

An Assessment of Crime Volume Following Casino Gaming Development in the City of Detroit

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Abstract

Debates surrounding casino gaming development in the US often are based on the assumption that the opening of a casino is followed by an increase in crime in the host community and surrounding areas. This paper examined crime volume in Detroit, Michigan and neighboring communities before, during and after the three Detroit casinos opened. Findings indicated that total Index Crime offenses did not increase in Detroit. However, it appeared that the volume of certain types of crime slightly increased while others decreased. Based on the analysis, this paper concluded that there is no alarming indication to suggest that the volume of crime has increased when the casinos opened in the city. In addition, this paper offers strategies to overcome some of the problems that are associated with the use of crime data.

Key words: tourism, casino development, crime volume, Detroit, public data.

Introduction

Referenda on casino gaming development have failed in many jurisdictions, partially because voters perceived a relationship between casinos and increased crime (Dombrink & Thomson, 1990). Similarly, people debating gaming development often make assumptions about the propensity of casinos to attract or stimulate crime (Stokowski, 1996). Casino gaming adversaries argue that when a casino opens in a community, crime increases. Casino advocates, on the other hand, believe that those arguments are based on preconceived notions, rather than on facts (American Gaming Association, 2004). A review of the literature on gaming and crime yielded mixed results; some communities have witnessed increased crime after the initiation of gaming, while others have experienced no change or even a decline in crime following the opening of a casino.

Three major issues appear to be associated with the gaming and crime literature: (1) some researchers based their conclusions on the examination of one-year crime data, only, (2) others did not include the transient population, and (3) several others did not control for internal validity by, for example, examining crime volume in neighboring communities, and/or the communities that feed the casinos (also called primary feeder markets).

Communities have embraced casino gaming for two main reasons: the first is to generate more tax revenue and increase employment by attracting more tourists; the second is to keep local gaming money at home. However, although more than half of the States in the US have introduced legislation related to gaming since the late 1980s, whenever and wherever casino gaming legislation has been introduced and discussed, heated debates have arisen between advocates and adversaries of gaming because it is a moral, religious, economic, political, and social issue. One of the most discussed social issues is crime.

Several studies have indicated that safety, tranquility, and peace are a necessary condition for tourism to grow (e.g., Pizam 1999). Crimes against tourists have caused

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considerable decline in the number of domestic, as well as international tourists, and has cost the tourism industry billions of dollars in lost revenue (Pizam & Mansfeld, 1996).

Results from a telephone survey of Midwestern US households conducted by the Travel, Tourism and Recreation Resource Center at Michigan State University in 1998 found that Michigan generally has a positive image as a pleasure trip destination. According to this study, the most frequently mentioned positive impressions of Michigan as a pleasure trip destination were “water-related resources”, “scenery”, “nature attractions”, and the Upper Peninsula”. However, weaknesses in this image were evident with respect to perceptions of climate, roads, Detroit, and crime in Detroit (Spotts, Kim, Carr, & Holecek 1998). So, Detroit has already a reputation for being “a crime city”. Hosting casinos would be, especially for casino gaming development skeptics, an invitation for more crimes. The passage of Proposal E, in 1996, authorized the city to establish three land-based casinos. MGM Grand casino opened on July 29, 1999; Motor City Casino opened on December 19, 1999; and Greektown Casino on November 10, 2000.

Two major studies have had an impact on casino development in Detroit. The first one is the *Governor’s Blue Ribbon Commission on Michigan Gaming: Report to the Commission* (April, 1994), and the second is the *Report of the Mayor’s Casino Advisory Committee* (June, 1997). Both reports were created to assess the impact of casino gaming on the community, including economic, legal, and social issues. Both argued that crime *may* follow the opening of casinos in the city of Detroit. Their arguments were hypothetical; based on the literature and experience of gaming communities. So, what actually happened to crime after the Detroit casino opened? The purpose of this paper was to assess crime volume following the opening of the three casinos in the City of Detroit. Specifically, this paper examined crime volume and types of crime in Detroit and neighboring communities. An analysis of crime volume and types of crime may produce a clearer picture for the city to: monitor crimes; contribute to the city’s image as a destination; encourage people to visit the city and the casinos; and shed more light on the overall debate surrounding casino gaming development.

The literature review of this paper focuses on (a) casino gaming and crime, (b) Index Crimes, and (c) major federal data sources of information on crime, including a brief discussion of the National Crime Victimization Survey (NCVS) and the Uniform Crime Reporting program (UCR). The literature review section is followed by the methods section, findings and discussion, conclusion, strategies for reducing problems associated with using crime data, and suggestions for further research.

