

# **CORRESPONDENCE**



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WRITER'S EMAIL

FILE NUMBER

July 18, 2011

**Via Email and U.S. Mail**

The Honorable William Bogaard  
Mayor  
City of Pasadena  
100 North Garfield Avenue, Suite S228  
Pasadena, CA 91109-7215

Re: Review Hearing: Operating Conditions for Super Liquor  
Hearing Date: July 25, 2011  
Hearing Time: 7:30 p.m.

Dear Mayor Bogaard and Members of the City Council:

This law firm represents Kun Chin Jhae and Kum Man Jhae, the owners and operators of Super Liquor (collectively "Super Liquor"), located at 125 East Orange Grove Boulevard, Pasadena, CA 91103.

**I. INTRODUCTION:**

As the Council is aware, the Code Enforcement Commission ("the Commission") conducted a Review Hearing on April 7, 2011 to consider modification of five of the twenty-one operating conditions imposed by the City Council of Pasadena ("the City") upon Super Liquor. At that time, Super Liquor submitted an extensive letter brief in support of its request for modification, which Super Liquor incorporates herein, and encourages the City to review.

Based upon the evidence and testimony presented at the hearing, the Commission ordered either the modification or removal of each of the five conditions challenged by Super Liquor. It is Super Liquor's contention that, after extensive public testimony and debate, the Commission got it right. Despite the impassioned and warranted testimony from the public regarding their objection to liquor stores in their neighborhoods, alcoholics in their streets, and litter in their yards, the Commission properly found that those issues *cannot* be solely attributed to Super Liquor, or addressed by placing operating conditions upon Super Liquor that have no

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connection to the suppression of a nuisance. This is especially true because there is no evidence on the record that a nuisance condition actually exists at the Super Liquor.

The public concerns voiced at the previous Commission and City hearings have more to do with the far-reaching social ills associated with liquor stores and alcohol, and not any particular nuisance conditions present at Super Liquor. In fact, one resident asserted that Super Liquor should be used as a “test case” for all liquor stores to justify the unreasonable and disparate conditions placed upon it. Another resident provided statistics on the detrimental effects of alcohol use upon society, in general. And yet another resident presented the Commission with a garbage bag full of alcohol-related litter, only a fraction of which had Super Liquor labels.

Unless the City is in a position to eradicate the presence of alcohol, litter, and the particular class of alcohol consumers that are not palatable to the residents of District 5, the imposition of unreasonable conditions upon any legally-run liquor store will not address the residents’ real concerns. It is simply not within the purview of the City to use Super Liquor, *and Super Liquor alone*, as a “test case” to address the larger issues of alcoholism and litter abatement in District 5.

## **II. THE CITY IS OBLIGATED TO ABIDE BY THE STANDARDS SET FORTH IN THE PASADENA MUNICIPAL CODE AND THE CALIFORNIA CODE OF CIVIL PROCEDURE.**

Pursuant to Pasadena Municipal Code section 14.50.060, with respect to alleged non-conforming uses: “The panel may impose such conditions which the panel determines are *necessary* to protect the best interests of the surrounding property or neighborhood, to eliminate, lessen, or prevent any detrimental effect thereon, or assure compliance with other applicable provisions of law” (emphasis added). In addition, the legal standard requires that the City’s findings are supported by *substantial* evidence. Code of Civil Procedure section 1094.5. The findings in this case regarding the presence of a nuisance are not supported by substantial evidence. As a result, the operating conditions are not only unnecessary, they are also completely unrelated to the abatement of any nuisance condition, even if one existed.

Moreover, the disparate treatment applied to Super Liquor in relation to other area liquor stores is evidence of the City’s arbitrary and unreasonable application of the Deemed Approved Ordinance, and constitutes a denial of Super Liquor’s Constitutional right to equal protection under the law. Courts have held that local regulations shall not be arbitrary and unreasonable. *Korean American Legal Advocacy Foundation v. City of Los Angeles* (1994) 23 Cal.App.4th 376, 389.

Based on the governing authority, it is likely that Super Liquor will prevail if it is forced to further litigate these issues way of its Petition for Writ of Mandate. Thus, it is in the

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best interest of all parties to resolve these issues under the standards set forth above, at the administrative level, to avoid the needless expense of trial.

### **III. THERE IS NO EVIDENCE ON THE RECORD THAT A NUISANCE EXISTS AT SUPER LIQUOR.**

The City's finding that a nuisance exists at Super Liquor must be supported by substantial evidence, and the conditions imposed must be necessary to address the alleged nuisance. The evidence in this case fails to meet either standard.

The alleged nuisance activity that was the subject of the ABC report has subsided as there has been no further disciplinary action by the ABC against Super Liquor since March 13, 2009; *and, to Super Liquor's knowledge, there has been absolutely no code enforcement or police activity at Super Liquor in the past year*<sup>1</sup>. Thus, the activity surrounding Super Liquor (in 2007 and 2008) which was the basis of the imposition of operating conditions has ceased to exist. In fact, the stay on the revocation of Super Liquor's license by the ABC became permanent on March 13, 2011 because there have been no further incidents at the property for two years.

