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Predicting the Impact of Casino Gambling on Crime and Law Enforcement in Windsor, Ontario

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This study assesses the predicted impact of casino gambling in Windsor, Ontario on street crimes and the demand for police resources there. Following a review of studies in other jurisdictions that have instituted, or are planning casino gambling, a prediction model is presented. This model offers a projection of the impact of casino gambling on crime and law enforcement in Windsor that avoids the errors of past studies and projections, and that accounts for factors unique to Windsor.

An assessment of prior casino-crime studies is presented, and their utility for understanding the Windsor experience is examined. Their methods are found to be more important than their results, but they do provide clues as to the possible location of casino-related crime. They also address problems of simple pre- and post-casino comparisons that do not account for changes in the average daily population, as well as the ratio of police strength to calls for police service and traffic enforcement activities.

The prediction model incorporates expected changes in the city's population, visitor estimates, calls for police service, traffic enforcement, and crime rates to estimate requirements for added police strength. The model is presented in the form of a table for purposes of clarity (see Table 4).

The prediction model is dynamic, based on police workload levels, rather than static, based solely on police strength per capita. The model predicts the need for twelve additional police officers in Windsor. This increase would maintain the same level of officers per call for service and traffic enforcement in 1994 with casino gambling, as they would be projected to be without casino gambling. Recommendations are made for deployment of these officers, crime location recording procedures, and a visible

police presence, that can mitigate and assess the potential impact of crime on the success of casino gambling in Windsor.

THREE TYPES OF CRIME-RELATED CONCERNS

The advent of casino gambling raises three types of crime-related concerns. These include:

1. The integrity of the games themselves,
2. Organized crime infiltration of the casinos and vendors, and
3. The impact on street crime in and around the casinos (ambient crime). This study assesses primarily ambient crime.

A. Integrity of the Games

The integrity of the games themselves will be the responsibility of the provincial Gaming Control Commission. Therefore, enforcement of game-related offenses will not be a duty of the Windsor Police. Instead, the enforcement of game-related offenses will be undertaken by the investigation unit of the Gaming Control Commission, which is to be staffed by officers of the Ontario Provincial Police.

B. Organized Crime Infiltration

The threat of organized crime infiltration of the casino, its games, or those servicing the casinos, are issues that are addressed primarily at the licensing and casino-monitoring levels. The issue of organized crime too often has been discussed on the basis of vague references and innuendo.¹ Although the threat of organized crime infiltration of legitimate business is a valid concern, studies of its occurrence in the past have offered clear methods for its prediction and prevention in the future.² In one of the only objective studies of the problem (a ten year analysis of casino vendors and ancillaries in Atlantic City), it was found that contracts with vendors, rather than with ancillaries or the casinos themselves (which must be licensed under New Jersey's Casino Control Act) were most vulnerable for organized crime infiltration. Recommendations for appropriate registration and background checks of vendors have been made based on this study.³ The Province of Ontario is now preparing regulations and licensing procedures to assess the backgrounds of casino applicants, as well as those businesses wishing to carry out ancillary functions (such as linens and garbage collection). Likewise, the casinos themselves, together with the Ontario Provincial Police, have been given responsibility of oversight of operations within the casinos to insure honesty in the games and to monitor the possibility of organized crime infiltration of the casinos, their employees, and associated vendors. The dominance of large, publicly held corporations in the casino industry in recent years has removed much of the threat of organized crime involvement in the casino itself. The extensive monitoring and accounting

requirements of the Securities and Exchange Commission and taxing agencies, exacting rules for corporate reporting, and the need to avoid negative publicity to avert falling stock prices, are among the reasons why organized crime does not dominate casino gambling today.⁴ Instead, the threat of organized crime lies primarily in infiltration of those businesses that service the casinos, as noted above, that will be regulated and licenced by the Gaming Control Commission in Ontario.

C. Ambient Crime

Ambient crime is a significant concern. The safety of casino patrons and the citizens of Windsor from street-level crimes, such as robbery, assault, larceny, and burglary is a fundamental factor in the decision to visit any attraction. Even the perception of unsafe conditions for casino visitors, their guests, or in the surrounding neighborhood can do much to undermine the success of casino gambling.