Casino Gaming and Crime

Tourism is an industry that attracts criminal activities for different reasons (Prideaux, 1996; Tarlow & Muehsam, 1996). However, unlike other recreation activities, the relationship between crime and casino gaming is more complex. Criminal activities that are associated with casino gaming may occur on as well as off site. Criminal activities may take place not only to steal money for economic or other purposes, but also to feed the gaming habits of pathological/problem gamers (National Gambling Impact Study Commission, 1999) [for the purpose of this paper the author uses gaming and gambling interchangeably]. Additionally, crimes associated with gaming may spill over to neighboring communities (Cabot, 1996), and those that feed the casinos (Moufakkir, 2002). Thus, casino gaming may increase crime in three main ways. First, people may steal to support problem gaming habits. Second, gaming may attract criminals because a lot of money is involved in this industry. Third, criminal activity may increase because crowds draw petty thefts (Cabot, 1996). Accordingly, three general forms of crime are associated with gaming: organized

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An Assessment of Crime Volume Following Casino Gaming Development in the City of Detroit crime, street crime near casinos, and ancillary crime created by problem gamblers (Cabot, 1996).

Debates about the relationship between modern casino gaming and crime are as old as the first Las Vegas casinos. Several referenda on casino gaming have failed because participants in debates about casino development often argue that casino gaming increases criminal activities. The conclusion after an extensive literature review in *Casinos and crime: An analysis of the evidence* is that: “communities with casinos are just as safe as communities that do not have casinos” (Margolis, 1997, p. 1). This work also showed that while many communities experienced no increase in crime or crime rates following the introduction of casino gaming, in some cases, both the numbers of crime and crime rates actually decreased. A further argument was that studies of gaming communities in which crime rates were reported to have increased when post-gaming crime rates were calculated, did not include average daily population figures, such as the number of tourists and commuter populations. When the number of tourists was accounted for the actual crime rate dropped. It is worth mentioning that the Margolis study was prepared for the American Gaming association (AGA).

Another study by Thompson, Gazel, & Rickman (1996), examined the impact of casino openings in Wisconsin on crime rates from 1992 to 1994. They compared counties with casinos with non-casino counties, and also casino and casino-adjacent counties with non-casino counties that were not near two casino counties. They suggested: “Our analysis strongly suggests that there is additional serious crime with the introduction of casinos into several areas of Wisconsin” (p. 12) and that “the introduction of casinos has had a pronounced effect upon the safety and security of Wisconsin residents” (p. 18).

The results of empirical studies of the amount and types of crime related to casino gaming differ considerably. Some studies indicate that crime increased in gaming communities while others report that crime per capita dropped when gaming was introduced because the number of visitors to the community increased by more than the increase in crime. The casino and crime controversy can be gleaned from Table 1. It is worth noting that the different results across these studies are often a result of differing methods being employed.

Table 1. Results of Selected Empirical Studies Addressing the Issue of Gaming and Crime.

Source	Location of the case study	Method employed	Result
Albanese, J. 1985. The effect of casino gambling on crime. <i>Federal Probation</i> .	Atlantic city, New Jersey.	Analysis of crime data.	No effect. When average daily population was taken into consideration, a slight reduction in the likelihood of being victimized was reported.
Chang, S. 1996. Impact of casinos on crime: the case of Biloxi, Mississippi. <i>Criminal Justice</i> .	Biloxi, Mississippi.	Analysis of crime data.	No effect.
Chiricos, T. 1994. Casinos and crime: an assessment of the evidence. <i>Unpublished manuscript</i> .	Atlantic City, NJ; Las Vegas, NV; Various riverboat casino locations.	Analysis of crime data. Survey of law enforcement officials.	Decrease in crime. When crime rates are adjusted for tourists.

Coman, D. and F. Scarpitt. 1991. Crime in Atlantic City: Do casinos make a difference? <i>Deviant Behavior.</i>	Atlantic city, NJ	Analysis of crime data.	Crime rates decrease. When Atlantic city crime rates were adjusted for the number of visitors the resulting rate was less than a third of the uniform crime rate reported.
Friedman, J. et al. 1989 Casino gambling as a 'Growth pole' strategy and its effect on crime. <i>Regional Science.</i>	Atlantic City, NJ.	Analysis of crime data.	Crime rates increased. The level of crime in localities adjacent to Atlantic city rose significantly following the introduction of casinos.
Giacopassi, D. and Stitt, G. 1993. Assessing the impact of casino gambling on crime in Mississippi. <i>Criminal Justice.</i>	Biloxi, Mississippi.	Analysis of crime data.	No increase in total violent crime; <i>No increase in any specific violent crime;</i> Increase in total UCR property crime.
Hakim, S. and Buck, A. 1989. Do casinos enhance crime? <i>Criminal Justice.</i>	Atlantic city, NJ	Analysis of crime data.	Levels of all crimes are higher in the post casino development. Communities with higher travel time from Atlantic city had less property and violent crime than those closer to the casino.
Stokowski, A. Patricia. 1996. Crime patterns and gaming development in rural Colorado. <i>Journal of Travel Research.</i>	Gilpin County (Black Hawk and Central City) and Teller County (Cripple Creek), Colorado.	Analysis of crime data. Observations, Interviews, Secondary materials.	Gaming development is related to an increase in crime, but crime has not grown proportionally to the increased number of gambling tourists.
Thompson, W. N., Gazel, R. and D. Rickman. 1996. Casinos and crime in Wisconsin: What's the connection? <i>Wisconsin Policy Research Institute Report.</i>	14 counties with casinos and 13 non-casino counties adjacent to at least two other counties with casinos.	Analysis of crime data.	Casinos generate crime.

