 or more identifies a respondent as a *probable pathological gambler*.

Weighted items on the SOGS include hiding evidence of gambling, spending more time or money gambling than intended, arguing with family members over gambling and borrowing money to gamble or to pay gambling debts. The SOGS has been found valid and reliable in distinguishing pathological gamblers among hospital workers, university students, prison inmates and inpatients in alcohol and substance abuse treatment programs (Lesieur & Blume 1987; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985). In 1991, the SOGS was expanded to collect more detailed information about gambling frequency and estimated expenditures from respondents. The screen was also expanded to assess current as well as lifetime prevalence of problem and pathological gambling (Abbott & Volberg 1991, 1992).

Sampling Design

Developing the sample of Native American respondents required a two-pronged approach in order to minimize the possible bias created by higher rates of non-telephone-owning households among Native Americans. The majority of interviews with Native American respondents were conducted over the telephone with individuals from the four North Dakota counties with the greatest proportions of Native American residents. These counties, including Benson, Mountrail, Rolette and Sioux, account for 60% of the Native American population living in North Dakota. To complete these telephone interviews, telephone numbers were purchased from Maritz Marketing Research, Inc. which also supplied telephone numbers for the general population survey in North Dakota.

For each county, the percentage of households without telephones was determined and that proportion of the sample from each county was contacted for personal rather than telephone interviews. To complete these interviews, clusters of addresses based on mail carrier routes in the same four counties were obtained. Personal interviews were completed only for households where one or more Native Americans resided and only for households without telephone service. Approximately one-fifth (18%) of the Native American interviews were conducted in person.

The following table compares the proportion of Native Americans in the general population of each county, the distribution of the Native American sample, and the proportion of interviews conducted in person in each of the four counties. This table shows that while the distribution of the Native American sample by county is representative, the proportion of the sample from Sioux County that was interviewed in person is significantly different from the proportion of households without telephones in that county.

TABLE 1
Comparing Census and Sample Data

	Benson	Mountrail	Rolette	Sioux
Proportion of Population Native American	18%	9%	55%	18%
Proportion of Sample	18%	10%	57%	16%
Proportion of Households Without Telephones	18%	9%	20%	38%
Proportion of Each Sample Interviewed in Person	17%	8%	21%	16%

Analysis of the demographics of the Native American sample shows that respondents interviewed in person were significantly more likely to be under 30 years of age and to have annual household incomes under \$25,000 than respondents interviewed by telephone. *Since the prevalence of problem and pathological gambling is generally higher among young, lower income individuals, these sample differences render conservative the estimates of problem and pathological gambling given here.* The prevalence rates for problem and probable pathological gambling among Native Americans in North Dakota (and especially in Sioux County) should be treated as minimum rather than as maximum rates.

Response Rates

The response rate for the proportion of the Native American sample interviewed by telephone was 60% which is within an acceptable range for this type of survey. The refusal rate for the proportion of the Native American sample interviewed by telephone was 17% while the refusal rate for the proportion of the Native American sample interviewed in person was 10%. These refusal rates compare well with gambling surveys done in the general population.

GAMBLING AMONG NATIVE AMERICANS IN NORTH DAKOTA

In this chapter, we present information about the scope and magnitude of gambling involvement among Native Americans in North Dakota. As noted in the previous chapter on Methods, this sample of Native Americans is representative of Native Americans living in North Dakota counties with significant Native American populations rather than of *all* Native Americans residing in the state. While this sample of Native Americans may not be fully representative of the Native American population living in North Dakota or of Native Americans in other jurisdictions in the United States, these data are invaluable in allowing us, for the first time, to compare gambling involvement and problem gambling rates for Native Americans and the general population of a single state.

Chi-square analysis was used to test for statistical significance. In order to adjust for the large number of statistical tests conducted, p-values smaller than .01 were considered *statistically* significant, while p-values at the more conventional .05 level were considered *somewhat* significant. In reading the tables presented in this report, asterisks in the right-hand column of each table indicate that *one* of the figures in that row is significantly or somewhat different from other figures in the same row.

The following table shows similarities and differences in the demographics of the general population sample and the Native American sample. It should be noted that only 3% of the general population sample was non-White in contrast to 100% of the Native American sample.

TABLE 2
Demographic Characteristics of the General
and Native American Samples in North Dakota

Demographics	General Sample (N=1,517)	Native American Sample (N=400)	
Male	41%	45%	
Under 30	15%	24%	**
Not Married	35%	47%	**
Less than HS	11%	19%	**
HH Income Under \$25,000	40%	60%	**
<hr/>			
*	Somewhat significant ($p \leq .05$)		
**	Statistically significant ($p \leq .01$)		

This table shows that there are significant demographic differences between the general population and Native American samples. Native American respondents are significantly more likely to be under the age of 30 and to be unmarried than the general population. These respondents are significantly less likely to have graduated from high school and to have annual household incomes over \$25,000 than the general population.

Gambling in the Native American Population

In every recent survey of gambling participation in the general population, the great majority of respondents state that they have participated in one or more gambling activities. Among Native Americans respondents in North Dakota, 85% of the respondents had participated in one or more of the gambling activities included in the questionnaire. Among the general population of North Dakota, 82% of the respondents said that they had participated in one or more of the gambling activities included in the questionnaire.

Among the general population, male respondents, those under the age of 30, and those who had graduated from high school were all significantly more likely to have ever gambled. Married respondents and those with annual household incomes over \$25,000 were somewhat more likely to have ever gambled. Among the Native American respondents, respondents under the age of 30 and those with less than a high school education were somewhat more likely than other respondents to have ever gambled.

TABLE 3
Demographic Characteristics of Native American Gamblers and Non-Gamblers in North Dakota

Demographics	Gamblers (N=338)	Non-Gamblers (N=62)	
Male	45%	44%	
Under 30	26%	13%	*
Less than HS	17%	29%	*
Not Married	46%	52%	
HH Income Under \$25,000	60%	60%	
<hr/>			
*	Somewhat significant ($p \leq .05$)		
**	Statistically significant ($p \leq .01$)		

As with the general population, the most popular types of gambling among North Dakota Native Americans were raffles and casino nights (69%), live bingo (59%) and pulltabs (48%). While respondents in the general population were more likely to have ever wagered on slot machines, Native American respondents were more likely to have ever wagered on live bingo. Lifetime participation rates in other types of gambling are quite similar.

A *conversion rate* is used to assess how likely respondents are to become regular players if they have ever tried a gambling activity. The following table shows the lifetime participation and conversion rates for the most popular types of gambling among North Dakota Native American respondents.

TABLE 4
Native American
Lifetime Involvement and Conversion Rates

Type of Activity	Lifetime Participation	Conversion Rate
Raffles and Casino Nights	69%	9%
Live Bingo	59%	27%
Pulltabs	48%	18%
Sports with Friends/Co-workers	31%	18%
Blackjack	25%	8%
Non-Poker Card Games	24%	22%
Slot Machines	23%	9%
Poker	21%	17%
Instant Lottery Games	20%	5%
Craps	17%	14%
Horse, Dog, or Mule Races	16%	11%
Video Lottery Games	13%	8%

Conversion rates among Native Americans are higher than among the general population in North Dakota. Among the general population, conversion rates were highest for sports wagering with friends and co-workers, live bingo and card games other than poker. However, these conversion rates only exceeded 10% for one type of gambling (sports wagering with friends and co-workers). In contrast, among Native American respondents, conversion rates exceed 10% for 7 types of gambling. Conversion rates among Native Americans are highest for live bingo and for card games other than poker. Conversion rates for pulltabs, sports wagers with friends and co-workers, poker, craps and horse or dog races are also high.

Gambling Participation

As noted above, a slightly greater proportion of the Native American sample had ever gambled than in the general population. In contrast, while 13% of the general population sample gambled once a week or more often, 30% of the Native American sample gambled this often.

The following table shows that weekly gamblers among the Native American sample are somewhat more likely than other Native American gamblers to have graduated from high school. Weekly and past-year Native American gamblers are significantly more likely to be employed than infrequent gamblers. In contrast to the general population, there are no significant differences between these groups of gamblers in terms of gender, age, marital status or household income.

TABLE 5
Gambling Involvement Among Native Americans
in North Dakota

	Infrequent (N=18)	Past Year (N=201)	Weekly (N=119)	
Demographics				
Male	50%	45%	44%	
Under 30	17%	26%	27%	
HS Graduate	61%	85%	82%	*
Married	50%	59%	48%	
Annual HH over \$25,000	33%	44%	34%	
Employed	44%	66%	61%	**
Number of Lifetime Activities				
1 - 4	94%	70%	39%	
5 - 9	6%	26%	52%	
10 or more	---	4%	8%	
Mean Number of Lifetime Activities	2.3	4.0	5.5	**
<hr/>				
*	Somewhat significant ($p \leq .05$)			
**	Statistically significant ($p \leq .01$)			

This table also shows that the great majority of infrequent gamblers (94%) have participated in less than 5 types of gambling and none have participated in 10 or more types of gambling. In contrast, 8% of the weekly gamblers have participated in 10 or more types of gambling. These participation rates, as well as the mean number of lifetime gambling activities, are lower for all types of Native American gamblers than for the general population despite the greater proportion of weekly gamblers among Native American respondents.