This study will make projections of expected increases in salient forms of street crime that draw the most concern among the public. These projections will provide a basis by which to assess the need for additional crime prevention measures in Windsor to insure a safe environment in and around the casinos.

LAW ENFORCEMENT-RELATED CONCERNS

There are two distinct ways that casino gambling in Windsor will affect the need for law enforcement services:

1. Increased numbers of visitors will increase calls for police service and traffic enforcement, and
2. Increased levels of crime will place demands on police investigative resources.

It is estimated that the permanent casino proposed for Windsor will attract 12,000 visitors per day. Although only 20 to 30 percent of these visitors are projected to stay overnight, and the average time spent in the casino is expected to be between three and five hours, there undoubtedly will be an increase in calls for police service. These calls will range from visitors separated from one another to lost or stolen property, as well as some robberies, burglaries, and assaults. Fortunately, the opportunities for street-level muggings, purse snatchings, and the like may be lessened to some degree, due to the casino's location and the projected age of casino patrons. The typical patron is expected to be in his or her late forties, reducing the likelihood that large numbers of patrons will be roaming the streets late at night, as might be the case with a younger clientele. Also, the casino will be located in very close proximity to the tunnel joining Detroit and Windsor. This will reduce exposure to criminal victimization risk. This reduction in risk may be offset to some

degree, however, as many casino patrons will be transient visitors carrying cash. A credit voucher system within the casinos should reduce the amount of cash carried at least inside the gaming area.

It is estimated that 80 percent of the 12,000 daily visitors to the casino will come from Detroit. This means, of course, there will be traffic to contend with, although this concern is mitigated somewhat by the extremely close proximity between the casino and the tunnel to Detroit, and the fact that one-third of all visitors are projected to travel to Windsor by bus. Nevertheless, calls to police regarding traffic accidents, directions, and parking problems can be expected to increase to some extent.

A summary of these ambient crime risk factors associated with casino gambling is provided in Table 1. It can be seen that the factors which might add to Windsor's crime problem are counterbalanced by a number of factors that serve to mitigate this impact. This study will estimate the extent to which calls for police service will increase, based on past trends in calls for service. Projections also will be made for the proportion of these calls that are actual offences. It will account for the increase in visitors due to casino gambling and traffic enforcement workload.

TABLE 1

Summary of Ambient Crime Risk Factors in Windsor
<i>Factors that Increase Risk of Crime Victimization</i>
Many patrons will be transient visitors unfamiliar with downtown Windsor.
Most patrons will be carrying some amount of cash (although credit vouchers will be used inside the casino).
Increased traffic will add to traffic enforcement problems.
<i>Factors that Lower Risk of Crime Victimization</i>
Close proximity of casino to tunnel.
Typical casino patron age will be in the late forties, reducing late night street presence.
Attached parking ramp with surveillance and bus loading at the casino door.
New jobs created by the casino will have some impact on crime rate in Windsor resulting from under-employment.
The casino will likely reduce current illegal gambling in Windsor to some extent.
Use of credit vouchers within the casino will reduce the number of patrons carrying large sums of cash.

EXPERIENCES AND PROJECTED IMPACTS IN OTHER JURISDICTIONS

Five major studies of the impact of casino gambling on crime are examined here to assess any relevance they may have to the Windsor casino experience. These five studies are distinguished by their reliance upon objective statistical analysis of population figures, crime rates, and other relevant data in evaluating trends in crime and police services.⁵ Three of these studies examined crime and police in Atlantic City, and two additional studies projected increases in crime and police resources for the cities of Chicago and New Orleans (two jurisdictions that have seriously considered casino gambling). Each of these five studies focused on street crime, because these crimes are of the most concern to the public and to policy-makers. Street crimes include criminal homicide, sexual assault, robbery, aggravated assault, burglary and larceny. In several studies, arson was also included in the analysis.

