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BROKEN BOTTLES

*Liquor, Disorder, and
Crime in Wisconsin*

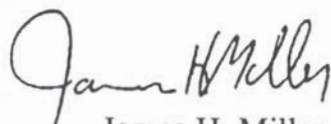
REPORT FROM THE PRESIDENT:

John J. DiIulio has become one of the most important public-policy researchers in the United States. A professor at Princeton University and the director of the Center for Public Management at The Brookings Institution in Washington, D.C., DiIulio's research on crime has been widely distributed throughout the country.

In this study, he examines the relationship between alcohol use and rising crime rates. While it cannot be totally proved statistically, there is enough empirical data that alcohol use is at least as much a cause as drug abuse in escalating crime rates, especially violent crime rates, throughout Wisconsin.

Years ago, Professor James Q. Wilson published a study called "Broken Windows," which focused on the role of public disorder in crime-ridden neighborhoods. DiIulio's research explores the role of alcohol consumption on crime and disorder in urban neighborhoods.

With some startling graphs and maps, he demonstrates the overabundance of liquor outlets in Milwaukee's crime-ridden, inner-city neighborhoods and makes a strong case for additional controls on alcohol consumption as a way of cutting crime. While no one is talking about prohibition of alcohol, the issue of its impact on crime rates in Wisconsin has not been fully discussed. We clearly need more data, but this issue may be potentially the most cost-effective way of lowering crime rates. Considering the enormous cost of additional police and prison space, this issue should be fully debated as a cost-savings alternative in protecting the citizens from rising crime and disorder.


James H. Miller

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BROKEN BOTTLES

Liquor, Disorder, and Crime in Wisconsin

JOHN J. DI IULIO, JR., PH.D.

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EXECUTIVE SUMMARY

There is a significant body of scientific evidence that links alcohol availability and consumption to community disorder, violent crime, and other major social problems. This report examines the liquor-disorder-crime nexus in Wisconsin. Part One of the report summarizes the scientific evidence on the relationship between alcohol and crime. Part Two of the report discusses alcohol-control laws in Wisconsin and documents the spatial concentration of liquor outlets in Milwaukee's poor, minority, high-crime neighborhoods. Part Three offers a set of ideas and proposals for restricting the availability and consumption of alcohol in Milwaukee.

This report finds that Wisconsin has a loose alcohol-control regime that permits liquor outlets to be concentrated in Milwaukee's inner-city neighborhoods. The concentration of liquor outlets in these places is almost certainly a major factor in their social demise and high rates of criminal victimization. In 1982, two prominent criminologists proposed the "broken-windows" thesis: when a broken window in a building goes unfixed, soon all of its windows are broken. The broken window is an invitation to incivility, unruly behavior, community apathy, public disorder, and crime. This report extends this famous and by now well-documented thesis. "Broken bottles" — concentrations of liquor outlets in distressed urban neighborhoods — fuel community breakdown and increase predatory street crime. Poor, minority neighborhoods where alcohol is readily available and liquor outlets are everywhere one turns seem to have more severe disorder and crime problems than otherwise-comparable neighborhoods where alcohol consumption and availability are average or below average.

This report concludes with five recommendations:

1. Conduct systematic empirical research into the relationship between alcohol-outlet densities and crime;
2. Impose stricter zoning ordinances for liquor stores throughout Milwaukee;
3. Limit alcohol-beverage advertising in Milwaukee;
4. Launch a multi-year, neighborhood-level demonstration research project in Milwaukee to test the effects of policies that restrict alcohol availability against the effects of policies that prohibit all alcohol sales; and,
5. Do not lower the legal drinking age in Wisconsin or enact other measures that would only serve to strengthen the links between alcohol, disorder, crime, and other major social problems in the state, especially in Milwaukee.

INTRODUCTION

The Los Angeles riots of 1992 were precipitated by public announcement of the not-guilty verdicts in the Rodney King case. Most of the murder, mayhem, arson, and looting occurred in the predominantly poor, black, and Latino neighborhoods of South Central Los Angeles. In mid-1993, *U.S. News & World Report* ran a story on the L.A. riots entitled "A Potent Brew: Booze and Crime."¹ As the story noted, when the riots erupted, South Central had a staggering 728 licensed liquor outlets — 13 per square mile. About half of the stores sold beer and wine; the rest sold hard liquor as well. South Central alone had more stores selling hard liquor than 13 states combined. There was a liquor outlet at almost every major intersection. Two-thirds of the rioters/looters reported regular alcohol or drug use. Some local police viewed alcohol as South Central's biggest problem: "At night, Los Angeles Police Department (LAPD) officers say they sometimes feel as if they are on booze patrols." Capt. Garrett Zimmon, commanding officer of the LAPD's southwest area, estimated that "at least 50 to 60 percent of our dispute-type calls are alcohol related."²

The relationship between alcohol availability, consumption, and abuse on the one side and inner-city social disorder and crime on the other has generally received scant attention. Over the last quarter-century, Americans have spent billions of dollars to wage a "war on drugs" as part of a broader "war on crime." Yet, by many measures, the role played by alcohol in community breakdown and violent crime is at least as great as the role played by drugs.

The tendency to leave liquor out of the nation's crime equation is understandable. After all, adult liquor sales are legal, most Americans drink in moderation, and — whatever the social costs of alcohol abuse (community breakdown, violent crime, cirrhosis mortality, traffic fatalities) — no one who wishes to be taken seriously is about to call for a return to prohibition.

From a public-policy perspective, however, to ignore the connections between liquor, disorder, and crime is short-sighted and dangerous. Although the relationships are complex, the high concentration of liquor stores, the ready availability of beer and hard liquor, and the high incidence of alcohol abuse are most definitely factors in making inner-city homes so troubled, inner-city neighborhoods so disorderly, and inner-city streets so dangerous.

Paying more attention to the liquor-disorder-crime nexus need not mean paying less attention to the massive social harms wrought by drugs. The crack-cocaine epidemic of the 1980s fueled a sharp and sudden rise in inner-city crime. The "crack binge," as it has been called, burned a hole through what little remained of the social fabric of America's inner cities. Compared to the consequences of crack-cocaine, the negative social effects of alcohol are hardly dramatic, but they are almost surely more pervasive, perverse, and persistent.

The time has come to examine the degree to which restrictions on the availability and consumption of alcohol in inner-city neighborhoods might contribute to a reduction in violent crime and the other social problems that plague the people of these places. In particular, the time has come to begin to assess the effects on neighborhood civility and safety of concentrating liquor stores in poor, minority, inner-city neighborhoods. Would laws forbidding local billboard ads for malt liquor, promoting tighter zoning restrictions, enforcing tougher liquor-licensing regulations, and increasing the price of alcohol be cost-effective in cutting inner-city disorder and crime?

So far as many decent, struggling, law-abiding residents of America's crime-torn, inner-city neighborhoods are concerned, this is no mere academic question or abstract policy concern. In many

places, people have begged local police and other public authorities to “do something” about the wall-to-wall, corner-to-corner proliferation of liquor outlets. To these truly disadvantaged citizens, the liquor-disorder-crime nexus is not an interesting theory in need of testing; it is a devastating reality in need of changing. In some places, local residents have taken it upon themselves to spray paint over liquor billboards. In other places, they have tried without success to get zoning laws changed so that it becomes as tough to open retail liquor stores in poor, minority, urban neighborhoods as it generally is to open them in rich, white, suburban neighborhoods.

This report explores the connections between liquor, disorder, and crime in Wisconsin. Throughout America, serious crime is concentrated in inner-city neighborhoods. Wisconsin is no exception. Serious crime in Wisconsin is most heavily concentrated in Milwaukee’s poorest minority neighborhoods — places where liquor stores are everywhere one turns.

This report is organized into three parts.

Part One offers an overview of the literature on alcohol availability and consumption and social problems, with a special focus on crime. Compared to the scientific literature on drugs and crime, the literature on liquor and crime is small, but revealing and highly suggestive.

Part Two outlines alcohol-control laws in Wisconsin, documents the concentration of liquor outlets in Milwaukee’s high-crime neighborhoods, and presents preliminary evidence on the correlations between liquor outlets and crime in Milwaukee. As always, the statistician’s maxim applies: correlation is not necessarily causation. No one can yet prove beyond a reasonable scientific doubt that “liquor causes crime.” But the correlations are strong, and common sense counsels that something is going on here, something that is most assuredly no help in checking crime in Milwaukee’s worst neighborhoods.

