

**April 2000****IMPACT OF  
GAMBLING****Economic Effects  
More Measurable  
Than Social Effects****G A O****Accountability \* Integrity \* Reliability**

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G A O

Accountability \* Integrity \* Reliability

United States General Accounting Office  
Washington, D.C. 20548

General Government Division

B-282745

April 27, 2000

The Honorable Frank R. Wolf  
House of Representatives

Dear Mr. Wolf:

In 1999, 48 of the 50 states had some form of legalized gambling. The estimated revenue from legalized gambling totaled about \$54.3 billion in 1998. As you requested, we have (1) examined the June 1999 National Gambling Impact Study Commission (NGISC) findings on the economic and social effects of gambling on communities and families and (2) explored the issues raised in the NGISC study through a case study in Atlantic City, NJ, a large destination gambling city where gambling was legalized in 1977. As agreed with you, we focused on

(1) the economic effects of gambling, particularly on employment, bankruptcy, and tax revenues and community investment;

(2) the social effects of gambling;

(3) the prevalence of pathological gambling;<sup>1</sup> and

(4) whether communities offer incentives to attract gambling establishments.

To address these objectives, we reviewed NGISC's and its research contractors' reports and studied gambling effects in Atlantic City, NJ. Congress created NGISC in 1996 to conduct a comprehensive study of the social and economic impacts of gambling in the United States. NGISC conducted a study, which involved \$2.5 million of research. The research included two national surveys of U.S. adults and youth, regarding gambling behavior and attitudes; a survey of patrons at 21 gambling facilities; case studies in 10 communities; and detailed analysis of a 100-community

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<sup>1</sup> The American Psychiatric Association (APA) defines pathological gambling as a pathological disorder having the essential feature of "persistent and recurrent maladaptive gambling behavior...that disrupts personal, family, or vocational pursuits."

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sample to determine the economic impact of casino gambling. NGISC issued its report in June 1999.<sup>2</sup>

For our case study of Atlantic City, we visited Atlantic City and Trenton, NJ, and interviewed New Jersey, Atlantic City, and Atlantic County personnel involved in economic, social, law enforcement, and regulatory areas, as well as officials representing nonprofit social agencies, unions, and casino gambling. We also analyzed economic and social data provided by federal, New Jersey, Atlantic City, and Atlantic County agencies. The approach we used focused on Atlantic City and did not measure the economic and social effects associated with or related to people who gamble in Atlantic City but do not live in the area. According to a New Jersey official, about two-thirds of Atlantic City's gamblers live outside of New Jersey. Also, data for some of the social indicators we studied were not readily available for Atlantic City, and we used Atlantic County data.

According to U.S. Census data, Atlantic City is the largest city in Atlantic County and in 1990, Atlantic City represented about 17 percent of the Atlantic County population. According to information provided by New Jersey officials, about 80 percent of Atlantic City hotel casino employees reside in Atlantic County. In addition, for crime and suicide rates in Atlantic City, we used an adjusted population base to include the average daily number of visitors and nonresident workers in Atlantic City because visitors become part of the pool that may either commit suicide or crimes or become victims of crime.

We did our work from May 1999 to December 1999 in accordance with generally accepted government auditing standards. Appendix V provides further details about our objectives, scope, and methodology. We requested comments on a draft of this report from various officials in New Jersey, the former Chairperson of NGISC, and the National Opinion Research Center (NORC) at the University of Chicago.

Under a separate assignment that you requested, we are also reviewing the economic and social effects of convenience gambling (e.g., video gambling devices) on selected U.S. communities and will report on the results of that review when it is completed.

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## Results in Brief

Both NGISC and our case study of Atlantic City were able to obtain data on many of the economic effects of gambling, but neither could find data

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<sup>2</sup> The National Gambling Impact Study Commission Final Report, June 18, 1999. We also reviewed information in NGISC's contractors reports, some of which was not included in NGISC's report.

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to show a cause-effect relationship between gambling and bankruptcies. According to NGISC, in 1996, the legalized gambling industry employed over a half million people, primarily in casinos and in the pari-mutuel industry. Almost 50,000 employees worked in Atlantic City casinos in 1999. NGISC did not report whether there was a cause-effect relationship between gambling and bankruptcy for the general population but found that a higher percentage of pathological gamblers had filed bankruptcy than others in the general population. The bankruptcy rate in Atlantic County has increased more than in New Jersey and the nation, but data were not available on the causes of the increases.

NGISC reported that the casino industry paid \$2.9 billion in federal, state, and local taxes in 1995. Atlantic City casinos paid about \$319 million in gambling taxes to New Jersey and over \$86 million in property taxes to Atlantic City in 1998, representing about 80 percent of total property taxes for the city's budget. In 1998, the casinos also paid \$41.7 million in school taxes and \$25 million in county property taxes. In addition, from 1985 through June 1999, about \$900 million of casino community reinvestment funds had been earmarked for community investment in Atlantic City, including housing, road improvements, and casino hotel room expansion projects. NGISC did not specifically address community investment received from gambling businesses.

Neither NGISC nor our Atlantic City case study was able to clearly identify the social effects of gambling for a variety of reasons. The amount of high quality and relevant research on social effects is extremely limited. While data on family problems, crime, and suicide are available, tracking systems generally do not collect data on the causes of these incidents, so they cannot be linked to gambling. Sometimes data were available only at the county level, not for Atlantic City. Further, while studies have shown increases in social costs of pathological gamblers, it is difficult to isolate whether gambling is the only factor causing these problems because pathological gamblers often have other behavior disorders. While NGISC and our case study in Atlantic City found some testimonial evidence that gambling, particularly pathological gambling, has resulted in increased family problems (such as domestic violence, child abuse, and divorce), crime, and suicides, NGISC reached no conclusions on whether gambling increased family problems, crime, or suicide for the general population. Similarly, we found no conclusive evidence on whether or not gambling caused increased social problems in Atlantic City.

NGISC reported on three studies completed in 1997 and 1998 that estimated the percentage of U.S. adults classified as pathological gamblers

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ranged from 1.2 to 1.6 percent. A NGISC contractor, who conducted one of the three studies, estimated that about 2.5 million adults are pathological gamblers and another 3 million adults should be considered problem gamblers (individuals who have gambling problems but do not meet the psychiatric criteria for pathological gambling). The most recent study covering New Jersey (Atlantic City was not isolated) estimated that in 1990, 1.2 percent of New Jersey residents were probable pathological gamblers. We did not attempt to independently verify the results or methodologies of these studies.

NGISC reported that pathological and problem gamblers in the United States cost society approximately \$5 billion per year and an additional \$40 billion in lifetime costs for productivity reductions, social services, and creditor losses. However, according to NGISC, the estimates are based on a small number of tangible consequences; and, as a result, the figures must be taken as minimums.

NGISC did not address whether communities offered incentives to attract gambling establishments. New Jersey and Atlantic City officials said casinos do not generally receive subsidies or tax incentives from the government, but New Jersey has allowed a portion of casino funds initially mandated for community investment to be used for casino hotel expansion (\$175 million) and to purchase land for hotel expansion (\$807,000). Also, other funds (\$330 million) are being used to help construct a tunnel to connect downtown Atlantic City with another area used for casino hotels and residences.

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## Background

Gambling, in one form or another, is now legal in every state except Hawaii and Utah.<sup>3</sup> A NGISC contractor stated that about 86 percent of Americans reported having gambled at least once during their lifetime, and 63 percent reported having gambled at least once in the previous year. The percentage of Americans who gamble is increasing. The 1976 Commission on the Review of the National Policy Toward Gambling reported that in 1975, 68 percent of Americans reported gambling at least once during their lifetime, and 61 percent reported gambling at least once in the previous year. According to the International Gaming and Wagering Business

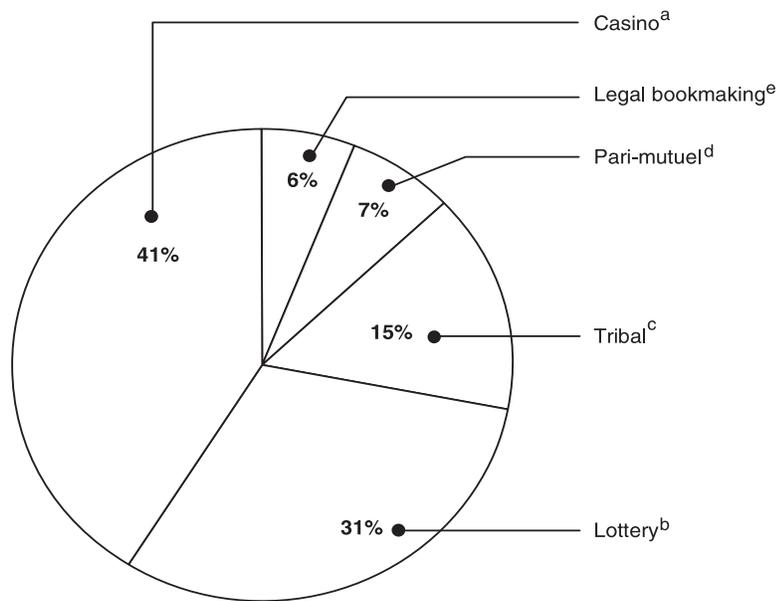
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<sup>3</sup> Pari-mutuel horse-track racing is legal in Tennessee, but the state had no racetracks in operation as of December 1999. Hawaii permits "social gambling"—certain noncommercial gambling among adults. Haw. Rev. Stat. § 712-1231.

(IGWB) magazine, gross revenues<sup>4</sup> from legalized gambling in the United States increased from about \$10.4 billion in 1982 (\$16.1 billion in 1998 dollars) to about \$54.3 billion in 1998.

As shown in figure 1, the majority of gross gambling revenue resulted from casinos (41 percent) and lotteries (31 percent).

Figure 1: 1998 Gambling Industry Gross Revenue



Note: Internet gambling revenue totaled about \$651 million worldwide in 1998, which is not included in the total U.S. gambling revenues of \$54.3 billion in 1998.

<sup>a</sup>Revenues from casinos include those from Nevada and New Jersey slot machines and table games, other land-based casinos, riverboats, deepwater cruise ships, cruises-to-nowhere, other commercial gambling, and noncasino devices.

<sup>b</sup>Revenues from lotteries include those from video and other lottery games.

<sup>c</sup>Revenues from tribal include those from tribal casinos.

<sup>d</sup>Revenues from pari-mutuels include those from horse and greyhound racing and jai alai.

<sup>e</sup>Revenues from legal bookmaking include sports bookmaking, horse bookmaking, card rooms, charitable bingo, and charitable games.

Source: International Gaming and Wagering Business, August 1999.

<sup>4</sup> Gross gambling revenues represent dollars wagered minus payouts. As reported by the New Jersey Casino Control Commission (NJCCC), casino gross revenue is the amount of money that casinos keep after all bets have been paid but before operating costs, interest, depreciation, taxes, and amortization are deducted.

## Atlantic City

Before the legalization of casino gambling in Atlantic City in 1977, the city's economy was declining. During the first half of the century, Atlantic City was one of the major convention centers and seaside resorts in the United States. However, during the 1950s, the city began to experience a decline. The affordability and ease of air travel and interstate highways drew vacationers from Atlantic City to other areas and the construction of convention centers in other cities began to draw conventioners away from the city. The New Jersey Casino Control Commission (NJCCC) reported that between 1966 and 1976, almost 6,000 Atlantic City hotel rooms closed. The city's population declined about 20 percent between 1960 and 1970. When conventioners began to hold more conventions elsewhere and hotels began to close, employment opportunities in Atlantic City also began to diminish. Atlantic City's unemployment rate increased from 10.6 percent in 1972 to 18.1 percent in 1977. Nationwide, the unemployment rate increased from 5.6 percent in 1972 to 7.1 percent in 1977.

In an attempt to help revitalize Atlantic City's economy, New Jersey (following voters' approval of an amendment to the state constitution) enacted the Casino Control Act in 1977 to authorize casino gambling in hotels. The act included the following statement:

"Legalized casino gaming has been approved by the citizens of New Jersey as a unique tool of urban redevelopment for Atlantic City. . . [and will] attract new investment capital to New Jersey in general and to Atlantic City in particular."<sup>5</sup>

The first casino began operating in Atlantic City in May 1978 and as of January 2000, the city had 12 casinos.

## Economic Effects of Gambling on Communities

NGISC and its contractors reported that legalized gambling, especially in casinos, has resulted in an increased number of jobs in communities and decreased the unemployment rate and unemployment insurance payments. According to a study cited by NGISC, in 1996 the legalized gambling industry employed more than half a million people, with total salaries of more than \$15 billion. Information provided by New Jersey officials showed that the casinos in Atlantic City employed about 50,000 people. However, between 1977 and 1998, Atlantic City's unemployment rate

<sup>5</sup> N.J. Stat. Ann. 5:12-1.b.(4). The legislation prohibits various persons with ties to the casino industry from making contributions to candidates seeking public office in New Jersey, any committee of a political party in New Jersey, or any group organized in support of any such candidate or political party, N.J. Stat. Ann. 5:12-138.

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remained higher than New Jersey and national rates (almost two times higher during some years).

NGISC and its contractors did not report whether there was a cause-effect relationship between gambling and bankruptcy for the general population. However, they found that a higher percentage of individuals suffering from pathological gambling had filed for bankruptcy than others in the general population. During 1990 to 1998, the bankruptcy rate in Atlantic County, NJ, was higher than New Jersey and national rates. Between 1994 and 1998, while bankruptcies per 100,000 population for New Jersey increased from 282 to 555 (about a two-fold increase), the rate for Atlantic County increased from 385 to 1,019 (about a three-fold increase)<sup>6</sup> The national trend was similar to New Jersey's trend. Government and community officials said they did not know whether gambling was a contributing factor.

A study conducted for the gambling industry and cited by NGISC estimated that the casino industry paid \$2.9 billion in federal, state, and local taxes in 1995. NGISC also reported that local officials in jurisdictions where casinos were located testified to the increased revenues and community improvements made possible with the advent of gambling in their communities. One NGISC contractor reported that net revenue (sales minus prizes and operating costs) from state lotteries totaled about \$11 billion in 1997, representing about 2 percent of the states' own-source general revenue<sup>7</sup>.

Atlantic City casinos dominated the city's economy and in 1998, paid about \$319 million in gaming taxes to New Jersey and over \$86 million in property taxes to Atlantic City, about 80 percent of total property taxes for the city's budget. In 1998, the casinos also paid \$41.7 million in school taxes and \$25 million in county property taxes. In addition, state legislation mandates that the casinos invest in the community. From 1985 through June 1999, about \$900 million of casino funds had been earmarked for casino community investment in Atlantic City, including housing, casino hotel room expansion, and road construction/improvements projects. NGISC did not specifically address community investment derived from

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<sup>6</sup> According to an official of the Administrative Office of the U.S. Courts, Atlantic County bankruptcy filing data were not readily obtainable until 1990. Thus, we were unable to show whether the bankruptcy rate had changed after casinos began operating in Atlantic City (in 1978).

<sup>7</sup> As defined in a report by Clotfelter and Cook, NGISC contractors, own-source general revenue excludes intergovernmental grants as well as special sources of revenue such as that generated by utilities or liquor stores.

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gambling businesses. See appendix I for a more detailed discussion on the economic impact of gambling.

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## Social Effects of Gambling on Communities

The social effects of gambling on communities are more difficult to measure than the economic effects, primarily because of limited quality data on social effects, the complexity of identifying and measuring social effects, and the difficulty of establishing a cause-effect relationship between gambling and social problems due to the difficulty of isolating any one factor that causes social problems. NGISC made no conclusion on whether or not gambling has increased family problems, crime, or suicide for the general population.

NGISC and our case study in Atlantic City found mostly testimonial evidence that pathological gambling has resulted in increased crime and family problems (such as domestic violence, child abuse, divorce, and homelessness). However, because pathological gambling in many cases is accompanied by other disorders, it is difficult to determine whether gambling is the only or primary factor causing these problems.

However, an analysis (conducted by NORC and reported in the NGISC report on the economic cost associated with problem and pathological gambling) isolated the effect of problem and pathological gambling from other effects, such as drug and alcohol abuse. NORC reported that while the annual economic cost estimated for problem and pathological gambling in 1998 was \$5 billion, 1995 estimates were \$110 billion for drug abuse and \$166.5 billion for alcohol abuse. According to NGISC, NORC focused on a small number of tangible consequences and, as a result, its figures on the costs associated with problem and pathological gambling must be taken as minimums.

We found no conclusive evidence on whether or not gambling caused increased social problems in Atlantic City. Data on family problems and suicide prior to 1978 (the year the casinos began operating in Atlantic City) were not readily available for all indicators. However, while we were not able to compare data for family problems before and after the casinos began operating, some family problems, including domestic violence incidents, child abuse, divorce, single-parent families, and suicide increased in some of the years after casinos began operating and decreased in other years. Some crime rates, including total crime,<sup>8</sup> property crime, embezzlement, and prostitution increased immediately

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<sup>8</sup> Total crime includes violent crime (murder, forcible rape, robbery, and aggravated assault) and property crimes (burglary, larceny-theft, and motor vehicle theft).

after casinos began operating in Atlantic City. However, increases based on Atlantic City's adjusted population (adjusted to include visitors and nonresident workers) were less than increases based on the unadjusted population (Atlantic City's residents only).<sup>9</sup>

Some of the officials we interviewed from 26 government, community, and private industry organizations in New Jersey viewed the casinos as contributing, at least in part, to the increases in some social problems—with the exception of suicides. However, other officials said the casinos had no impact on the increased social problems. See appendix II for a more detailed discussion on the social effects of gambling.