Analysis shows that Native American respondents who gamble weekly are most likely to be gambling on live bingo (54%). Other types of gambling that these respondents are likely to be involved with on a weekly basis are pulltabs (29%), raffles (22%), wagering on sports events with friends or acquaintances (18%) and card games, including non-poker (18%) and poker (12%).

Reasons for Gambling

Native American respondents who had ever gambled were asked to say why they did so. As in the general population, the most frequently cited reason for involvement in gambling among Native American respondents is for fun or entertainment (83%). As in the general population, other important reasons include socializing (72%), winning money (69%), and excitement (57%). While 73% of the Native American gamblers stated that they gambled in order to support worthy causes, only 66% of the

gamblers in the general population stated that this was an important reason for their participation in gambling.

Married Native American respondents and those with a high school education were significantly more likely to say that they gambled in order to support worthy causes than unmarried respondents and those with less than a high school education. Native American respondents under the age of 30 were somewhat more likely to say that they gambled in order to win money and out of curiosity than respondents over the age of 30. Finally, Native American women were somewhat more likely than Native American men to say that they gambled in order to distract themselves from everyday problems.

Favorite Gambling Activities

As in the general population, 9% of the Native American respondents who ever gambled had participated in only one type of gambling. Among these respondents, 33% wagered on raffles while 27% wagered on live bingo.

Native American respondents who had participated in more than one type of gambling were asked to indicate which was their favorite game. Among respondents who had participated in more than one type of gambling, 9% expressed no preference for any one type of gambling. Among respondents who had participated in more than one type of gambling and expressed a preference, live bingo was by far the favorite type of gambling. Over a third of these respondents (38%) identified live bingo as their favorite gambling activity. Much smaller proportions of the sample preferred slot machines (8%), blackjack (8%), raffles and casino nights (6%) and pulltabs (6%). Among the general population, 13% preferred live bingo, 15% preferred slot machines and 11% preferred pulltabs.

Expenditures on Gambling

Reported estimates of expenditures obtained in this survey are based on recollection and self-report. Data on reported expenditures are best suited for analyzing the relative importance of different types of gambling rather than for ascertaining absolute spending levels on different types of wagering.

Respondents who had done any kind of gambling in the past year were asked to indicate how much money they spend on that activity in a typical month. The reported *total monthly expenditure* for each gambling activity was calculated by summing the amount of money spent by each respondent on each gambling activity. The total amount reportedly spent in a typical month by all respondents on all gambling activities was then calculated. The *proportion* of reported total monthly expenditure spent on each gambling activity was calculated by dividing the amount spent on each activity by the reported total monthly expenditure.

In calculating estimated expenditures among Native Americans in North Dakota, speculative investments were excluded from the calculation of reported total monthly expenditures. While amounts spent on speculative investments by Native Americans constituted only a small proportion of the unadjusted total monthly expenditure, the adjustment was made in order to maintain comparability with estimated expenditures among the general population in North Dakota.

The following table shows the proportion of the total monthly expenditure among Native Americans for each of the gambling activities included in the survey. Total estimated monthly

expenditures on live bingo among Native Americans are far greater (\$13,488) than total estimated monthly expenditures on this type of gambling in the general population (\$5,718). Total estimated monthly expenditures on pulltabs among Native Americans (\$4,071) are lower than total estimated expenditures among the general population (\$7,846).

TABLE 6
Reported Monthly Expenditures on Gambling
Among Native Americans

Type of Gambling Activity	Total Monthly Expenditure	Percentage of Total
Live Bingo	\$13,488	40.8
Pulltabs	\$ 4,071	12.3
Poker	\$ 2,597	7.9
Blackjack	\$ 2,595	7.9
Raffles and Casino Nights	\$ 2,467	7.5
Horse, Dog or Mule Races	\$ 1,658	5.0
Slot Machines	\$ 1,524	4.6
Sports Bets with Friends	\$ 1,174	3.6
Non-Poker Card Games	\$ 924	2.8
Craps or Other Dice Games	\$ 922	2.8
Video Lottery	\$ 851	2.6
Instant Lottery Games	\$ 397	1.2
Out-of-State Casinos	\$ 281	0.9
Other Lottery Games	\$ 86	0.3
State Total	\$33,040	100.0

The reported total monthly expenditure on all gambling activities except speculative investments was divided by the number of respondents (N=400) to obtain an average estimated expenditure for all gambling per respondent per month. Using this method, we calculate that Native American respondents in North Dakota spend an average of \$83 on gambling activities per month. This average estimated expenditure on gambling is much higher than the average of \$25 reported by respondents in the general population sample from North Dakota. It is worth noting that the average estimated expenditure among Native American respondents interviewed in person (\$142) is significantly higher than the average estimated expenditure among respondents interviewed over the telephone (\$69).

If the average estimated expenditure is taken as an average of the amount spent on gambling by all Native American individuals over 18 in North Dakota, the reported total expenditure of North Dakota Native American adults on gambling is \$19 million per year. The total reported expenditure of the adult general population in North Dakota is \$137 million per year. Data provided by the North Dakota Office of the Attorney General show that gross wagering proceeds for the year ending June 30,

1992 are \$239 million. The combined total of estimated gambling expenditures for the North Dakota general population and Native Americans is much lower, at \$156 million.

There are several possible reasons for differences between reported expenditures on gambling in this survey and the gross wagering proceeds identified by the Attorney General. We have noted that the data from this survey are based on recollection and self-report which can affect their reliability. Respondents are probably not including amounts that they obtain while in a gambling venue (through credit or check cashing) in their reported expenditures.

In addition, non-residents may be wagering substantial amounts of money in North Dakota that would not be reflected in estimates of gambling expenditures by residents. Finally, some groups in the general population and among the Native American population that were under-sampled, including young men and individuals with household incomes under \$25,000 annually, spend far greater amounts than the per capita expenditures reported here suggest. Greater expenditures, even by small groups in the general population, could contribute to substantially higher per capita expenditures. These differences underscore our earlier caution that these data are best suited for analyzing the relative importance of different types of gambling in the general population rather than for ascertaining absolute spending levels.

Variations in Expenditures

As with gambling participation and reported expenditures in the general population, reported monthly gambling expenditures vary across groups within the Native American sample. Native American respondents under the age of 30 report spending significantly more money on gambling (\$95 per month) than respondents over the age of 30 (\$79 per month). Native American respondents who have graduated from high school report spending significantly more money (\$89 per month) than respondents who have not graduated from high school (\$56 per month).

Unmarried Native American respondents report spending significantly more money on gambling (\$98 per month) than married respondents (\$69 per month). Native American respondents with annual household incomes under \$25,000 report spending significantly more money on gambling (\$88 per month) than respondents with annual household incomes over \$25,000 (\$74 per month). Finally, Native American women report spending somewhat more money on gambling (\$85 per month) than men (\$80 per month).

As with the general population, it is interesting to compare reported monthly expenditures on gambling among respondents who have participated in a particular type of gambling during the past year (e.g. Past-Year Gamblers) and the total Native American sample. This is especially true for the Native American sample given the high conversion rates noted in Table 4.

In the following table, the first column displays reported gambling expenditures among Native American respondents. The second column displays reported gambling expenditures among Native American respondents who participated in specific types of gambling during the past year. The table shows that, as with the general population, reported average expenditures for most types of gambling among Native Americans are much lower than reported average expenditures among past-year Native American gamblers.

TABLE 7
Summary of Average Monthly Gambling Expenditures

Type of Gambling Activity	Total Sample (N=400)	Past-Year Gamblers (N varies)
Live Bingo	\$33.72	\$72.13
Pulltabs	10.17	26.10
Raffles and Casino Nights	6.17	10.37
Poker	6.49	47.22
Blackjack	6.49	37.61
Horse, Dog or Mule Races	4.15	43.63
Slot Machines	3.81	23.81
Sports Bets with Friends	2.94	11.86
Craps or Other Dice Games	2.31	24.92
Non-Poker Card Games	2.31	12.49
Video Lottery	2.13	22.39
Instant Lottery Games	.99	7.78
Out-of-State Casinos	.70	21.62
Other Lottery Games	.22	4.10

There are substantial differences between the average estimated expenditures on each type of gambling of the overall samples and past-year gamblers among both the general population and the Native Americans. These differences are greatest for live bingo expenditures. Differences are also high for craps and other dice games, horse and dog races, poker, blackjack and pulltabs. Differences are smaller for instant lottery games, non-poker card games, sports bets with friends, video lottery games, slot machines and raffles and casino nights.

Figure 1 (see Page 30) illustrates differences in the distribution of estimated monthly expenditures on different gambling activities by Native Americans. In contrast to expenditures in the general population, 75% of Native American expenditures on live bingo are in amounts over \$20. Expenditures for pulltabs also tend to be in much higher amounts among Native Americans than in the general population.

PROBLEM GAMBLING AMONG NATIVE AMERICANS IN NORTH DAKOTA

In the chapter on Methods, we noted that 18% of the Native American respondents were interviewed in person. Respondents interviewed in person were significantly more likely to be under 30 years of age and to have annual household incomes under \$25,000 than respondents interviewed by telephone. We believe that the estimates of problem and pathological gambling contained in this chapter are extremely conservative (see discussion of sampling design in Methods).