Part Three draws some tentative conclusions about the connections between liquor, disorder, and crime in Wisconsin and, by implication, other states. The main conclusion is that if the inner-city neighborhoods of Milwaukee and other major cities had fewer retail liquor outlets and restricted the easy availability of alcohol, then these neighborhoods would also have less per-capita alcohol consumption and lower rates of many social problems including adult and juvenile crime.

Among the sobering truths about liquor, disorder, and crime in Wisconsin and the nation presented in this report are the following:

1. Nationally, the number of arrests each year for liquor-law violations (for example, drunk and disorderly) and public drunkenness (not including drunken driving) exceeds the number of arrests for drug-law violations and drug abuse. In 1992, alcohol-related arrests numbered 1.37 million, versus 1.02 million drug-related arrests. In the same year, 1.6 million arrests were made for driving under the influence. Thus, total liquor-related arrests (liquor-law violations, public drunkenness, and driving under the influence) numbered almost 2.97 million, or almost three times the number of drug arrests.
2. Violent and repeat criminals have a high incidence of drinking problems. For example, one study found that 60% of inmates drank heavily just prior to committing the violent crime for which they were incarcerated. Another study calculated that 63% of jail inmates incarcerated for homicide had been drinking before the offense, as compared with about 27% of juvenile corrections inmates in custody for homicide.

3. Poor neighborhoods with high rates of alcohol consumption experience more serious crime than otherwise comparable poor neighborhoods, where consumption rates are lower. For example, several studies find that in places with high rates of alcohol consumption, the relationship between poverty and homicide is much stronger than it is in places with average or below-average rates of consumption.
4. Rates of alcohol consumption are affected by the availability of alcohol. Research indicates that restricting alcohol availability via increases in taxes on alcohol, restrictions on alcohol advertising, reductions in the density of alcohol outlets, and stricter enforcement of limits on the hours of alcohol sale and prohibitions against sales to minors can reduce alcohol consumption and, in turn, reduce the incidence of crime and other alcohol-related social and public-health problems.
5. The biggest immediate beneficiaries of restrictions on alcohol availability would be the residents of crime-plagued, inner-city neighborhoods with a high density of liquor stores.
6. Wisconsin's alcohol-control laws are loose. The "badger state" is also the "beer state," as Wisconsin is home to several large breweries. Liquor manufacturing and sales is a major industry in Wisconsin. Licenses for the sale of "fermented malt beverages" and "intoxicating liquors" are regulated and assigned by municipalities with minimal intervention from the state.
7. Wisconsin's alcohol-control laws permit liquor stores to be concentrated in poor, minority, inner-city neighborhoods. A sample of the locations of 1,592 liquor licenses in Milwaukee reveals that liquor outlets are disproportionately concentrated in the city's poor, minority districts.
8. Outlets with one type of liquor license — Class A Malt Liquor Only — are located almost exclusively in Milwaukee's poorest minority neighborhoods.
9. The high density of liquor outlets in Milwaukee's inner-city neighborhoods is strongly correlated to the high incidence of violent crime in these neighborhoods.
10. In Milwaukee and other cities, policy experiments should be conducted to determine the conditions under which given types of restrictions on alcohol availability reduce disorder and crime. Under no circumstances should Wisconsin lower the legal drinking age or enact other measures that would increase alcohol availability and consumption. Such measures would succeed only in increasing community disorder, violent crime, and other serious social problems, especially in Milwaukee's worst neighborhoods.

These "sobering truths" will come as no shock to poor, minority citizens who live in places where malt liquor to-go is easy to get but jobs, social services, police protection, and a decent education are not. About 36% of persons in households of incomes of under \$15,000 a year — versus just 12% of persons in households of incomes of more than \$50,000 a year — consider "drunkenness" to be "a real problem" in their neighborhood.³ And some 27% of blacks, versus 19% of whites, would even support "a law forbidding the sale of all beer, wine, and liquor throughout the nation."⁴

Far short of any return to prohibition, however, there are things that governments can do to address the probable connections between liquor, disorder, and crime. Wisconsin can and should lead the way.

PART ONE: AN OVERVIEW OF THE LITERATURE

Alcohol as a "Multiplier"

Scientific research on alcohol-related crime and other social ills has been crowded out by studies of the social costs and consequences of drug abuse. Still, a number of significant findings have emerged from the literature on the epidemiology of alcohol-related crime and other problems. Perhaps the single best summary of the evidence in relation to crime is as follows:

Alcohol use has been associated with assaultive and sex-related crimes, serious youth crime, family violence toward both spouses and children, being both a homicide victim and a perpetrator, and persistent aggression as an adult. Alcohol "problems" occur disproportionately among both juveniles and adults who report violent behaviors.⁵

Of course, the fact remains that most crime is not related to drinking, and most drinking never results in crime. But some people are far more prone to crime and violence when they are drinking or drunk than when they are clean and sober. For example,

while under the influence of alcohol, a parent may strike a child, a college student may force a date to have sex, friends may escalate an argument into a fist fight, a robbery victim may attempt to resist an armed mugger, and soccer fans may turn disappointment over an unsatisfactory game into a riot.⁶

Still, all scientific studies of the subject stress that the relationships between excessive drinking, social disorders, and violent crimes are complex, changeable, and contingent on a wide variety of circumstances. As one study stressed, much of "the connection between drinking and violence is attributable to the fact that intoxication is often coincident with situations in which the probability of aggression would be elevated regardless of the presence of alcohol."⁷ Moreover, "conceptions of how drinking affects social behavior are largely a product of social learning, shaped more by powerful cultural, economic, and political forces than by scientific evidence regarding the direct effects of alcohol."⁸

But exactly the same species of cautions can be made — indeed, have been made — in reference to the relationships between drug abuse, crime, and other social problems. The empirical evidence that "drug abuse causes crime" is of the same kind and quality as the evidence that "alcohol abuse causes crime" — namely, plentiful but inferential, generally persuasive but not scientifically precise.

What the literature suggests is that alcohol, like drugs, acts as a "multiplier" of crime. Aggressive behavior or criminality often occur prior to involvement with drugs or alcohol, but the onset of use (especially, but not exclusively, in cases where use leads to abuse and addiction) results in higher levels of aggressive behavior or criminal activity.

If anything, the evidence that alcohol abuse drives crime and other social problems is probably more weighty than the evidence that drug abuse drives crime and other social problems.

An estimated 10.5 million Americans are alcoholics and 73 million Americans have been directly affected by alcoholism in some form.⁹ Each year, the nation suffers some 45,000 alcohol-related traffic fatalities.¹⁰ Cirrhosis of the liver ranks among the top-ten leading causes of death in America.¹¹ Half of black men ages 30 to 39 drink heavily.¹² Black males are at extremely high risk for acute and chronic

alcohol-related diseases, such as cirrhosis of the liver, hepatitis, heart disease, and cancers of the mouth, larynx, tongue, esophagus, and lung.¹³ And, as we shall see below, alcohol figures prominently in disorder and crime, especially in poor, minority, inner-city neighborhoods where liquor outlets cast their shadows everywhere.

In short, no illicit drug on which there is scientific research, not even crack cocaine during the 1980s,¹⁴ has ever produced negative social consequences on the order that legal spirits have. While “heroin, cocaine, and marijuana have addictive qualities, none of them approach the levels of use or addiction evident in socially tolerated drugs such as alcohol.”¹⁵ Indeed, the estimated per capita death rate per 100,000 citizens is 150 for alcohol use, versus four for cocaine use.¹⁶ Both alcohol and drugs are indeed “multipliers” of crime and other social problems. But it would seem that alcohol multiplies these problems by 100, while drugs multiply them by ten.

Such comparisons between the harmful effects of alcohol (or tobacco) versus drugs are normally paraded as a preface to arguments in support of legalizing some or all currently illicit substances. Logically, however, they serve just as well as a springboard for considering whether it makes sense to restrict the availability of alcohol by prohibiting the proliferation of liquor outlets and taking related measures to reduce consumption among those citizens who are most at risk.