## Estimated Prevalence of Pathological Gambling

NGISC reported on three studies completed in 1997 and 1998 that estimated the percentage of U.S. adults classified as pathological gamblers ranged from 1.2 to 1.6 percent. A NGISC contractor, who conducted one of the three studies, estimated that about 2.5 million adults were pathological gamblers and another 3 million adults should be considered problem gamblers (individuals who have gambling problems but do not meet the psychiatric criteria for pathological gambling). The most recent study covering New Jersey (Atlantic City was not isolated), issued in 1990, estimated that the percentage of New Jersey residents classified as probable pathological gamblers was 1.2 percent. See appendix III for a more detailed discussion on the prevalence of gambling disorders.

## Incentives to Attract Gambling Establishments

NGISC did not address whether communities offered incentives to attract gambling establishments.

According to New Jersey and Atlantic City officials, the state and local governments have not provided incentives to the casinos as a means of enticing them to come to and/or remain in Atlantic City. However, New Jersey has allowed a portion of the casino obligations, initially mandated for community investment, to be used for casino hotel expansion and to purchase land for hotel expansion. In addition, other funds are being used to pay most of the cost of constructing a tunnel in Atlantic City to connect downtown Atlantic City with another local area used for casino hotels and residential purposes. See appendix IV for a more detailed discussion on incentives to attract gambling interests.

<sup>9</sup> While researchers disagree over whether to use the adjusted or unadjusted population when calculating crime rates, we believe that use of the adjusted population is the more appropriate method because, as some researchers have stated, visitors become part of the pool that may either commit or become victims of crime.

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## Agency Comments

We requested comments on a draft of this report from the Mayor of Atlantic City, NJ; the Chairman of the NJCCC; the Director of New Jersey's Division of Gaming Enforcement; the Chair of the former NGISC; and the Senior Research Vice President of NORC.

On February 15, 2000, the Senior Public Information Assistant for New Jersey Division of Gaming Enforcement orally stated that the Division had no comments.

On February 18, 2000, the Chief of Staff for the Mayor of Atlantic City, NJ orally stated that the Mayor generally agreed with our report and thought it was well done.

We received written comments from the Chairman of NJCCC in a letter dated February 10, 2000, which are reproduced in appendix VI. The Chairman said that our draft report provided a thorough analysis of the quantifiable impacts that casinos have had on Atlantic City but that excluding the surrounding Atlantic County metropolitan area provides an incomplete picture of the overall impacts of the casinos. The Chairman noted that Atlantic County's unemployment rate decreased from 12.2 percent in 1976 to 7.8 percent in 1998, and casinos paid over \$41 million in school taxes and another \$25 million to support county government in addition to the \$86.6 million in property taxes paid to the city. The Chairman agreed with our conclusions that it is difficult to quantify some of the perceived negative effects from casinos. The Chairman also said that NJCCC believes the positive effects casinos have generated outweigh the perceived negative effects. While our report focuses on Atlantic City, it also includes some information on Atlantic County, including information on bankruptcy and social indicators, such as divorce rates and domestic violence. We have, however, added the school taxes and other information the Chairman provided to the report.

We also received written comments from the Senior Research Vice President of NORC in a letter dated March 10, 2000. He stated that our draft report was generally satisfactory and made two observations. First, he questioned our conclusion based on a localized methodology that economic effects are more measurable than social effects. He said that Atlantic City is a typical "destination-style" gambling operation where, as stated in the draft report, most of the gamblers live outside of the gambling area and thus, a substantial share of the economic benefits are captured locally while the bulk of the social costs are exported elsewhere—where the gamblers actually reside. He said that this is a fact that should be emphasized more in the report. We modified the report to make this point

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clearer. Secondly, he noted our statement in the draft report that it is difficult to isolate whether gambling is the only factor causing problems, because pathological gamblers have other behavior disorders—a situation termed comorbidity. In addition, as NORC suggested, we acknowledged in this report that NGISC addressed the problem of comorbidity in its report.

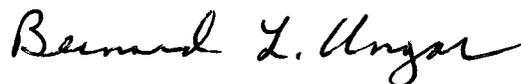
We also received written comments from the Chair of the former NGISC in a letter dated February 14, 2000, which is reproduced in appendix VII. The Chair said that our conclusion that not enough information is available to make a completely informed decision regarding the true social effect of the gambling industry is consistent with NGISC's final report. She noted several areas where she believed that we should add information to our report for additional perspective and context. We added such information to our report if we had it or if it was readily available. Appendix VII contains our additional responses to her comments.

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We are sending copies of this report to Senator Fred Thompson, Chairman, and Senator Joseph I. Lieberman, Ranking Minority Member, Senate Committee on Governmental Affairs; Representative Dan Burton, Chairman, and Representative Henry A. Waxman, Ranking Minority Member, House Committee on Government Reform; Senator Orrin Hatch, Chairman, and Senator Patrick Leahy, Ranking Minority Member, Senate Judiciary Committee; Representative J. Henry Hyde, Chairman, and Representative John Conyers, Jr., Ranking Minority Member, House Judiciary Committee; and other interested parties. Copies will be made available to others upon request.

If you have any questions regarding this report, please call me or John Baldwin on (202) 512-8387. Key contributors to this report are acknowledged in appendix VIII.

Sincerely yours,



Bernard L. Ungar  
Director, Government Business  
Operations Issues

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## Abbreviations

ACIR	Advisory Commission on Intergovernmental Relations
APA	American Psychiatric Association
CRDA	Casino Reinvestment Development Authority
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders
FBI	Federal Bureau of Investigation
IGWB	International Gaming and Wagering Business
NGISC	National Gambling Impact Study Commission

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NJCCC	New Jersey Casino Control Commission
NORC	National Opinion Research Center at the University of Chicago
NRC	National Research Council of the National Academy of Sciences
SJTA	South Jersey Transportation Authority
UCR	Uniform Crime Report

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# Economic Effects of Gambling on Communities

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Legalized gambling, especially casino gambling, has provided increased employment opportunities. NGISC reported that in 1996, the legalized gambling industry employed more than half a million people in the United States. Casinos have created about 50,000 jobs in Atlantic City.

Although NGISC contractors' findings revealed a link between pathological gambling and increased bankruptcy, NGISC did not report whether such a link between the general population and gambling was found. Since 1994, Atlantic County has had a higher bankruptcy rate than New Jersey and national bankruptcy rates. New Jersey and local officials in the Atlantic City area said they did not know why Atlantic County had a higher rate of bankruptcy and did not know whether gambling was a contributing factor.

NGISC cited a report conducted for the gambling industry that indicated that federal, state, and local tax revenues generated by casinos were about \$2.9 billion in 1995. NGISC contractors reported that states also receive substantial revenue from lotteries. NGISC did not report on how all of the gambling revenues were used or how much community investment was made with gambling revenues. Tax revenue derived from the casinos in Atlantic City increased from \$10.7 million in 1978 (\$22.6 million in 1998 dollars) to \$319.3 million in 1998. In addition, from 1985 through June 1999, over \$900 million of casinos' community reinvestment funds have been earmarked for redevelopment projects in Atlantic City.

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## Effects of Gambling on Employment

NGISC reported that in 1996, the legalized gambling industry employed more than half a million people who earned more than \$15 billion in salaries. As reported by NGISC, because they are highly labor intensive, the casino and pari-mutuel gambling segments provide higher employment potential than other gambling segments. NGISC reported that in 1995, the casino industry directly employed about 300,000 people, and pari-mutuel employment has been estimated at 119,000 jobs.

According to the NGISC report, convenience gambling, such as video poker machines meant to attract the business of local residents, did not offer the jobs and economic benefits found in destination resort casinos, which bring in money from outside the immediate community.

NGISC noted that most local and tribal government officials from communities with casino gambling testified that casinos had a positive economic impact on their communities. NGISC also cited the testimony of employees who said that, with the introduction of casino gambling, they were able to find better jobs with health and retirement benefits.

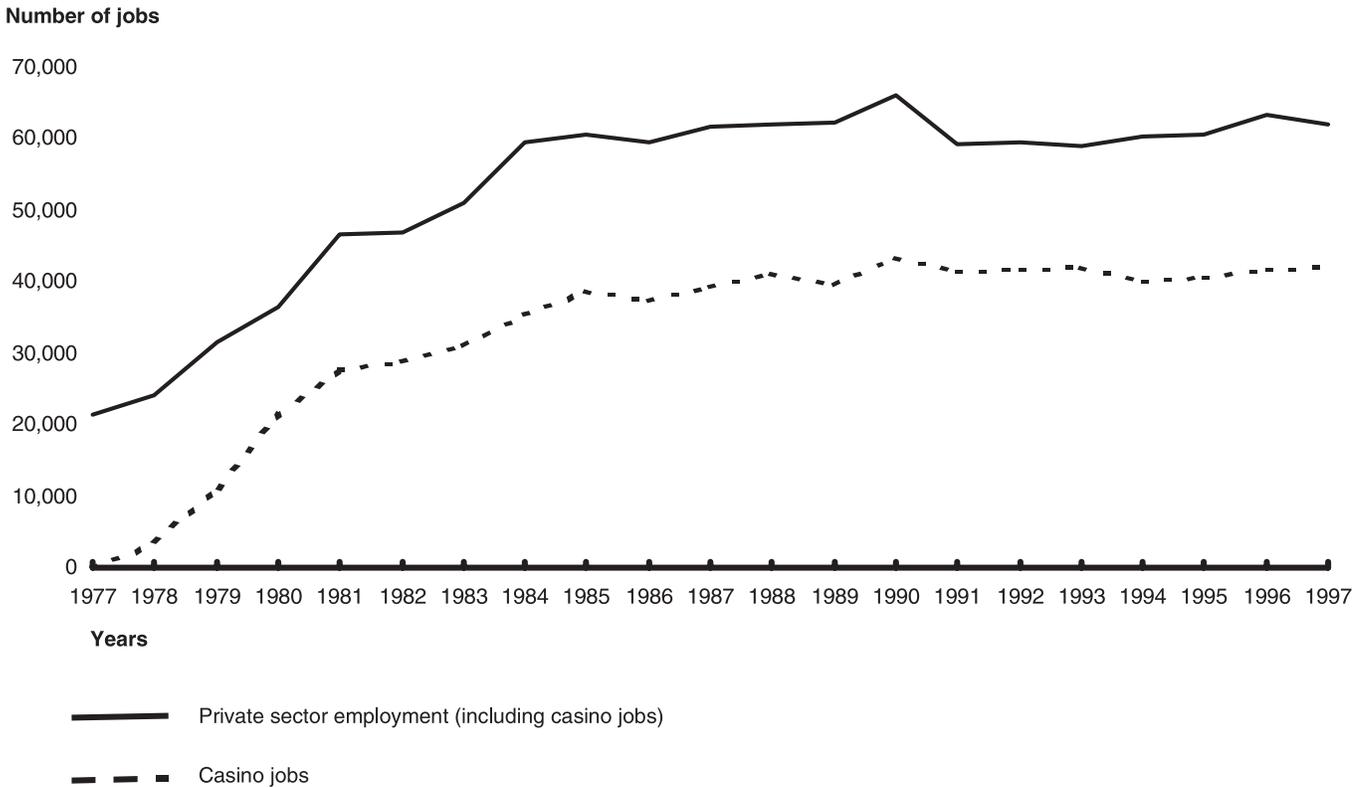
In addition, in 1998, using a 100-community sample that included 40 communities where casinos had been introduced between 1980 and 1997, the National Opinion Research Center at the University of Chicago (NORC), an NGISC contractor, analyzed data from 1980 to 1997 to determine the impact of casinos on jobs and other economic indicators. NORC reported that communities with a casino within a 50-mile radius experienced a 1-percent decrease in the unemployment rate, a 17-percent decrease in per capita unemployment insurance payments, and a 13-percent decrease in per capita income maintenance (welfare) costs.

In 1998, NORC also interviewed officials from 10 randomly selected communities that were located within a 50-mile radius of at least one major casino (a casino having at least 500 gambling devices) to obtain additional information on the effects of casino gambling. While respondents in 5 of 9 communities cited new job opportunities as a very positive advantage of casinos, respondents in 4 of the 9 communities indicated that unemployment remained a problem. In addition, respondents in 6 of the 9 communities said that the casinos, for the most part, provided low paying and/or part time jobs with no benefits.

Another NGISC contractor, Adam Rose and Associates, who reviewed 36 studies on the economic impact of casino gambling, reported that some researchers characterized casino jobs as relatively low-skilled and low-paying service jobs. However, the firm also noted that unionized casino workers were 10 times more likely than the national average to have health benefits paid for in full and have pension benefits that exceed the national average.

In Atlantic City, total jobs increased from about 21,000 in 1977, 1 year before casinos began operating, to about 62,000 in 1997, as shown in figure I.1. The increase in Atlantic City's employment was driven by the hotel casinos.

Figure I.1: Trends in Private Sector Jobs in Atlantic City 1977-1997



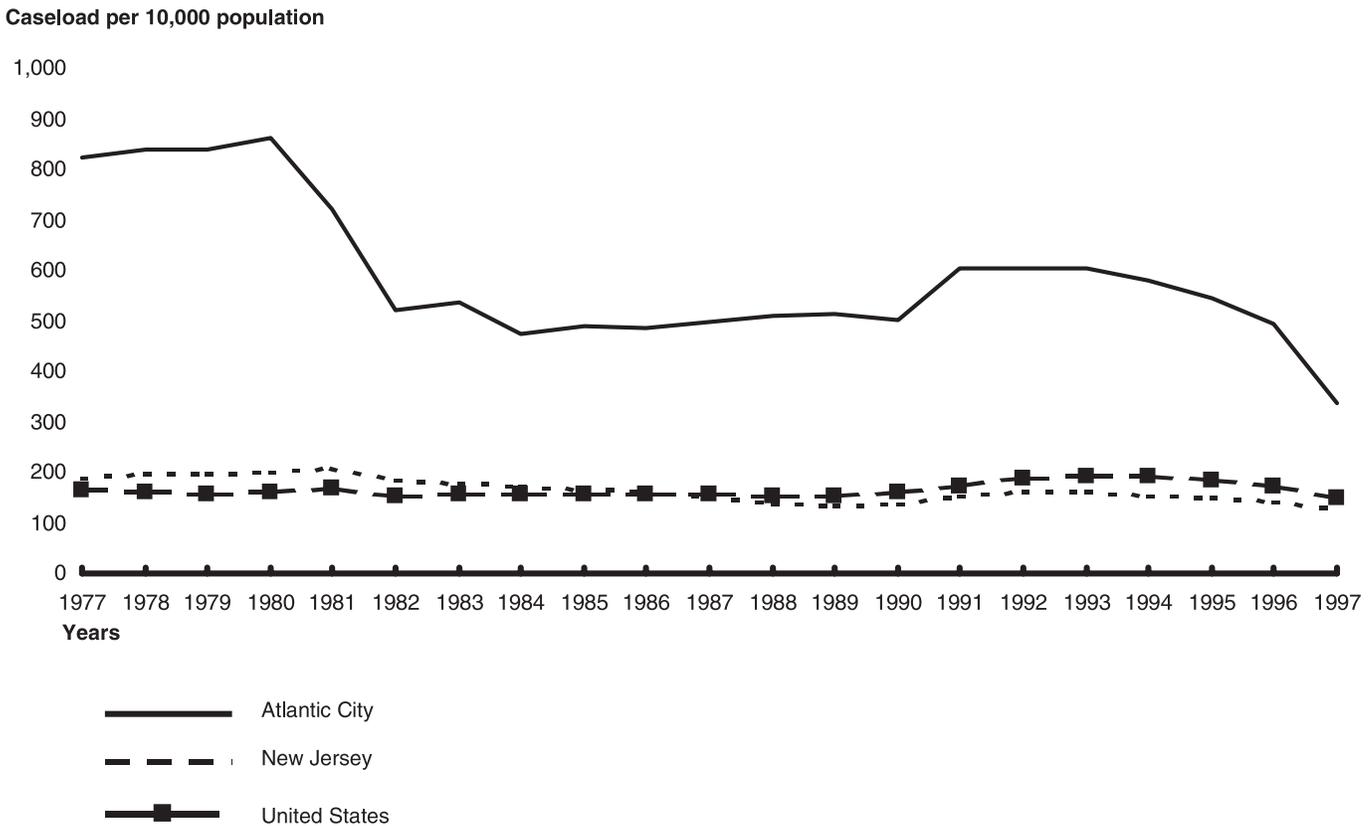
Note: According to information provided by the New Jersey Casino Control Commission, the number of hotel casino jobs reflects full-time positions.

Source: New Jersey Department of Labor and New Jersey Casino Control Commission.

Information provided by the New Jersey Casino Control Commission (NJCCC) showed that as of July 1999, 48,704 employees (full and part time) worked in Atlantic City's hotel casinos. Of the total number of hotel casino employees, 38,861 (or about 80 percent) were residents of Atlantic County, including about 11,000 Atlantic City residents (or about 23 percent of the casino jobs).<sup>1</sup> Both government and community officials said jobs produced by the hotel casinos partly contributed to the steep decrease in the Atlantic City welfare caseload during the early 1980s (as shown in figure I.2).

<sup>1</sup> For the last 3 census years, 1970, 1980, and 1990, Atlantic City's residents represented about 27, 21, and 17 percent of Atlantic's County's population, respectively.