Index Crimes

Crimes tracked by the Uniform Crime Reporting (UCR) program include violent crimes of murder, rape, robbery, and aggravated assault, property crimes of burglary, larceny and theft, and motor vehicle theft.

Crimes tracked by the Uniform Crime Reporting (UCR) program include violent crimes of murder, rape, robbery, and aggravated assault, property crimes of burglary, larceny and theft, and motor vehicle theft. These eight crimes that constitute the Index Crimes serve as a common indicator of the country's crime experience because of the seriousness and frequency of their occurrence (Criminal Justice Information Center, Michigan State Police 2004). In the academic gaming literature, Index Crime rates or volume are, generally, used to assess crime in gaming jurisdictions before, during, and after the development of casinos. Crime volume is the raw number of offenses reported to the police; whereas crime rates constitute the number of reported offenses divided by the jurisdiction's population, which provides crime volume per capita. It is important to reiterate that crime data in the UCR represent a census, not a sample, of reported crime and therefore statistical tests that attempt to predict from samples to larger populations are inappropriate. The other most common approach that gaming researchers use to assess crime is interviews of police officials. It is suggested that a combination of UCR crime data and interviews of police officials can provide a better understanding of gaming and crime (Stokowski 1996). Definitions of the Index Crimes, provided by the FBI, are presented in Table 2.

Table 2. Definition of Index Crimes.

Index Crimes	Definitions
Murder	Murder is defined as the willful killing of another.
Aggravated assault	The unlawful attack by one person upon another for the purpose of inflicting severe bodily injury, usually accompanied by the use of a weapon or other means likely to produce death or serious bodily harm.
Forcible rape	The carnal knowledge of a female through the use of force or threat of force. Assaults to commit forcible rape are also included.
Robbery	The stealing or taking of anything of value from the care, custody, or control of a person by the threat of force.
Burglary	The unlawful entry of a structure to commit a felony or theft.
Larceny-theft	The unlawful taking of property without the use of force.
Violence or fraud	Shoplifting, pick-pocketing, and purse-snatching.
Motor vehicle theft	The unlawful taking or stealing of a motor vehicle, including attempts.

Source: FBI Uniform Crime Reports. U.S. Department of Justice.

Major Federal Data Sources of Information on Crime

There exist three major federal data sources of information on crime in the United States, each of which uses different methods. Each method has strengths and weaknesses (MacKenzie, Baunach, & Roberg 1990). They are: The Federal Bureau of Investigation's Uniform Crime Reporting (UCR) program, The National Crime Victimization Survey (NCVS) of the Bureau of Justice Statistics, and The Survey of Inmates of Adult Prisoner Statistics Program. (Only the two first sources will be discussed in this paper because of their high usage).

The National Crime Victimization Survey (NCVS)

The NCVS is a national survey of a probability sample of US households. People are interviewed regarding victimizations they have suffered during a period of time, mostly during the previous six months. According to criminologists, this method seems to provide more information about crime and crimes that are not reported by victims or uncovered by the police. However, like any other measurement technique, these victim surveys have several limitations. These can be categorized as sampling issues, representativeness, ambiguity about definitions, the context in which data are collected, the skill of the interviewers, and several others (for details see MacKenzie, et al. 1990).

The Uniform Crime Reporting program (UCR)

The UCR program makes use of police reports of crime and arrests sent to the Federal Bureau of Investigation (FBI) by law enforcement agencies (MacKenzie et al. 1990). The problems that are associated with this source of information are: under-reporting and over-reporting of crimes. A large number of victims do not report criminal incidents to the local police for several reasons, the most common of which are: victims might think that the degree of their victimization is not serious enough to be reported to the police; the offense was perpetrated by a family member; or the victim was a tourist, and therefore perceives reporting the crime as a waste of time (MacKenzie, et al. 1990). Furthermore, some police agencies might not report all of the crimes for different reasons. A high figure of crime might imply (a) police efficiency or (b) the need for more law enforcement resources. On the other hand, depending on "a community's confidence in reporting crime to the authorities, a low reported crime figure might imply an inactive police force; a suspicious or cynical public; frightened victims; an underdeveloped criminal justice sector; a disorganized or under-resourced collection of statistics; or a low occurrence of crime" (Findley, 1999: 34). Some reported crime may also not be considered serious enough to get police attention, and, therefore may not be included in the data (Schiebler, Crotts & Hollinger, 1996). According to MacKenzie and colleagues (1990), crime volume may vary from one community to another because of the level of confidence victims have in reporting crime to the police.