The first study was conducted by Albanese, who investigated the link between casino gambling and street crime in Atlantic City. Controlling for the impact of the average daily population of the city (using partial correlation analysis), he found that "growth in the number of visitors to Atlantic City has surpassed increases in crime to the point that the personal risk of victimization is declining to some extent".⁶ He found that increases in police personnel and statewide crime trends (outside Atlantic City) had very little effect on the casino/crime relationship. In a separate analysis of risk for the crime of burglary (because only homes, apartments, hotel rooms, and businesses are candidates for burglary victimization, rather than people), Albanese found a "a sharp decline in the individual risk" of burglary in Atlantic City since the advent of casinos there. This is because the number of burglaries rose much more slowly than did the number of establishments (especially hotel rooms) able to be burglarized. Albanese concluded that "the average visitor to Atlantic City in 1982 was less likely to be the victim of a serious violent or property crime than he or she was before casinos were introduced there [in 1978]."⁷ Although this study is useful in pointing to the need for accurate measures of crime risk, it does not address how the demand for police resources should be assessed in light of the additional crimes that do occur, resulting from the increased population drawn by casino gambling.

A second study of the impact of casinos on crime in the Atlantic City area was conducted by Hakim and Buck.⁸ Like Albanese, this study focused on street crimes, but examined them before and after the advent of casinos (1972-1984). Albanese examined crimes only after the advent of casinos. Hakim and Buck gathered information on sixty-four communities in three counties surrounding Atlantic City, whereas Albanese focused on Atlantic City itself. Using multiple regression analysis,

Hakim and Buck found "there was less crime before the introduction of casinos," even when controlling for effects of increased community wealth, police, unemployment rates, travel time from Atlantic City, and population. The authors conclude that "the increase in crime of accessible communities (to Atlantic City) was higher than any increase that could be attributed to growth."⁹ Interestingly, this study by Hakim and Buck found the number of police in each of the sixty-four surrounding communities to be generally unrelated or inversely related to the levels of crime there. This study is limited by its focus on the impact of crime in surrounding communities, rather than in the casino area. In a similar study using the same data, Friedman, Hakim, and Weinblatt concluded what many other studies have found "namely, crime is positively associated with population size, density, and the rate of unemployment."¹⁰

A third statistical study of the impact of casino gambling was conducted by Ryan, Connor, and Speyrer, examining the projected impact of casino gambling in New Orleans. They noted that it is often "difficult to separate the effects of increased visitors from the effects of gambling."¹¹ They combined data for eighty cities with the highest resident populations with data for cities with large visitor populations (but smaller resident populations, such as Orlando, Reno, and Atlantic City). Controlling for the possible influence of visitor spending, income levels, racial composition, poverty levels, unemployment rates, population density, and local criminal justice expenditures, the authors concluded that casino gambling leads to an increase of 133 crimes per 1,000 residents (comparing Las Vegas, Reno, and Atlantic City to the other cities in their analysis). This study employed multiple regression analysis and examined the same crimes as did Albanese, and Hakim and Buck. The authors also concluded that each million dollars of increased visitor spending results in .005805 total crimes per 1,000 residents, although police and corrections spending did not significantly affect crime rates. Interestingly, the authors suggest that estimates of the impact of casinos should be indexed to account for the scale of casino operations (they used square footage of casino floor), compared to Reno, Las Vegas, and Atlantic City. They accounted for this factor in their projection of 133 additional crimes per 1,000 residents.

Unfortunately, the study has several serious limitations. First, most comparison cities used in the study are not identified, and it is doubtful that many are truly comparable. It is likely, for instance, that visitors to Orlando have many significant differences from those to Reno, Las Vegas, or Atlantic City that are not accounted for by their seven control variables. Second, the nature of the statistical analysis is suspect. It is very likely they "over-fitted" their prediction model to the cities they chose to include, due to a failure to validate the model on a different sample of cities. It is highly probable that, when applied to a different

group of cities, the number of projected additional crimes would drop markedly from the number predicted by the authors. The very small number of dissimilar cities with a history of casino gambling makes their statistical comparisons questionable, a problem compounded by the lack of a validation sample of cities.¹² Third, and most devastating, is the fact that only hotel/motel receipts were used to estimate the number of visitors in a city. This *undercounts* the total number of visitors to most cities by a wide margin, especially those like Atlantic City and Windsor, which are short commuting distance for millions of visitors.