Liquor, Disorder, and Crime

Neighborhood disorder takes many forms — public drinking, prostitution, catcalling, aggressive panhandling, rowdy teenagers, battling spouses, graffiti, vandalism, abandoned buildings, trash-filled lots, alleys strewn with bottles and garbage.¹⁷ But no social disorder is at once so disruptive in its own right and so conducive of other disorders and crime as public drinking. In a classic 1990 study of community breakdown in American cities, public drinking was ranked first among the disorders identified by residents across 40 neighborhoods.¹⁸ In conjunction, there remains no doubt that “increased alcohol consumption is associated with increased violent crime” and little doubt that “interventions that reduce drinking may also reduce violent crime” and related disorders.¹⁹

Some of the solitary statistics that can be teased from the last few decades of research on liquor, disorder, and crime are simply striking.

- 60% of convicted homicide offenders drank just before committing the offense.²⁰
- 63% of adult jail inmates incarcerated for homicide had been drinking before the offense, versus about 27% of juvenile corrections inmates incarcerated for homicide.²¹
- 60% of prison inmates drank heavily just prior to committing the violent offense for which they were incarcerated, and 40% “of all persons convicted of rape, assault, or burglary had been heavy drinkers in the year before they went to prison.”²²
- Between 1973 and 1992, the rate of violent victimizations among young black males (ages 12 to 24) increased by 25%,²³ and between 1985 and 1992, the black male homicide rate increased by 300%.²⁴ Most of these violent crimes — including homicides — are committed by poor, inner-city black males against other poor, inner-city black males. Other things being equal, however, the relationship between poverty and homicide is stronger in neighborhoods with higher rates of alcohol consumption than it is in neighborhoods with average or below-average rates of alcohol consumption.²⁵

- Numerous studies report a strong association between sexual violence and alcohol, finding that “anywhere between 30 and 90% of convicted rapists are drunk at the time of offense.”²⁶
- Numerous studies indicate that, while aggressive and criminal behavior among youth often begins well before the onset of alcohol use, juveniles (especially young males) who drink to the point of drunkenness are more likely than juveniles who do not drink to get into fights, get arrested, commit violent crimes, and recidivate later in life.²⁷
- Alcohol-dependent, male factory workers are over three times as likely to physically abuse their wives as otherwise comparable, non-alcohol-dependent, male factory workers are to physically abuse theirs.²⁸

It is important, however, not to be swept away by the seemingly self-evident power or suggestiveness of such findings. For example, the high incidence of drinking among convicted criminals does not necessarily “prove” that drinking stimulates crime; it may be nearer to being evidence that criminals who drink are more likely to get caught and convicted than criminals who do not drink or do not drink a lot. The fact remains that alcohol consumption “has no uniform behavioral effects,” and it is often difficult or “impossible to judge whether alcohol is a genuine or a spurious correlate of violence or under what circumstances alcohol may contribute to the occurrence of violence.”²⁹ Over-interpreting disturbing aggregate statistics is a mistake that has plagued much of the applied research and policy-relevant commentary on the drugs-disorder-crime nexus; it ought not to be repeated here.

At the same time, however, it is equally important not to discount or deny the probable — and, in some cases, patently obvious — connections between liquor, disorder, and crime. Where these connections are concerned, researchers will probably never be able to untie or cut through every last causal knot, at least not in ways that meet every last test of scientific validity. But common sense supposes that the connections are real and quite important. Some research may challenge or complexify the suppositions of common sense. Generally speaking, however, the more sophisticated the model and methods, the more it happens that research reinforces rather than rebuts the counsels of common sense.

So it is with the scientific literature on alcohol availability, alcohol consumption, and alcohol-related crime and social problems: *ceteris paribus*, easy availability increases consumption, and consumption increases the incidence of disorder, crime, and other problems.³⁰

Restricting Alcohol, Cutting Crime

The practical question is how best to cut disorder and crime by restricting (without prohibiting) alcohol availability and consumption among those citizens who are most at risk. The scientific-research literature that addresses this question is in its infancy. Still, already a number of fascinating, well-documented, and important findings have emerged. The main finding is that both changes in the price of alcohol and changes in liquor law regulations can succeed in reducing alcohol availability, alcohol consumption, and alcohol-related problems including violent crime among at-risk youth and adults.

First, it is clear that alcohol price and alcohol consumption tend to vary inversely: the more it costs, the less people buy; the less they buy, the less they consume; the less they consume, the fewer social problems that result. Alcohol taxes influence per-capita alcohol consumption, and per capita alcohol consumption is closely linked to violent crime rates.³¹

- On average, a 10% increase in alcohol consumption can mean an estimated 9.13% increase in

robberies, a 6.8% increase in rapes, a 5.8% increase in assaults, and a .87% increase in homicides. A 10% increase in a state beer tax can mean an estimated .48% reduction in per-capita alcohol consumption, and, in turn, a 1.32% drop in rapes, a .87% drop in robberies, a .32% drop in homicides, and a .26% drop in assaults.³²

- A 10% increase in the price of alcohol can mean an estimated 3% reduction in beer consumption and a 10% reduction in wine consumption.³³

One aspect of the drinking-disorder-violent crime nexus that must be considered is its apparently age-specific character. Most violent crime is committed by young males. Drinking in males normally begins around adolescence and rises until the late teens or mid-twenties. Longitudinal research suggests that the relationship between drinking and serious crime is strongest before young males reach age 31.³⁴ The “good news,” however, is that youth (including the high fraction of youth who drink only beer) tend to be highly price-sensitive. As one of the most comprehensive studies concluded, increasing beer taxes to their real (inflation-adjusted) 1951 levels in 1990 “would have reduced the number of heavy drinkers among youth” by “almost 20 percent.”³⁵ Such a reduction in youth drinking would spell fewer adult alcoholics, fewer traffic fatalities, and fewer violent deaths.³⁶

The economics of figuring out precisely what types of taxing or other fiscal strategies work best in discouraging alcohol consumption can be extremely complicated (to put it mildly). Under the “user-fee” conception of what constitutes a socially optimal tax rate, the challenge is to set alcohol taxes “high enough so that the total revenues from these taxes are equal to the total external costs resulting from alcohol abuse.”³⁷ But that is far easier said than done. Even as an exercise in advanced econometrics or public-finance economics, things can get very difficult very quickly. For one thing, no one really has a reliable estimate of just what the annual “total external costs” of alcohol abuse are. One 1985 study, for example, estimated that the total economic costs of alcohol abuse were (in constant 1983 dollars) \$116 billion in 1983, \$136 billion in 1990, and would rise to \$150 billion by 1995. The same study estimated that about 60% of the costs of alcoholism consisted of lost employment and reduced economic productivity, while about 13% was due to health-care costs and treatment.³⁸ But various drug-legalization advocates have come in with estimates many times that amount, and it is an inherently difficult task to estimate the total costs to society of so complicated a phenomenon as alcoholism or violent crime.³⁹

There is no doubt that price changes can have some effects on alcohol consumption and alcohol-related problems. There is, however, a second approach — namely, laws and regulations that directly reduce the physical availability of alcohol. For “independent of the effects of beverage prices, and controlling for the endogeneity of sales and availability, physical availability of alcohol” is “directly related to sales of spirits and wine.”⁴⁰

A number of first-rate studies have already found “statistically significant relationships between per capita outlet densities and consumption and alcohol problem rates.”⁴¹ Policies that reduce the geographic density of liquor outlets have been found to work in a wide variety of settings. “Fewer outlets per square kilometer and/or lower per capita outlet densities would result in reductions in both consumption and problems.”⁴²

The fact, however, is that most states do not have strong liquor-law regulations and procedures. Even states that do have strong liquor laws and regulations “on the books” tend to underfund the agencies that are responsible for enforcing them. Naturally, “anemic funding” often leads to “inadequate enforcement.”⁴³ And whether related to funding levels or other variables, loose enforcement opens up

the possibility of socially harmful concentrations of liquor outlets and other regulatory failures which can lead, willy-nilly, to a hornet's nest of alcohol-related social problems, including disorder and crime.