Criminologists explain that no matter how crime figures are measured and shortcomings of the methodology, quantification of crime remains a very important feature of criminal justice. According to Findley (1999) crime figures remain important because they are used to make projections about public safety, expectations for crime control, and expenditures on criminal justice. Findley (1999: 35) notes: "The modern method for quantifying crime arises from the recognition of crime as a dynamic social relationship, rather than the result of any single institutional intervention or a simple cause and effect scenario." This paper, therefore, does not seek to explain why crime occurs at casino destinations; rather, its focus is on assessing crime volume following casino development.

Method

The purpose of this study was to examine crime volume before, during and after the casinos opened in Detroit. Data for this study were collected from the Uniform Crime Reports. The Uniform Crime Reports give a nationwide view of crime based on data contributed by state and local law enforcement agencies. Since 1930, city, county and state law enforcement agencies have *voluntarily* provided the FBI with a set of crime statistics through the Uniform Crime Reporting Program. Crime statistics are periodically released to the public on the Internet and in printed publications. In order to shed light on the issue of crime and gaming development in the City of Detroit, the Crime Indexes in Detroit were compared over a seven-year period (1996-2002)—three years before the casinos opened and three years after. To control for internal validity, state, county, tri-county area, and city crime data were examined. The tri-county area

An Assessment of Crime Volume Following Casino Gaming Development in the City of Detroit includes Macomb, Wayne, and Oakland counties. The Crime Index offenses serve as common indicators of the country's crime experience because of their seriousness and frequency of occurrence. The Crime Index is composed of selected offenses used to show fluctuations in the overall volume and rate of crime reported to law enforcement agencies. The offenses included are the violent crimes of murder, rape, robbery, aggravated assault, and the property crimes of burglary, larceny, motor vehicle theft, and arson.

Furthermore, selected Non-index Crime offenses are also examined. These include: non-aggravated assault, forgery and counterfeiting, fraud, embezzlement, stolen property, vandalism, prostitution, sex offenses, family and children abuse, driving under the influence –alcohol or narcotics, and disorderly conduct. Total number of arrests for prostitution, driving under the influence, embezzlement, fraud, forgery and counterfeiting, disorderly conduct, and vandalism in Detroit were also examined. The number of arrests was a logical choice because these types of crime are likely to be less adequately reported to the police than the other types of offenses. In addition, because it is also believed that casinos export crime to neighboring communities, Crime Index data analysis based on selected counties of origin of Michigan non-local casino visitors were also examined. Accordingly, Crime Index offenses for the top three Michigan casino non-local feeder markets were presented.

It is worth noting, at this point, that while this author believes that there is a need for more data points to offer a clear picture about crime volume following the development of casino gaming in a community, there is also the necessity to track crime volume for immediate policy and management concerns. Up to March 30, 2004 the latest crime data available from the Michigan Police Department were 2002 crime data. Specifically, the examination of crime volume for the purpose of this study includes:

- Seven-year comparison of Crime Index offenses in the State of Michigan, Wayne County (where Detroit is located), Macomb County, Oakland County, and the City of Detroit;
- Seven-year trend in specific Crime Index offenses in Detroit;
- Volume and percent change in selected types of crime for Michigan, Wayne County, Macomb County, Oakland County, and the City of Detroit;
- Seven-year comparison of Selected NonIndex Crime offenses in Detroit;
- Seven-year comparison of arrests in Detroit for selected NonIndex types of crime;
- Seven-year Crime Index offenses for six counties of origin of all non-local Detroit casino visitors whose trip began in Michigan.

In addition, consultations about crime data use and analysis took place with a crime analyst at the Criminal Justice Information Center, Michigan State Police, before, during and after the analysis. Face-to-face consultations were supplemented with telephone and e-mail communications with the same analyst (see End Note).

Findings and Discussion

The purpose of this paper was to examine crime volume in Detroit and its neighboring communities following the initiation of casino gaming in the City of Detroit. Specifically this study examined crime volume in six locations, to control for internal validity. Examining Index Crime offenses for the period 1996 through 2002, there was a decrease in Michigan, Wayne County, Macomb County, and the City of Detroit. Oakland County, on the other hand, indicated an increase (Table 3). Although total Crime Index offenses in Detroit decreased from 1996 through 2001 (Table 3), when examining crime by type, murder, rape and arson increased in post casino gaming development (Table 4).

To control for internal validity the numbers of murder, rape and arson offenses in Detroit were compared to the number of murder, rape, and arson offenses in four other locations. As can be seen in Table 5, the volume of rape offenses show a decrease in

Oakland and Macomb counties but an increase in Wayne county, after the casinos opened in Detroit. This suggests that the increase in rape offenses was typical to Detroit.