Following the established criteria for discriminating between non-problem gamblers and individuals with moderate to severe gambling problems (Lesieur & Blume 1987), Native American respondents' scores on the lifetime and current South Oaks Gambling Screen items were tallied. In accordance with these criteria, prevalence rates were calculated as follows:

- *lifetime problem gamblers* are those respondents who score 3 or 4 points on the lifetime SOGS items;
- *lifetime probable pathological gamblers* are those respondents who score 5 or more points on the lifetime SOGS items;
- *current problem gamblers* are those respondents who score 3 or 4 points on the current SOGS items; and
- *current probable pathological gamblers* are those respondents who score 5 or more points on the current SOGS items.

Lifetime prevalence data are most useful for identifying the characteristics of individuals in the general population at greatest risk for experiencing problems related to their gambling involvement. Current prevalence data are most useful for assessing rates of change in gambling problems and pathology over time, both for individuals and in the general population.

Lifetime Prevalence

Among Native American respondents in North Dakota, 7.5% of the sample scored as lifetime problem gamblers and 7.0% of the sample scored as lifetime probable pathological gamblers. Overall, the combined lifetime prevalence rate of problem and probable pathological gambling among Native Americans in North Dakota is 14.5% of the population. This compares to a combined lifetime prevalence rate of 3.5% in the general population.

There are significant differences in prevalence rates of lifetime problem and probable pathological gambling by style of interview. The combined lifetime prevalence rate among Native Americans interviewed by telephone is 10.1% compared to 34.7% among Native Americans interviewed in person.

According to the 1990 census, the population aged 18 and over in North Dakota is 463,000 individuals and 4.1% of the population is Native American. Based on an estimated population of 19,000 Native Americans aged 18 and over in North Dakota, we calculate that between 900 and 1900

North Dakota Native American adults can be classified as lifetime problem gamblers. We calculate that an additional 800 to 1800 North Dakota Native American adults can be classified as lifetime probable pathological gamblers.

TABLE 8
Comparing Native American Lifetime Problem Gamblers
with the Lifetime Problem Gamblers in the General Population

Demographics	General Population Problem Gamblers (N=53)	Native American Problem Gamblers (N=58)	
Male	55%	36%	*
Under 30	25%	36%	
Less than HS	9%	24%	*
Not Married	36%	55%	*
HH Income Under \$25,000	43%	66%	*
<hr/>			
*	Somewhat significant ($p \leq .05$)		
**	Statistically significant ($p \leq .01$)		

In contrast to the general population, Native American respondents who score as lifetime problem or probable pathological gamblers are more likely to be female than the larger sample of Native Americans. The preceding table shows that Native American lifetime problem and probable pathological gamblers are also more likely to be female than problem and probable pathological gamblers in the general population. Native American problem and probable pathological gamblers are somewhat more likely to be under 30 years of age, to have less than a high school education, to be unmarried and to have annual household incomes under \$25,000 than problem and probable pathological gamblers in the general population.

The majority of lifetime problem and probable pathological gamblers reside in Rolette County (57%). Much smaller proportions of the Native American problem and probable pathological gamblers reside in Benson County (17%), Sioux County (14%) and Mountrail County (12%).

Current Prevalence

Among Native American respondents in North Dakota, 6.3% of the sample scored as current problem gamblers and 6.0% of the sample scored as current probable pathological gamblers. Overall, the combined current prevalence rate of problem and probable pathological gambling among Native Americans in North Dakota is 12.3% of the population. This compares to a combined current prevalence rate of 2.0% in the general population.

As with lifetime prevalence rates, there are significant differences in prevalence rates of current problem and probable pathological gambling by style of interview. The combined current prevalence

rate among Native Americans interviewed by telephone is 8.0% compared to 32.0% among Native Americans interviewed in person.

Based on an estimated population of 19,000 Native Americans aged 18 and over in North Dakota, we calculate that between 700 and 1700 North Dakota Native American adults can be classified as current problem gamblers. We calculate that an additional 700 to 1600 North Dakota Native American adults can be classified as current probable pathological gamblers.

The following table shows that current problem and probable pathological gamblers in the Native American population are just as likely to be female, under the age of 30, and to have annual household incomes under \$25,000 as current problem and probable pathological gamblers in the general population. Current Native American problem gamblers are less likely to be married than current problem gamblers in the general population.

TABLE 9
Comparing Native American Current Problem Gamblers
with the Current Problem Gamblers in the General Population

Demographics	General Population Problem Gamblers (N=30)	Native American Problem Gamblers (N=49)
Male	37%	35%
Under 30	33%	35%
Less than HS	10%	20%
Not Married	40%	55%
HH Income Under \$25,000	60%	63%
<hr/>		
*	Somewhat significant ($p \leq .05$)	
**	Statistically significant ($p \leq .01$)	

As in the general population in North Dakota, a proportion of the Native American respondents who score as lifetime problem or probable pathological gamblers do not score as having a current problem or pathology. This proportion is much smaller among Native Americans than in the general population. While 45% of lifetime problem and probable pathological gamblers in the general population do not score as having a current problem or pathology, only 17% of the lifetime problem and probable pathological gamblers in the Native American population do not score as having a current problem or pathology.

Gambling Involvement of Native American Problem Gamblers

Lifetime problem and probable pathological gamblers among the Native American respondents are significantly more likely to gamble once a week or more on one or more types of wagering. While 23% of the non-problem Native American respondents gamble once a week or more, 67% of the

lifetime problem and probable pathological gamblers and 76% of the current problem and probable pathological gamblers wager once a week or more often on one or more types of gambling.

The following table shows that lifetime problem and probable pathological gamblers among the Native American respondents are significantly more likely than non-problem Native American respondents to gamble once a week or more on live bingo, slot machines and pulltabs as well as on raffles. Lifetime problem and probable pathological gamblers are somewhat more likely than non-problem Native American respondents to gamble once a week or more on horse or dog races and on sports events with friends or acquaintances.

TABLE 10
Weekly Gambling Involvement
of Problem and Non-Problem Gamblers

Games Played Weekly	Non-Problem Gamblers (N=280)	Problem & Pathological Gamblers (N=58)	
Live Bingo	27%	55%	**
Slot Machines	2%	44%	**
Horse, Dog or Mule Races	10%	44%	*
Craps or Other Dice Games	18%	44%	
Pulltabs	16%	43%	**
Sports Bets with Friends	18%	40%	*
Non-Poker Card Games	26%	38%	
Raffles and Casino Nights	6%	36%	**
Poker	24%	31%	
Blackjack	9%	19%	
Video Lottery	7%	18%	
Instant Lottery Games	7%	11%	
Other Lottery Games	6%	0%	
Mean Number of Weekly Activities	.46	1.66	**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Gambling Expenditures Among Native American Problem Gamblers

As we pointed out in the report on gambling and problem gambling in the general population of North Dakota (Volberg & Silver 1993), there is a strong correlation between gambling problems and regular heavy gambling losses. For this reason, it is important to compare gambling expenditures of non-problem Native American gamblers with those with moderate to severe gambling-related problems. The following table shows that reported monthly expenditures are significantly higher among Native

American problem and probable pathological gamblers than among Native Americans who have ever gambled for several types of gambling.

TABLE 11
Average Monthly Gambling Expenditures
of Problem and Non-Problem Gamblers

Type of Gambling Activity	Non-Problem Gamblers (N=280)	Problem & Pathological Gamblers (N=58)	
Live Bingo	\$27.04	\$102.02	**
Pulltabs	5.36	44.29	**
Raffles and Casino Nights	5.04	18.21	**
Horse, Dog or Mule Races	2.73	15.43	**
Slot Machines	2.52	14.12	**
Poker	6.74	12.22	
Video Lottery	.86	10.50	**
Blackjack	7.34	9.33	
Non-Poker Card Games	1.81	7.17	**
Craps or Other Dice Games	1.89	6.76	*
Sports Bets with Friends	2.95	6.00	
Out-of-State Casinos	.63	1.83	
Instant Lottery Games	1.11	1.47	
Other Lottery Games	.21	.47	
Total Monthly Expenditures on Gambling	66.24	249.90	**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

As with the general population, differences in reported monthly expenditures between Native American problem and non-problem gamblers are greatest for wagering on live bingo and pulltabs. Differences for wagering on raffles, horse or dog races, slot machines, video lottery games and non-poker card games are also significant as are the reported total monthly expenditures on gambling.

On the basis of weekly involvement and reported monthly expenditures, the types of gambling in North Dakota most closely associated with problem and pathological gambling among Native Americans are live bingo and pulltabs. Research shows that continuous forms of gambling, with rapid cycles of stake, play and determination, are more likely to lead to problematic gambling involvement than non-continuous forms of gambling (Dickerson 1993). Pulltabs and live bingo are both continuous forms of gambling.

Other Significant Differences

There are several further significant differences between Native American respondents who have ever gambled and those who score as problem and probable pathological gamblers in North Dakota. Like the general population, Native American problem and probable pathological gamblers are significantly more likely than non-problem gamblers to have ever felt that they had a problem with gambling. Despite this difference, it is worth noting that less than one-fifth of the lifetime problem and probable pathological gamblers felt that they had ever had a gambling problem.

Lifetime problem and probable pathological gamblers are also significantly more likely to have ever felt nervous about their gambling. Again, less than half of the respondents who scored as lifetime problem and probable pathological gamblers had ever felt nervous about their gambling.