- Liquor-outlet densities have been found to be "related in important ways to alcohol problems" and felony-arrest rates.⁴⁴
- A detailed study of 44 alcohol beverage control (ABC) jurisdictions in the United States found that the strict enforcement of formal laws constraining access to alcoholic beverages, including laws that effectively regulate densities of alcohol outlets, can succeed in reducing alcohol consumption and alcohol-related problems.⁴⁵ But in "the absence of increased enforcement, it is unlikely that any formal alcohol beverage control law would have any effect upon the distribution and sales" of alcohol.⁴⁶
- A study of all 25 California ABC offices and 167 ABC investigators found that the state's liquor laws were loosely enforced. Community concerns and considerations of community welfare generally received short shrift in decisions governing the granting of retail liquor licenses. The ABC investigators were "less concerned with public health and welfare than with the rights of applicants."⁴⁷ The study concluded "that the selling of alcohol in California is treated more as a right than a privilege. This is a finding of some significance, because it underscores the relationship between outlet densities and consumption."⁴⁸

PART TWO: REGULATING SPIRITS IN WISCONSIN

A Loose Liquor-Control Regime

Since 1980, California and other states have devoted less human and financial resources to the development and enforcement of rigorous liquor laws and regulations that might succeed in cutting the physical availability of alcohol, reducing the density of liquor stores in urban areas and, in the bargain, cutting crime and other alcohol-related problems in poor, minority, high-crime, inner-city neighborhoods.

It would appear that Wisconsin is no exception to this trend.

Today, alcohol-control laws in Wisconsin are rather loose. The laws are set up with parallel subsections for "fermented malt beverages" and "intoxicating liquors." Licenses for the sale of both are regulated and assigned by municipalities with very little intervention or oversight by the state, which has only a skeleton crew of people assigned to the task.

In the late 1960s, the state's Department of Revenue handled beverage-tax enforcement (stamps). Under the so-called Kellett reorganization, the Division of Criminal Investigation, which handled beverage enforcement, was brought into the state's Department of Justice. Then, in the mid-1970s, the state attorney general promised to reduce department staff; he moved alcohol enforcement back to the Department of Revenue.

Over the last two decades, the state's main liquor-control staff has shrunk to its present level of 15 people. Until 1986, the state had a three-person unit that reviewed licenses issued by municipalities. But that unit was eliminated in 1986 along with the tax-stamp program.

There are basically five types of liquor licenses in Wisconsin. Strictly speaking, the state grants permits (authorizations issued by the Department of Revenue) and the municipalities grant licenses

(authorization to sell beer, wine, or spirits). There are in Wisconsin two types of "Class A" licenses, two types of "Class B" licenses, and one type of "Class C" license or permit:

- *Class A:* Authorization for retail sale of beer for consumption off premises. No beer sales between midnight and 8 a.m.
- *Class A:* Authorization for retail sale of liquor off premises. No liquor sales between 9 p.m. and 8 a.m.
- *Class B:* Authorization for retail sale for consumption on or off premises of beer. Can be issued on annual, probationary, or temporary basis. Must be closed between 2 a.m. and 6 a.m. (2:30 a.m. to 6 a.m. on Sundays except on New Year's Eve). Clubs may remain open during these hours, but may not serve alcohol.
- *Class B:* Authorization for retail sale of liquor for on-premises consumption (unless municipality authorizes limited off-premises consumption). Must be closed between 2 a.m. and 6 a.m. (2:30 a.m. to 6 a.m. on Sundays except on New Year's Eve). Clubs may remain open during these hours, but may not serve alcohol.
- *Class C or Permit:* Authorization for retail sales of wine only for consumption on premises.

Unless you have been convicted of a crime, have lived in the state for fewer than 90 consecutive days, are unable to complete a responsible beverage-server course, or already have a liquor license, then you are eligible to apply for a liquor license or permit to sell or distribute alcohol in Wisconsin. You cannot locate your Class A or Class B license within 300 feet of a school, hospital, or church unless the municipality approves, or unless liquor represents under 50% of your gross receipts. You can use alcohol as a prize at raffles, provided that the alcohol is unopened. And, as a result of a 1993 law, if you operate a bed and breakfast, you may serve your guests a limited amount of alcohol without a license. Under no circumstances, however, may you serve alcohol to minors.

There have been but a few recent political skirmishes over the state's liquor-control regime. A 1990 law allowed any retailer the right to be issued a Class B license (sale for consumption on or off premises). The law was challenged by the 4,000-member state tavern league. In 1991, the law was repealed. Also, the state has adopted a law that forbids out-of-state distributors from selling a given brand of alcohol in any area of the state where an in-state distributor holds a franchise on that brand. This law, which creates a virtual monopoly for in-state companies, was challenged by out-of-state distributors. It remains on the books. And, in 1994, a law was passed that prohibited wholesalers from holding Class A or Class B licenses unless they had recently held such licenses.

But for these minor changes and disputes, Wisconsin's liquor-control regime has remained fairly inert, structured without any apparent regard for the connections between alcohol availability, consumption, crime, and other social problems — and calculated to give the state almost zero capacity to regulate and directly enforce liquor laws.

Liquor Outlets in Milwaukee

To date, however, no one has kicked up any legal or political dust over one of the probable negative consequences of Wisconsin's lax, municipality-centered, liquor-control regime. Based on the scientific literature reviewed in Part One of this report, one obvious question to ask is whether the state's

liquor-control regime permits high concentrations of liquor outlets in low-income urban neighborhoods and whether, in turn, any such concentrations are strongly correlated with crime. The place where such results might be expected to show up is inner-city Milwaukee.

A picture is worth a thousand words (and a few dozen regressions).

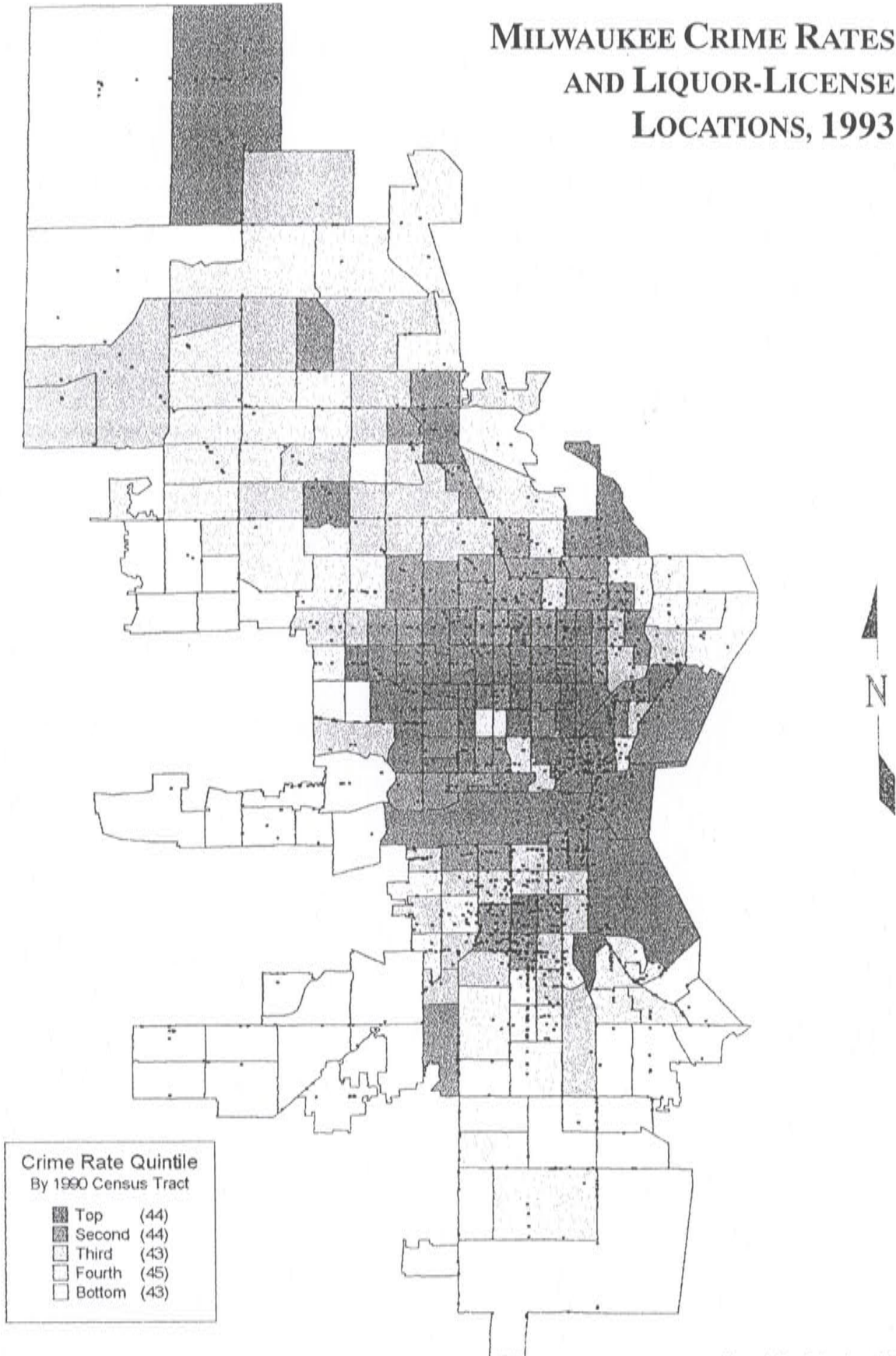
The maps on the next two pages depict Milwaukee crime rates and liquor-license locations in 1993. License information representing 1,632 liquor outlet addresses in Milwaukee as of February 18, 1994, was obtained from the city's License Division. The liquor-store addresses were matched to census tracts using a program called MapInfo. Initially, the software was able to match 1,590 addresses; 38 were matched by hand and four were dropped because of an inability to match them. Crime statistics at the census-tract level were drawn from the Milwaukee Fire and Police Commission's 1993 Annual Report and the City of Milwaukee 1993 Public Safety Report. The population and control variables used to run the regressions that resulted in the tables that appear as the technical appendix to this report were obtained from the 1990 U.S. Census Summary Tape File 3. In merging these various data files at the tract level, information on 215 of the 218 census tracts included in the city's 1993 public-safety report was preserved (i.e., not lost due to technical or mismatch problems). In total, data were entered on all 1,632 license locations in Milwaukee, and the final analysis preserved data on 1,592 of them.