Figure I.2: Trends in Welfare Caseload in the United States, New Jersey, and Atlantic City 1977-1997



Note: In calculating welfare caseload per 10,000 population, we did not adjust Atlantic City's population (to include visitors and nonresident workers) because welfare recipients are local residents only. Atlantic County officials said that over the last 20 years, Atlantic City residents have represented about 50 percent of the county's welfare caseload.

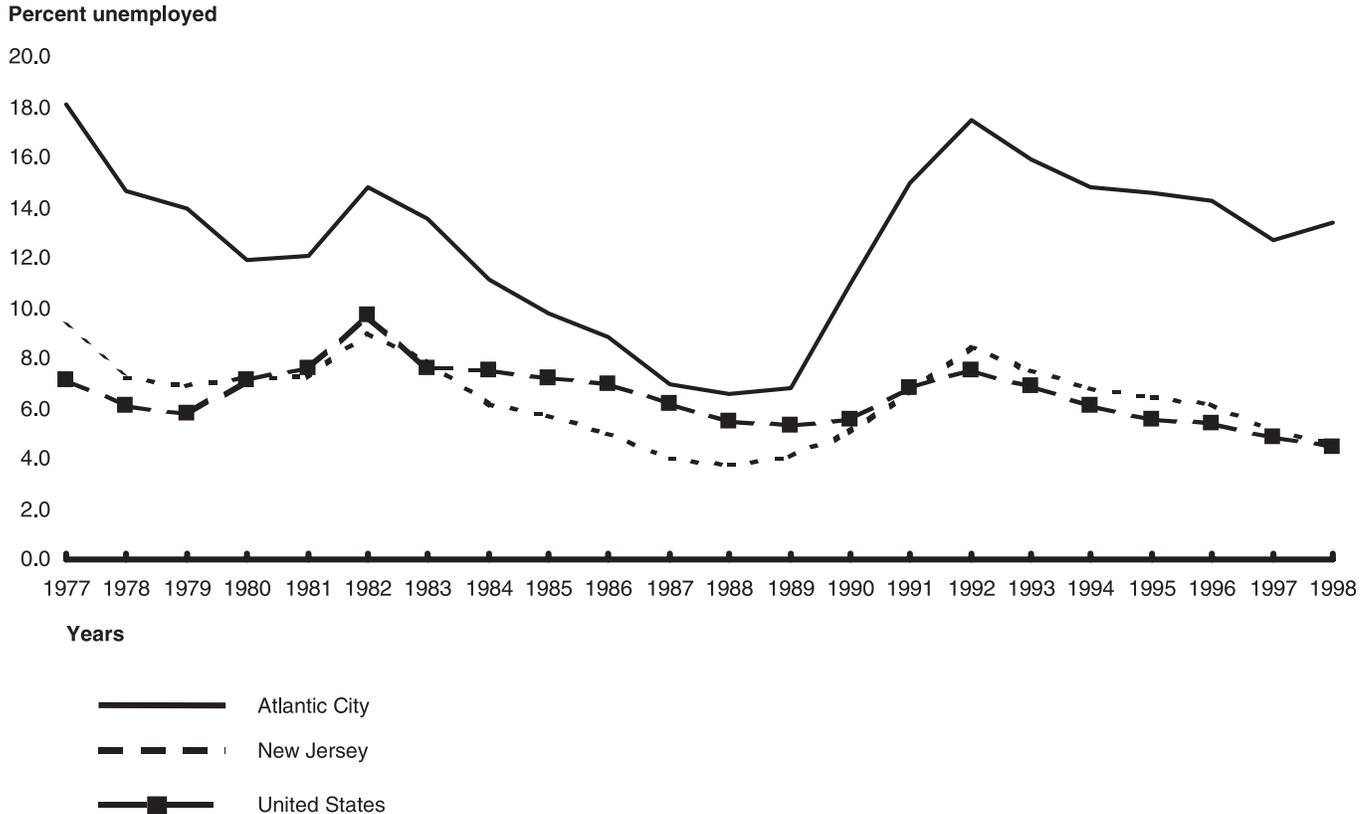
Source: GAO analysis of data obtained from the Atlantic County Department of Family and Community Development, the Bureau of the Census, and the U. S. Department of Health and Human Services.

Atlantic County officials said that the decrease in the welfare caseload resulted mostly from regulations established by federal and local governments to reduce welfare rolls.

Although Atlantic City's unemployment rate decreased from 18.1 percent in 1977 to 13.4 percent in 1998, the city's rate has remained higher than New Jersey and national rates during this time frame, as shown in figure I.3.

**Appendix I  
Economic Effects of Gambling on Communities**

**Figure I.3: Trends in the Unemployment Rate in the United States, New Jersey, and Atlantic City 1977-1998**



Note: According to an official in New Jersey's Department of Labor/Employment Commission, an increase in the unemployment rate occurred between 1990 and 1992 because of the national recession.

Source: GAO analysis of data obtained from the Bureau of Labor Statistics, U.S. Department of Labor, and New Jersey Department of Labor.

Officials we interviewed in the Atlantic City area said that unemployment in Atlantic City is still a problem. They provided a variety of reasons for the unemployment rate, including that (1) the more prosperous middle class moved out of the city leaving behind a younger and poorer population whose work habits and substance abuse problems contribute to their unemployment and (2) the unemployment rate is indicative of Atlantic City's economy remaining to some degree seasonal where most unemployment occurs after the summer tourist season ends. Some officials said that Atlantic City's unemployment rate shows that casinos did not and could not solve all of the city's problems.

Several of the state and local government and community representatives we interviewed in New Jersey said that casinos had hurt small businesses, with restaurants cited most often. An Atlantic City official said that restaurants suffered because the casinos established over 100 inhouse restaurants. NJCCC agreed and reported that the noncasino eating and drinking establishments had experienced tough competition since the onset of casino gambling and that this partially resulted from the former statutory requirement that casino hotels establish restaurants within their properties. State officials said this requirement no longer exists.

We reviewed data that showed that in 1977 (before casinos), there were 242 eating and drinking establishments in Atlantic City.<sup>2</sup> In 1981 (3 years after casinos began operating), the number had declined to 160, and by 1996 (19 years after casinos began operating), the number had declined to 142.<sup>3</sup> One city official said that even though the number of restaurants had decreased, the decrease has not had a negative impact upon the number of restaurant jobs, because the number of employees working in casino restaurants is greater than the number of persons who had been employed by the now closed restaurants.

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## Effects of Gambling on Bankruptcy

While NGISC reported that community leaders testified that personal indebtedness tended to increase with legalized gambling, NORC's 1998 analysis of data on 100 communities between 1980 and 1997 showed no significant change in per capita bankruptcy rates in communities where casinos were introduced. However, NORC's 1998 national telephone survey of 2,417 adults regarding gambling behavior and attitudes found that 19.2 percent of the respondents who were classified as lifetime pathological gamblers reported filing bankruptcy, compared with 4.2 percent for nongamblers and 5.5 percent for low-risk gamblers.

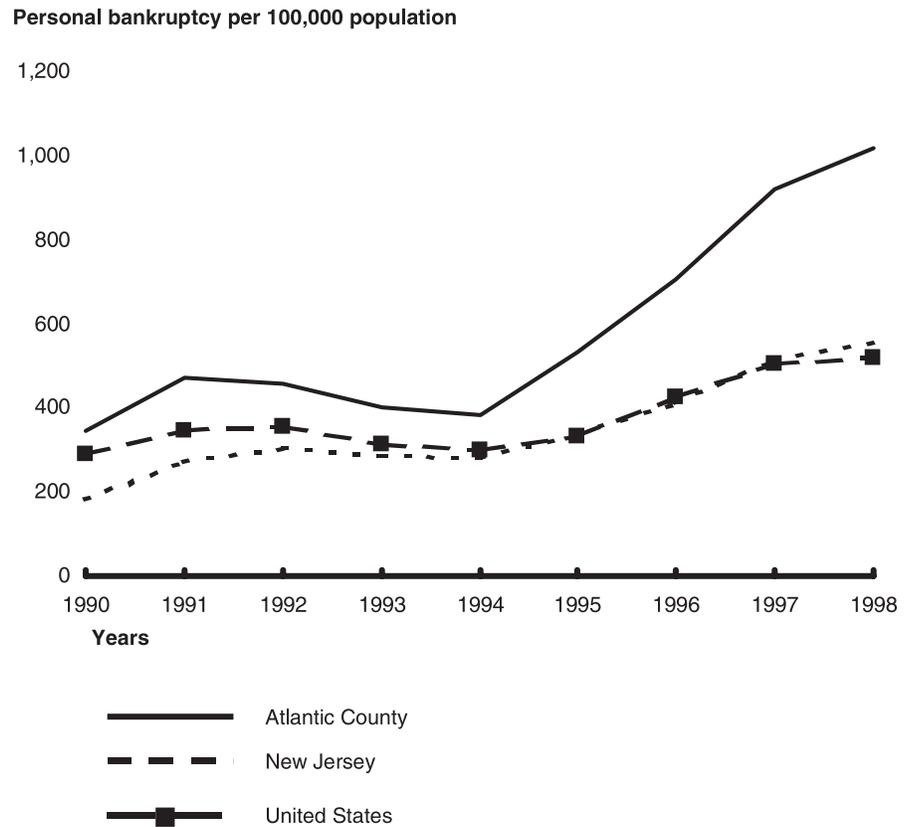
Personal bankruptcy data provided by the Administrative Office of the U.S. Courts showed that the bankruptcy rate for Atlantic County was higher than the New Jersey and national rates during the period 1990 to 1998, as shown in figure I.4.

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<sup>2</sup>We reviewed data from Atlantic City's Yellow Pages, the Bureau of the Census Zone Improvement Plan (ZIP) code database that showed the number and type of establishments by ZIP code, the U.S. Postal Service listing of Atlantic City ZIP codes, along with the Department of Commerce's standard industry classification manual.

<sup>3</sup> Our number of restaurants for 1981 and 1996 contained both casino and noncasino restaurants because according to NJCCC, information on the number of casino restaurants was not readily available.

**Figure I.4: Trends in Personal Bankruptcy Rates in the United States, New Jersey, and Atlantic County 1990-1998**



Note: Bankruptcy data for Atlantic City were not readily available.

Source: GAO analysis of data obtained from the Administrative Office of the U.S. Courts and the Bureau of the Census.

Between 1994 and 1998, while the bankruptcy rate per 100,000 population for New Jersey increased from 282 to 555, the rate for Atlantic County increased from 385 to 1,019. The national trend was similar to New Jersey's trend. We were unable to obtain data to show whether the bankruptcy rate had increased after the casinos began operating in Atlantic City (in 1978) because, according to an official of the Administrative Office of the U. S. Courts, Atlantic County bankruptcy filing data before 1990 were not readily obtainable.

We asked officials in 16 of the 26 government agencies and community and private industry organizations we contacted in New Jersey about the Atlantic County bankruptcy rate. Most of the officials said they were not sure why the bankruptcy rate in Atlantic County was much higher than the

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## Effects of Gambling on Tax Revenue and Community Investment

New Jersey rate (nearly twice as high in 1998) and did not know whether gambling was a contributing factor. An official, who had been involved in Atlantic City's economic activities for several years, said that some bankruptcies occurred because of unwise business decisions made by persons drawn to Atlantic City by the casinos.

NGISC reported that local officials in jurisdictions where casinos were located testified about the increased revenues and community improvements made possible with the advent of gambling in their communities. It also cited the testimony of tribal members who said that, in addition to new jobs, legalized gambling provided their communities with improved hospitals, clinics, schools, and the capital to invest in new businesses.

NGISC also reported that an Arthur Anderson study conducted for the American Gaming Association reported that, in 1995, the casino industry paid a total of \$2.9 billion in taxes to federal, state, and local jurisdictions.

Based on its review of economic impact studies for NGISC, Adam Rose and Associates reported that taxes from casino gambling typically more than pay for government expenditures on roads, police services, and fire protection needed to support the casinos. The firm noted that it did not consider social costs in its analysis and said that social costs might be significant. The firm also reported that casinos are subject to higher levels of taxation than other enterprises in most locations.

Another NGISC contractor, Clotfelter and Cook, reported that in 1997, net revenue (sales minus prizes and operating costs) from state lotteries totaled about \$11 billion. The contractors reported that the average net revenue state treasuries received from the average dollar wagered on lotteries was 33 cents. The firm reported that, in 1997, lottery revenue from the 38 state lotteries<sup>4</sup> represented about 2.2 percent of own-source general revenue<sup>5</sup> compared with about 25 percent for state general sales taxes and 25 percent for state income taxes. According to Clotfelter and Cook, 16 of the 38 states earmarked all or part of lottery revenues for education, 10 allocated lottery revenue to a general fund, and the other states used the lottery funds for a wide range of purposes including parks and recreation, tax relief, economic development, sports stadiums, and police and fireman pensions.

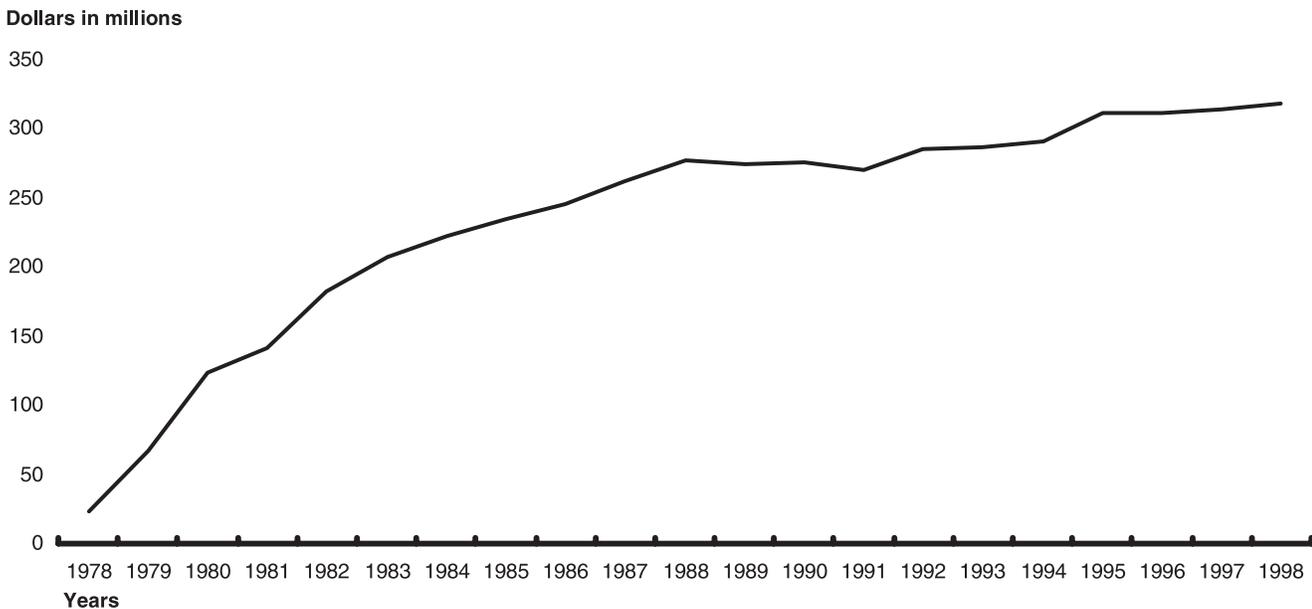
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<sup>4</sup>The 38 state lotteries include 37 states and the District of Columbia.

<sup>5</sup>As defined in Clotfelter and Cook report, own-source general revenue excludes intergovernmental grants as well as special sources of revenue, such as that generated by utilities or liquor stores.

New Jersey enacted legislation that set an 8 percent tax rate on Atlantic City's casinos' gross gambling revenue and earmarked it for social services programs to benefit senior citizens and the disabled in New Jersey. As shown in figure 1.5, the annual gambling taxes paid by casinos increased from \$22.6 million in 1978 (in 1998 dollars) to \$319.3 million in 1998.

Figure 1.5: Casino Gambling Taxes Paid to New Jersey 1978-1998, in 1998 Dollars



Note: The dollars in this figure have been adjusted to 1998 dollars. The index used to convert 1978-1997 dollars to 1998 dollars was the Chain-Type Price Index for GDP from the Department of Commerce's Bureau of Economic Analysis.

Source: New Jersey Casino Control Commission.

Casinos also paid about \$86.6 million in property taxes to Atlantic City in 1998, which was about 80 percent of total property taxes for Atlantic City's budget. In 1998, the casinos also paid \$41.7 million in school taxes and \$25 million in property taxes to the county. In addition, information provided by New Jersey officials showed that Atlantic City's property value increased from \$300 million in 1977 (\$677 million in 1998 dollars) to \$6.7 billion in 1998, with much of the increase reflecting the value of casino properties. Information provided by New Jersey officials showed that local real estate tax rates decreased from \$7.95 per \$100 of assessed valuation in 1977 (\$17.94 per \$100 in 1998 dollars) to \$2.88 per \$100 of assessed valuation in 1998.

Other taxes and fees paid by casinos include Atlantic City tourism promotion, parking, and luxury taxes and fees for a total of about \$40 million in 1998. Tax revenue generated by casinos from insurance, state corporate taxes, and state personal income tax totaled about \$87 million in 1995.<sup>6</sup> In addition, casinos invested in community redevelopment projects, which are discussed below.