TABLE 12
Other Significant Differences Between
Native American Problem and Non-Problem Gamblers

Type of Gambling Activity	Non-Problem Gamblers (N=280)	Problem & Pathological Gamblers (N=58)	
Ever felt you had a problem?	0%	17%	**
Ever felt nervous about gambling?	11%	45%	**
Main Reasons for Gambling			
For fun or entertainment	81%	93%	*
To win money	64%	91%	**
To socialize	71%	76%	
To support worthy causes	73%	74%	
For excitement or challenge	55%	71%	*
Out of curiosity	40%	36%	
As a distraction from everyday problems	18%	36%	**
As a hobby	11%	35%	**
<hr/>			
*	Somewhat significant ($p \leq .05$)		
**	Statistically significant ($p \leq .01$)		

The preceding table also shows that there are significant differences between Native American problem and non-problem gamblers in North Dakota in motivations for gambling. Native American problem and probable pathological gamblers are significantly more likely than non-problem gamblers to say that they gamble in order to win money, as a hobby and as a distraction from everyday problems. These respondents are somewhat more likely than non-problem gamblers to say that they gamble for fun or entertainment and for excitement.

In response to a question suggested by key informants, Native American respondents were asked whether they had ever sold food stamps to obtain money to gamble or pay gambling-related debts. Three of the respondents who scored as probable pathological gamblers acknowledged in face-to-face interviews with Native American interviewers that they had done this. All three respondents had sold food stamps to gamble or to pay gambling debts in the past year.

COMPARING GAMBLING AND PROBLEM GAMBLING AMONG NATIVE AMERICANS BY COUNTY

In order to implement services for problem and pathological gamblers throughout North Dakota, it is essential to understand differences in gambling involvement, gambling expenditures, and problem and pathological gambling prevalence rates across the state. The counties identified in this chapter include:

- Mountrail County (Fort Berthold reservation)
- Benson County (Fort Totten reservation)
- Sioux County (Standing Rock reservation)
- Rolette County (Turtle Mountain reservation)

Differences across these counties are summarized below. Details of gambling involvement, gambling expenditures and prevalence rates are presented in Appendix B. In reading the tables presented in Appendix B, we remind readers that asterisks in the far right column indicate that *one* of the figures in that row is significantly or somewhat different from other figures in the same row.

Gambling Involvement

There are few differences across these counties in the demographic characteristics of Native American respondents who have ever gambled. As Table B1 shows, Native American respondents from Mountrail County are more likely to have ever gambled and respondents from Sioux County are more likely to have participated in numerous types of gambling than respondents from other counties. Table B2 shows that while lifetime gamblers from Sioux County are most likely to be male, those from Mountrail County are most likely to be under 30 years of age, unmarried and to have less than a high school education. Lifetime gamblers from Rolette County are most likely to have household incomes under \$25,000 per year. None of these differences achieve statistical significance.

There are several significant differences in lifetime involvement in gambling across these counties. Table B3 shows that respondents from Sioux County are significantly more likely to have wagered on instant lottery games and on video lottery games than respondents from the other three counties. Respondents from Sioux County are somewhat more likely to have wagered on slot machines than respondents from the other counties while respondents from Rolette County are somewhat more likely to have wagered on horse or dog races than respondents from the other counties.

Expenditures on Gambling

Table B4 shows that reported monthly expenditures on gambling are highest among respondents from Benson County (\$97) and lowest in Mountrail County (\$59). Total reported monthly expenditures on gambling in all of these counties is higher than the average reported monthly expenditures reported by respondents in the general population sample.

Reported expenditures on specific types of gambling are far higher for live bingo than for any other type of gambling in every county except Sioux County. Expenditures on live bingo, pulltabs, raffles, slot machines, video lottery games and out-of-state casinos are highest in Benson County.

Expenditures on horse or dog races, craps and non-poker card games are highest in Rolette County. Expenditures on poker, blackjack, sports events and instant lottery games are highest in Sioux County.

Lifetime and Current Prevalence

Table B1 also summarizes differences across the counties in lifetime and current prevalence of problem and probable pathological gambling as well as gambling participation. The lifetime and current prevalence rates of problem and probable pathological gambling are highest in Mountrail County and lowest in Sioux County although this may be due to the factors discussed in the chapter on Methods.

DISCUSSION

Problem and pathological gamblers suffer from a treatable disorder whose costs go far beyond individual monetary losses. The results of this survey show that, at a minimum, 1,400 Native American adults in North Dakota are currently experiencing moderate to severe problems related to their involvement in gambling. While the personal, family and community costs of problem and pathological gambling among Native Americans in North Dakota are undoubtedly substantial, there is the added concern of the interaction of gambling with other social problems among Native Americans.

The extreme poverty on most Native American reservations has contributed to alcoholism rates that are over 600% higher than among the general population and suicide rates that are nearly 100% higher than among the general population (Connor 1993). International comparisons suggest that higher rates of gambling-related problems are accompanied by other social problems, including alcoholism and depression, among particularly disadvantaged groups in other cultures.

Comparison with New Zealand

A prevalence survey completed in New Zealand in 1991 provides an important comparison with the results of this study of Native Americans in North Dakota (Abbott & Volberg 1991, 1992). In New Zealand, Maori and Pacific Islander groups have an economic and social status similar to Native Americans in the United States. The New Zealand study included interviews with 4,053 respondents in the adult population and oversampled among Maori and Pacific Islanders in order to obtain adequate representation of these groups in the sample. The New Zealand study included a second phase in which a subsample of respondents, including equal numbers of non-problem and problem gamblers, were interviewed in person. These interviews included questions about alcohol use and abuse as well as about psychological states.

In New Zealand, a disproportionate number of lifetime and current problem and probable pathological gamblers were young Maori and Pacific Islanders. While 5% of the Caucasian respondents scored as problem or probable pathological gamblers, 16% of the Maori respondents and 32% of the Pacific Islanders scored as problem or probable pathological gamblers. While 45% of the Caucasian respondents who scored as problem or probable pathological gamblers were under 30 years of age, 59% of the Maori and 53% of the Pacific Islander respondents who scored as problem or probable pathological gamblers were under 30 years of age.

The second phase of the New Zealand study found that problem and probable pathological gamblers, the majority of whom were Maori and Pacific Islanders, experience substantially higher rates of depression and alcohol abuse than the general population. For example, 43% of the probable pathological gamblers suffered from mild to severe depression compared to 19% among respondents who gambled. More than 60% of the probable pathological gamblers and 46% of the problem gamblers were classified as engaging in hazardous or harmful alcohol use compared to 20% among respondents who gambled.

Addressing the Needs of Native American Pathological Gamblers

The State of North Dakota cannot address the issue of problem and pathological gambling among Native Americans alone. Native American problem and pathological gamblers live on reservation lands as well as among the general population in other North Dakota communities. The Indian Health Service and other agencies engaged in providing social services to Native Americans in North Dakota must be involved in addressing this issue along with state agencies. The imminent establishment of casino gaming operations on the Standing Rock, Turtle Mountain and Fort Berthold reservations makes the need for such efforts particularly important.

In establishing services for Native American problem and pathological gamblers, it will be important to remain sensitive to a variety of Native American and tribal concerns, including self-governance and the acceptability of Western models of mental health treatment. The consensus among treatment professionals working with problem and pathological gamblers in the general population is that a broad array of services is necessary.

While a broad array of services will probably be needed to address the issue of Native American problem gambling in North Dakota, this should not be taken for granted. There may be alternative approaches that will work as well or better with Native Americans than the services recommended for problem and pathological gamblers in the general population. It will be important to involve tribal governments, churches and traditional healers as well as other members of the Native American community in the effort to develop these services.

Critical to the implementation of services is adequate and continued funding, a supportive regulatory environment, and an organizational commitment to establishing and maintaining these efforts. Regardless of the options developed for funding and implementing services for Native American gamblers in North Dakota, it is essential that a firm and continuing financial commitment be made to minimize the negative impacts of gambling on Native American communities.

Conclusion

While the revenues generated by legalized gambling benefit all citizens, gambling legalization also produces social costs. Since state and tribal governments both sanction legalized gambling and benefit directly from their citizens' participation, it seems reasonable to expect these governments to provide assistance to individuals who experience problems related to their gambling.

The data presented here provide a benchmark for future assessments of gambling involvement and problem and pathological gambling among Native Americans in North Dakota. These data also provide a foundation for policy making and planning for services for Native Americans who experience difficulties related to their involvement in gambling. Consideration must now be given to educating Native Americans about the potential problems associated with gambling, to providing treatment services for those individuals who experience problems related to their gambling, and to ensuring that adequate and continuing funds for such efforts are made available.