As the maps show, there is most definitely a relationship between liquor outlets and crime in Milwaukee. The maps show the tracts divided into five groups, with those in Group 5 having the highest crime rates and those in Group 1 the lowest.

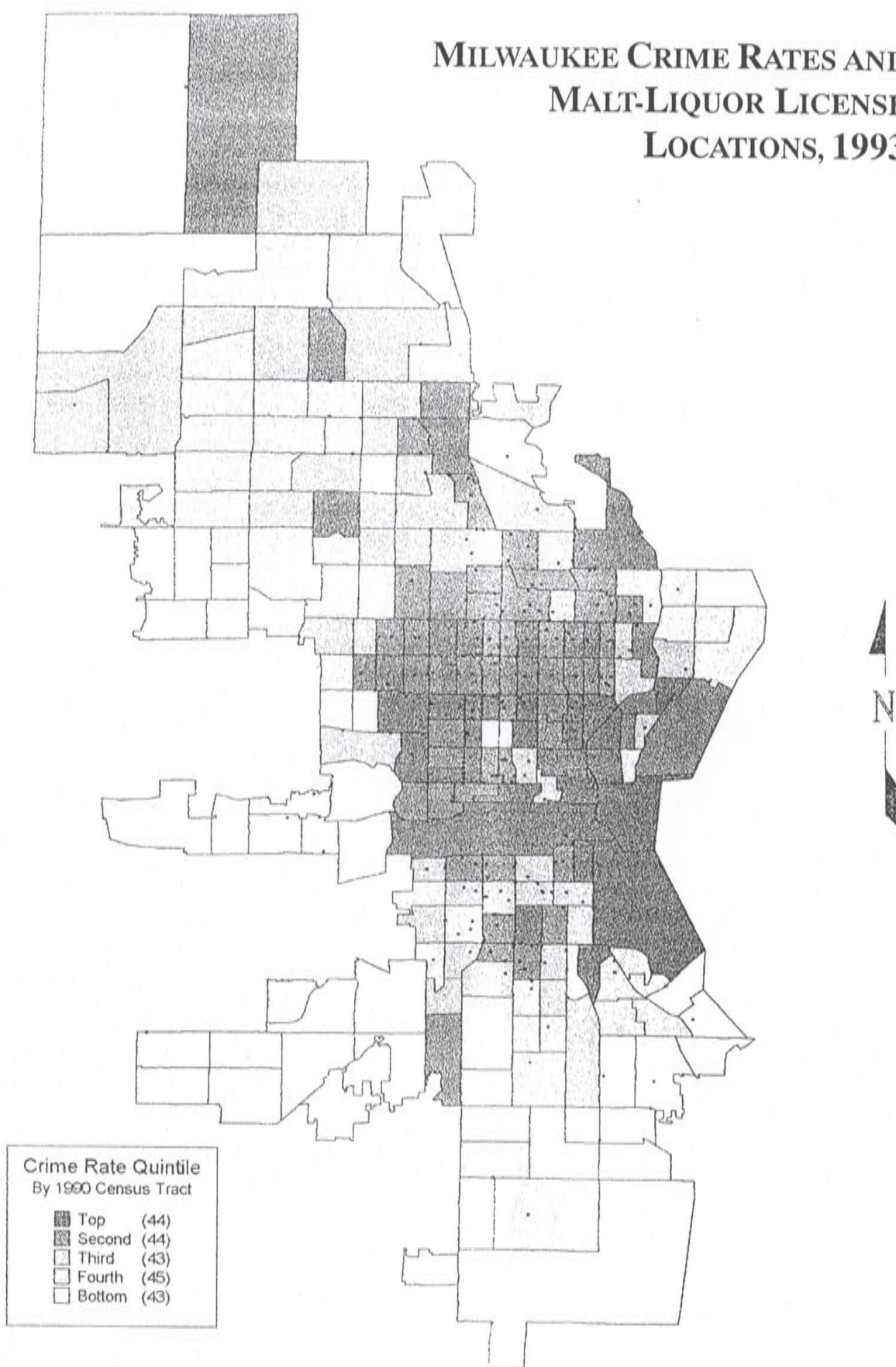
If you knew nothing about either the city or what the dots on the maps represent, and you were simply asked to draw circles around the places where the dots are clustered, you would end up drawing circles around Milwaukee's poor, minority, high-crime, inner-city neighborhoods.

Apart from the sheer strength of the liquor-crime correlation, what is most striking about these findings is the role played by Class A malt-only liquor licenses, as shown by the second map, on page 13. These account for 15% of the licenses in the sample (245 license locations). The malt-only outlets are most strongly clustered in Milwaukee's inner-city neighborhoods. In fact, a descriptive analysis of the data revealed that the best way to predict where malt-liquor outlets were located was to identify tracts with a less-than-citywide-average annual family income and a greater-than-citywide-average proportional black population. Fully 81% of tracts with less-than-average income and greater-than-average black populations had malt-beer to-go stores! There is virtually nowhere else in the city, and probably hardly anywhere else in the state, where so many liquor stores — let alone so many of a particular kind — are so heavily concentrated.

MILWAUKEE CRIME RATES AND LIQUOR-LICENSE LOCATIONS, 1993



MILWAUKEE CRIME RATES AND MALT-LIQUOR LICENSE LOCATIONS, 1993



PART THREE: MAKING LIQUOR OUTLETS GO?

Broken Bottles

But should one leap to the conclusion that if Milwaukee's worst neighborhoods had fewer liquor outlets, they would also have less alcohol consumption and less crime? The answer is that while one should *not* leap to that conclusion, anyone who cares about reducing community breakdown and crime in the inner-city should begin moving in the direction of policies that restrict alcohol availability and reduce the density of liquor outlets.

Think about it. Most Wisconsin citizens, like most American citizens, would not tolerate for one second laws that permitted any such concentration of liquor (let alone beer-to-go) stores in or around the places where they and their loved ones live, work, shop, go to school, or recreate. It makes no sense to insist that it is all merely a matter of free markets, as if liquor stores simply go where the people want what they sell and sell to whomever they want. As a nation, Americans have embraced laws that raise the drinking age to 21, punish drunken drivers, and educate the young about the dangers of alcohol and drug use. At various times, California and other states have attempted to limit the density of liquor outlets around college campuses; indeed, California once had a statute that prohibited liquor stores and bars within a one-mile radius of a college campus.⁴⁹

Nor, for that matter, can one hide behind a fog of empirical uncertainties about the connections between liquor, disorder, and crime. As the research summaries in the first two sections of this report indicate, that fog is lifting, and the liquor-disorder-crime nexus is increasingly well-substantiated: let any researcher who doubts it relocate his or her working office to a flat above any inner-city malt-liquor to-go outlet.