The casinos make investment in the community through the Casino Reinvestment Development Authority (CRDA). In 1984, New Jersey enacted legislation that created CRDA and required casinos to either pay 2.5 percent of their gross revenue as a tax or invest 1.25 percent of their gross revenue in obligation deposits to CRDA for community investment throughout New Jersey.<sup>7</sup> In addition, New Jersey enacted legislation in 1993 that imposed a daily parking fee on motor vehicles parked in facilities either owned or operated by casinos. The fee as of July 1999 was \$2.00; \$1.50 of the fee is to be deposited into CRDA.

Information provided by CRDA shows that, from 1985 through June 1999, CRDA had earmarked about \$900 million of casino reinvestment funds for community development projects in Atlantic City.<sup>8</sup> CRDA groups community development projects into four main categories: housing, nonhousing, casino hotel room expansion, and Atlantic City corridor projects. The greatest percentage (30.9) of the casino funds have been earmarked for nonhousing projects, which include such activities as road construction/improvements, beautification projects, and activities directed toward youth.

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<sup>6</sup>According to a New Jersey official, the 1995 data were the most current data available for these taxes, and the insurance tax includes taxes withheld from casino employees and the state personal income tax referred to state income taxes withheld from casino industry employees.

<sup>7</sup> The casinos have the option to purchase CRDA issued bonds or make direct investments in projects. According to a CRDA official, the casinos also may make donations for a CRDA project. If a casino purchases bonds issued by or offered through CRDA or makes other investments approved by CRDA, the casino has the possibility to receive the return of principal and a return on its investment. However, neither the State of New Jersey nor any political subdivision is authorized to guarantee any return of principal or interest on any purchase of bonds or approved eligible investments. N. J. Stat. Ann. 5:12-144.1.i, N. J. Stat. Ann. 5:12-162.i.

<sup>8</sup> A 15-member board governs CRDA and decides which projects will be funded with casino reinvestment funds. Board membership includes the Mayor of Atlantic City, state personnel, and members from the casino industry and the general public.

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# Social Effects of Gambling on Communities

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Measuring the social effects of gambling upon communities is difficult, primarily because of the limited amount of quality data on the social effects and the complexity of establishing a cause-effect relationship between gambling and social problems due to the difficulty of isolating gambling from other factors, such as substance abuse and personality disorders, that cause social problems.

NGISC did not report whether gambling leads to an increase in social costs, such as increased family problems, crime, and suicide for the general population. However, NGISC determined that individuals suffering from pathological gambling engaged in destructive family behavior, committed more crime than other citizens, and had higher suicide rates. While NGISC found that these social problems are associated with pathological gambling, quantifying these costs is difficult because of hard-to-measure and hard-to-identify damages or emotional costs, such as the impact of addictive behaviors upon families. Also, because people with gambling disorders often also have other behavior problems, such as substance abuse, social scientists have not been able to isolate the amount of increased social costs caused by gambling.

We found no conclusive evidence on whether or not gambling increased social problems in Atlantic City. Some family problems, including domestic violence and child abuse; crime; and suicide increased during some of the years after the casinos began operating and decreased in others. Some of the individuals we interviewed in New Jersey viewed the casinos, at least partly, as contributing to the increases—with the exception of suicides. However, other officials said the casinos had no impact on the increased social problems.

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## Effects of Gambling on Family Problems

NGISC stated that based on testimonial accounts presented in its hearings, individuals who suffer from problem or pathological gambling engage in destructive family behavior, such as domestic violence, divorce, and homelessness. NGISC reported that one of its research contractors, the National Research Council of the National Academy of Sciences (NRC), cited two studies showing that between one quarter and one half of spouses of pathological gamblers had been abused by their spouses. In addition, respondents in 6 of the 10 communities located within a 50-mile radius of a casino that were in NORC's case studies reported their perception of an increase in domestic violence after the opening of casinos.

NGISC also reported that children of individuals suffering from pathological gambling are often prone to suffer abuse and neglect.

According to the report, NGISC heard testimony of cases in which parents or caretakers locked children in cars for an extended period of time while they gambled. NGISC discussed NRC's review of two studies indicating that between 10 and 17 percent of children of individuals suffering from pathological gambling had been abused by those parents. NORC also reported that in its 10-community case study, 6 communities had one or more respondents who said they had seen increases in child neglect and attributed this increase, at least in part, to parents leaving their children alone at home or in casino lobbies and parking lots while they gambled.

NGISC also reported that testimonial statements were made indicating that pathological gambling and divorce were frequently linked. In addition, the NORC survey found that 53.5 percent of identified pathological gamblers reported having been divorced. This figure contrasts with the 18.2 percent of nongamblers and 29.8 percent of low-risk gamblers who reported having been divorced.

Similarly, gambling disorders possibly contribute to the homeless population. Three surveys of homeless populations cited by NGISC (including one conducted by the Atlantic City Rescue Mission) reported that 18 to 33 percent of homeless individuals cited gambling as a contributing factor or cause of their homelessness. NGISC cautioned that it remains unclear whether homelessness is actually caused by gambling or other factors related to addictive behavior.

Concerning a direct cost associated with the pathological gambler, NGISC reported that in 1998, NORC estimated that the annual average cost to society for problem and pathological gamblers for job loss, unemployment and welfare benefits, poor physical and mental health, and gambling disorder treatments were approximately \$1,200 per pathological gambler and \$715 per problem gambler. NGISC also stated that NORC further estimated that the lifetime costs (bankruptcy, arrests, imprisonment, legal fees for divorce, and so forth) for problem gamblers were \$5,130 per gambler and \$10,550 per pathological gambler. NORC concluded that overall, pathological and problem gamblers in the United States cost society approximately \$5 billion per year and an additional \$40 billion in lifetime costs for productivity reductions, social services, and creditor losses.

NORC's analyses on the economic costs associated with problem and pathological gambling, reported in NGISC's report, isolated the effect of problem and pathological gambling net of other effects, such as drug and alcohol abuse. NORC reported that it compared economic cost estimates

from its study with measurable costs of other sources of morbidity, mortality, and productivity loss and found that while the annual economic cost estimated for problem and pathological gambling in 1998 was \$5 billion, 1995 estimates were \$110 billion for drug abuse and \$166.5 billion for alcohol abuse. According to NGISC, NORC focused on a small number of tangible consequences and, as a result, its figures on problem and pathological gambling must be taken as minimums.

NGISC concluded that determining the social impact of gambling on the general population was difficult because the amount of quality research was extremely limited. In addition, NGISC reported that pathological gambling often occurs in conjunction with other behavioral problems, including substance abuse, mood disorders, and personality disorders—a joint occurrence, which is termed comorbidity. Because of this, even when an individual acknowledges that gambling contributed to a particular family or social problem, it is extremely difficult to determine exactly what caused the problem. In addition, NGISC concluded that while studies have attempted to quantify the costs associated with pathological gambling, such as costs of crime and abuse, many of the costs, including the costs of emotional damage and long-term impact on families, are hard to identify and quantify.

We also were not able to clearly identify the social effects of gambling on Atlantic City due to the difficulty of isolating the effects of gambling from other factors and finding conclusive evidence on whether or not gambling increased social problems. In addition, according to a New Jersey official, about two-thirds of the gamblers in Atlantic City reside outside of New Jersey. Therefore, whatever the social costs are upon gamblers who gamble in Atlantic City, the bulk of the social costs is exported elsewhere—where the gamblers actually reside.

Data on some family problems, such as domestic violence, prior to 1978 in the Atlantic City area were not readily available. Therefore, we were not able to compare social problems before and after casinos began operating in the city. However, as discussed below, some family problems, including domestic violence, child abuse, divorce, and single-parent families increased in Atlantic County in some years after the casinos began operating and decreased in others.<sup>1</sup> Also, the incidents of family problems

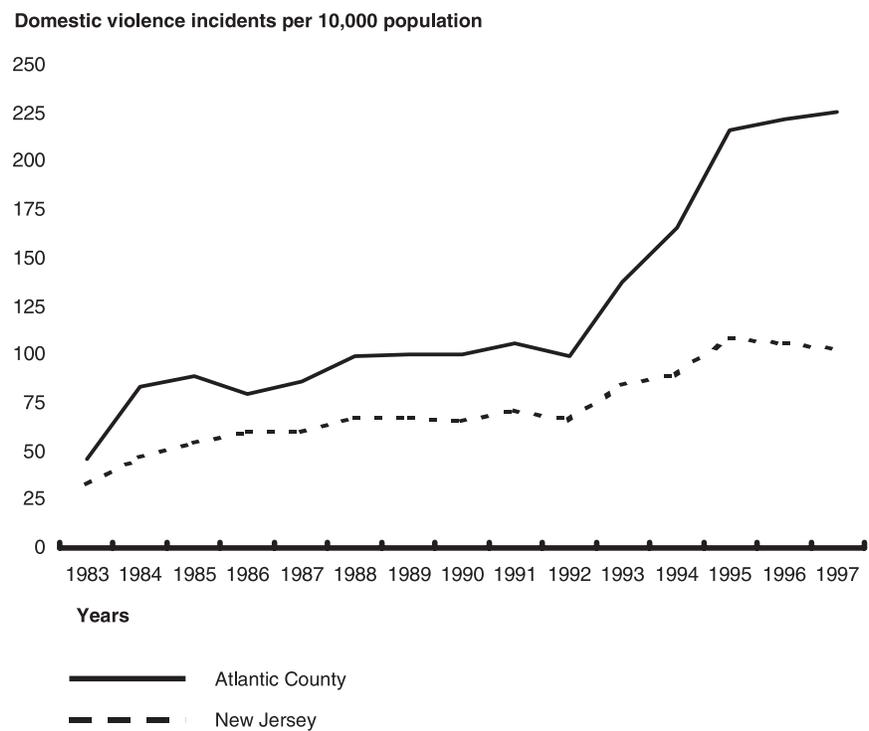
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<sup>1</sup>An official in an Atlantic County community agency dealing with domestic violence said that about 40 percent of the agency clientele were Atlantic City residents. Officials from three additional county agencies providing family services said that Atlantic City residents represented from 15 to 50 percent of the agencies' clientele.

per 10,000 population in Atlantic County have generally been higher than New Jersey rates.

As shown in figure II.1, the reported number of domestic violence incidents per 10,000 population for Atlantic County has been higher than the rate for New Jersey since 1983.<sup>2</sup>

**Figure II.1: Reported Number of Domestic Violence Incidents for New Jersey and Atlantic County 1983-1997**



Note: According to a Department of Justice official, national data on the reported number of domestic violence incidents were not available; national data are based on surveys and not actual reported incidents. Also, domestic violence data for Atlantic City were not readily available.

Source: GAO analysis of data obtained from New Jersey State Police Department, Atlantic County officials, and the Bureau of the Census.

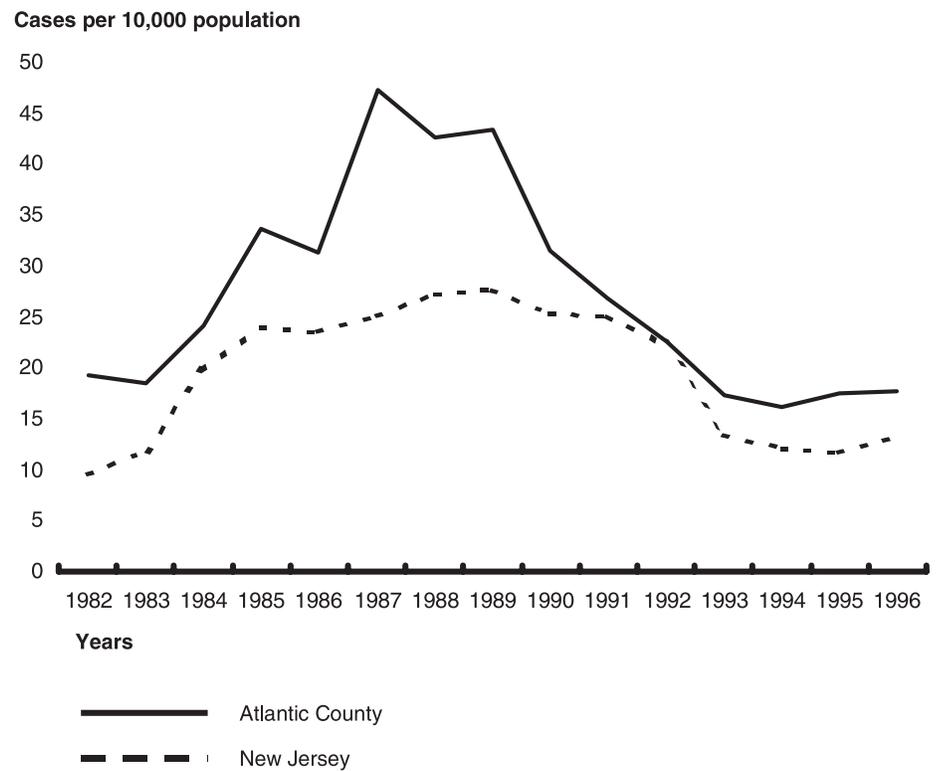
While the reported number of domestic violence incidents per 10,000 population in Atlantic County increased from 45 in 1983 to 225 in 1997, the rate increased from 33 to 102 in New Jersey during the same time period. However, a state official emphasized that yearly data may not be comparable because the reporting system has been revised and the post-

<sup>2</sup>Data for 1977 to 1982 were not available. According to a state official, state legislation on domestic violence was passed in 1981, and counties began collecting statistics in 1983. We used Atlantic County data because domestic violence data for Atlantic City were not readily available.

1992 data include more categories of domestic violence than the pre-1992 data.

As figure II.2 shows, with the exception of 1 year, between 1982 and 1996, substantiated child abuse and neglect cases per 10,000 population in Atlantic County have been higher than the number of cases in New Jersey.

**Figure II.2: Trends in Substantiated Child Abuse and Neglect Cases in New Jersey and Atlantic County 1982-1996**



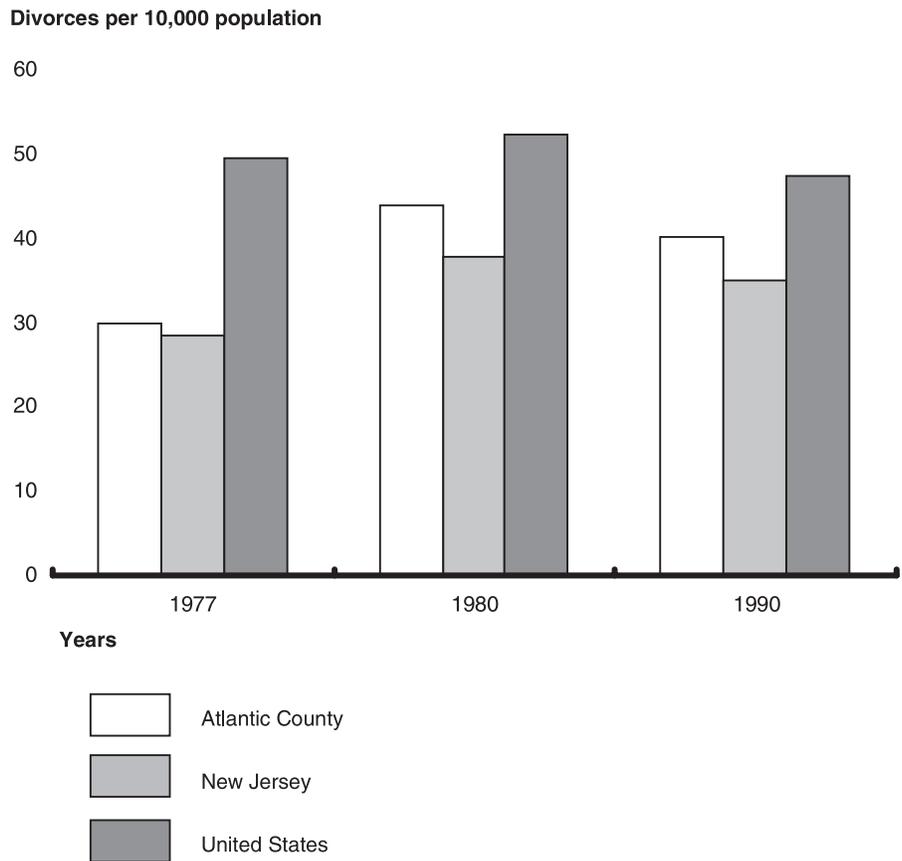
Note: An official with New Jersey's Division of Youth said that data for 1977 to 1981 were not available. The state began collecting the data in 1982. Also, according to the National Clearinghouse on Child Abuse and Neglect, a U.S. Department of Health and Human Services contractor, complete national data on substantiated child abuse and neglect cases were not available, because national reporting, which began in 1990, is on a voluntary basis and all states do not report certain data. Also, substantiated child abuse data for Atlantic City were not readily available.

Source: GAO analysis of data obtained from the New Jersey Division of Youth and Family Services and the Bureau of the Census.

While substantiated child abuse and neglect cases per 10,000 population in Atlantic County increased from 19 in 1982 to 47 in 1987, they had declined to 18 in 1996.

Atlantic County's divorces per 10,000 population slightly increased from 30 in 1977 (1 year before the casinos began operating) to 44 in 1980 (2 years after the casinos began operating). The county's rate was lower than the national rate and higher than New Jersey's rate in 1977, 1980, and 1990 as shown in figure II.3.