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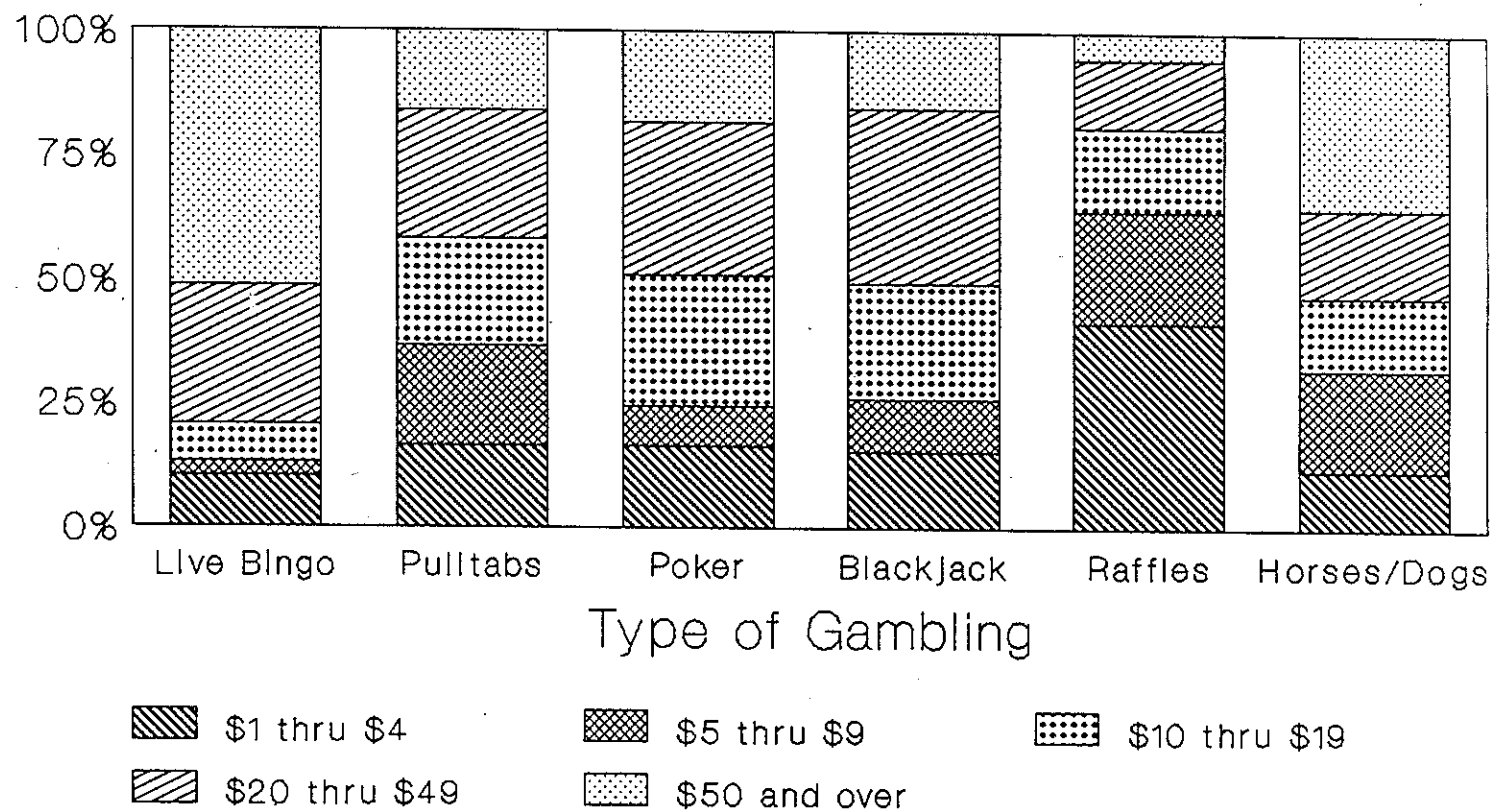
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Figure 1

Distribution of Monthly Expenditures by Gambling Activity



APPENDIX A

Questionnaires for the North Dakota Native American Survey on Gambling Involvement and Problem Gambling

ATA ENTRY #: _____ INTERVIEWER NAME: _____ EMP. #: _____
 DATE: ____/____/____ START TIME: _____ am pm RESPONDENT #: _____

Hello, my name is (Your first name) and I am calling from PMI Research in Fargo. We are doing a study of the gambling practices of the Citizens of North Dakota. This is a scientific study funded by the North Dakota Department of Human Services and the results will influence how government funds will be spent. Your household is one of 1,500 being surveyed in North Dakota. Your number was randomly selected by a computer and I do not even know your name. All of your answers will be anonymous. In order to interview the right person, I need to speak with the member of your household who is over 18 and has had the most recent birthday. Would that be you? Y .. Yes

ASK TO SPEAK TO CORRECT PERSON. <--- N .. No/Not Sure/No Response
 CALL BACK (CB) IF NOT AVAILABLE.

1. First, which of the following best describes your racial or ethnic group -- would you say--

Discontinue Close (DC3) <--- a ... White/Caucasian
 Discontinue Close (DC3) <--- b ... Hispanic

GO TO Q1 <----- c ... Native American

Discontinue Close (DC3) <--- d ... Asian
 Discontinue Close (DC3) <--- e ... Black, or
 Discontinue Close (DC3) <--- f ... Some other group?
 Discontinue Close (DC3) <--- g ... <DO NOT READ> Don't Know
 Discontinue Close (DC3) <--- h ... <DO NOT READ> No Response

ASK Q1 (Q2-Q4 AS NEEDED) FOR EACH ACTIVITY LISTED ON NEXT PAGE.

People bet on many different things such as raffles, football games and card games. I am going to ask you about some activities such as these that you may participate in. Have you ever bet or spent money on (From list on next page)? <Record on next page under Q1.Ever Bet>

IF "Yes", ASK Q2. Otherwise go to next activity on the list.

Have you bet or spent money on this activity in the past year? <Record on next page under Q2.Past Year>

IF "Yes", ASK Q3 & Q4. Otherwise go to next activity on the list.

Can you give me an idea of the amount that you spend on this activity in a typical month? <IF RELUCTANT OR NOT SURE: I am only looking for an approximate amount, rounded to the nearest 5 dollars or so.> <Record on next page under Q3.\$/Month>

Do you gamble for money on this activity at least once per week? <Record on next page under Q4.1/Week>

GO BACK to Q1, until you have asked about all listed activities. If Q1 (and Q2 to Q4 as needed) have been asked for all activities, either continue with Q5 if the respondent said "yes" to one or more activities in Q1; SKIP to Q39 if the respondent did not say "yes" to any activities in Q1.

IF RESPONDENT ONLY NAMED ONE ACTIVITY IN Q1, THEN RECORD THAT NUMBER IN Q5 AND GO TO Q7.

Q5. Thinking about these sorts of activities, which involve an element of luck or chance or which we call gambling activities, can you please tell me which is your favorite type of gambling activity?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

Q6. Do you have a second favorite type of gambling activity?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

Type of Wagering 1=Yes 2=No 3=DK 4=NR	Q1.Ever Bet	Q2. Past Year	Q3.\$/ Month	Q4.1/ Week+
1. Raffles, casino nights and other small stakes games sponsored by schools, clubs or other organizations				
2. Live Bingo				
3. Pull tabs				
4. Blackjack				
5. Instant lottery games, such as scratch cards in Minnesota where you know instantly if you've won				
6. Video lottery such as bingo, poker, black jack with progressive prizes such as those in South Dakota				
7. Other lottery games where winning numbers are announced at the end of the day or week				
8. Slot machines and other gaming machines, not including video lottery, that pay out tickets or cash				
9. Poker				
10. Card games other than poker played with friends or relatives for money				
11. Craps or other dice games				
12. Any card or dice games at out of state casinos				
13. Outcome of sports and other events with friends or co-workers				
14. Sports with a bookie				
15. Any type of horse, dog, or mule races				
16. Speculative investments including the stockmarket and commodities				
17. Other gaming activities				

IF THE RESPONDENT SAID "YES" TO ONE OR MORE ACTIVITIES IN Q1, CONTINUE WITH Q5.

IF THE RESPONDENT DID NOT SAY "YES" TO ANY ACTIVITIES IN Q1, SKIP TO Q39.

7. And can you tell me the main reasons why you participate in the types of activities we have just discussed? Is it:

- | | Yes | No/NS |
|---|--------|-------|
| a. For socializing, | 1 .. 2 | |
| b. For excitement or as a challenge, | 1 .. 2 | |
| c. As a hobby, | 1 .. 2 | |
| d. To win money, | 1 .. 2 | |
| e. To support worthy causes, | 1 .. 2 | |
| f. Out of curiosity, | 1 .. 2 | |
| g. For entertainment or fun, | 1 .. 2 | |
| h. To distract myself from everyday problems, or .. | 1 .. 2 | |
| i. Some other reasons? | 1 .. 2 | |

8. The next set of questions is part of a standard measurement scale which has been used throughout the United States in surveys similar to this one. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is anonymous.

For Q8 to Q29, if respondent answers never or no to part "a", then skip to next "a", otherwise ask part "b".

person refuses to complete this section, please say "We realize these questions may not apply to everyone, but we do need answers to all of the questions. It will only take a few more minutes."