As can be seen in Table 6, the number of murders shows an increase in Oakland and Macomb counties but a decrease in Wayne County after the casinos opened in Detroit. What is interesting to note is that while there is an increase of murders in Detroit, Wayne County indicates a decrease, suggesting that the increase in murder was typical for Detroit. Furthermore, if the number of visitors and the number of the transient population that visit Detroit have been added to the crime equation, crime figures would indicate an even sharper decrease. According to the latest figures published by the Detroit Convention and Visitors Bureau the Metro Detroit area receives on average a little over 16 million visitors yearly. It was estimated that in 2000, 2001 and 2002 the area attracted 6.3 million day visitors, 6.6 million, and 5.6 million, respectively (Detroit Convention and Visitors Bureau, 2004). This may suggest that there is no significant or alarming indication that crime increased after the casinos opened.

In the Uniform Crime reports, there are also NonIndex Crime offenses. Following is a discussion of a selection of this type of crime. The types of crime that were selected are those that were directly related to casino gaming. As indicated in Table 8, except for non aggravated assault, the rest of the selected types of crime indicate a decrease.

Because it has been argued that certain type of NonIndex crime are sensitive to be reported to the police, it was advised to consider the number of arrests related to these crimes. As can be seen in Table 9, only the number of disorderly conduct and fraud arrests did not increase. The number of prostitution arrests, driving under the influence, embezzlement, forgery and counterfeiting, and vandalism increased.

While it has been argued that crimes associated with casino gaming do spill over to neighboring communities, Crime Index offenses for the top six counties that feed Detroit's casinos were examined. As can be seen in Table 10, there is no discernible trend that can indicate the direction of crime in these selected counties, that is, that crime volume decreased in one year but leveled up in the following year or vice versa.

Crime is an issue that holds a prominent place on the casino gaming development public policy agenda. Opponents of casino gaming claim that crime increases with casino gaming development. Advocates, on the other hand, claim that because casinos generate employment, crime may even decrease in some gaming jurisdictions. Researchers have also noted that when the number of non-local visitors and the number of the transient population are added to the crime equation, crime figures indicated a decrease in certain jurisdictions. A review of the literature presented in a literature matrix (Table 1) in this paper clearly indicates this controversy. Findings of this paper also indicate mixed results. For example, total crime volume did not increase in Detroit after gaming began, but this trend was not discernible in the other neighboring communities that feed Detroit's casinos. Examining crime by type, some crimes increased while others decreased.

Conclusion

This study has assessed crime volume in the city that hosts gaming and its neighboring communities, including the primary gaming feeder markets. Total Index Crime figures for Detroit show a steady decline from 1996 through 2002; clearly indicating that crime did not increase in the three years following casino development in the city. The examination of crime volume by types of crime in Detroit indicates that most crimes did not increase, except for prostitution (arrests) and arson offenses. On the other hand, crime volume in the other selected locations has been fluctuating. Based on the analysis and interpretation of the compiled data, this paper concludes, therefore, that there is no alarming indication to suggest that the volume of crime has increased when the casinos opened in the city. It is worth noting that this conclusion is based on three years before and *only* three years (most recent data available) after the casinos opened.

As has been mentioned, crime figures remain important because they are used to make projections about public safety, expectations for crime control, and expenditures on criminal justice. Thus, examining crime volume may help to uncover, control and mitigate the types of crime that show an increase with casino gaming development. In the case of Detroit, it may be suggested that, for example, more efforts should be geared towards finding ways to control and curtail prostitution and arson.

Crime data are public. There are a few complications that may be encountered when using crime data. Finding the right data and compiling them is not only time consuming, but may be confusing and, sometimes, frustrating. The upcoming discussion considers this issue and offers strategies that may be helpful to researchers.

Strategies for Reducing Problems Associated with Using Crime Data

Crime statistics provided by police departments have been widely used indicators to examine crime in gaming jurisdictions. However, it is worth indicating the complexity of finding crime figures and the problems that may occur if they are not used properly. The collection of crime data is a strenuous and complex task. Following are the strategies that had been used by this study to overcome encountered problems:

- a. *Use the same source throughout the analysis:* Use either print resources or Internet resources: Whereas Internet resources are easily updated and modified because they are electronic, the print media may be updated but not necessarily modified. The modified version of the print media may exist but in a second publication. That is, if the reader wants to examine crime statistics it is advisable not to compare figures on the print media with figures on the Internet, although they may come from the same source. One source may offer actual figures while the other may have estimated figures.

There are different websites that offer crime statistics. For comparative purposes, it is advised to use crime figures from the same website. Here is an example to illustrate the point: Crime figures from two websites are compared:

Source	1996	1997	1998	1999	2000	2001	2002
U.S. Department of Justice*	490,971	480,579	459,720	426,596	408,456	407,777	Not yet available
Criminal Justice Information Center**	502,281	477,697	470,845	429,638	411,873	405,633	388,648

*Source: U.S. Department of Justice: Office of Justice Programs. Bureau of Justice Statistics, (<http://bjsdata.ojp.usdoj.gov/dataonline/Search/Crime/State/>. April 02, 2004).

**Source: Criminal Justice Information Center. Michigan State Police. 2004. (<http://www.michigan.gov/documents/>. March 24, 2004).