**Figure II.3: Trends in Divorce Rate in the United States, New Jersey, and Atlantic County 1977, 1980, and 1990**

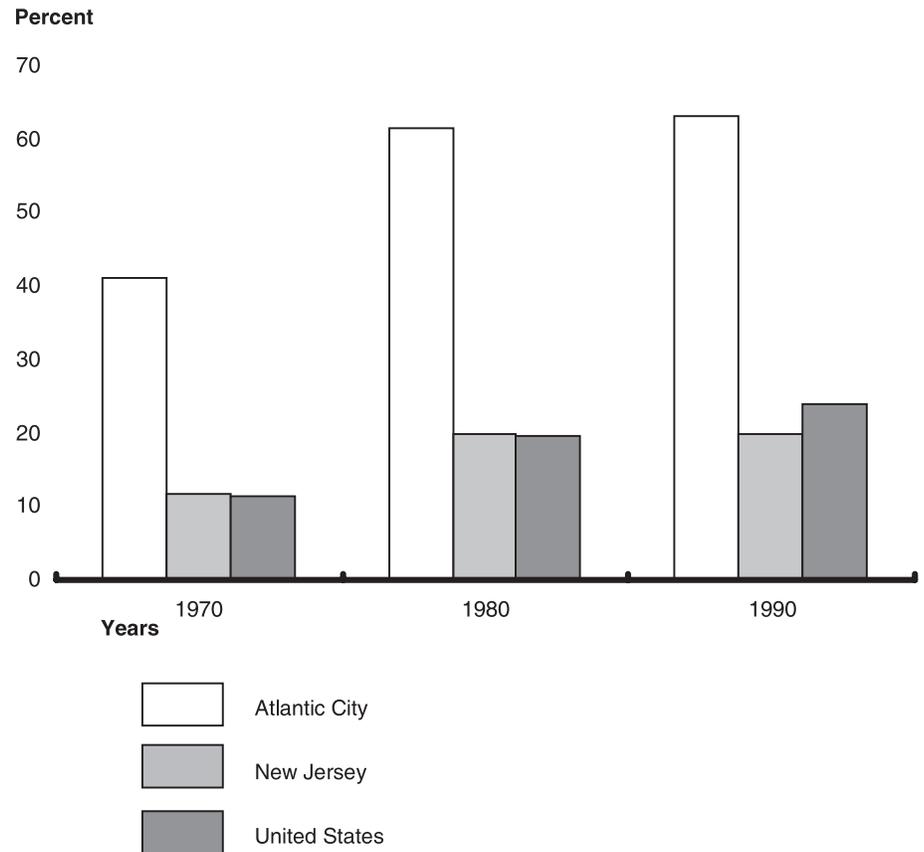


Note: Divorce data for Atlantic City were not readily available.  
 Source: GAO analysis of data obtained from the Bureau of the Census.

Also, as shown in figure II.4, the percent of families with children under 18 who were single-parent families in Atlantic City was higher than both the state and national rates in 1970, 1980, and 1990. The percentage in Atlantic City increased from 41 percent in 1970 to 61 percent in 1980 and to 63 percent in 1990.

**Appendix II**  
**Social Effects of Gambling on Communities**

**Figure II.4: Percent of Families With Children Under 18 that Are Single-Parent Families in the United States, New Jersey, and Atlantic City 1970, 1980, and 1990**



Note: We did not adjust the Atlantic City population to include visitors and nonresident workers because these data represented Atlantic City's residents only. We looked at the single-parent rates for Asbury Park and Long Branch, two other New Jersey shoreline cities. Asbury Park's rates were similar to Atlantic City's rates, and Long Branch's rates were about twice the state and U.S. rates. This indicates that factors other than casinos may be contributing to the difference in Atlantic City's single-parent rate compared with New Jersey and U.S. single-parent rates.

Source: GAO analysis of data provided by the Bureau of Census.

As table II.1 shows, while some officials said the casinos had at least some impact on family problems, other officials said the presence of the casinos had no impact on social problems in Atlantic City.

**Table II.1: Opinions of Officials in Nine Government and Community Social Services Agencies on the Impact of Casinos on Family Problems in the Atlantic City Area**

Family problems	Number of agencies				Total number of agencies with officials responding
	Casinos had no impact	Casinos had some impact	Casinos had great impact	No basis to judge	
Domestic violence	1	4	3	1	9
Child abuse and neglect	1	3	2	2	8 <sup>a</sup>
Divorce	0	4	3	1	8 <sup>a</sup>
Single-parent families	0	4	3	1	8 <sup>a</sup>
Homelessness	1	4	3	1	9

Note: Of the 26 agencies and organizations included in our case study in the Atlantic City area, nine were government and community agencies that provided social services to Atlantic City residents. We asked officials in those nine agencies for their opinions on the impact, if any, that the casinos in Atlantic City had on family problems, such as domestic violence.

<sup>a</sup>The official from one of the nine agencies did not comment on the impact of the casinos on child abuse, divorce, and single-parent families

Source: GAO analysis of comments made by officials in the Atlantic City area.

Both government and community officials stated that working in the casinos was very stressful and had a negative impact on employees' personal lives. For example, they said casino job security is limited by the seasonal nature of many positions; casino employees work in shifts and many are on-call 24 hours; and employees have difficulty maintaining consistent child care when both parents work irregular hours. The officials said stress originating from these factors contributed to family problems.<sup>3</sup>

Concerning the impact of gambling on homelessness, officials in seven of the nine government and community agencies in our case study that provided social services to Atlantic City residents said that the casinos in Atlantic City had at least some effects on homelessness. They commented that (1) the casinos attract troubled, unskilled persons to Atlantic City who are "looking for a new life" and (2) because of the problems they bring with them, they cannot obtain employment and thus, in some cases, become homeless.

## Effects of Gambling on Suicide

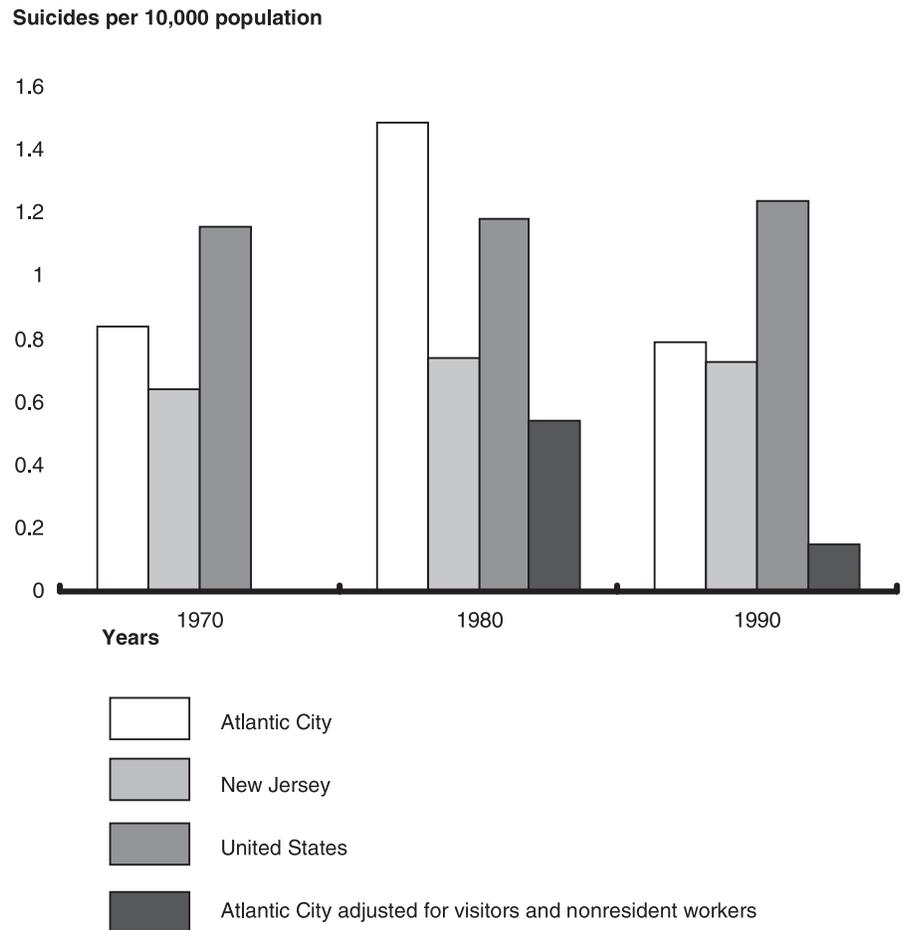
NGISC reported that the suicide rate among pathological gamblers is higher than for any other addictive disorder, but questioned whether a link existed between gambling and suicide in general. NGISC stated that it heard repeated testimony and received various reports about suicide and attempted suicide on the part of individuals suffering from pathological gambling; however, the reports' conclusions conflicted. According to

<sup>3</sup>Information from the New Jersey Casino Control Commission shows that about 80 percent of total casino employees live in Atlantic County, and about 23 percent of the total employees reside in Atlantic City.

NGISC, while some of the reports concluded that the magnitude of the link between gambling and suicide may be understated, others questioned whether a link even existed between suicide and gambling.

While three suicides occurred in Atlantic City casinos during the summer of 1999, Atlantic City area community and government officials said that the available data were insufficient to link suicide and gambling. As shown in figure II.5, in 1970, the suicide rate in Atlantic City on the basis of unadjusted population was higher than New Jersey's rate but lower than the national rate.

**Figure II.5: Suicides for the United States, New Jersey, and Atlantic City 1970, 1980, and 1990**



Note 1: Suicide rates were calculated by dividing the number of suicides that took place in each area by the number of residents. When calculating the suicide rate for 1970, we did not adjust Atlantic City's population to include visitors and nonresident workers because in 1970, Atlantic City's Convention and Visitors Authority did not collect visitors' information.

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Note 2: In addition, because many Atlantic City gamblers do not reside in Atlantic City, if gambling-related suicides occur in other geographic locations that may be related to gambling in Atlantic City, they would not be identified with Atlantic City. According to a New Jersey official, about two-thirds of the gamblers in Atlantic City casinos reside outside of New Jersey.

Source: GAO analysis of data obtained from the Bureau of the Census and South Jersey Transportation Authority.

In 1980, Atlantic City's suicide rate was higher than both the New Jersey and U.S. rates and in 1990, it was lower than the U.S. rate and slightly higher than the New Jersey rate. After adjusting Atlantic City's population data to include visitors and nonresident workers, the rate dropped below both New Jersey and the U.S rates for 1980 and 1990.

The majority of individuals in nine government and community agencies that provided social services to Atlantic City residents said they either had no basis to judge or they did not believe that the casinos had an impact on suicides.

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## **Effects of Gambling on Crime**

While NGISC and its contractors reported a linkage between increased crime and pathological gambling, NGISC concluded that, in general, existing data were not sufficient to quantify or define the relationship between gambling and crime. It reported that although numerous studies have explored the relationship between gambling and crime, the reliability of many of these studies is questionable. Some studies suggested that increased crime rates in gambling jurisdictions result from surges in tourist populations rather than the introduction of gambling. Other studies were limited to particular types of crime and/or particular locations, thus prohibiting generalization of their results.

The NORC study completed for NGISC found that pathological gamblers had higher arrest and imprisonment rates than nonpathological gamblers. NRC's study completed for NGISC also found that some persons with gambling disorders resort to crime to pay debts and secure additional funds for gambling. These findings were supplemented by testimony before NGISC from and about pathological gamblers who commit crimes to finance their gambling habit.

Rates for some crimes increased in Atlantic City after the casinos began operating in the city. Both county and city officials we interviewed said that the visitor population that casinos attract to the area has increased some types of crime.

We examined the crime rates in the Atlantic City area before and after the casinos began operating<sup>4</sup> and compared the rates with both state and national rates. Because New Jersey and local government officials emphasized that any crime data analysis should include in the population the number of visitors Atlantic City receives daily, we calculated crime rates with and without adjustments to Atlantic City's population to include the influx of visitors and nonresident workers to the city. While we show crime rates based on both the city's unadjusted population and the city's adjusted population, we believe that the more appropriate method is the method that includes the adjusted population. We agree with some researchers' comments that visitors become part of the pool who may both commit and become victims of crime and therefore should be added to the resident population when calculating the crime rate. In contrast, other researchers have stated that calculating the crime rate using the unadjusted population (local residents only) provides a more complete picture of the impact of crime on the local geographic area. They stated that regardless of whether visitors are included in the crime rate calculation, the actual increase in the number of crimes affects the local area's law enforcement costs.

Our analysis of the FBI's Uniform Crime Report (UCR) data showed that the total crime rate initially increased in the years after casinos began operating in Atlantic City (1978).<sup>5</sup> As shown in table II.2, the increase occurred when we used either the unadjusted or adjusted population.

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<sup>4</sup>We used the Federal Bureau of Investigation (FBI) Uniform Crime Report (UCR) to calculate the rate of crime in Atlantic City, New Jersey, and the United States. UCR includes reported incidences of violent crime (murder, forcible rape, robbery, and aggravated assault) and property crimes (burglary, larceny-theft, and motor vehicle theft).

<sup>5</sup> Total crime includes violent crimes (murder, forcible rape, robbery, and aggravated assault) and property crimes (burglary, larceny-theft, and motor vehicle theft).

**Appendix II**  
**Social Effects of Gambling on Communities**

**Table II.2: Total Crimes in the United States, New Jersey, and Atlantic City 1977-1997**

Year	Total crimes per 10,000 population			
	United States	New Jersey	Atlantic City (based on the population adjusted to include visitors and nonresident workers)	Atlantic City (based on unadjusted population)
1977	507.76	511.39	695.89	1,006.00
1978	514.03	520.72	768.66	1,336.00
1979	556.55	582.06	798.62	1,678.00
1980	595.00	640.13	1079.29	3,109.37
1981	585.82	617.98	922.29	3,132.91
1982	560.36	567.61	986.85	3,863.68
1983	517.50	516.34	947.99	4,168.01
1984	503.13	485.55	763.01	3,537.48
1985	520.71	509.44	857.61	4,203.70
1986	548.04	524.13	850.56	4,179.05
1987	555.00	526.15	749.90	3,963.67
1988	566.42	529.53	833.44	4,593.15
1989	574.10	526.94	794.57	4,323.13
1990	582.03	544.72	800.75	4,107.04
1991	589.78	543.13	808.80	4,047.54
1992	566.02	506.44	721.22	3,597.11
1993	548.44	480.08	641.31	3,144.05
1994	537.35	466.09	509.63	2,555.94
1995	527.59	470.37	538.08	2,902.93
1996	508.66	433.29	525.89	2,874.49
1997	493.00	405.70	526.49	2,776.26

Note: While we show the crime rate based on both the unadjusted and adjusted Atlantic City population, we believe that the rate based on the adjusted population to include visitors is the more appropriate rate calculation method.

Source: GAO analysis of data obtained from the FBI's UCR, South Jersey Transportation Authority, and the Bureau of the Census.

A 1997 study sponsored by the American Gaming Association said that while the number of reported crimes in Atlantic City increased between 1978 and 1982, so did the number of police employees, raising the possibility that reported crime increased because more police employees were available to uncover crimes.

While the Atlantic City unadjusted total crime rates have been higher than the New Jersey and U.S. rates during all of the years since 1977, beginning in the early 1990s, all rates began an overall decline. In 1997, Atlantic City's crime rate based on the adjusted population was closer to the New Jersey and U.S. rates, while the unadjusted rate still remained higher than the state and U.S. rates.

**Appendix II**  
**Social Effects of Gambling on Communities**

Officials in Atlantic City and Atlantic County said that casinos have had some impact on property crime. For example, according to an Atlantic County official, the number of larceny cases (nonviolent property crimes such as hotel room theft) increased from 2,000 cases in 1977 (the year before casinos began operating in Atlantic City) to 8,000 in 1980 and 12,000 in 1985. As shown in table II.3, the overall property crime rate per unadjusted population began to increase in 1978 and remained higher than the state and national rates through 1997.

**Table II.3: Property Crimes in the United States, New Jersey, and Atlantic City 1977-1997**

Year	Property crimes per 10,000 population			
	United States	New Jersey	Atlantic City (based on the population adjusted to include visitors and nonresident workers)	Atlantic City (based on unadjusted population)
1977	460.17	472.18	624.42	902.68
1978	464.25	478.37	682.13	1185.59
1979	501.66	531.94	710.33	1492.48
1980	535.33	579.70	985.87	2840.26
1981	526.39	554.92	827.97	2812.51
1982	503.25	506.88	906.31	3548.34
1983	463.74	461.03	885.10	3891.49
1984	449.21	432.78	706.36	3274.86
1985	465.05	454.99	800.91	3925.78
1986	486.26	466.88	790.28	3882.88
1987	494.03	472.05	702.73	3714.35
1988	502.71	471.25	776.85	4281.28
1989	507.79	466.04	731.11	3977.84
1990	508.85	479.97	726.53	3726.37
1991	513.97	479.65	732.83	3667.40
1992	490.27	443.85	652.81	3255.94
1993	473.76	417.40	569.09	2789.98
1994	466.00	404.68	453.83	2276.10
1995	459.13	410.39	489.01	2638.19
1996	445.01	380.14	481.41	2631.35
1997	431.87	356.44	484.67	2555.72

Note: While we show the crime rate based on both the unadjusted and adjusted Atlantic City population, we believe that the rate based on the adjusted population to include visitors is the more appropriate rate calculation method.

Source: GAO analysis of data obtained from the FBI's UCR, South Jersey Transportation Authority, and the Bureau of the Census.

After adjusting the population data, Atlantic City's property crime rate dropped considerably but still remained higher than the state and national rates until 1994, when it decreased to a point closer to the New Jersey and U.S. rates. According to a county law enforcement official, the number of car thefts also increased when casinos opened; however, after several

**Appendix II**  
**Social Effects of Gambling on Communities**

years, the number decreased due to the crime prevention experience gained by local police and casino employees.