- | | Never | Some of the time | Most of the time | Every time | Don't know | No response |
|---|----------------------------|------------------|------------------|------------|------------|-------------|
| 9a. When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost? Is it never, some of the time, most of the time, or every time? | 1 .. 2 .. 3 .. 4 .. 5 .. 6 | | | | | |
| 9b. How often have you done this in the past year? | 1 .. 2 .. 3 .. 4 .. 5 .. 6 | | | | | |
| 10a. Have you ever claimed to be winning money from these activities when in fact you lost? Is it never, some of the time, most of the time, or every time? | 1 .. 2 .. 3 .. 4 .. 5 .. 6 | | | | | |
| 10b. How often have you done this in the past year? | 1 .. 2 .. 3 .. 4 .. 5 .. 6 | | | | | |
| 11a. Have people ever criticized your gambling? | 1 .. 2 .. 3 .. 4 | | | | | |
| 11b. Have people criticized your gambling in the past year? | 1 .. 2 .. 3 .. 4 | | | | | |
| 12a. Have you ever felt guilty about the way you gamble or about what happens when you gamble? | 1 .. 2 .. 3 .. 4 | | | | | |
| 12b. Have you felt this way in the past year? | 1 .. 2 .. 3 .. 4 | | | | | |
| 13a. Have you ever felt that you would like to stop gambling, but didn't think that you could? | 1 .. 2 .. 3 .. 4 | | | | | |
| 13b. Have you felt this way in the past year? | 1 .. 2 .. 3 .. 4 | | | | | |

- | | Yes | No | Don't know | No response |
|---|------------------|----|------------|-------------|
| Q14a. Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life? | 1 .. 2 .. 3 .. 4 | | | |
| Q14b. Have you done so in the past year? | 1 .. 2 .. 3 .. 4 | | | |

- | | | | | |
|---|------------------|--|--|--|
| Q15a. Have you ever argued with people you live with over how you handle money? | 1 .. 2 .. 3 .. 4 | | | |
| Q15b. Have these arguments ever centered on your gambling? | 1 .. 2 .. 3 .. 4 | | | |
| Q15c. Have you had any of these arguments in the past year? | 1 .. 2 .. 3 .. 4 | | | |

We are almost through this section of questions.

Please remember that all this information is anonymous.

- | | | | | |
|--|------------------|--|--|--|
| Q16a. Have you ever missed time from work or school due to gambling? | 1 .. 2 .. 3 .. 4 | | | |
| Q16b. Have you missed time from work or school in the past year due to gambling? | 1 .. 2 .. 3 .. 4 | | | |

- | | | | | |
|--|------------------|--|--|--|
| Q17a. Have you ever borrowed from someone and not paid them back as a result of your gambling? | 1 .. 2 .. 3 .. 4 | | | |
| Q17b. Have you done so in the past year? | 1 .. 2 .. 3 .. 4 | | | |

I am going to read a list of the ways in which some people get money for gambling. Can you tell me which of these, if any, you have ever used to get money for gambling or to pay gambling debts?

- | | | | | |
|--|------------------|--|--|--|
| Q18a. Have you ever borrowed from household money? | 1 .. 2 .. 3 .. 4 | | | |
| Q18b. Have you borrowed from household money in the past year? | 1 .. 2 .. 3 .. 4 | | | |

Please remember we are asking you about the sources of money for gambling or to pay gambling debts.

- | | | | | |
|---|------------------|--|--|--|
| Q19a. Have you ever borrowed money from your spouse or partner? | 1 .. 2 .. 3 .. 4 | | | |
| Q19b. Have you borrowed money from your spouse or partner in the past year? | 1 .. 2 .. 3 .. 4 | | | |
| Q20a. Have you ever borrowed from other relatives or in-laws? | 1 .. 2 .. 3 .. 4 | | | |
| Q20b. Have you borrowed from other relatives or in-laws in the past year? | 1 .. 2 .. 3 .. 4 | | | |

- | | | | | |
|---|------------------|--|--|--|
| Q21a. Have you ever gotten loans from banks, loan companies or credit unions? | 1 .. 2 .. 3 .. 4 | | | |
| Q21b. Have you gotten loans from banks, loan companies or credit unions in the past year? | 1 .. 2 .. 3 .. 4 | | | |

Please remember we are asking you about the sources of money for gambling or to pay gambling debts.

- | | | | | |
|--|------------------|--|--|--|
| Q22a. Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (Does not include instant cash cards) .. | 1 .. 2 .. 3 .. 4 | | | |
| Q22b. Have you made cash withdrawals on credit cards in the past year? | 1 .. 2 .. 3 .. 4 | | | |

- | | | | | |
|--|------------------|--|--|--|
| Q23a. Have you ever gotten loans from loan sharks to gamble or pay gambling debts? | 1 .. 2 .. 3 .. 4 | | | |
| Q23b. Have you gotten loans from loan sharks in the past year? | 1 .. 2 .. 3 .. 4 | | | |

- | | Yes | No | Don't Know | No response |
|--|-----|----|------------|-------------|
| Q24a. Have you ever cashed in stocks, bonds or other securities to finance gambling? | 1 | 2 | 3 | 4 |
| Q24b. Have you cashed in stocks, bonds or other securities in the past year? | 1 | 2 | 3 | 4 |
| Q25a. Have you ever sold personal or family property to gamble or pay gambling debts? | 1 | 2 | 3 | 4 |
| Q25b. Have you sold personal or family property to gamble or pay gambling debts in the past year? | 1 | 2 | 3 | 4 |
| Q26a. Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts? | 1 | 2 | 3 | 4 |
| Q26b. Have you borrowed from your checking account by writing checks that bounced in the past year? | 1 | 2 | 3 | 4 |
| Q27a. Have you ever had a credit line with a casino or a bookie? | 1 | 2 | 3 | 4 |
| Q27b. Have you had a credit line with a casino or a bookie in the past year? | 1 | 2 | 3 | 4 |
| Q28a. Have you ever sold food stamps or food you get from a government program for gambling or to pay gambling debts? | 1 | 2 | 3 | 4 |
| Q28b. Have you done this in the past year? | 1 | 2 | 3 | 4 |
| Q29a. Do you feel that you have ever had a problem with betting money or gambling? | 1 | 2 | 3 | 4 |
| Q29b. Do you feel that you have had a problem with betting money or gambling in the past year? | 1 | 2 | 3 | 4 |
| Q30. Do you feel that either of your parents has ever had a problem with betting money or gambling? | 1 | 2 | 3 | 4 |
| Q31. How old were you when you first started gambling? | | | | |

ENTER AGE: _____

- Q32. What type of gambling was that?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

- Q33. Was there any time when the amount you were gambling made you nervous?
1 ... Yes

Skip to Q36 <--- 2 ... No
Skip to Q36 <--- 3 ... Don't Know
Skip to Q36 <--- 4 ... No Response

- Q34. How old were you when that happened?

ENTER AGE: _____

- Q35. What types of gambling were you doing when that happened? <UP TO THREE RESPONSES>
<ENTER ACTIVITY NUMBERS FROM "CODE SHEET">

1st: _____ 2nd: _____ 3rd: _____

- Q36. Have you ever been in trouble with the law because of activities related to gambling?

1 ... Yes
2 ... No
3 ... Don't Know
4 ... No Response

- Q37. Have you ever desired or sought treatment to help you stop gambling?

1 ... Yes

Skip to Q39 <--- 2 ... No
Skip to Q39 <--- 3 ... Don't Know
Skip to Q39 <--- 4 ... No Response

- Q38. What type of treatment was that?

1 ... Gamblers Anonymous
2 ... Veterans Administration
3 ... Psychologist
4 ... Psychiatrist
5 ... Physician
6 ... A mental health center
7 ... Other counselor (incl. Social Workers)
8 ... Minister/Clergy
9 ... Other: _____
10 ... Not sure/no response

- Q39. As you probably know, different types of people have different opinions and experiences. The following questions are for statistical purposes only and the answers to these questions, like all of the others, will be anonymous. Are you currently married, widowed, divorced, separated, or have you never been married?

1 ... Married, common-law, co-habitation
2 ... Widowed
3 ... Divorced
4 ... Separated
5 ... Never married
6 ... Refused/NR

- Q40. Including yourself, how many people over the age of 18 live in your household?

ENTER NUMBER: _____ 98 = Not Sure

- Q41. What is the highest level of education you have completed?

1 ... Elementary or some high school
2 ... High school graduate or GED
3 ... Some college or associates degree (including technical and trade schools)
4 ... Bachelor's degree
5 ... Graduate study or degree
6 ... Refused/No response

12. Last week, were you working full-time, part-time, going to school, keeping house, or something else?

- 1 ... Working full-time
- 2 ... Working part-time

Skip to Q44 <— 3 ... Going to school

Skip to Q44 <— 4 ... Keeping house

- 5 ... Disabled
- 6 ... Retired
- 7 ... Unemployed

Skip to Q44 <— 8 ... Refused or no answer

13. What kind of work (do/did) you normally do?

- 1 ... Farming/agriculture
- 2 ... Mining
- 3 ... Retail services
- 4 ... Other services
- 5 ... Professional/technical
- 6 ... Manager/proprietor
- 7 ... Skilled, craftsman
- 8 ... Semi-skilled, operative
- 9 ... Laborer
- 10 ... Student
- 19 ... Refused or no answer

14. May I have your age please? <IF RELUCTANT OR REFUSE: Remember, your answers are anonymous and will be used for statistical purposes only.>

ENTER AGE: _____ 0=Refuse/No response

15 3

16. Which of the following best describes your current religious preference -- would you say...

- 1 ... Protestant (Examples: Lutheran, Baptist, Methodist, Presbyterian, Seventh Day Adventist, and Episcopalian)
- 2 ... Catholic
- 3 ... Jewish
- 4 ... Muslim, or
- 5 ... Some other religion? _____
- 6 ... <DO NOT READ> None
- 7 ... <DO NOT READ> Don't Know
- 8 ... <DO NOT READ> No Response

Q47. What was your total household income last year?