A fourth study of casino gambling and crime was conducted by Curran and Scarpitti in Atlantic City.¹³ They collected street crime data for the period 1968 to 1989 to examine pre- and post-casino crime rates (casinos first opened in Atlantic City in 1978). Using multiple regression analysis, Curran and Scarpitti separated crimes committed in the community from those committed within the casinos (on the casino floor or in the casino-hotels). Controlling for total daily population of the city, casino visitors, crimes inside casinos, and crimes elsewhere in the city, the authors concluded that "it is inaccurate to argue that crime in the community has risen significantly since the legalization of gambling." In fact, Atlantic City crime rates "are not very different from those of comparable cities."¹⁴ Instead, casino gambling in Atlantic City "has brought with it more crime, but it is 'in-house crime' in the sense that it occurs on casino premises, and casino patrons are its victims." This, of course, does not make the crimes any less serious, but it does put such crime "in a somewhat different light in terms of risk assessment and social control strategies."¹⁵ Such a finding suggests the need for effective internal security within the casinos and a good relationship with external police agencies for arrest processing and prosecution purposes.

The fifth study of casino gambling and crime was conducted by the Illinois Criminal Justice Information Authority.¹⁶ This study assesses a proposal for casino gambling in Chicago. Noting the differences between Chicago and other gambling sites, the authors concluded that simple city-to-city comparisons are not necessarily valid. For example, the long gambling histories, economies, and locations of Reno and Las Vegas make them unique, as does the bifurcated nature of Atlantic City where the casinos are separated from the rest of the city. Nevertheless, the authors posited five different scenarios looking at different visitor estimates, and their impact on street crimes in Cook County (that surrounds Chicago). Of their five scenarios, the report concluded that two of them were most likely. Both these scenarios are based on the formula developed by Ryan, Connor, and Speyrer in New Orleans. This formula is the one that predicts an increase of 133 additional street crimes per 1,000 residents. Use of this arbitrary number, when its origin is dubious (as

noted earlier), and its applicability to the city of Chicago even less plausible, makes this study's conclusions suspect.

For purposes of clarity, Table 2 below summarizes the major features of each of the five statistical studies reviewed here.

TABLE 2

Summary of Past Casino-Crime Impact Studies			
Author/Year	Focus of Study	Major Findings	Limitations
Albanese (1985)	Risk of crime victimization in Atlantic City since casinos started.	Risk of victimization has decreased, as population has increased faster than crime.	No recommendations for police strength, other than increase in Atlantic City Police has had no effect on crime.
Hakim and Buck (1989)	Crime in sixty-four communities surrounding Atlantic City.	Crime increased in surrounding communities more than could be attributed to growth alone.	No direct impact on Atlantic City assessed, although police strength in surrounding towns was unrelated to levels of crime.
Ryan, Connor, and Speyrer (1990)	Projected impact of casino gambling on crime and police in New Orleans.	Compared gambling cities with non-gambling cities and found an increase of 133 crimes per 1,000 residents in gambling cities.	Questionable comparisons of dissimilar cities, statistical problems in arriving at "133" figure, counted only hotel receipts estimating visitors.
Curran and Scarpitti (1991)	Risk of victimization in Atlantic City before and after casinos.	Crimes on Atlantic City streets have not risen significantly; instead crimes on casino premises have caused most of the increase in crime there.	No direct assessment of police needs, other than the obvious need for competent casino security who have good relations with outside police.
Illinois Criminal Justice Authority (1992)	Projected impact of casino gambling on crime and police in Chicago.	Same as New Orleans study.	Same as New Orleans study.

their calls for police service, geographical location, casino location, proximity to population centers, and other important factors are crucial in assessing the impact of casino gambling on crime and law enforcement. These factors are unique to each city and make the utility of studies conducted in other jurisdictions valuable primarily for examining their method, rather than for their findings.

It is interesting to note, for example, that increased crime in Atlantic City has been largely due to crimes within casinos, rather than elsewhere in the city. This is information that should be monitored, once the Windsor experience commences.