In the end, academic statistical exercises are no substitute for live ethnographic realities. Imagine what it is like for a typical inner-city child,

let's call him John, to grow up near Florence and Normandie avenues, flash point of the [L.A.] riot. To middle-class African-Americans and whites, liquor stores are generally a remote presence, located far from where adults pray and children play. But to John, Tom's liquor store is a short walk from his house, school and the storefront church in the same shopping strip. A slew of transactions take John to Tom's. He tags along with his mom when she goes to cash her welfare checks free of charge. With no supermarket nearby, John goes to Tom's when he wants a candy bar. Even when his mother takes him to the adjoining neighborhoods, John rarely sees a bank or supermarket. ... Many neighborhood traits convey disorder but unchecked public drinking is a particularly potent affirmation that "no one cares." That is the message John gains by observing Tom's liquor store, where winos and crack addicts congregate at night in the parking lot In fact, in the eight times in the 14 months preceding the riot, LAPD dispatchers sent squad cars to the store to investigate robberies, assaults and a shooting.⁵⁰

One doubts that any reader of this report would want to live where "John" does or have their children switch places with him. Following a famous article by Professors James Q. Wilson and George L. Kelling, criminologists as well as many journalists refer to the realities of such inner-city neighborhoods as evidence for the "broken-windows" thesis — when a broken window in a building goes unfixed, soon all of its windows are broken.⁵¹ The broken window is an invitation to incivility, disorder, and crime.

Where disorder problems are frequent and no one takes responsibility for unruly behavior in public places, the sense of "territoriality" among residents shrinks to include only their own households; meanwhile, untended property is fair game for plunder or destruction ... [and] a concentration of supposedly "victimless" disorders can soon flood an area with serious, victimizing crime.⁵²

But as the evidence summarized in this report makes plain, "broken bottles" have an even worse effect on community order and safety than "broken windows." The fact that government itself licenses the entire mess by letting the liquor stores proliferate and the "broken bottles" pile up so high in poor, inner-city neighborhoods is the single most compelling symbol that "nobody cares," the ultimate invitation to disorder and crime.

Without adopting either the most sinister or the most cynical perspective on the subject, it seems clear that the high concentrations of liquor outlets in these urban neighborhoods reflects "the relative power of alcohol producers and wholesalers, who supply liquor outlets, banks who loan money to store owners, and state regulators whose activities are more oriented towards the interests of alcohol industry lobbying than the regulation of that industry, and the relative powerlessness of the poor and unemployed individuals and groups who live in greater concentration in these areas of high outlet density."⁵³

Reduce Alcohol Availability in Milwaukee

The time has come for Wisconsin and other states to experiment with policies aimed at cutting crime by cutting alcohol availability and consumption. In Wisconsin, the place to begin the experiment is in those poor, minority, high-crime neighborhoods of Milwaukee, where the density of liquor outlets far exceeds citywide averages.

In addition to the scientific literature on disorder, crime, and liquor summarized in the preceding sections of this report, the theory behind this policy experiment should be guided by the large and methodologically sophisticated body of research that documents that in inner-city neighborhoods, the relationship between poverty on the one side and crime and disorder on the other is mediated by community norms and the extent of citizens' attachments to traditional institutions like home, school, and church.⁵⁴

As a rule, the stronger are community norms and traditional institutional attachments, the weaker is the link between poverty and crime and the lower are the chances that children growing up in disadvantaged settings will become deviant, delinquent, or predatory (assault, rape, rob, burglarize, deal deadly on drugs, or murder). Studies have shown "that religious affiliation fosters less drinking."⁵⁵ Indeed, one major study finds that, even after controlling for all relevant individual characteristics (race, gender, education, parental education, family structure, religious involvement, and so on), youths whose neighbors attend church are more likely to find a job, less likely to use drugs, and less likely to be involved in criminal activities whether or not the youths themselves attend church or have other attachments to traditional institutions.⁵⁶

But in poor neighborhoods where alcohol is readily available and liquor outlets dot every intersection, informal and indirect social controls on deviant, delinquent, and criminal behavior are diluted. Where broken bottles fill the gutters, social bonds are weakened and social capital goes down the drain. In economic terms, high rates of alcohol consumption and high densities of liquor outlets create negative "externalities" that compete against, cancel out, or overwhelm the positive "externalities" associated with traditional institutions and behaviors like churchgoing. Whether or not they themselves

drink to excess, hang out at bars, or engage directly in related behaviors, it is probable that poor, inner-city youths who grow up in places where drinking is common and liquor outlets are everywhere are more likely than otherwise-comparable youths to have diminished life prospects that include joblessness, substance abuse, and getting into serious trouble with the law. Indeed, as one recent study speculates, this is probably true even with respect to homicides:

Social bonds that tie individuals to each other and to larger social collectivities have played a key role in the understanding of how crime and violence come about. ... [But social bonds] break down in the presence of high rates of alcohol consumption. ... [T]he basic form of this relationship may be one in which higher alcohol consumption reduces the effectiveness of attachment to institutions, thus leading to higher rates of homicide.⁵⁷

There are at least four specific types of policy experiments that should be considered as means of deepening our understanding of the alcohol-disorder-crime nexus and confronting the apparent reality “that drinking does indeed cause violence: interventions that reduce drinking can also tend to reduce violent crime.”⁵⁸ And there is one specific policy change that should be avoided at all costs — namely, lowering the drinking age.

First, *conduct systematic empirical research* to determine whether there is “a significant relationship behind the fact that parts of cities where the alcohol outlet density is extremely high are also places that frequently come to the attention of law enforcement and community residents as the location of violent crimes.”⁵⁹ As a first step, it would be necessary to develop a rich data base that includes detailed information about the precise degrees of spatial overlap between liquor outlets, the incidence of communal disorders (public fighting, child and spousal abuse, aggressive panhandling, rowdy teenagers), rates of criminal activity (assault, rape, robbery, homicide), and the frequency of police responses (“911” calls, arrests). To build such data sets would require the concerted efforts and cooperation of a number of different state and local agencies (police department, social-service agencies). The data would then need to be analyzed in relation to a complete list of relevant socio-economic and demographic variables in order to determine whether the links between alcohol availability, consumption, disorder, and crime are truly causal.

Second, *impose stricter zoning ordinances for liquor stores throughout Milwaukee*. In essence, the new zoning laws would increase the distances between liquor stores, reduce the total number of bars and/or liquor stores in the city, and ban the sale of malt liquor to go. Other jurisdictions around the country have experimented with such zoning laws, but in each case, states and cities have faced a unique set of political, legal, and administrative hurdles.⁶⁰ At present, the State of Wisconsin imposes few meaningful limitations on the distributions and sale of alcohol, and it is clear that Milwaukee has not exercised its legal discretion and local controls on alcohol to minimize the density of liquor outlets in high-crime areas. The possible menu of such limitations includes stricter laws and enforcement procedures governing “population-based and geographically-based limits on permissible densities of alcohol outlets; limitations on types of outlets; limitations on service of alcohol; requirements for architectural features of outlets; and special spacing arrangements for distances between outlets of the same type.”⁶¹

Third, make strong efforts to *limit alcoholic-beverage advertising in Milwaukee*. There have been few systematic, scientifically rigorous studies of the relationship between alcohol ads on the one side and the incidence of excessive drinking, disorder, crime, and related social problems on the other. But it seems clear that the alcohol industry believes that these ads make a positive difference to their sales. Liquor manufacturers have not been the least bit reluctant to invest in bombarding urban

neighborhoods with messages like the one contained in the lyrics of a malt-liquor commercial:

*Get a grip, take a sip,
And you'll be picking up models
And it ain't no puzzle my cousin
'Cause I'm more a man
I'm downin' a forty [a 40-ounce bottle]
Be a man and get a can of St. Ides [a high-alcohol malt beer].⁶²*

Indeed, the alcohol industry seems perfectly well aware of the relationship between alcohol, disorder, and crime — and in some infamous cases, it has been quick to exploit it for commercial gain. In the early 1990s, for example, one of the billboarded spokesman for St. Ides malt liquor was Ice Cube, a “gangsta” rapper” whose hits include the song “Black Korea.” The song includes “lyrics such as, ‘Pay respect to the black fist or we’ll burn your store right down to a crisp’ and ‘Don’t follow me up and down your market, or little chop-suey ass will be a target.’”⁶³ Ice Cube appeared “in a poster holding a can of St. Ides flashing a gang sign” and claimed in a televised ad “I gotta’ 40 [ounce bottle] every ‘hood that you see me in.”⁶⁴ Only after a vigorous protest and retaliatory boycott of the product by Korean merchants did the company that produces St. Ides pull the ads.