- b. *Use estimated figures rather than actual reported figures throughout the analysis:* Some sources offer actual figures while others offer figures with estimates. Sometimes, the same source offers both estimated and actual figures, but it is not clear which is what. Actual figures are figures reported to and compiled by police departments. These figures have missing data because, sometimes, not all agencies report the twelve-month period. On the other hand, crime figures are estimated when data are missing because some agencies did not report their crime figures (Michigan State Police 2004). Actual figures may, then, present a distorted picture of crime volume, and mixing actual figures with the estimated ones would present biased results.

- c. *Use Crime Index figures or Modified Crime Index figures throughout the analysis:* For example, the FBI offers crime statistics to the public in a table containing a column with Crime Index and another column with Modified Crime Index. In 2002, Crime Index for Detroit was 85,035, whereas the Modified Crime Index was 87,464. “The Modified Crime Index is the sum of the seven offenses making up the Crime Index, with the addition of arson. If the FBI does not receive 12 months of arson data from either the agency or the state, no arson or Modified Crime Index will be shown”. Also, sometimes, “due to changes in reporting practices, annexations, and/or incomplete data, figures are not comparable to previous year’s data (Michigan State Police 2004).
- d. *Consult a crime analyst:* State police headquarters have crime analysts that offer advice free of charge to people interested in using crime data. Crime analysts could be contacted by e-mail, but because of the complexity of crime data it is most helpful and thus advisable to have a face-to-face encounter with a crime analyst. Talking with a crime analyst not only helps to understand the complexities of using crime data, but also to make sure that the data that are being used for the specific study is been compiled and presented properly.

Suggestions for Further Research

So, what can be learned from Detroit –why in spite of the establishment of casinos crime volume did not increase in the city? The following research questions that appear to be directly related to gaming and crime in the city may serve as a sample of questions that warrant future investigation:

- How has casino gaming affected employment in the city?
- How do the casinos impact other community businesses?
- What strategies have been used by the Detroit police force to deal with crime prior to casino gaming establishment and after the casinos opened to the public?
- What measures have been taken by the local government in the city along with casino development?

End Note

This author would like to thank the Criminal Justice Information Center, Michigan State Police. A special thank you to crime analyst Amy Higgins for her time advice and kindness.

Table 3. Seven-year Comparison of Crime Index Offenses In Michigan, Tri-count Area, and the City of Detroit, 1996-2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>				<i>After the casinos opened</i>		
Michigan	502,281	477,697	470,845	429,638	411,873	405,633	388,648
Wayne	182,202	174,313	171,311	150,366	142,807	133,059	126,807
Macomb	28,682	28,739	28,979	24,387	22,358	23,488	23,151
Oakland	51,883	48,610	47,482	40,482	36,658	36,320	33,552
Tri-county	262,767	251,662	247,532	215,235	201,823	192,867	183,510
Detroit	121,999	121,801	120,095	103,682	97,776	91,827	87,464

Source: Criminal Justice Information Center. Michigan State Police. 2004.

Due to the unique nature and the statistical implications inherent in the events of September 11, 2001, the crimes committed in those attacks were not included in the Uniform Crime Report’s program.

Table 4. Seven-year Trend in Specific Crime Index Offenses in Detroit From 1996 Through 2002.

Offenses	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>				<i>After the casinos opened</i>		
Murder	428	469	430	415	369	395	402
Rape	1,119	968	858	790	811	652	708
Robbery	9,504	8,208	8,558	7,823	7,868	7,096	6,288
Aggravated Assault	12,188	12,331	14,581	12,948	13,037	12,804	12,542
Burglary	21,491	19,324	21,516	18,278	15,828	15,096	14,399
Larceny	41,193	44,451	43,317	34,537	31,929	29,613	26,839
Motor Vehicle Theft	34,265	33,439	28,651	26,770	25,892	24,537	23,857
Arson	<u>1,811</u>	<u>2,611</u>	<u>2,184</u>	<u>2,121</u>	<u>2,015</u>	<u>1,634</u>	<u>2,429</u>
Index Total	121,999	121,801	120,095	103,682	97,776	91,827	87,464
Change		-198	-1,706	-16,413	-5,906	-5,949	-4,363
Percent change		-0.2	-1.4	-13.7	-5.7	-6.1	-4.7

Source: Criminal Justice Information Center. Michigan State Police. 2004.

Table 5. Volume and Percent Change in Rape Offense for Five Locations From 1996 Through 2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>				<i>After the casinos opened</i>		
Michigan	5,517	4,931	5,417	4,946	5,068	5,336	5,438
Detroit	1,119	968	858	790	811	652	708
Wayne	1,530	1,313	1,245	1,126	1,163	989	1,073
Oakland	401	295	345	455	319	409	361
Macomb	252	239	291	313	309	319	279
Percent change							
Michigan		-10.6	9.8	-8.7	2.5	5.3	1.9
Detroit		-13.5	-11.4	-7.9	2.6	-19.6	8.9
Wayne		-14.2	-5.2	-9.5	3.3	-14.9	8.5
Oakland		-26.4	16.7	31.9	-29.9	28.2	-11.7
Macomb		-5.1	21.7	7.6	-1.3	3.2	-12.5

Source: Criminal Justice Information Center. Michigan State Police. 2004.