Likewise, it is noteworthy that no study has found a relationship between increased police force strength and reduced crime rates. This finding holds true in both casino and non-casino cities. In American cities with populations of 250,000 or more, police departments vary in size from 1.7 to 7.0 officers per 1,000 citizens. There is no evidence from these cities that larger numbers of police have any effect whatsoever on the crime rate. Between 1957 and 1982 the number of police officers per 1,000 residents of the United States rose from an average of 1.6 to 2.6 nationwide. During the same period, crimes reported to police increased more than 400 percent.¹⁷ Simply stated, police have little to do with crime rates. This is due to their largely reactive role. Because nearly all crimes are committed out of view of the police, law enforcement depends primarily on reports by citizens of criminal incidents that have already occurred. This puts police in a difficult position if they are expected to prevent crime. A study of police response time in Kansas City found only about six percent of callers reported crimes in progress.¹⁸ In addition, it has been found that only about one-third of all serious crimes are reported to police in the first place.¹⁹

As a result, crime prevention is best achieved through measures other than changes in police per capita. Nevertheless, police perform an important function in maintaining a visible presence to enhance public perceptions of safety, responding appropriately to calls for service, and enforcing traffic laws.

THE WINDSOR POLICE REPORT

Given this background, the Windsor Police Department issued a report in January, 1993 titled *The Impact of Casino Gambling on the Windsor Police Service* (hereinafter cited as *Windsor Police Report*).²⁰ Relying on statements of police officials in other gambling jurisdictions, the report concluded that "a significant impact is felt with respect to policing requirements" in those jurisdictions. The report also compared the number of police officers per 1,000 population in Windsor to the proportions in other gambling jurisdictions. Finally, the report projects requirements

PROJECTING THE IMPACT OF CASINO GAMBLING ON CRIME AND POLICE

It is clear that the findings of gambling studies from one city to another are not *generalizable*. Differences in historical crime rates among cities,

for new police officers, based on the number of casino patrons who will visit Windsor each day.

The *Windsor Police Report* fails to fulfill its objectives in five important ways. First, it relies on the subjective impressions of others without adequate or accurate supporting data. Only anecdotal evidence is provided regarding policing issues in other cities. Further, it is not clear that these other jurisdictions hold enough similarity to Windsor to make the comparisons meaningful.

Second, the *Windsor Police Report* bases its comparisons of police officers per 1,000 population on residents, rather than on average daily population. For example, the report claims that Reno, Nevada has a police strength of 2.1 officers per 1,000, based on Reno's resident population of 150,000. This level of police strength is slightly higher than the 1.99 officers per 1,000 in Windsor. Unfortunately, this ratio omits the fact that Reno has five million visitors every year, raising its average daily population to 164,000. Using this corrected figure, Reno has 1.92 officers per 1,000 population, a level slightly lower than the current level of police staffing in Windsor. This is especially interesting when one considers that Reno's level of police strength per capita exists in a city with a large number of casinos, whereas Windsor will have only one casino.

Third, the *Windsor Police Report* makes its projections based on visitors per day, overlooking the fact that the average stay of each visitor is projected to be between three to five hours. Therefore, the 12,000 projected daily visitors will not be in the City of Windsor all at once. Instead, there will be approximately 5,280 visitors in the city on average.²¹ While the interim casino is in operation, these visitor projections can be expected to be lower than 5,280 per day, but this report focuses on expected visitors to the permanent casino.

Fourth, the *Windsor Police Report* also uses its 1.99 per 1,000 officer ratio as the standard for its request for more officers, when it implicitly criticizes this level of staffing in its earlier comparisons of police strength to other cities with casino gambling.

Fifth, the *Windsor Police Report* violates its own formula for justifying new police positions. If one accepts the report's erroneous and speculative assumptions regarding casino visitors and ideal police strength, 5,000 casino patrons per day (the report's "Scenario #1") would result in ten new police officers. By the end of the analysis, however, this number is increased to eighteen officers plus four civilian staff. This doubling of the report's own calculation is not explained, except by statements such as "the supervisory staff should be in addition to the total," and "the nature of casino gambling will also require one additional detective." In

fact, there is no valid justification for these additions. The nature of the tasks performed by the officers hired is clearly a police prerogative, but it is also clear that additional positions cannot be invented once the department's own formula arrives at a different, but lower, recommendation.

A summary of the errors in the *Windsor Police Report* are presented in Table 3. In the second column is a list of how these flaws can be corrected. The third column shows the factors to be considered in a new formula, based on corrections to the *Windsor Police Report*.