In many big cities, “religious leaders in black communities have taken to the streets to whitewash old billboards, thereby ridding their communities of the destructive advertisements.”⁶⁵ But city officials ought to take the lead in enforcing zoning limitations on alcohol-billboard advertising, banning such ads from the horizons of schools, churches, and public-housing centers. With whatever help that may be required from the state, Milwaukee ought to experiment with such restrictions.

Fourth, Milwaukee should *launch a multi-year demonstration research project* involving two Milwaukee high-crime neighborhoods that are as near to being “twins” as possible, in terms of their socio-economic and other objective characteristics. In one neighborhood, enforce total prohibition on alcohol sales. In the other neighborhood, apply only such restriction measures as are being applied citywide. The chief aim of this policy experiment would be to document and compare the effects of the prohibition versus the restriction policies over a period of years.

Finally, *under no circumstances should Wisconsin lower the legal drinking age* or enact other measures that would increase alcohol consumption, disorder, crime, and other social problems in Milwaukee and other parts of the state. For starters, there is a tremendous stock of research showing that lowering the legal drinking age increases alcohol-related auto fatalities.⁶⁶ And unless one simply refuses to accept the overwhelming weight of the evidence on the relationship between drinking, disorder, and crime presented in the earlier sections of this report, then one must believe that reducing the minimum drinking age or any other measure that would increase, rather than further limit, the availability of alcohol in Wisconsin, would have socially undesirable, even disastrous, consequences — most especially in Milwaukee’s worst neighborhoods.

TECHNICAL APPENDIX

TABLE 1 Summary Statistics
by Census Tract,
Means (*Standard*
Errors)

	All Tracts	Tracts with No Liquor Licenses
<i>N</i>	215	9
Overall	.2013	.1094*
Crime Rate	(.0223)	(.0207)
Robbery Rate	.0090	.0050*
	(.0008)	(.0011)
Total Licenses	7.405	
	(.426)	
"B" Taverns	5.674	
	(.392)	
"A" Liquor & Malt	.591	
	(.052)	
"A" Malt Only	1.139	
	(.094)	
Population	2,899.89	2,221.78*
	(97.62)	(260.63)
"B" Taverns Per Capita	.0034	
	(.0008)	
"A" Liq & Malt Per Capita	.0002	
	(.00003)	
"A" Malt Per Capita	.0005	
	(.00004)	
% Black	.329	.318
	(.025)	(.134)
% Other Race	.064	.036*
	(.006)	(.011)
% Hispanic	.063	.021*
	(.008)	(.009)
% Aged 15-24	.160	.127
	(.006)	(.017)
Median Family Income	\$26,109.13	\$33,792.56
	(827.40)	(6,225.15)
Per-Capita Income	\$10,580.17	\$12,996.89
	(317.10)	(2,183.95)
% Owner- Occupied	.418	.568
	(.015)	(.101)

Note: An asterisk indicates that the value for the nine tracts with no liquor licenses is statistically significantly different from the overall mean at the 5% level of significance.

In order to discern the relationship between crime and liquor outlets, we must look at three sources of data. Crime statistics are available in the City of Milwaukee 1993 Public Safety Report. Population and other demographic variables can be obtained from the 1990 U.S. Census. Liquor-license information is compiled by the License Division (Common Council-City Clerk, City Hall).⁶⁷ Three different classes of liquor licenses are considered here: Class B taverns (which sell for on and off-premises consumption), Class A liquor and malt stores, and Class A outlets that can sell only malt liquor.

There are 218 census tracts in Milwaukee. Tracts are a convenient unit of analysis because they are relatively small and the definitions are consistently used by different agencies. In particular, the Public Safety Report lists crimes by census tract.⁶⁸ Liquor-license locations were mapped onto census-tract boundaries.⁶⁹ The following analysis looks at crime rates and liquor-license prevalence at the tract level. While the analytic framework does not allow us to attribute crime to the presence of liquor stores, it does allow us to sort out correlations that suggest policy responses.

Table 1 to the left reports average values of several variables for 215 of the 218 census tracts in Milwaukee. While census tracts vary in size, an average census tract consists of 2,900 people. The table shows that the overall crime rate in Milwaukee in 1993, averaged across these tracts, is one crime per five people. The robbery rate is one per 100 people.

There are, on average, 7.4 liquor licenses per tract. This means that there is one liquor license for every 400 people in Milwaukee. Most of the license are for taverns (75%), with fewer Class A liquor stores (8%) and Class A malt outlets (15%).

On average, tract populations are 61% white, 33% African American, and 6.5% of another race. Slightly more than 6% report Hispanic ethnicity. Median family income averages \$26,000 per year, while per capita income is \$10,600. On average, 42% of households in a tract own their residences.

TABLE 1a Cross-correlations (*P-values*)

	overall crime rate	"B" taverns per capita	"A" liquor per capita	"A" malt only per capita	% black	Income per capita	% owner- occupied
overall crime rate	1.000						
"B" taverns per capita	.914 (.000)	1.000					
"A" liquor per capita	.397 (.000)	.177 (.009)	1.000				
"A" malt only per capita	.174 (.000)	.104 (.127)	.198 (.004)	1.000			
% black	.108 (.114)	-.108 (.113)	.112 (.103)	.412 (.000)	1.000		
income per capita	.022 (.751)	.167 (.014)	.006 (.935)	-.506 (.000)	-.661 (.000)	1.000	
% owner- occupied	-.323 (.000)	-.193 (.004)	-.169 (.013)	-.405 (.000)	-.377 (.000)	.476 (.000)	1.000

Note: N=215 census tracts in Milwaukee. A reported p-value of .000 means that the p-value is less than .001 for the test of the hypothesis that the correlation is zero.

These overall averages, however, mask differences across tracts. Some of these differences can be seen by looking at the right-hand column of Table 1. Values for the same variables are reported there, but for the subset of census tracts (nine) that had no liquor licenses. These tracts had substantially lower crime rates. Because the number of tracts without liquor outlets is so low, it is hard to draw statistical inferences. As a result, while these tracts appear to be more heavily white and to have higher incomes, we cannot conclude that this is not due to chance associated with sampling.

Table 1a above shows that many of these variables are highly correlated. For example, taverns and both types of liquor stores tend to be in census tracts with high crime rates. In addition, tracts with a high density of taverns also have an above-average number of Class A liquor stores. Some of the most interesting correlations are found in the lower right-hand corner of the table. Tracts with above-average proportions of African-American residents have above-average densities of Class A malt outlets. Tracts with low average incomes have high concentrations of Class A malt stores. Income and race are not strongly negatively correlated with the other two types of liquor licenses, however. The proportion of residents living in owner-occupied housing is negatively correlated with all types of liquor licenses. It is important to notice that the demographic variables are highly correlated with each other: e.g., tracts with a high proportion of blacks tend to have low average incomes and low home-ownership rates.

One way to see the relationships among Class A malt licenses, crime rates, and other descriptive characteristics is to divide the tracts into three groups and then compare the values of the variables across them. Table 1b on the next page reports average values for the same variables as Table 1 for the 96 tracts with no Class A malt licenses, the 81 tracts with fewer than one malt outlet per 1,000 population, and the 38 tracts with a higher density of malt stores. The tracts with a high density of Class A malt stores have statistically significantly higher overall crime rates than the other tracts. They also have higher robbery rates. The density of other liquor outlets is not different across the categories in a statistically meaningful way. The proportion of blacks, however, varies dramatically across these three categories: 18% on average in the tracts without any malt stores, 34% in tracts with low density, and 66% in the tracts with the most malt outlets. Also, as should be expected from the correlations in the previous table, the income

TABLE 1b Summary statistics by census tract, by concentrations of "A" malt only licenses, means (*standard errors*)

	no "A" malt only licenses	< 1,000 "A" malt only licenses	> 1,000 "A" malt only licenses
<i>N</i>	96	81	38
overall	.1796	.1732	.3158*
crime rate	(.0424)	(.0097)	(.0616)
robbery rate	.0062	.0087*	.0169*
	(.0008)	(.0009)	(.0030)
population	2,950.469	3,157.333	2,223.342*
	(156.856)	(145.214)	(196.765)
"B" taverns	.00355	.0023	.0053
per capita	(.00162)	(.0002)	(.0017)
"A" liquor & malt per capita	.00018	.00021	.0004
	(.000027)	(.000032)	(.0002)
"A" malt per capita	0	.0005*	.0016*
		(.00003)	(.00008)
% black	.1882	.3390*	.6636*
	(.0260)	(.0416)	(.0611)
% other race	.0453	.0779*	.0829
	(.0069)	(.0112)	(.0206)
% Hispanic	.0450	.0767	.0810
	(.0095)	(.0136)	(.0222)
% aged 15-24	.1457	.1703	.1756
	(.0083)	(.0116)	(.0129)
median family income	32,258.93	24,596.83*	13,796.42*
	(1,179.58)	(1,127.337)	(841.748)
per-capita income	12,833.52	9,982.432*	6,161.632*
	(457.85)	(436.657)	(396.200)
% owner- occupied	.5024	.3899*	.2638*
	(.0228)	(.0216)	(.0162)

Note: An asterisk indicates that the value is statistically significantly different from the value in the column to the left (at the 5% level of significance).

and degree of home ownership is much lower in tracts with more malt licenses.