Both county and city officials said that the introduction of casino gambling had resulted in an increase in white-collar crimes. One county official said that the most likely reason for this increase was that people lose money at casinos and embezzle or steal money to recover their losses. As table II.4 shows, an analysis of the UCR data from 1977 to 1997 showed that embezzlement rates increased in 1978 and 1979 after casinos began operating in Atlantic City in 1978 and have been lower than New Jersey and national rates in most of the years since 1980.

**Table II.4: Embezzlement Arrests in the United States, New Jersey, and Atlantic City 1977-1997**

Year	Embezzlement arrests per 10,000 population		
	United States	New Jersey	Atlantic City
1977	0.36	0.58	0.23
1978	0.38	0.55	0.92
1979	0.40	0.52	0.94
1980	0.42	0.25	0.00
1981	0.42	0.17	0.00
1982	0.39	0.16	0.00
1983	0.38	0.21	0.26
1984	0.40	0.23	0.00
1985	0.48	0.15	0.00
1986	0.52	0.18	0.27
1987	0.53	0.29	0.55
1988	0.61	0.22	4.36
1989	0.65	0.20	0.85
1990	0.61	0.20	0.00
1991	0.55	0.15	0.00
1992	0.55	0.16	0.00
1993	0.51	0.10	0.00
1994	0.56	0.12	0.00
1995	0.57	0.09	0.00
1996	0.60	0.12	2.44
1997	0.65	0.15	0.00

Note: In calculating the embezzlement arrest rate, we did not adjust Atlantic City's population to include visitors and nonresident workers because embezzlement cases are handled in the jurisdiction in which they occur.

Source: GAO analysis of data obtained from the FBI's UCR, South Jersey Transportation Authority, and the Bureau of the Census.

Both city and county officials said that the presence of casinos had a great impact on prostitution. One official commented that the casinos do not generally draw families, and this creates an atmosphere conducive to prostitution. Another official said the impact of the casinos on prostitution is now decreasing. As shown in table II.5, analysis of UCR prostitution data from 1977 to 1997 shows that the arrest rate for prostitution crimes based

**Appendix II**  
**Social Effects of Gambling on Communities**

on Atlantic City's unadjusted population increased in some of the years between 1977 and 1997 and remained higher than the state and national levels.

**Table II.5: Prostitution Arrests in the United States, New Jersey, and Atlantic City 1977-1997**

Year	Prostitution arrests per 10,000 population			
	United States	New Jersey	Atlantic City (based on adjusted population to include visitors and nonresident workers)	Atlantic City (based on unadjusted population)
1977	4.34	1.44	14.26	20.89
1978	4.49	1.07	31.08	53.08
1979	4.49	1.03	20.73	42.61
1980	4.24	1.18	12.89	37.13
1981	5.07	1.34	15.67	55.52
1982	5.93	2.30	31.76	122.88
1983	5.94	2.27	23.88	100.27
1984	5.66	1.91	23.54	107.60
1985	5.53	3.15	36.35	169.33
1986	5.23	3.66	28.33	138.67
1987	4.99	2.31	16.82	88.89
1988	4.25	2.41	19.97	106.15
1989	4.42	2.56	14.12	76.58
1990	4.64	3.44	18.02	92.40
1991	4.53	3.33	21.20	105.69
1992	4.37	3.33	20.80	102.94
1993	4.43	3.99	19.55	96.97
1994	4.17	3.29	18.90	95.60
1995	4.46	2.97	12.93	69.38
1996	4.25	3.02	11.36	61.43
1997	4.19	3.91	9.59	52.08

Note: While we show the prostitution arrest rate based on both the unadjusted and adjusted Atlantic City population, we believe that the rate based on the adjusted population to include visitors is the more appropriate rate calculation method.

Source: GAO analysis of data obtained from the FBI's Uniform Crime Report, New Jersey's South Jersey Transportation Authority, and the Bureau of the Census.

However, after adjusting Atlantic City's population data, the prostitution arrest rate moved much closer to the state and national rates between 1977 and 1997 than the rates based on the unadjusted population.

UCR data on drug arrests showed that in 1977 (the year before casinos were established in Atlantic City), the national, state, and city rates were similar, as shown in table II.6.

**Appendix II**  
**Social Effects of Gambling on Communities**

**Table II.6: Drug Arrests in the United States, New Jersey, and Atlantic City 1977-1997**

Year	Drug arrests per 10,000 population			
	United States	New Jersey	Atlantic City (based on population adjusted for visitors and nonresident workers)	Atlantic City (based on unadjusted population)
1977	30.52	40.47	29.95	43.88
1978	29.81	44.66	17.68	30.20
1979	26.44	36.70	21.08	43.31
1980	27.38	36.82	19.25	55.44
1981	28.90	42.33	35.37	125.31
1982	30.17	41.36	30.96	119.78
1983	30.74	41.13	38.89	163.26
1984	31.67	46.17	40.12	183.42
1985	35.20	48.50	43.91	204.54
1986	36.03	47.90	47.57	232.81
1987	40.09	56.13	43.72	231.05
1988	45.02	72.35	63.04	335.07
1989	53.88	88.16	60.26	326.80
1990	44.40	62.07	70.68	362.50
1991	42.25	55.97	65.02	324.14
1992	44.85	54.50	74.48	368.66
1993	46.97	55.16	65.62	325.53
1994	53.87	64.12	58.26	294.77
1995	59.80	70.72	60.18	322.98
1996	59.27	73.24	72.70	393.23
1997	63.79	77.87	71.48	388.19

Note: While we show the drug arrest rate based on both the unadjusted and adjusted Atlantic City population, we believe that the rate based on the adjusted population to include visitors is the more appropriate rate calculation method.

Source: GAO analysis of data obtained by the FBI's UCR and the Bureau of the Census.

As table II.6 shows, between 1980 and 1997, Atlantic City's drug arrests per 10,000 unadjusted population experienced an overall increase and was about five times higher than the state and national rates during some years. When the population is adjusted, the city's drug arrest rate was closer to the state and national rates and in some years, lower than the state and national rates. Although an Atlantic County official said the casinos in Atlantic City had not had a material impact upon the amount of drug-related crimes in the county, an Atlantic City official said he believed that gambling had made a direct impact on drug-related crimes.

Officials in the New Jersey Attorney General's office said that the state has had no major scandal or organized crime influence in the casino industry. They attribute this in large part to the strong controls and strict regulation that the state enforces over the casino industry. They described their system of regulating casino gambling as being the best in the United States.

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Some Atlantic City mayors have been charged with and a number of them have been convicted of corruption crimes both prior to and since the introduction of legalized casino gambling. State officials noted that two mayors have been charged with corruption since casino gambling was legalized. The public record indicated that one of the two mayors pled guilty to federal corruption charges; and the charges in that case, at least in part, involved an attempt to make a favorable sale of city land with casino development potential. State officials also pointed out four money-laundering cases involving casino employees.

The difficulty of directly attributing social problems to problem gambling or to the presence of casinos in Atlantic City was a recurrent theme in response to questions about Atlantic City's primary social problems. When asked to identify the city's key social problems, several officials said Atlantic City suffers from the same social problems faced by other cities, such as drug use, unemployment fueled by a transient population, and a group of individuals who lack job skills. Whether these problems would be better or worse without the presence of casinos in Atlantic City remains unknown.

# Estimated Prevalence of Pathological Gambling

Researchers looking at the prevalence of pathological gambling in the United States and New Jersey estimated that the percentage of pathological gamblers ranged from 1.2 to 1.6 percent. The American Psychiatric Association (APA) defines problem gambling as a pathological disorder and includes it in APA’s Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). APA states that the essential feature of pathological gambling is a “persistent and recurrent maladaptive gambling behavior . . . that disrupts personal, family, or vocational pursuits.” Individuals who meet at least five of the criteria (shown in table III.1) that are used to diagnose pathological gambling—Level 3 gambling disorder—are diagnosed as having the disorder.

**Table III.1: Diagnostic Criteria for Pathological Gambling**

<b>Diagnostic criteria</b>	<b>Behavior pattern</b>
Preoccupation	Is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
Tolerance	Needs to gamble with increasing amounts of money in order to achieve the desired excitement
Withdrawal	Is restless or irritable when attempting to cut down or stop gambling
Escape	Gambles as a way of escaping from problems or relieving dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, or depression)
Chasing	After losing money gambling, often returns another day in order to get even (“chasing one’s losses”)
Lying	Lies to family members, therapists, or others to conceal the extent of involvement with gambling
Loss of control	Has made repeated unsuccessful efforts to control, cut back, or stop gambling
Illegal acts	Has committed illegal acts (e.g., forgery, fraud, theft, or embezzlement) to finance gambling
Risked significant relationship	Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling
Bailout	Has relied on others to provide money to relieve a desperate financial situation caused by gambling

Source: National Gambling Impact Study Commission final report, June 1999 and American Psychiatric Association information.

Some researchers classify individuals with gambling problems who do not meet the psychiatric criteria for a gambling disorder but who appear to experience substantial difficulties related to gambling as either “problem” or “potential pathological” gamblers or individuals with a Level-2 gambling disorder.<sup>1</sup>

<sup>1</sup> Some researchers have noted that the use of various terms has contributed to confusion about what constitutes Level-2 problem gambling.

Researchers estimate the prevalence of pathological gambling by conducting surveys among populations or within clinical settings and using screening instruments to identify individuals with gambling disorders. The screening instruments are used to assign points based on answers to gambling related questions, and individuals with scores at certain levels are placed in various gambling disorder categories. As noted by NGISC, prevalence rates are stated in terms of time frames, either “lifetime” (prevalence rate of individuals who have at some time met the criteria for a gambling disorder category) or “past-year” (prevalence rate of individuals who met the criteria for a gambling disorder category in the past year).<sup>2</sup>

NORC, an NGISC contractor, based its prevalence results on a 1998 national telephone survey supplemented with data from on-site interviews with patrons of gambling establishments. In addition, in December 1997, NGISC contracted the National Research Council of the National Academy of Sciences (NRC) to conduct a review of available literature on the prevalence and nature of problem and pathological gambling.

NGISC concluded that researchers have different opinions on the definition and prevalence of pathological gambling and reported the results of four studies—three recent studies and one published over 20 years ago. As shown in table III.2, on the basis of the three most recent studies, the estimated percentage of adults in the United States classified as lifetime pathological gamblers ranged from 1.2 percent to 1.6 percent, and the percentage of lifetime problem gamblers ranged from 1.5 percent to 3.9 percent.

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<sup>2</sup> NGISC noted that for measuring prevalence in the general population, lifetime estimates may overestimate prevalence because the estimates include people who may have recently gone into recovery and no longer manifest any symptoms; and in contrast, past-year estimates may understate prevalence because they do not include people who continue to manifest pathological gambling behaviors, but have refrained from such behavior during the past year.

**Appendix III**  
**Estimated Prevalence of Pathological Gambling**

**Table III.2: Estimate of Adult Pathological and Problem Gambling Prevalence in the United States**

	Estimated percentage of adult pathological and problem gamblers			
	University of Michigan ( 1976)	Harvard Meta-analysis (1997)	National Research Council(1998) <sup>a</sup>	National Opinion Research Center(1998) <sup>a</sup>
Lifetime pathological gamblers	0.8	1.6	1.5	1.2
Past year pathological gamblers	<sup>b</sup>	1.1	0.9	0.6
Lifetime "problem" gamblers	2.3	3.8	3.9	1.5
Past year "problem" gamblers	<sup>b</sup>	2.8	2.0	0.7

<sup>a</sup>Both the National Research Council of the National Academy of Sciences (NRC) and the National Opinion Research Center at the University of Chicago (NORC) were contractors hired by NGISC to conduct research on gambling behaviors.

<sup>b</sup>NGISC did not include a past year estimate for the 1976 study.

Source: The National Gambling Impact Study Commission Final Report, June 1999.

NORC estimated that about 2.5 million adults are pathological gamblers and another 3 million adults should be considered problem gamblers. NORC further estimated that about 15 million adults are at risk of becoming problem gamblers.

The NGISC report showed that in comparison to drug and alcohol addictions, the percentage of gambling addiction in the adult population was lower. As table III.3 shows, while the estimated prevalence of lifetime drug and alcohol addiction in the adult population ranged from 6.2 percent to 13.8 percent respectively, the estimated prevalence of lifetime adult pathological gamblers was about 1.6 percent.

**Table III.3: Comparing the Estimated Pathological Gambling Prevalence With the Estimated Drug Abuse and Alcohol Dependence in the United States**

Type of disorder	Estimated lifetime percent of adults	Estimated past year percent of adults
Pathological gambling	1.6 <sup>a</sup>	1.1
Drug abuse/dependence	6.2	2.5
Alcohol abuse/dependence	13.8	6.3

<sup>a</sup>When making this comparison, NGISC elected to use prevalence rates derived from the 1997 Harvard Meta-analysis study titled: Estimating the Prevalence of Disordered Gambling Behavior in the U. S. and Canada: A Meta-analysis, Harvard Medical School Division of Addictions.

Source: The National Gambling Impact Study Commission Final Report, June 1999.

NORC reported that pathological and problem gamblers are much more likely than low-risk gamblers to have been troubled by mental or emotional problems, including manic symptoms and depressive episodes and to have received mental health care in the past year. NORC also concluded that lifetime and past year at-risk, problem, and pathological gamblers are more likely than low-risk or nongamblers to have ever been alcohol or drug dependent and to have used illicit drugs in the past 12 months.

NGISC's contractors also conducted surveys on the prevalence of pathological gambling among youth in the United States. NORC estimated that on the basis of a 1998 national survey of 534 U. S. youth ages 16 to 17 that the combined rate of pathological and problem gambling was 1.5 percent. NRC reported that on the basis of its review of 16 studies of U. S. adolescent and college students from 1988 to 1997, the estimated percentage of lifetime adolescent pathological gamblers ranged from 1.2 percent to 11.2 percent, with a median of 5.0 percent. The contractors cautioned that the proportions reported in the adolescent and adult studies are not always directly comparable because different instruments were used to collect data.

The availability of gambling, specifically in casinos, appears to be associated with increased problem and pathological gambling. NORC reported that on the basis of its combined 1998 patron and national telephone survey results (that were previously discussed), the availability of a casino within 50 miles (versus 50 to 250 miles) is associated with about double the prevalence of problem and pathological gambling.

According to the Council of Compulsive Gamblers of New Jersey, Inc., the most recent study on the prevalence of pathological gamblers in New Jersey was conducted in 1990. The study did not include a separate rate for Atlantic City. It concluded that 1.2 percent of the New Jersey respondents may be classified as probable pathological gamblers, 1.9 percent as potential pathological gamblers, and 5.8 percent as problem gamblers. The study noted that to identify pathological gambling, it used the criteria in the fourth edition of APA's Diagnostic and Statistical Manual (DSM-IV).<sup>3</sup>

In our attempt to compare the rates of alcohol and drug addiction in the Atlantic City area with the pathological gambling rate, we reviewed data

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<sup>3</sup> According to the 1990 study on the prevalence of pathological gambling for New Jersey residents age 15 and older, the nine criteria established by APA to identify gambling disorders were used; and a score of four or more positive responses was deemed "probable pathological;" a score of two or three was deemed as "potential pathological;" and because of the maladaptive behavior of each of the nine criteria, a score of one positive response was deemed as "problem" gambling.

**Appendix III**  
**Estimated Prevalence of Pathological Gambling**

from the New Jersey Department of Health. The most current available information was 1995 data covering Atlantic County and New Jersey—which again provided no specific rate for Atlantic City. As table III.4 shows, the estimated percentage of New Jersey residents suffering from alcohol and drug addictions was higher than the estimated percentage of pathological gamblers in New Jersey.

**Table III.4: Comparing the Estimated Pathological Gambling Prevalence With the Estimated Drug and Alcohol Prevalence in New Jersey**

<b>Type of disorder</b>	<b>Estimated percent of New Jersey residents</b>
Probable Pathological gambling <sup>a</sup>	1.2
Drug abuse/dependence <sup>b</sup>	3.9
Alcohol abuse/dependence <sup>c</sup>	7.7

<sup>a</sup>Includes New Jersey residents age 15 and older.

<sup>b</sup>Includes New Jersey residents age 12 and older.

<sup>c</sup>Includes New Jersey residents age 18 and older.

Source: The 1.2 percentage relating to pathological gambling is derived from a report entitled Pathological Gambling Prevalence in New Jersey 1990 Final Report for New Jersey Department of Higher Education Research on Pathological Gambling: Epidemiological and Needs Assessment Factors, November 1990. Both the 3.9 and 7.7 percentages relating to drug and alcohol abuse are based on 1995 data provided by New Jersey Department of Health and Senior Services, Division of Alcoholism, Drug Abuse, and Addiction Services.

The 1990 study on pathological gambling in New Jersey also noted that a 1987 study on the prevalence of adolescents' gambling in New Jersey reported a 5.7 percent probable pathological prevalence rate for New Jersey teens.

On the basis of information provided by NJCCC, in 1999, 53,400 juveniles (under the age of 21) were stopped and prevented from entering Atlantic City casinos, 39,461 were escorted from the casinos, 337 were found gambling in the casinos, and 270 were taken into custody by New Jersey State Police.

Information provided by NJCCC showed that from 1983 to 1999, fines imposed by NJCCC upon the casinos for underage gambling totaled about \$335,250. According to a NJCCC official, annually, the first \$600,000 of all casino fines are allocated to a fund for compulsive gambling treatment and education, and the balance is placed in the casino revenue fund to be used for senior citizens and the disabled in New Jersey.