TABLE 3

Summary of Errors and Corrections to the Windsor Police Report			
No.	Errors in Windsor Police Report	Corrections	Revised Formula Ingredients
1	Relies on anecdotal evidence from other cities.	Evidence suggests these other cities are not comparable to Windsor.	Remove subjective impressions from any formula for police strength.
2	Police strength in Windsor is compared to other cities against their resident populations.	Average daily population must be used to make meaningful assessments of police per capita.	Accepted estimates of daily visitors must be added to resident population counts.
3	Visitor estimates are based on assumption that all visitors stay for twenty-four hours.	Visitor estimates must be based on accepted projections of average length of stay.	Revised formula must account for average visitor stay, plus any overnight stays.
4	Projections of needed police strength are based on existing proportions (i.e., 1.99 per 1,000 population).	This is an unwarranted assumption regarding optimum police strength. The report suggests earlier that 1.99 is not optimum.	Projections of police strength must rely on workload (i.e., calls for service and crimes), rather than on static ratios.
5	The report violates its own officer projections by recommending twenty-two new positions (scenario #1) when its formula recommends ten.	The ultimate formula for projecting police needs must incorporate all relevant factors. Arbitrary additions of new positions abuse the purpose of the study.	Past calls for service and traffic enforcement must form the basis for projections, adding contingencies such as visitor levels and increased city traffic.

POLICE NEEDS IN WINDSOR FOR 1994 AND THE IMPACT OF CASINO GAMBLING

Given the inaccuracies of the *Windsor Police Report*, and the corrections and revisions offered in Table 3, it is possible to construct a more valid projection for changes in calls for police service, crime rate, and police strength. In fact, six factors are most predictive in assessing the impact of casino gambling on crime and police in Windsor.

The six factors on which a prediction of police needs should be based are average daily population, calls for service, crime rate, traffic enforcement, and past levels of police strength. The sixth factor is the rate at which the population calls the police and the number of officers per calls for service (including traffic enforcement). It is the relationship among these variables that makes an objective prediction reliable. Table 4 summarizes the prediction model. It provides a history of the six factors for the years 1987-1991, and it offers a prediction based on anticipated changes caused by historical trends in population growth, calls for service, crime rate, traffic enforcement, police staffing, and casino gambling.

Table 4 indicates that by 1994 the population of Windsor can be expected to reach 199,048 (see column "1994 Projected"), based on the growth trends in the city since 1987. Similarly, calls for police service can be expected to reach 96,110 based on yearly averages since 1987. This calculates to an increase to 483 per 1,000 calls per population, meaning that on average more than 48 percent of the population can be expected to call the police in Windsor during 1994 (an increase from less than 43 percent in 1987).

Approximately 32 percent of calls for police service will be actual criminal offences, using the average from prior years, resulting in a crime rate of 155 per 1,000 in 1994. Total traffic enforcement will result in 2,101 traffic arrests and citations based on trends from prior years, and police strength should reach 408 officers, if trends since 1987 are continued. This will result in 4.15 officers per 1,000 calls for service and traffic enforcement actions for 1994.

The last column of Table 4 ("1994 with casino") displays how the opening of a casino can be expected to impact the 1994 projections. Population should reach 204,328, adding projected casino visitors, resulting in a proportionate increase in calls for police service to 98,705 in 1994. Traffic citations are predicted to increase 20 percent (to 2,521), due to a corresponding 20 percent increase in traffic through Windsor that is expected. In order to keep the police workload at the same level as it is projected to be without casinos in 1994, it will be necessary to increase police strength to 420, in order to maintain the same ratio of 4.15 police officers per 1,000 calls for service and traffic enforcement. Therefore, it

TABLE 4

Projections for Calls for Service, Crime Rates, Traffic Enforcement and Police Strength for the City of Windsor						
Row	Predictor Variables	1987	1989	1991	1994* Projected	1994** (w/casino)
A	Windsor Population	193,100	193,200	196,106	199,048	204,328
B	Calls for Police	84,897	82,891	91,056	96,110	98,705
C	Calls per 1,000 pop.	426	9	464	483	483
D	Calls that are Actual Offences	35%	3%	27%	32% '87-'91 av	32%
E	Crime Rate per 1,000	147	142	125	155	155
F	Total Traffic Enforcement	2,393	2,017	2,207	2,101	2,521
G	Police per 1,000 calls plus traffic	4.13	4.18	4.10	4.15	4.15
H	Police Strength	350	355	382	408	420

Sources (for 1987-1991 data): Canadian Centre Justice Statistics (city population, calls that are actual offences, and traffic enforcement) and Windsor Police Department (calls for police service and police strength).