Table 6. Volume and Percent Change in Murder Offenses For Six Locations From 1996 Through 2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>				<i>After the casinos opened</i>		
Michigan	729	750	728	692	674	661	671
Detroit	428	469	430	415	369	395	402
Wayne	473	520	478	458	434	443	430
Oakland	25	18	29	20	22	15	30
Macomb	20	9	10	20	17	13	16

Source: Criminal Justice Information Center. Michigan State Police. 2004.

Table 7. Volume of Arson Offenses for Six Locations From 1996 Through 2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>			<i>After the casinos opened</i>			
Michigan	4,874	5,371	5,107	4,711	4,592	4,262	4,901
Detroit	1,811	2,611	2,184	2,121	2,015	1,634	2,429
Wayne	2,165	2,981	2,543	2,415	2,304	1,929	2,692
Oakland	312	244	325	273	236	265	257
Macomb	151	129	146	124	111	190	148

Source: Criminal Justice Information Center. Michigan State Police. 2004.

Table 8. Selected Offenses Reported to the Detroit Police Headquarters From 1996 Through 2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>			<i>After the casinos opened</i>			
Non-Aggravated Assault	7,868	8,860	9,961	8,958	9,369	8,825	8,890
Forgery & Counterfeiting	2,571	2,335	2,188	2,025	1,958	1,741	1,551
Fraud	833	774	1,070	1,006	1,065	1,158	1,541
Embezzlement	109	92	105	129	129	116	114
Stolen Property	1,321	1,126	957	1,107	1,088	857	759
Vandalism	17,928	16,735	17,042	13,803	13,872	14,030	14,007
Prostitution	1	0	0	0	0	0	0
DUI	0	0	0	0	1	0	2
Disorderly Conduct	2	0	0	1	4	2	0
Family & Children	1,080	837	917	932	1,018	493	206
Total	31,713	30,759	32,240	27,961	28,504	27,222	27,067
% change total		-3.0	4.8	-13.3	1.9	-4.5	-0.57

Source: Criminal Justice Information Center, Michigan Sate Police. 2004.

Table 9. Volume Of Arrests In Detroit For Selected Non-index Types Of Crime From 1996 Through 2002.

	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>			<i>After the casinos opened</i>			
Prostitution	1,970	1,560	783	528	382	574	968
D.U.I	1,870	2,301	2,300	2,142	2,142	1,908	2,198
Embezzlement	80	66	63	73	63	49	61
Forgery& Counterfeiting	454	472	495	469	447	436	449
Vandalism	1,318	1,367	1,427	838	807	445	476
Disorderly Conduct	7,348	6,725	6,593	5,284	4,555	2,830	2,601
Fraud	715	656	845	739	996	761	728

Source: Criminal Justice Information Center, Michigan Sate Police. 2004.

Table 10. Crime Index Offenses For Top Six County Of Origin Of All Non-local Detroit Casino Visitors Whose Trip Began In Michigan, From 1996 Through 2002.

County	1996	1997	1998	1999	2000	2001	2002
	<i>Before the casinos opened</i>			<i>After the casinos opened</i>			
Washtenaw	15,262	13,676	13,074	12,079	12,087	12,483	12,199
Monroe	4,851	4,926	4,448	4,053	4,575	4,820	4,466
Genesee	28,683	30,050	30,710	28,114	24,689	24,641	21,694
Livingston	3,204	2,860	2,698	2,437	2,565	2,662	2,392
St. Clair	5,385	5,652	5,311	4,740	4,593	4,870	4,600
Ingham	17,805	16,478	15,358	14,251	13,239	14,063	12,778

Source: Criminal Justice Information Center. Michigan State Police. 2004.