The same relationships can be seen using multivariate regression, which allows for all of the relationships among all the variables to be considered simultaneously. Table 2 on the next page reports the results of five regressions of the log of the tract-level crime rate on various sets of control variables. The first column shows that liquor licenses of all types are associated with higher crime rates. Column (2) adds the racial and ethnic composition of the tracts and shows that tracts with higher proportions of blacks and higher proportions of those of another race are associated with higher rates of crime. Controlling for race, the relationship between malt outlets and crime is no longer statistically significant, but since the two variables are so highly correlated (see Table 1a), it is impossible to isolate any independent influences.

As more controls are added to the regressions, Class B taverns and the Class A liquor stores remain positively correlated with the crime rate, as does the proportion of the population that is black. Adding the "owner-occupied" proportion causes the coefficients on income and the "other-race" proportion to lose statistical significance and the coefficient on the black proportion to fall — all of which is unsurprising, given the strong correlations between these measures.

It may be that the crimes about which we are most concerned, violent crimes, are obscured by using the overall crime rate (which is predominantly made up of property offenses). Table 3, on page 22, shows that the same pattern is found when only violent crimes are considered: that is, all types of licenses are positively associated with crime, at least until race is controlled, and income and home ownership are negatively associated with crime rates.⁷⁰

In sum, liquor stores and taverns are located in census tracts with high crime rates. In addition, the stores that are restricted to selling only malt liquor are disproportionately located in neighborhoods that have a high proportion of black residents and that are low-income. Also, because of the proportion that is black, the level of income, and the proportion "owner-occupied," it is impossible to tease out the independent correlations.

Note that we also cannot ascertain causality here: it is hard to know if liquor outlets *cause* crime.

TABLE 2 Simple Regressions: Log of Overall Crime Rate

	(1)	(2)	(3)	(4)	(5)
"B" Taverns	25.38*	30.19*	29.89*	31.33*	26.23*
Per Capita	(3.252)	(2.638)	(2.622)	(2.673)	(2.451)
"A" Liq & Malt	239.87*	242.63*	251.26*	260.96*	195.12*
Per Capita	(74.432)	(59.662)	(59.354)	(58.934)	(52.723)
"A" Malt Only	396.30*	78.40	73.77	44.94	2.836
Per Capita	(60.468)	(56.147)	(55.762)	(56.681)	(50.334)
% Black		1.035*	1.022*	.802*	.605*
		(.095)	(.0946)	(.135)	(.122)
% Other Race		2.523*	2.027*	1.840*	.511
		(.841)	(.869)	(.865)	(.783)
% Hispanic		-.612	-.231	-.530	-.019
		(.708)	(.726)	(.731)	(.649)
% Aged 15-24			.687*	.581	-.509
			(.335)	(.335)	(.328)
Income				-.000025*	-.000016
Per Capita				(.000011)	(.00001)
% Owner-Occupied					1.315*
					(.171)
R-square	.4132	.6375	.6447	.6533	.7311

Note: N=215 census tracts in Milwaukee. A constant was included in each regression. An asterisk indicates the coefficient is statistically significantly different from zero at the 5% significance level.

But it is clear that there is something special about the Class A malt-only licenses, which account for just 17% of the licenses in the sample. While the number of taverns per capita is positively correlated with income and Class A liquor stores are uncorrelated with income, Class A malt stores are very strongly negatively associated with income. (The same pattern is true if you substitute "% white" for "income" in the previous sentence.) Tracts with fewer malt stores have lower crime, are more white, are richer, and have higher home-ownership rates.

TABLE 3 Simple Regressions: Log of Violent Crime Rate
(Assaults + Robberies + Homicides + Rapes)

	(1)	(2)	(3)	(4)	(5)
"B" Taverns	18.539*	29.392*	29.190*	31.889*	24.470*
Per Capita	(6.083)	(4.310)	(4.320)	(4.395)	(4.147)
"A" Liq & Malt	242.629	241.077*	247.313*	264.475*	162.221
Per Capita	(139.360)	(97.587)	(97.932)	(96.901)	(89.369)
"A" Malt Only	805.942*	117.610	114.398	59.300	-20.499
Per Capita	(113.423)	(92.106)	(92.248)	(93.624)	(85.898)
% Black		2.315*	2.306*	1.898*	1.551*
		(.156)	(.157)	(.224)	(.210)
% Other Race		4.403*	4.070*	3.718	1.634
		(1.376)	(1.432)	(1.420)	(1.328)
% Hispanic		-.863	-.605	-1.163	-.454
		(1.156)	(1.197)	(1.201)	(1.097)
% Aged 15-24			.470	.244	-1.548*
			(.555)	(.555)	(.572)
Income				-.00005*	-.00004*
Per Capita				(.00002)	(.00002)
% Owner-Occupied					-2.0098*
					(.303)
R-square	.2712	.6566	.6578	.6683	.7276

Note: N=215 census tracts in Milwaukee. A constant was included in each regression. An asterisk indicates the coefficient is statistically significantly different from zero at the 5% significance level.

NOTES

- 1 D. Whitman and D. Bowemaster, "A Potent Brew: Booze and Crime," *U.S. News & World Report*, May 31, 1993, pp. 57-59.
- 2 *Ibid.*, p. 58.
- 3 *Sourcebook of Criminal Justice Statistics, 1993* (U.S. Bureau of Justice Statistics, 1994), p. 190.
- 4 *Ibid.*, p. 211.
- 5 J. Fagan, "Intoxication and Aggression," in M. Tonry and J.Q. Wilson, eds., *Crime and Justice Series: Drugs and Crime*, Volume 13 (University of Chicago Press, 1990), p. 292.
- 6 P.J. Cook and M.J. Moore, "Violence Reduction Through Restrictions on Alcohol Availability," *Alcohol Health & Research World*, Volume 17, Number 2, 1993, p. 151.
- 7 A.R. Lang and P.A. Sibrel, "Psychological Perspectives on Alcohol Consumption and Interpersonal Aggression," *Criminal Justice and Behavior*, Volume 16, Number 3, September 1989, p. 321.
- 8 *Ibid.*, p. 301.
- 9 J.A. Inciardi and A.S. Trebach, *Legalize It?: Debating American Drug Policy* (The American University Press, 1993), p. 160.
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67 The addresses used here represent licenses as of February 18, 1994.

68 Note that the Bureau of the Census suppresses data when the number of individuals in a particular category is small, in order to maintain anonymity. This leads to missing data for some of the desired control variables. This analysis only uses controls that are universally available.

69 There are 1,592 licenses in the sample: the three Class A "liquor-only" licenses were dropped, as were the licenses to allow non-profit organizations to serve beer; four addresses could not be matched to a census tract; 17 licenses were dropped because of inconsistent reporting of census tracts (between the census data and the crime data, affecting two tracts); and 16 were dropped due to suppressed information by the Bureau of the Census on owner-occupation rates (for one tract).

70 Though the results are not reported here, the same is true if only robberies are examined.

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Under the new federalism, government policy increasingly is made at the state and local level. These public-policy decisions affect the lives of every citizen in the state of Wisconsin. Our goal is to provide nonpartisan research on key issues that affect citizens living in Wisconsin so that their elected representatives are able to make informed decisions to improve the quality of life and future of the state.

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