* 1994 projections are based on expected "natural" changes extrapolating from trends established in prior years (1987-1991).

** 1994 Casino Projections add the following to the 1994 "natural" projections:

- Row A:** Adding 12,000 estimated visitors per day x 30 percent staying overnight = +3,600 visitors per day. Adding remaining 8,400 visitors / (average 20-hour casino day / average 4-hour stay) = +1,680 visitors per day. Total = 5,280 visitors/day.
- Row B:** Adding 2.7% increase in calls, corresponding to 5,280 visitors per day.
- Row C:** Calls per population = Row B/Row A.
- Row D:** Five year average (since 1987) is used.
- Row E:** Crime rate = (Row B x Row D)/Row A
- Row F:** Traffic enforcement figure based on expected 20 percent traffic increase.
- Row G:** Police per calls and traffic = Row H/(Row B + Row F).
- Row H:** 420 officers needed to keep 4.15 police/workload ratio with casino.

will be necessary to hire twelve additional police officers (the difference between 408 and 420) to handle the anticipated increase in calls for service and traffic enforcement brought about by the increased average daily population in Windsor. This increase of twelve police officers will enable the Windsor Police Department to maintain the same level of service it would have in 1994 without casinos (i.e., 4.15 officers per 1,000 calls and traffic enforcement).

CONCLUSIONS

This study has projected the impact of casino gambling on crime and law enforcement in Windsor, Ontario. Based on a review of previous studies, and an assessment of Windsor's experience with population growth, calls for police service, crime rate, traffic enforcement, and police strength since 1987, it was found that twelve additional police officers will be necessary to handle the additional workload produced by the increase in visitors and traffic matters produced by the introduction of casino gambling (see detail in Table 3). This number will permit the Windsor Police Department to maintain the same ratio of officers per calls for service and traffic enforcement activity as would be needed in 1994 without casino gambling. In fact, this ratio (4.15 officers per 1,000 service calls plus traffic enforcement) is comparable to the level maintained by the Department since 1987.

RECOMMENDATIONS

Three important recommendations flow from the data and projections considered in this study. These involve:

1. Examination of the locations of crime,
2. Police deployment options, and
3. Public perceptions.

As Curran and Scarpitti (1991) found in their study of crime in Atlantic City, the advent of casinos may change the location of criminal events. They discovered that most of the increase in crime there resulted from crime occurring inside the casinos, rather than from street crimes. Windsor Police should consider keeping close scrutiny over the location (and time of day) of calls for service and crimes once the casino opens. This is crucial in several ways: 1) it may affect police deployment decisions; 2) there may be need for agreements between Windsor Police and security officials within the casino regarding responsibility for arrest reports and other case processing concerns, and 3) the sources of calls and crimes may lead to innovative ideas for new crime prevention strategies in and around the casino site.

Second, it is important for the Windsor Police Department to establish a visible police presence at or near the casino site. Given the findings in

Atlantic City regarding the location of crimes there, and the calls for service likely to emanate from the casino, the Windsor Police may wish to establish a substation, or other presence, on the casino site, across the street, or in some other easily accessible and highly visible location. The Windsor Police Report also recommended such a substation or similar special deployment of officers to handle casino-related calls. This may be an appropriate assignment for the twelve additional police officers recommended in this study.

Third, public perception regarding safety is crucial for the success of casino gambling in Windsor. This is especially true when one considers that most casino patrons are expected to come from the Detroit area, where many residents fear downtown Detroit and have little experience in downtown Windsor. The fact is that many American visitors are likely to anticipate the city of Windsor to be unsafe, given their experience with comparable US cities. Therefore, Windsor faces a significant burden in assuring visitors (especially US visitors) that it is a safe place to travel, park, walk, and gamble. A visible police presence is one way to assure visitors that public safety is not being taken lightly, and that Windsor is serious about the safety of its casino patrons and visitors. Similarly, the design of the casino itself should be highlighted in promotions. These should demonstrate how the construction of the casino, its proximity to the tunnel, protected parking, use of credit vouchers, and similar measures will make casino gambling in Windsor an enjoyable recreational experience. Once visitors to the casino come away with a feeling of safety and enjoyment, the word will quickly spread, overnight stays will increase, and the city in general will benefit.