References

- Albanese, J. (1985). The effect of casino gambling on crime. *Federal Probation*, 49, 39-44.
- American Gaming Association. (2004). Industry Information: Does the Introduction of Legalized Gaming Increase the Level of Street Crime in a Community? March 25, 2004 from the World Wide Web: <http://www.americangaming.org/casino>.
- Cabot, A. N. (1996). *Casino gaming: Policy, economics and regulation*. Las Vegas, NV: International Gaming Institute, Trace Publications.
- Chang, S. (1996). Impact of casinos on crime: The case of Biloxi, Mississippi. *Journal of Criminal Justice*, 24, 431-436.
- Giacopassi, D., & Stitt, G. (1993). Assessing the impact of casino gambling on crime in Mississippi. *American Journal of Criminal Justice*, 18, 35-44.
- Chiricos, T. (1994). *Casino and crime: An assessment of the evidence*. Unpublished Manuscript.
- Coman, D., & Scarpitt, F. (1991). Crime in Atlantic City: Do casinos make a difference? *Deviant Behavior*, 431-439.
- Criminal Justice Information Center. Michigan State Police. (2004). Uniform Crime Reports. March 27, 2004 from the World Wide Web: <http://www.michigan.gov/documents/>.
- Criminal Justice Information Center, Michigan Sate Police. (2004). Uniform Crime Reports. March 27, 2004 from the World Wide Web: <http://www.state.mi.us/msp/cjic/ucrstats/CountyArrestsT.asp>.
- Detroit Convention and Visitors Bureau. (2004). Tourism Barometer. March 27, 2004 from the World Wide web: <http://www.visitdetroit.com/media/tourismbarometer>.
- Dombrink, J., & Thompson, W. (1990). *The last resort: Success and failure in campaign for casinos*. Reno: University of Nevada Press.
- Feldman, P. (1993). *The psychology of crime*. New York: Syndicate of the University of Cambridge.
- Friedman, J., Hakim, S., & Weinblatt, J. (1989). Casino gambling as a 'growth pole' strategy and its effect on crime. *Journal of Regional Science*, 29, 615-623.
- Garcia, R., & Nicholls, L. L. (1995). Crime in new tourism destinations: The Mall of America. *Visions in Leisure and Business*, 14, 28-51.
- Gartell, R. B. (1988). *Destinations marketing for conventions and visitors bureaus*. Dubuque, IA: Kendal-Hunt.
- Hakim, S., & Buck, A. J. (1989). Do casinos enhance crime? *Journal of Criminal Justice*, 17, 409-416.
- MacKenzie, D. L., Baunach, P. J., & Roberg, R. R. (1990). *Measuring crime: Large-scale, long-range efforts*. Albany, NY: State University of New York Press.
- Margolis, J. D. (1997) *Casinos and crime: An analysis of the evidence*. American Gaming Association.

- Moufakkir, O. (2002). *Changes in selected economic and social indicators associated with the establishment of casinos in the city of Detroit: A case study*. Dissertation for the degree of Ph.D. Michigan State University, East Lansing, Michigan.
- National Gambling Impact Study Commission. (1999) Research Reports. January 26, 2000 from the World Wide Web: <http://www.ngisc.gov/reports>.
- Pizam, A. (1999). A comprehensive approach to classifying acts of crime and violence at tourism destinations. *Journal of Travel Research*, 38, 5-13.
- Prideaux, B. (1996). The tourism crime cycle: A beach destination case study. In A. Pizam and Y. Mansfeld (Eds.), *Tourism, crime and international security issues*, (pp. 59-76). Chichester, England: John Wiley & Sons Ltd.
- Roncek, D. W., & Maier, A. (1991). Bars, blocks, and crime revisited: Linking the theory of routine activities to the empiricism of 'Hot Spots'. *Criminology*, 29, 725-753.
- Ryan, C., & Kinder, R. (1996). The deviant tourist and the crimogenic place: The case of the tourist and the New Zealand prostitute. In A. Pizam & Y. Mansfeld, (Eds.), *Tourism, crime and international security issues* (pp. 23-36). Chichester, England: John Wiley & Sons Ltd.
- Sherman, L. W., Gartin, P. R., & Buerger, M. E. (1989). Hot spots of predatory crime. *Criminology*, 27, 27-55.
- Schiebler, S., Crotts, J. C., & Hollinger, R. C. (1996). Florida tourists' vulnerability to crime. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 37-50). Chichester, England: John Wiley & Sons Ltd.
- Spring, J. W., & Block, C. R. (1988). *Finding crime hotspots: Experiments in the identification of high crime areas*. Paper Presented at the 1988 Annual Meeting of the Midwest Sociological Society, Minneapolis.
- Stokowski, P. (1996). Crime patterns and gaming development in rural Colorado. *Journal of Travel Research*, 3, 63-69.
- Tarlow, P., & Muehsam, M. (1996). Theoretical aspects of crime as they impact the tourism industry. In A. Pizam & Y. Mansfeld (Eds.), *Tourism, crime and international security issues* (pp. 11-22). Chichester: John Wiley & Sons Ltd.
- Thompson, W. N., Gazel, R., & Rickman, D. (1996). Casinos and crime in Wisconsin: What's the connection? Wisconsin Policy Research Institute Report, 9: 9 December 02, 2004 from the World Wide Web: <http://www.wpri.org/Reports/Volume9/Vol9no9.pdf>.
- U.S. Department of Justice. Office of Justice Programs. Bureau of Justice Statistics. 2004 Crime Trends. April 02, 2004 from the World Wide Web: <http://bjsdata.ojp.usdoj.gov/dataonline/Search/Crime/State/>.

Article submitted: 6/18/04

Sent to peer review: 6/28/04

Reviewers' comments sent to authors: 9/08/04

Authors' revised version received: 12/03/04

Article accepted for publication: 1/24/05