- 1 ... Under \$15,000
- 2 ... \$15,001 to \$25,000
- 3 ... \$25,001 to \$35,000
- 4 ... \$35,001 to \$50,000
- 5 ... Over \$50,000
- 6 ... Don't Know
- 7 ... No Response

Q48. <DO NOT READ> RESPONDENT GENDER

- 1 ... Male
- 2 ... Female
- 3 ... Cannot tell

Q49. <DO NOT READ> Enter Region from list: _____

VERIFICATION CLOSE: That's all the questions I have for you. Lastly, let me verify that I dialed _____. Again, my name is (Your First Name), and on occasion a small percentage of people like yourself are called back just to verify that this interview actually took place. Your responses will remain anonymous and if this interview is verified, you will be identified by your age and gender. Thank you for your time and have a good (evening/day).

END TIME: _____ am pm PHONE: (_____) _____

DATA ENTRY #: _____ INTERVIEWER NAME: _____ EMP. #: _____
DATE: ____/____/____ START TIME: ____ am pm RESPONDENT #: _____

Hello, my name is (Your first name) and I am from PMI Research in Fargo. We are doing a study of the gambling practices of the Citizens of North Dakota. This is a scientific study funded by the North Dakota Department of Human Services and the results will influence how government funds will be spent. Your household is one of 1,900 households being surveyed in North Dakota. Your address was randomly selected by a computer. All of your answers will be anonymous.

0A. <DO NOT READ> ANSWER BASED ON SIGHT. IF UNSURE, ASK...First, which of the following best describes your racial or ethnic group - would you say...

GO TO Q8 <----- a ... Native American, or

Ask if any Native Americans in household,

if not, Discontinue Close (DC3) <---- b ... Some other group?

Discontinue Close (DC3) <----- c ... <DO NOT READ> Don't Know/No Response

0B. In order to interview the right person, I need to speak with the member of your household who is Native American, over 18, and has had the most recent birthday. Would that be you?
Y ... Yes

ASK TO SPEAK TO CORRECT PERSON. <--- N ... No/Not Sure/No Response
CALL BACK (CB) IF NOT AVAILABLE.

0C. Do you have a working telephone in your house?

Discontinue Close (DC4) <----- Y ... Yes

N ... No

ASK Q1 (Q2-Q4 AS NEEDED) FOR EACH ACTIVITY LISTED ON NEXT PAGE.

01. People bet on many different things such as raffles, football games and card games. I am going to ask you about some activities such as these that you may participate in. Have you ever bet or spent money on (From list on next page)? <Record on next page under Q1.Ever Bet>

IF "Yes", ASK Q2. Otherwise go to next activity on the list.

02. Have you bet or spent money on this activity in the past year? <Record on next page under Q2.Past Year>

IF "Yes", ASK Q3 & Q4. Otherwise go to next activity on the list.

03. Can you give me an idea of the amount that you spend on this activity in a typical month? <IF RELUCTANT OR NOT SURE: I am only looking for an approximate amount, rounded to the nearest 5 dollars or so.> <Record on next page under Q3.\$/Month>

04. Do you gamble for money on this activity at least once per week? <Record on next page under Q4.1/Week>

GO BACK to Q1, until you have asked about all listed activities. If Q1 (and Q2 to Q4 as needed) have been asked for all activities, either continue with Q5 if the respondent said "yes" to one or more activities in Q1 or SKIP to Q39 if the respondent did not say "yes" to any activities in Q1.

IF RESPONDENT ONLY NAMED ONE ACTIVITY IN Q1, THEN RECORD THAT NUMBER IN Q5 AND GO TO Q7.

Q5. Thinking about these sorts of activities, which involve an element of luck or chance or which we call gambling activities, can you please tell me which is your favorite type of gambling activity?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

Q6. Do you have a second favorite type of gambling activity?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

Type of Wagering 1=Yes 2=No 3=DK 4=NR	Q1.Ever Bet	Q2. Past Year	Q3.\$/ Month	Q4.1/ Week+
1. Raffles, casino nights and other small stakes games sponsored by schools, clubs or other organizations				
2. Live Bingo				
3. Pull tabs				
4. Blackjack				
5. Instant lottery games, such as scratch cards in Minnesota where you know instantly if you've won				
6. Video lottery such as bingo, poker, black jack with progressive prizes such as those in South Dakota				
7. Other lottery games where winning numbers are announced at the end of the day or week				
8. Slot machines and other gaming machines, not including video lottery, that pay out tickets or cash				
9. Poker				
10. Card games other than poker played with friends or relatives for money				
11. Craps or other dice games				
12. Any card or dice games at out of state casinos				
13. Outcome of sports and other events with friends or co-workers				
14. Sports with a bookie				
15. Any type of horse, dog, or mule races				
16. Speculative investments including the stockmarket and commodities				
17. Other gaming activities				

IF THE RESPONDENT SAID "YES" TO ONE OR MORE ACTIVITIES IN Q1, CONTINUE WITH Q5.

IF THE RESPONDENT DID NOT SAY "YES" TO ANY ACTIVITIES IN Q1, SKIP TO Q39.

7. And can you tell me the main reasons why you participate in the types of activities we have just discussed? Is it:

	Yes	No/NS
a. For socializing,	1 .. 2	
b. For excitement or as a challenge,	1 .. 2	
c. As a hobby,	1 .. 2	
d. To win money,	1 .. 2	
e. To support worthy causes,	1 .. 2	
f. Out of curiosity,	1 .. 2	
g. For entertainment or fun,	1 .. 2	
h. To distract myself from everyday problems, or ..	1 .. 2	
i. Some other reasons?	1 .. 2	

For Q8 to Q29, if respondent answers never or no to part "a", then skip to next "a", otherwise ask part "b".

person refuses to complete this section,
Please say "We realize these questions may not
apply to everyone, but we do need answers to
all of the questions. It will only take a few more minutes."

8a. The next set of questions is part of a standard measurement scale which has been used throughout the United States in surveys similar to this one. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is anonymous. When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost? Is it never, some of the time, most of the time, or every time?

	Never	Some of the time	Most of the time	Every time	Don't know	No response
8b. How often have you done this in the past year?	1 .. 2 .. 3 .. 4 .. 5 .. 6					

9a. Have you ever claimed to be winning money from these activities when in fact you lost? Is it never, some of the time, most of the time, or every time?

9b. How often have you done this in the past year?	1 .. 2 .. 3 .. 4 .. 5 .. 6
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10a. Do you ever spend more time or money gambling than you intended?

10b. Have you done this in the past year?	1 .. 2 .. 3 .. 4
---	------------------

11a. Have people ever criticized your gambling?

11b. Have people criticized your gambling in the past year?	1 .. 2 .. 3 .. 4
---	------------------

12a. Have you ever felt guilty about the way you gamble or about what happens when you gamble?

12b. Have you felt this way in the past year?	1 .. 2 .. 3 .. 4
---	------------------

13a. Have you ever felt that you would like to stop gambling, but didn't think that you could?

13b. Have you felt this way in the past year?	1 .. 2 .. 3 .. 4
---	------------------

Q14a. Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life?

Q14b. Have you done so in the past year?	1 .. 2 .. 3 .. 4
--	------------------

Q15a. Have you ever argued with people you live with over how you handle money?

Q15b. Have these arguments ever centered on your gambling?	1 .. 2 .. 3 .. 4
--	------------------

Q15c. Have you had any of these arguments in the past year?	1 .. 2 .. 3 .. 4
---	------------------

Q16a. We are almost through this section of questions. Please remember that all this information is anonymous. Have you ever missed time from work or school due to gambling?

Q16b. Have you missed time from work or school in the past year due to gambling?	1 .. 2 .. 3 .. 4
--	------------------

Q17a. Have you ever borrowed from someone and not paid them back as a result of your gambling?

Q17b. Have you done so in the past year?	1 .. 2 .. 3 .. 4
--	------------------

Q18a. I am going to read a list of the ways in which some people get money for gambling. Can you tell me which of these, if any, you have ever used to get money for gambling or to pay gambling debts?

Q18b. Have you borrowed from household money in the past year?	1 .. 2 .. 3 .. 4
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Q19a. Please remember we are asking you about the sources of money for gambling or to pay gambling debts. Have you ever borrowed money from your spouse or partner?

Q19b. Have you borrowed money from your spouse or partner in the past year?	1 .. 2 .. 3 .. 4
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Q20a. Have you ever borrowed from other relatives or in-laws?

Q20b. Have you borrowed from other relatives or in-laws in the past year?	1 .. 2 .. 3 .. 4
---	------------------

Q21a. Have you ever gotten loans from banks, loan companies or credit unions?

Q21b. Have you gotten loans from banks, loan companies or credit unions in the past year?	1 .. 2 .. 3 .. 4
---	------------------

Q22a. Please remember we are asking you about the sources of money for gambling or to pay gambling debts. Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (Does not include instant cash cards)

Q22b. Have you made cash withdrawals on credit cards in the past year?	1 .. 2 .. 3 .. 4
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Q23a. Have you ever gotten loans from loan sharks to gamble or pay gambling debts?