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# Incentives to Attract Gambling Establishments

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NGISC did not address whether communities offered incentives to attract gambling establishments.

According to New Jersey and Atlantic City officials, casinos generally do not receive subsidies or tax incentives from the government. In fact, New Jersey officials pointed to taxes and levies uniquely imposed on casinos that are not imposed on other businesses in the state. In addition to the usual corporate, property, or other taxes imposed on businesses in New Jersey, casinos must also pay an 8 percent gross revenue tax to the state<sup>1</sup> and invest 1.25 percent of their gross revenue as obligation deposits in CRDA.<sup>2</sup> (See appendix I for a description of CRDA.) Furthermore, New Jersey laws specifically prohibit casinos from receiving 5-year property tax exemptions or abatements that may be granted to other businesses, which are located in areas in need of rehabilitation.<sup>3</sup>

Atlantic City casinos also pay for the costs of their own regulation. The New Jersey Division of Gaming Enforcement and NJCCC are state agencies charged with regulating casinos in Atlantic City. According to the Gaming Enforcement Division, casino operators desiring to establish themselves in Atlantic City must pay for the costs of background investigations that the Gaming Enforcement Division performs on prospective licensees.

Additionally, once a casino has been established, it must continue to pay for the costs of the regulatory oversight of casino operations. For example, the Division of Gaming Enforcement and the NJCCC do not receive annual state appropriations for their oversight activities. The casinos pay the operating expenses of the two agencies. For fiscal year 1998, the Enforcement Division's budget was about \$32 million and NJCCC's was about \$23 million, all of which was funded by state levies on casino interests, on the basis of information provided by New Jersey officials.

As mentioned earlier, casinos are required to either pay 2.5 percent of their gross revenue as a tax or invest a percentage of their gross revenue as obligation deposits in CRDA, and CRDA was initially established to reinvest these funds into Atlantic City and state community development projects. State law has since authorized the use of some casino reinvestment funds for projects that provide for the expansion of casino

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<sup>1</sup> N.J. Stat. Ann. 5:12-144a.

<sup>2</sup> N.J. Stat. Ann. 5:12-144.1.

<sup>3</sup> N.J. Stat. Ann. 40A:21-4.

hotel rooms in Atlantic City. Specifically, in 1993, New Jersey enacted a law<sup>4</sup> authorizing CRDA to use \$100 million of the funds for investment in hotel development projects in Atlantic City undertaken by casinos, “which result in the construction, reconstruction or rehabilitation of at least 200 hotel rooms” in Atlantic City. According to a state official, the funding was designed to increase the rooms available in Atlantic City for the new convention center. As a condition for receiving the funds, the casinos were required to agree to reserve the rooms at certain times for convention business. In 1996, the state authorized CRDA to invest another \$75 million of the casino reinvestment funds for further hotel room construction/rehabilitation.<sup>5</sup> Under that law, funding provided to the casinos was limited to 27 percent of the hotel rooms’ construction costs.

While state and local officials said casino owners are not provided with free land for their casinos, casino reinvestment funds have been used to purchase land for a casino. According to a CRDA official, CRDA used the funds to pay \$807,000 for land that it obtained under its eminent domain authority (the forced sale of private property for public use) and transferred it to a casino to use for hotel expansion. As previously mentioned, the use of the reinvestment funds for hotel expansion was authorized by state law.

Atlantic City recently used the eminent domain process to obtain land for casino development purposes. According to an Atlantic City official, in October 1999, the results of an eminent domain court decision favored Atlantic City. City officials said that while Atlantic City has been granted title to the land, the actual payment to the landowner for the land will be made by the casino—not by Atlantic City.

Although state officials said casinos have not received subsidies from the state, one recent development has been challenged as providing a state subsidy for a casino. The state is funding two-thirds of the costs to construct a tunnel pursuant to an agreement with a casino interest. A. C. Holding Corporation, a Mirage Resorts Incorporated company (Mirage), is planning to construct a casino in the Atlantic City marina district, contingent upon New Jersey agreeing to construct a highway connecting the marina district to the Atlantic City Expressway. In an agreement with Mirage, the state, through the South Jersey Transportation Authority (SJTA), has authorized the construction of the Atlantic City/Brigantine

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<sup>4</sup> N.J. Stat. Ann. 5:12-173.8.

<sup>5</sup> N.J. Stat. Ann. 5:12-173.8b.

Connector. The connector, a little over 2 miles in length, would unite the expressway with the bridge to Brigantine, NJ, thus providing a means of travel to the marina without the need to drive through the city. The cost of the connector is estimated to be \$330 million. On the basis of information provided by SJTA and CRDA, Mirage is to finance one-third of this cost — \$110 million—which is also to be used as a future credit to satisfy Mirage’s requirement to deposit funds into the CRDA fund for community reinvestment purposes. Of the remaining \$220 million, \$125 million is being funded by SJTA in the form of bonds and \$95 million is being funded by the New Jersey Transportation Trust Fund Authority.

The connector has generated nine lawsuits from a contractor, a casino operator, and residents of Atlantic City, partly because of the belief that the tunnel is being erected solely for the benefit of Mirage. SJTA argues that the tunnel would benefit both the residents of Brigantine, NJ, as well as Mirage and the two casinos that are already in the marina district. According to a New Jersey official, as of January 28, 2000, six of the nine cases either had been dismissed, settled, or resolved. Five of the court rulings have been in favor of SJTA, and one case resulted in a financial settlement paid by the casino. The remaining three cases were still on appeal.

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# Objectives, Background on the National Gambling Impact Study Commission, and Scope and Methodology

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## Objectives

Our objectives were to determine the social and economic effects of gambling on communities and families focusing on

- (1) the economic effects of gambling, particularly on employment, bankruptcy, and tax revenues and community investment;
- (2) the social effects of gambling;
- (3) the prevalence of pathological gambling; and
- (4) whether communities offer incentives to attract gambling establishments.

To accomplish objectives 1, 2, and 3, we examined the final reports from the National Gambling Impact Study Commission and its contractors and conducted a case study in Atlantic City to determine the social and economic impacts of gambling. We selected Atlantic City for our case study because it is a large destination gambling location that—compared to Las Vegas, Nevada—recently established gambling, which enabled a before and after review of the effects of gambling. Our work included a review of information on gambling provided by federal, New Jersey, Atlantic County, and Atlantic City agencies; the gambling industry; and nonprofit organizations.

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## NGISC Background

NGISC was established by the National Gambling Impact Study Commission Act (NGISC Act).<sup>1</sup> The Act required the NGISC to conduct a comprehensive study of the social and economic impacts of gambling in the United States and report its findings, conclusions, and recommendations to the President, Congress, state governors, and Native American tribal governments. Pursuant to the Act, a nine-member commission was formed, with three members (or commissioners) appointed by the President, three by the Speaker of the House of Representatives, and three by the Majority Leader of the Senate.

Guided by the NGISC Act and a research agenda adopted in October 1997 covering 42 specific policy questions, NGISC reported its findings on June 18, 1999. During its 2-year study, the NGISC held hearings and/or conducted site visits in Atlantic City, NJ; Biloxi, MS; Boston, MA; Chicago, IL; Las Vegas, NV; Ledyard, CT; New Orleans, LA; San Diego, CA; Tempe, AZ; Virginia Beach, VA; and Washington, D.C. These visits included two tribal casinos. The NGISC also heard testimony from federal and state

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<sup>1</sup> P.L. 104-169, 110 Stat. 1482, Aug. 3, 1996, 18 U.S.C. 1955 note.

officials; community leaders; representatives of more than 50 Indian nations; and experts on state lotteries, casinos, sports wagering, pari-mutuel, and other forms of gambling.

NGISC spent about \$2.5 million in contracts with outside research organizations to collect data. NGISC contracted with the National Opinion Research Center at the University of Chicago (NORC) to conduct four studies: (1) a database analysis of economic and social indicators in 100 communities (with and without gambling), from 1980 to 1996; (2) case studies in 10 communities that were within a 50-mile radius of at least one major casino; (3) two nationally representative telephone surveys of 2,417 adults and 534 youths, regarding gambling behavior and attitudes; and (4) an exit survey of 530 adult patrons of 21 gambling facilities in eight states, regarding problem and pathological gambling.

NGISC contracted with the National Research Council (NRC) to review existing pathological gambling literature and contracted with Adam Rose and Associates to review published economic impact studies on casino gambling.

In addition, NGISC contracted with Clotfelter and Cook<sup>2</sup> to develop a profile of typical lottery players, perform an analysis of lottery marketing strategies, and review some broad policy questions regarding lotteries.

Finally, NGISC contracted with the Advisory Commission on Intergovernmental Relations (ACIR) to conduct a review and catalogue the laws and regulations on commercial gambling and gambling on Indian reservations.

NGISC's report contained a total of 76 recommendations to the President, Congress, the federal government, state governments, tribal governments, gambling regulators, and gambling operators. In summary, NGISC's research covered the following topics: regulation of gambling by federal, state, local, and Native American governments; an estimation of the prevalence and costs of pathological and problem gambling; the economic and social impacts of gambling on individuals, families and communities; and an assessment of the interstate and international effects of gambling by electronic means, including through the Internet. According to a General Services Administration official, NGISC ceased operation in August 1999.

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<sup>2</sup> Charles Clotfelter and Phillip Cook are Duke University professors who have conducted research studies on state lotteries.

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## Scope and Methodology

We examined NGISC's final report, its contractors' research reports, and testimony and written statements submitted to NGISC. We met with the Commission's Executive Director and Research Director and attended several Commission meetings in 1999.

Our review of NGISC's work focused on the conclusions stated in its final report and the reports of its research contractors. We did not replicate its work in an effort to verify its conclusions. We also did not attempt to independently verify the results or methodologies of any of the studies cited in NGISC's report.

In conducting the Atlantic City case study, we interviewed officials in 26 government agencies and community and private industry organizations. We judgmentally selected agencies whose missions involved the social and economic issues addressed in the request letter. Interviewees included New Jersey, Atlantic County, and Atlantic City personnel involved in social, economic, revenue collection, law enforcement, and regulatory efforts in the area as well as officials representing unions, casinos, the banking industry, and nonprofit organizations. Included in the 26 agencies were nine government and community organizations providing social services to Atlantic City residents. We used data collection instruments that contained both general questions that we asked each interviewee and specific questions pertaining to the subject area of which the interviewee was involved.

In addition, we analyzed social and economic statistics using data from the FBI's UCR and other federal agencies and New Jersey, Atlantic County, and Atlantic City agencies. For example, we compared the crime rates in the Atlantic City area before and after the introduction of legalized casino gambling.<sup>3</sup> We then compared these data with crime trends in New Jersey and in the United States during the same time period. We calculated crime rates with and without adjustments for visitors to Atlantic City. New Jersey and local government officials emphasized that any crime analysis should include in the population the number of visitors Atlantic City receives daily. We also asked Atlantic City and Atlantic County law enforcement officials about their perception of a relationship between crime and casino gambling.

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<sup>3</sup> We used the FBI's UCR to calculate the rate of crime in Atlantic City, New Jersey, and the United States. The UCR includes reported incidences of violent crime (murder, forcible rape, robbery, and aggravated assault) and property crimes (burglary, larceny-theft, and motor vehicle theft).

In some cases, data were not available specifically for Atlantic City. In such cases, we used the data covering the closest geographic area to Atlantic City. In all cases, this was Atlantic County—the county in which Atlantic City is located. Census Bureau data show that since 1970, Atlantic City has been the largest city in Atlantic County. For the last 3 census years, 1970, 1980, and 1990, Atlantic City’s residents represented about 27, 21, and 17 percent of Atlantic County’s population respectively. While historical national and state data were available on a yearly basis for most of the social indicators we reviewed, comparable data for Atlantic City or Atlantic County were available for census years only—1970, 1980, and 1990, and in those cases, we analyzed data for only those years.

As noted by NGISC, the amount of high quality and relevant research on the social effects of gambling is extremely limited. Both NGISC’s and our work in Atlantic City regarding the social effects of gambling relied heavily on testimonial evidence. Added to the lack of information was the fact that individuals who suffer from pathological gambling tend to suffer from other addictive disorders, and this situation, called comorbidity, further complicates the process of attributing negative effects to any one cause.

Our response to objective 4, on whether communities offer incentives to attract gambling establishments, is based solely on our case-study work in Atlantic City. The issue of subsidies and incentives provided to the gambling industry was not covered by NGISC. To accomplish objective 4, we reviewed state and local legislation and regulations related to Atlantic City casinos. We also interviewed pertinent state and local officials, including those of New Jersey’s Casino Control Commission and the Division of Gaming Enforcement of the Department of Law and Public Safety. As you requested, we limited our inquiry in Atlantic City to legalized casino gambling.

We did our review between May 1999 and December 1999 in accordance with generally accepted government auditing standards. We did our work in Atlantic City, and Trenton, NJ and Washington, D.C. We also attended one NGISC hearing held in Virginia Beach, VA. We did not independently verify the results and methodologies of gambling prevalence reports or the accuracy of data we obtained from various national, New Jersey, Atlantic County, and Atlantic City databases, such as the FBI’s UCR and New Jersey’s Department of Labor employment information.

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We contacted the following government agencies and community and private industry organizations in New Jersey:

- Office of the Mayor, Atlantic City, NJ;
- Office of the City Council, Atlantic City, NJ;
- Department of Health & Human Services, Atlantic City, NJ;
- Department of Revenue and Finance, Atlantic City, NJ;
- Police Department, Atlantic City, NJ;
- Department of Planning and Development, Atlantic City, NJ;
- Greater Atlantic City Chamber of Commerce;
- Office of the County Prosecutor, Atlantic County, NJ;
- Board of Taxation, Atlantic County, NJ;
- Department of Regional Planning and Development, Atlantic County, NJ;
- Department of Family and Community Development, Atlantic County, NJ;
- Atlantic County Women's Center, Northfield, NJ;
- New Jersey Casino Control Commission;
- New Jersey Division of Gaming Enforcement;
- New Jersey Office of the State Treasurer, Management and Budget Office;
- New Jersey Department of Labor/Atlantic City Employment Services;
- New Jersey Department of Health and Senior Services;
- South Jersey Transportation Authority;
- The Casino Reinvestment Development Authority, Atlantic City, NJ ;
- Former New Jersey State Legislator, Atlantic City, NJ;
- The Council of Compulsive Gambling of NJ, Inc.;
- Atlantic City Rescue Mission;
- Family Service Association, Absecon, NJ;
- AlantiCare Behavioral Health, Hammonton, NJ;
- Clark Institute, Brigantine, NJ;
- Community Presbyterian Church of Brigantine, NJ;
- Sun National Bank, Atlantic City, NJ;
- Bally's Park Place, A Hilton Casino Resort, Atlantic City, NJ; and
- Hotel and Restaurant Workers Union, Local 54, Atlantic City, NJ.

# Comments From the New Jersey Casino Control Commission



State of New Jersey  
CASINO CONTROL COMMISSION  
TENNESSEE AVENUE AND BOARDWALK  
ATLANTIC CITY, NJ 08401

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*Governor*

February 10, 2000

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*Chairman*

SUSAN F. MAVEN  
*Vice Chair*

DIANE M. LEGREIDE  
MICHAEL A. FEDORKO  
*Commissioners*

(609) 441-3122

Mr. Bernard Unger  
Director  
Government Business Operations Issues  
United States General Accounting Office  
Washington DC, 20548

Re: Draft Report **Impact of Casino Gambling: Economic Effects More Measurable Than Social Effects.**

Dear Mr. Unger,

Thank you for the opportunity to comment on your report on the impact that casino gaming has had on Atlantic City.

Casino gambling was approved by the voters of New Jersey in 1976 to serve as a unique tool of urban redevelopment. We believe that this unique tool was much more successful than anyone ever anticipated. Casinos invested more than \$6 billion in Atlantic City and created approximately 48,000 direct jobs with a payroll over \$1 billion annually. They also have generated several billions of dollars in new tax revenue for the city, the county and the state. And they have created economic opportunities for residents and businesses all around the state.

The report provided a thorough analysis of the quantifiable impacts that casinos have had on Atlantic City, but looking at the impacts on Atlantic City alone does not tell the entire story. Atlantic City is a very small municipality, both in population and in area. It is only 48 blocks long and has only 2,500 acres of developable land. That is about one-fourth the size of Dulles International Airport. Casino companies have invested more than \$6 billion in that small area. There are approximately 37,000 residents in Atlantic City and a workforce of approximately 20,000 people. Casinos employ more than half of Atlantic City's workforce and the remaining 37,000 more come from the surrounding communities. To look at the economic and social impact gaming has had on Atlantic City and not include the surrounding metropolitan area gives an incomplete picture of what has happened here.

The unemployment rate in the county has fallen from 12.2 percent in 1976 to 7.8 percent in 1998 and the county's population has increased from 189,600 to 238,000. There were 34,000 housing permits issued for Atlantic County in the last 20 years, representing \$2.1 billion of new housing. There has been an enormous amount of new commercial and

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**Appendix VI**  
**Comments From the New Jersey Casino Control Commission**

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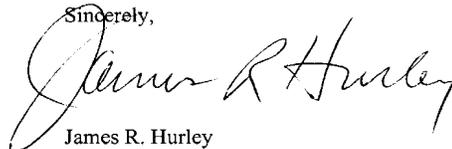
retail development in the county - including an expansion in the number of restaurants. While the report notes that casinos paid \$86.6 million in real estate taxes to fund city government in 1998, they also paid \$41.7 million in school taxes and another \$25 million to support county government. That represents a total real estate tax payment of more than \$153 million.