¹ Peter Edwards, "Mob's Casino Interests Run Deep; Is the Mob Poised to Move In?" *Toronto Star*, July 6, 1993.

² Jay Albanese, *Organized Crime in America*, Cincinnati: Anderson Publishing, 1989, pp. 169-176.

³ Craig A. Zendzian, "The Vulnerability of Casino Ancillary Services and Vendors to Racketeering: Atlantic City, New Jersey." *Law Enforcement Intelligence Analysis Digest*, vol. 6 (Summer, 1991), pp. 13-31.

⁴ Jerome H. Skolnick, *House of Cards: Legalization and Control of Casino Gambling*, Boston: Little, Brown, 1978 and Lionel Sawyer and Collins, *Nevada Gaming Law*, Las Vegas: Lionel Sawyer and Collins, Attorneys at Law, 1991.

⁵ There have been other studies which assess the impact of casino gambling on crime and law enforcement that are impressionistic, subjective, and unreliable. An example of such a study is the *Final Report* of the Detroit Casino Gaming Study Commission (1988). This report makes crime and law enforcement projections without relying on objective information sources regarding visitor

estimates, past trends in calls for police service in Detroit, levels of crime, or other relevant factors.

- ⁶ Jay S. Albanese, "The Effect of Casino Gambling on Crime," *Federal Probation Quarterly*, vol. 59 (June, 1985), pp. 39-44.
- ⁷ Albanese, p. 44.
- ⁸ Simon Hakim and Andrew J. Buck, "Do Casinos Enhance Crime?" *Journal of Criminal Justice*, vol. 17 (1989), pp. 409-416.
- ⁹ Hakim and Buck, p. 414.
- ¹⁰ Joseph Friedman, Simon Hakim, and J. Weinblatt, "Casino Gambling as a 'Growth Pole' Strategy and Its Effect on Crime." *Journal of Regional Science*, vol. 29 (1989), pp. 615-623.
- ¹¹ Timothy P. Ryan, Patricia J. Connor, and Janet F. Speyrer, *The Impact of Casino Gambling in New Orleans*. New Orleans: University of New Orleans Division of Business and Economic Research, 1990.
- ¹² For a review of the statistical and methodological issues raised here, see Jay S. Albanese, Bernadette A. Fiore, Jerie H. Powell, and Janet R. Storti, *Is probation working?: A guide for managers and methodologists*. Lanham, MD: University Press of America, 1981, pp. 135-178.
- ¹³ Daniel Curran and Frank Scarpitti, "Crime in Atlantic City: Do Casinos Make a Difference?" *Deviant Behavior*, vol. 12 (1991), pp. 431-449.
- ¹⁴ Curran and Scarpitti, p. 448.
- ¹⁵ Ibid.
- ¹⁶ Illinois Criminal Justice Information Authority, *Casino Gambling and Crime in Chicago*. Chicago: Criminal Justice Information Authority, 1992.
- ¹⁷ Jay S. Albanese, *Myths and Realities of Crime and Justice*, Second Edition, New York: Apocalypse Publishing, 1990, pp. 123-4.
- ¹⁸ Marianne W. Zawitz, ed., *Report to the Nation on Crime and Justice*, Second Edition, Washington, DC: Bureau of Justice Statistics, 1988 and Samuel Walker, *The Police in America*, Second Edition, New York: McGraw-Hill, 1992, pp. 62-3.
- ¹⁹ Lisa D. Bastian, Marshall M. DeBerry, and Tina Dorsey, *Criminal Victimization 1991*. Washington, DC: US Bureau of Justice Statistics, 1991.
- ²⁰ Barry Horrobin, *The Impact of Casino Gambling on the Windsor Police Service*. Windsor, Ontario, January, 1993.
- ²¹ The number of 5,280 visitors is calculated given 140 hours of casino operation per week (average twenty hours per day) and a four hour average patron's stay (totaling 1,680 visitors at any one time). Added to this number is the assumption that approximately 30 percent of the visitors stay overnight (totaling 3,600). Together, these day visitors and overnight visitors total 5,280. See Table 4 for detail.