Q23b. Have you gotten loans from loan sharks in the past year?	1 .. 2 .. 3 .. 4
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- 24a. Have you ever cashed in stocks, bonds or other securities to finance gambling? 1 ... 2 ... 3 ... 4
- 24b. Have you cashed in stocks, bonds or other securities in the past year? 1 ... 2 ... 3 ... 4
- 25a. Have you ever sold personal or family property to gamble or pay gambling debts? 1 ... 2 ... 3 ... 4
- 25b. Have you sold personal or family property to gamble or pay gambling debts in the past year? 1 ... 2 ... 3 ... 4
- 26a. Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts? 1 ... 2 ... 3 ... 4
- 26b. Have you borrowed from your checking account by writing checks that bounced in the past year? 1 ... 2 ... 3 ... 4
- 27a. Have you ever had a credit line with a casino or a bookie? 1 ... 2 ... 3 ... 4
- 27b. Have you had a credit line with a casino or a bookie in the past year? 1 ... 2 ... 3 ... 4
- 28a. Have you ever sold food stamps or food you get from a government program for gambling or to pay gambling debts? 1 ... 2 ... 3 ... 4
- 28b. Have you done this in the past year? 1 ... 2 ... 3 ... 4
- 29a. Do you feel that you have ever had a problem with betting money or gambling? 1 ... 2 ... 3 ... 4
- 29b. Do you feel that you have had a problem with betting money or gambling in the past year? 1 ... 2 ... 3 ... 4
30. Do you feel that either of your parents has ever had a problem with betting money or gambling? 1 ... 2 ... 3 ... 4
31. How old were you when you first started gambling?

ENTER AGE: _____

32. What type of gambling was that?

ENTER ACTIVITY NUMBER FROM "CODE SHEET": _____

33. Was there any time when the amount you were gambling made you nervous?

1 ... Yes

Skip to Q36 <--- 2 ... No
Skip to Q36 <--- 3 ... Don't Know
Skip to Q36 <--- 4 ... No Response

34. How old were you when that happened?

ENTER AGE: _____

35. What types of gambling were you doing when that happened? <UP TO THREE RESPONSES>
<ENTER ACTIVITY NUMBERS FROM "CODE SHEET">

1st: _____ 2nd: _____ 3rd: _____

- Q36. Have you ever been in trouble with the law because of activities related to gambling?

1 ... Yes
2 ... No
3 ... Don't Know
4 ... No Response

- Q37. Have you ever desired or sought treatment to help you stop gambling?

1 ... Yes

Skip to Q39 <--- 2 ... No
Skip to Q39 <--- 3 ... Don't Know
Skip to Q39 <--- 4 ... No Response

- Q38. What type of treatment was that?

1 ... Gamblers Anonymous
2 ... Veterans Administration
3 ... Psychologist
4 ... Psychiatrist
5 ... Physician
6 ... A mental health center
7 ... Other counselor (incl. Social Workers)
8 ... Minister/Clergy
9 ... Other: _____
10 ... Not sure/no response

- Q39. As you probably know, different types of people have different opinions and experiences. The following questions are for statistical purposes only and the answers to these questions, like all of the others, will be anonymous. Are you currently married, widowed, divorced, separated, or have you never been married?

1 ... Married, common-law, co-habitation
2 ... Widowed
3 ... Divorced
4 ... Separated
5 ... Never married
6 ... Refused/NR

- Q40. Including yourself, how many people over the age of 18 live in your household?

ENTER NUMBER: _____ 98 = Not Sure

- Q41. What is the highest level of education you have completed?

1 ... Elementary or some high school
2 ... High school graduate or GED
3 ... Some college or associates degree (including technical and trade schools)
4 ... Bachelor's degree
5 ... Graduate study or degree
6 ... Refused/No response

42. Last week, were you working full-time, part-time, going to school, keeping house, or something else?

- 1 ... Working full-time
- 2 ... Working part-time

Skip to Q44 <--- 3 ... Going to school

Skip to Q44 <--- 4 ... Keeping house

- 5 ... Disabled
- 6 ... Retired
- 7 ... Unemployed

Skip to Q44 <--- 8 ... Refused or no answer

43. What kind of work (do/did) you normally do?

- 1 ... Farming/agriculture
- 2 ... Mining
- 3 ... Retail services
- 4 ... Other services
- 5 ... Professional/technical
- 6 ... Manager/proprietor
- 7 ... Skilled, craftsman
- 8 ... Semi-skilled, operative
- 9 ... Laborer
- 10 ... Student
- 19 ... Refused or no answer

44. May I have your age please? <IF RELUCTANT OR REFUSE: Remember, your answers are anonymous and will be used for statistical purposes only.>

ENTER AGE: _____ 0 = Refuse/No response

45 ③

46. Which of the following best describes your current religious preference -- would you say...

- 1 ... Protestant (Examples: Lutheran, Baptist, Methodist, Presbyterian, Seventh Day Adventist, and Episcopalian)
- 2 ... Catholic
- 3 ... Jewish
- 4 ... Muslim, or
- 5 ... Some other religion? _____
- 6 ... <DO NOT READ> None
- 7 ... <DO NOT READ> Don't Know
- 8 ... <DO NOT READ> No Response

Q47. What was your total household income last year?

- 1 ... Under \$15,000
- 2 ... \$15,001 to \$25,000
- 3 ... \$25,001 to \$35,000
- 4 ... \$35,001 to \$50,000
- 5 ... Over \$50,000
- 6 ... Don't Know
- 7 ... No Response

Q48. <DO NOT READ> RESPONDENT GENDER

- 1 ... Male
- 2 ... Female
- 3 ... Cannot tell

Q49. <DO NOT READ> Enter Region from list: _____

Q50. On occasion a small percentage of surveys are verified to be sure this interview actually took place. Your responses will remain anonymous, and if this interview is verified, you will be identified only by your age and gender. In order to verify that you participated in the survey, please complete this card.

<HAND RESPONDENT ATTACHED VERIFICATION CARD AND ENVELOPE>

APPENDIX B

Gambling Involvement, Gambling Expenditures and Prevalence Rates Across North Dakota Counties

TABLE B1

**Lifetime and Current
Prevalence Rates and Gambling Involvement
by County
(N=400)**

	Mountrail (N=38)	Rolette (N=226)	Benson (N=72)	Sioux (N=64)
Reservation	Fort Berthold	Turtle Mountain	Fort Totten	Standing Rock
Lifetime Prevalence				
Lifetime Prevalence Rate	18.4%	14.6%	13.9%	12.5%
Lifetime Participation in Gambling	86.8%	84.5%	83.3%	84.4%
Mean # of Lifetime Gambling Activities	3.5	3.8	3.5	4.3
Current Prevalence				
Current Prevalence Rate	15.8%	11.9%	12.5%	10.9%
Weekly Participation in Gambling	26.3%	31.4%	33.3%	21.9%

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

TABLE B2

**Demographics of Lifetime Gamblers
By County
(N=338)**

Demographic Variables	Mountrail (N=33)	Rolette (N=191)	Benson (N=60)	Sioux (N=54)
Male	49%	41%	42%	59%
Under 30	36%	26%	18%	30%
Less than HS	24%	18%	13%	13%
Not Married	55%	44%	40%	52%
Annual Income				
Under \$25,000	61%	64%	48%	59%

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

TABLE B3

Differences in Lifetime Gambling Involvement
By County
(N=400)

	Mountrail (N=38)	Rolette (N=226)	Benson (N=72)	Sioux (N=64)	
Raffles/Casino Nights	66%	68%	72%	70%	
Live Bingo	58%	60%	61%	53%	
Pulltabs	55%	51%	44%	36%	
Slot Machines	29%	18%	22%	36%	*
Sports w/Friends	29%	29%	28%	44%	
Blackjack	21%	27%	22%	20%	
Non-Poker Card Games	21%	26%	19%	23%	
Craps or Other Dice Games	16%	18%	7%	22%	
Instant Lottery Games	13%	16%	19%	38%	**
Poker	11%	22%	22%	20%	
Horse/Dog Races	8%	21%	7%	14%	*
Out-of-State Casinos	8%	5%	6%	14%	
Video Lottery Games	5%	9%	13%	28%	**
Other Lottery Games	5%	6%	7%	9%	
Speculative Investments	3%	1%	1%	---	
Lifetime Participation in Gambling	87%	85%	83%	84%	

* Somewhat significant ($p \leq .05$)
 ** Statistically significant ($p \leq .01$)

TABLE B4

Estimated Monthly Expenditures
by County
(N=400)

Estimated Monthly Expenditures	Mountrail (N=38)	Rolette (N=226)	Benson (N=72)	Sioux (N=64)	
Live Bingo	39.76	34.34	43.53	16.91	
Pulltabs	4.03	10.25	18.36	4.38	
Poker	3.16	4.22	3.58	19.77	
Raffles/Casino Nights	3.13	6.12	7.76	6.33	
Sports w/Friends	2.95	2.50	2.11	5.41	
Craps or Other Dice Games	1.79	3.32	.83	.67	
Instant Lottery Games	1.58	.33	1.14	2.81	**
Non-Poker Card Games	1.24	3.30	.58	1.41	
Slot Machines	.66	3.04	7.07	4.75	
Other Lottery Games	.47	.12	.11	.53	
Blackjack	.29	5.21	3.28	18.28	*
Video Lottery Games	.26	1.32	5.35	2.47	
Horse/Dog Races	.13	6.49	1.63	1.09	
Out-of-State Casinos	.00	.31	1.88	1.19	
Total Estimated Expenditures	59.45	80.86	97.21	86.06	

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)