We agree with the report's conclusion that it is difficult to quantify some of the perceived negative impacts from casinos. For example, the report notes that there has been some disagreement on whether gambling has an impact on suicide rates. It goes on to show the rate in Atlantic City has always been well below the national average and between 1980 and 1990, the local rate fell below the suicide rate for the entire state. I would note that statistics from the Centers for Disease Control and the National Institutes for Health show that the suicide rate in New Jersey through 1995 is the lowest in the nation. Neighboring states also have comparatively low suicide rates.

We clearly believe that the positive impacts that casinos have generated far outweigh the perceived negative impacts. Through a strict system of licensing and regulation, New Jersey has minimized a number of the potential negative impacts. For example, the report notes that there have been no major scandals or organized crime influence over the industry here. That is a direct result of the licensing standards we have in place here. (For a detailed review of our regulatory system, you need only look at your agency's May 1998 report **Casino Gaming Regulation: Roles of Five States and the National Indian Gaming Commission.**) We remain committed to maintaining tight controls over integrity so that the people of New Jersey can continue to reap the positive impacts that gaming has created.

Thank you again for the opportunity to review and comment on this report. I am happy that our office was able to assist you in obtaining the information you needed to prepare it. If we can be of any additional assistance, please feel free to contact me.

Sincerely,



James R. Hurley  
Chairman  
New Jersey Casino Control Commission

# Comments From the Former Chair of the Former National Gambling Impact Study Commission

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

**KAY COLES JAMES**

555 East Main Street  
Suite 800  
Norfolk, Virginia 23322

February 14, 2000

Mr. Bernard Ungar  
Director  
Government Business and Operation Issues  
United States Government Accounting Office  
Washington, D.C. 20548

Dear Mr. Ungar:

Thank you for the opportunity to comment on the draft report, *Impact of Gambling: Economic Effects More Measurable Than Social Effects*. As the former Chairman of the National Gambling Impact Study Commission (NGISC), I appreciate the work that the General Accounting Office is doing to contribute to the research in this important area of public policy.

In order for the GAO study to be received as a credible report that is fully responsive to the original request, additional efforts should be made to provide greater depth and balance. Overall, the NGISC found that, based upon expert testimony and research data, destination casino resort areas offered more positive economic and social benefits than non-destination casinos, lotteries or convenience gambling operations. The NGISC also determined that more research exists on the economic impacts of legal gambling than on the social impacts. However, the expert information NGISC received contained many other relevant points regarding the social impact of legal gambling throughout the United States and specifically, in Atlantic City, New Jersey that should be examined and included in the GAO report.

As you know, the United States Congress created the National Gambling Impact Study Commission in 1996 with the passage of Public Law 104-169. Over the course of two years, my fellow Commissioners and I invested a tremendous amount of our personal and professional time to fulfill the charge and responsibilities assigned to the Commission by the Congress. At the outset of the Commission, as Chair, I pledged to conduct the operations and processes of the Commission in a fair, balanced and objective manner and work towards a goal of developing a consensus report. On June 18, 1999, we presented to the President, Congress, and the American people a final, unanimous report containing 76 recommendations.

The contents and recommendations of the final report were based on multiple sources of information developed and identified during our two-year existence. Commissioners relied upon testimony and written responses from elected and non-elected local, state, federal and tribal government officials, as well as several comprehensive national research studies contracted by the NGISC. Testimony was also received from hundreds of citizens as well as dozens of experts including industry and union officials.

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**Appendix VII  
Comments From the Former Chair of the Former National Gambling Impact Study  
Commission**

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Mr. Bernard Ungar  
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Since the submission of the final report in June 1999, numerous elected officials at every level of government have cited the report to either support or oppose the growth of new or existing legal gambling operations within their communities. Further, in states as diverse as Alabama, South Carolina, Rhode Island, New York and North Dakota, the NGISC final report has been utilized by business organizations and community activists on many different sides of the gambling issue as a reliable source to support their arguments. I believe that in each of these instances, the validity of the report and the integrity of the process has been upheld and there is a clear indication that the Commission met its charge to develop a comprehensive study of the social and economic impacts of legal gambling.

I have divided my response into overall structural comments concerning the report and a final comment regarding the Atlantic City case study.

**1. Make full use of original NGISC source documents, expert testimony and contracted research experts:**

The draft report appeared to include many references to data and testimony developed in conjunction with the NGISC study, but there were a number of important omissions, especially in terms of research data. The draft did not appear to include comments or conversations between the GAO and expert researchers originally contracted by the NGISC. I believe the report would be strengthened if these experts were asked to provide detailed background and analysis of the completed research studies and their relevance to the scope, purpose and specific questions contained in the original study request to the GAO.

**2. Provide greater context to factors related to problem and pathological gambling and social impact:**

Overall, the report does not provide adequate context, explanation or discussion of the significant data concerning gambler types other than pathological. The initial sections of the GAO report, including discussion of the findings in regard to the Atlantic City, are primarily limited to references to pathological gambling. While I understand that the initial request for the study asked for a review of the prevalence of pathological gambling, I find it difficult that this single type of behavior can be adequately addressed without also addressing concurrent rates of problem and other types of gambling and their associated behaviors.

The National Opinion Research Center (NORC) study included percentages of life-time and past-year gambler types by health, mental health, substance abuse and other problems for several categories other than pathological. As illustrated in Table 7-2 on page 7-21 of the NGISC report, data is available for non-gamblers, low-risk gamblers, at-risk gamblers and problem gamblers as well as pathological gamblers. Further detailed information on these variables is contained in Chapter IV of the NGISC final report. This information is relevant to any comparative assessment of pathological gambling and problems such as depression, alcohol and drug abuse, job loss, bankruptcy and crime that may stem from gambling addictions and problems.

See comment 1.

See comment 2.

Mr. Bernard Ungar  
Page Three

See comment 3.

**3. Discuss lifetime costs of problem and pathological gambling and provide greater detail regarding factors that cannot be quantified:**

One significant fact that was developed by NORC and was included in the NGISC report, but which is not fully mentioned in the GAO report, is the lifetime cost of problem and pathological gambling. NORC estimated the annual cost to society for problem and pathological gamblers in terms of unemployment benefits, welfare benefits, poor mental and physical health and gambling disorder treatments. These costs were estimated to be \$750 per problem gambler and \$1,200 per pathological gambler. The same NORC study that estimated annual costs estimated lifetime costs for problem gamblers at \$5,130 per gambler and \$10,550 per pathological gambler. Further, NORC estimated the aggregate annual costs of problem and pathological gambling at approximately \$5 billion per year, in addition to \$40 billion in estimated lifetime costs.

Annual and lifetime costs have significant policy implications for elected officials and policy-makers at every level, as well as for taxpayers who inevitably bear the burden for increased public assistance, treatment and healthcare costs. This fact is especially true considering the high recidivism rate among different treatment approaches to pathological gambling. As cited in the NGISC final report, "Gamblers Anonymous found that only 8 percent of GA members were in abstinence after one year in the group."

See comment 4.

**4. Use both actual population and percentage of population figures to describe economic and social impact.**

Throughout the report, the numbers of problem and pathological gamblers are expressed as percentages of an overall population. Since the GAO report is intended to provide an accurate and helpful overview of the economic and social impacts of gambling, I believe that it is important to express this information in both actual numbers and percentages of population.

See comment 5.

**5. Avoid the perception of a biased report by listing the officials, agencies and experts who were contacted by GAO.**

Any government study or report on the issue of legal gambling will be subjected to tremendous scrutiny for content as well as for sources. The GAO draft report relied, in part, on individuals or organizations that collect, manage or benefit from the revenues and economic opportunities created by legalized gambling. Without further specific information regarding which officials were contacted and what agencies or organizations provided information, the report appears to lack balance and is therefore subject to being labeled as biased. Out of respect to the large number of government officials, government agencies, union, casino, banking industry and non-profit organization officials that provided information to the GAO, I believe each person should be recognized and listed at the conclusion of the report.

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**Appendix VII**  
**Comments From the Former Chair of the Former National Gambling Impact Study**  
**Commission**

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Mr. Bernard Ungar  
Page Four

**6. Expand the balance of the Atlantic City case study with testimony received during the NGISC site visit and other research sources.**

I fully appreciate the considerable task involved in conducting the Atlantic City case study, and recognize the significant contributions and involvement government and other officials made to the draft GAO report. The NGISC received considerable expert testimony during our visit to Atlantic City on January 21 and 22 1998, and several important issues brought to the Commission's attention merit renewed interest and updated information.

See comment 6.

First, adolescent gambling and juvenile access to gambling facilities was an issue of tremendous concern to law enforcement officials and treatment providers in Atlantic City. The Commission received testimony from Captain Richard Andrews of the Atlantic City Police Department that unattended juveniles in casinos were a dilemma and an issue utmost importance. Mr. Terrence O'Connor, Assistant Commissioner of the Division of Addiction Services for the New Jersey Department of Health and Senior Services testified to the Commission that in 1995, 135,000 youngsters were stopped at casino doors, 25,000 youngsters were removed from casino floors and 437 were taken into custody. GAO should report current and historical information regarding these violations, the fines imposed on casinos, allocation of revenues collected from these and related fines and a detailed analysis of adolescent gambling.

See comment 7.

Second, the NGISC final report and recommendations for future research indicated that the role of gambling as a potential cause of homelessness is unclear. The NGISC did cite three studies that reported that 18-33 percent of homeless individuals cited gambling as a source of their situation. While these studies are referenced in the GAO report, the fact that the NGISC received testimony on homelessness in Atlantic City was omitted. A January 24, 1998 report to the Commission from the Atlantic City Rescue Mission reported that 22 percent of the Mission's clients cited gambling as the source of their homelessness. The GAO should revisit this issue with Mission officials and other homeless service providers to provide current and historical information.

See comment 8.

Third, the GAO report concerning the economic impact of casinos on Atlantic City's non-casino restaurants other businesses should also be reviewed to provide additional information regarding the impact on small business owners and entrepreneurs. On January 22, 1998, the Commission received testimony from Mr. Joseph Faldetta, then President of the Atlantic City Restaurant and Tavern Association, that casinos had triggered a staggering decline in non-casino restaurants, a drop from 311 taverns and restaurants in 1978 to 66 establishments in 1998. The draft report echoes this point, yet cites a 1996 figure of 142 restaurants remaining. Some reconciliation should occur between the testimony received by the NGISC in 1998 and the information contained in the draft GAO report. Further, additional historical information should be provided regarding the creation or elimination of other non-casino retail establishments and small businesses.

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**Appendix VII**  
**Comments From the Former Chair of the Former National Gambling Impact Study**  
**Commission**

Mr. Bernard Ungar  
Page Five

Once again, I appreciate the opportunity to provide comments on the draft GAO Report *Impact of Gambling: Economic Effects More Measurable than Social Effects*. I believe that the GAO has invested a tremendous amount of time in the development of this report and that the final product will prove to be very helpful to policy-makers. The final chapter of the NGISC final report, entitled Future Research Recommendations, concluded,

*“There are undeniably millions of problem and pathological gamblers causing severe harm to themselves, their families and many others. Understanding the reasons that gambling disorders are multiplying is crucial to the health and stability of these families, their communities and many businesses.”*

Perhaps the most important impact of this GAO report will be that it will serve as a further reminder that additional research must be undertaken at the federal, state and local level. At this point, the most accessible research data remains in the area of economic impact. Regardless of the direction elected officials and their constituents choose to take on legal gambling, the fact is that there is simply not enough information available to make a completely informed decision regarding the true social impacts of this industry. On this particular point, the conclusions of the NGISC final report and the GAO study are consistent.

Thank you once again for the opportunity to comment on your report. If you have any further questions, or if I can be of assistance in the future, please contact me.

Sincerely,



Kay C. James

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The following are GAO's comments on a letter dated February 14, 2000, from the former Chair of NGISC in which she noted several areas in our draft report where she believed that we should add information to provide additional perspective and context.

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## GAO Comments

1. The Chair said our draft report did not appear to include comments or conversations between us and expert researchers originally contracted by NGISC that would provide needed background and analysis to the report. Our scope, in agreement with the requester's office, was to examine the contents of NGISC's and its contractors final reports and summarize that work as part of our study. Throughout our report, we reported relevant information from both NGISC and its contractors. For example, regarding the prevalence of pathological gambling, we reported that the National Opinion Research Center (NORC), a NGISC contractor, found that the availability of a casino within 50 miles (versus 50 to 250 miles) is associated with about double the prevalence of problem and pathological gambling. As another example, we noted that Clotfelter and Cook, NGISC contractors, reported that in 1997, total revenues from the 38 state lotteries amounted to about 2.2 percent of the states' own-source general revenue compared with 25 percent for state general sales taxes and 25 percent for state income taxes. We did not, however, include discussions with NGISC's researchers in the scope of our review.

2. The Chair said that our draft report did not provide adequate context, explanation, or discussion of the significant data concerning gambler types other than pathological gamblers. The Chair further said the NORC report included percentages of lifetime and past-year gamblers by mental health, bankruptcy, crime, and other problems for several categories other than pathological gamblers and that this information is relevant to any comparative assessment of pathological gambling and social problems.

As the Chair said, our objective was to report on the prevalence of pathological gambling. However, our report also includes available information on the prevalence of problem gamblers (those individuals who have gambling problems but do not meet the psychiatric criteria for pathological gambling). Our report also includes discussions on NORC's findings that (1) a higher percentage of lifetime pathological gamblers reported filing bankruptcy than low-risk gamblers and nongamblers and (2) pathological gamblers had higher arrest and imprisonment rates than nonpathological gamblers. In response to the Chair's comments, we added text to the letter and included a discussion in appendix III on NORC's finding that lifetime pathological and problem gamblers are more likely than low-risk gamblers to have been troubled by mental or emotional

disorders. We also noted that NORC reported that lifetime pathological, problem, and at-risk gamblers are more likely than low-risk or nongamblers to have been alcohol or drug dependent. We also included NORC's estimate that 15 million adults are at risk of becoming problem gamblers.

3. The Chair said that our draft report did not fully mention the lifetime cost of problem and pathological gambling. The Chair emphasized that both annual and lifetime costs have significant policy implications for policymakers and taxpayers. Our report included NGISC's estimate of the annual cost to society for a pathological and a problem gambler. As suggested by the Chair, we included in appendix II of the report NORC's estimated lifetime cost per pathological and problem gambler and NORC's overall estimated annual cost to society for problem and pathological gambling.

4. The Chair said that our draft report should use both percentages of the population and actual numbers when discussing the number of problem and pathological gamblers. We modified appendix III of this report to include NORC's estimated number of pathological and problem gamblers.

5. The Chair said that our draft report did not list the officials, agencies, and experts whom we contacted, and thus the report is subject to being labeled as biased. As is our policy, we conducted this review in an objective manner, attempting to obtain data and views from various available sources and sides of the issue so we could present a balanced and fair report of our results. Generally, we do not however, list the names of officials we contact in our reports. However, we modified this report in the Objectives, Scope, and Methodology section in appendix V to include the names of the government agencies and community and private industry organizations we contacted in New Jersey.

6. The Chair said our draft report should include information on adolescent gambling in Atlantic City in terms of the number of youngsters removed from casinos, the number taken into custody, the fines imposed on casinos and allocation of revenues collected from these and related fines, and a detailed analysis of adolescent gambling. The Chair said NGISC received testimony from the Atlantic City Police Department that unattended juveniles in casinos were a dilemma and an issue of utmost importance.

The Atlantic City Police Department did not mention the juvenile issue in our contacts with the Department. However, we modified the report in

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appendix III to include 1999 information provided by NJCCC on the number of juveniles (under the age of 21) stopped and prevented from entering Atlantic City casinos, removed from the casinos, found gambling in the casinos, and taken into custody. We also included data on the fines imposed on casinos because of juveniles found gambling there. Regarding the Chair's suggestion that we provide a detailed analysis of adolescent gambling, our report includes some information on this topic in New Jersey, but we did not do a detailed review of adolescent gambling.

7. The Chair said that while our draft report referenced three studies on homelessness that were cited in the NGISC report, it omitted that NGISC received testimony on the homelessness in Atlantic City and suggested that we report information that the Atlantic City Rescue Mission provided to NGISC. As the Chair stated, we referenced three studies on homelessness in our report including the Atlantic City Rescue Mission study. We modified our report in appendix II to show that the Mission's study was one of the three studies on homelessness.

8. The Chair said our draft report section on the economic impact of casinos on Atlantic City's noncasino restaurants differed from information received by NGISC. The Chair said that our 1996 data did not reconcile with 1998 data NGISC received. The 1998 data cited by the Chair was provided to NGISC in testimony and did not include casino food and beverage establishments. The 1996 data we used was the most readily available concrete data we found and included both casino and noncasino establishments. According to NJCCC, data on the number of casino restaurants were not readily available. We added a footnote in appendix I of our report to explain why our numbers and the numbers cited by NGISC differed.

# GAO Contacts and Staff Acknowledgments

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## GAO Contacts

Bernard Ungar, (202) 512-8387

John Baldwin, (202) 512-8387

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## Acknowledgments

In addition to those named above, Bradley Dubbs, Laurie Ekstrand, Lynn Gibson, V. Bruce Goddard, Lucy Hall, Michael Horton, Yesook Merrill, and Michelle Sager made key contributions to this report.

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