The fact that the ABC has not taken any further action against Super Liquor and that there has only been one incident reported to the Police Department in the past year which may have nothing to do with Super Liquor, demonstrates that the prior nuisance activity is no longer present.

### **IV. CONDITIONS AT ISSUE:**

#### **A. Condition Nos. 3 and 19.**

Condition Nos. 3 and 19, which prohibit the sale of single containers of distilled spirits and severely limit Super Liquor's hours of operation, were removed in their entirety by the Commission to comply with the preliminary injunction ordered by the Los Angeles Superior Court. Super Liquor is confident that it will prevail in its Motion for Writ of Mandate with regard to these two conditions on the grounds that the City does not have jurisdiction to rule on these matters. As important, there have been no police incidents or code enforcement complaints related to Super Liquor in the past year, without enforcement of these two conditions. This is undisputed proof that the conditions are not necessary to abate a nuisance.

Thus, Super Liquor respectfully requests that the City remove these conditions in their entirety.

#### **B. Condition No. 9.**

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<sup>1</sup> There is one police report involving public intoxication on East Orange Grove Boulevard in front of Super Liquor. There is no evidence that the suspect had any connection to Super Liquor. Indeed, the suspect was also reported in front of Andy's Liquor across the street.

Condition No. 9 was clarified by the Commission to require Super Liquor to provide an onsite security guard to patrol the business, as opposed the employment of a private security guard. In fact, Mr. Jhae became a certified security guard in order to patrol the Super Liquor Premises at all times.

Because there is no evidence on the record, let alone substantial evidence, that a nuisance exists at Super Liquor, the City does not have any justification to impose a condition that is not only unnecessary and prohibitively costly to Super Liquor, it is also patently unfair in that neighboring liquor stores are not subject to the same requirement.

Super Liquor, therefore, proposes that the condition be reinstated in the form ordered by the Commission to avoid the imposition of a burden that is both arbitrary and disparately applied to Super Liquor.

**C. Condition No. 10.**

Condition No. 10 which requires Super Liquor to remove litter from the premises and the public right of way up to 100 feet from the premises, was clarified and only requires Super Liquor to remove litter on and directly in front of its premises. Super Liquor has always taken pride in its store's appearance and does not dispute its responsibility to keep the premises litter free. Thus, the condition should be reinstated in the form ordered by the Commission, which was not in dispute at the Commission hearing.

**D. Condition No. 18.**

Finally, Condition No. 18, which requires the labeling of all alcoholic beverage containers with the name of Super Liquor, was removed in its entirety by the Commission. This was perhaps the most contentious issue at Commission hearing.

The City cannot dispute that this condition, in particular, is completely unrelated to the abatement of any nuisance condition, and certainly does not preclude Super Liquor's customers from littering. At most, it punishes Super Liquor for the acts of its customers, and is ostensibly designed to hold Super Liquor responsible for the proper disposal of the products it sells. Super Liquor, however, cannot control what customers do once they leave the store. This is not a reasonable burden to put on any business. And based upon the bag of garbage presented by the residents to the Commission at the last hearing, it is undisputed that the garbage came from many sources – some with labels and some without.

There is also no evidence that the City is conducting an evaluation or assessment of the proportion of City litter attributable to Super Liquor. What then is the purpose if the City is not using the data for some rational purpose?

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Again, Super Liquor should not be punished and used as a "test case" to evaluate the efficacy of an arbitrary labeling requirement, when the City is not even involved in the "test" results. The labeling requirements are simply not necessary to protect the best interests of the residents because the requirements are completely unrelated to the abatement of litter.

V. CONCLUSION:

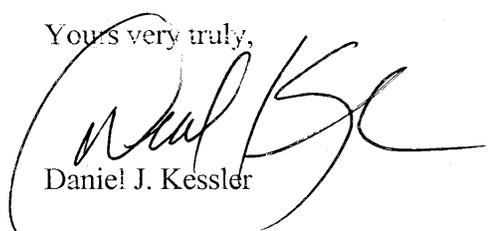
It is not Super Liquor's intention to belabor the points made in its prior letter brief or at the prior hearings. It is, however, necessary to reaffirm that the residents' complaints have nothing to do with Super Liquor, in particular. Instead, the residents are pleading with the City to address the larger issues of alcoholism and litter in District 5. Super Liquor should not, and cannot, be used as a scapegoat to address these concerns.

It should also be noted that Super Liquor's compliance with the ABC operating conditions and the City's additional conditions that are not at issue at this hearing, have drastically improved the area surrounding Super Liquor. This fact is supported by the indisputable evidence on the record that:

- 1) The ABC has taken no further action against Super Liquor since March of 2009;
- 2) There has only been one incident reported to the Police Department in the past year which may have nothing to do with Super Liquor; and
- 3) There has been no code enforcement complaints lodged against Super Liquor in the past year.

It is our hope that Super Liquor can continue to partner with the City to improve the conditions present in District 5, while still running a sustainable business subject only to the conditions *necessary* to protect the community and its citizens.

Yours very truly,

  
Daniel J. Kessler

DJK/slp

cc: Client  
Frank Rhemrev, Esq.

# Request to the City of Pasadena to Not Remove Restrictions Imposed on Super Liquor

By Laura Liptak – 668 North Summit, Pasadena, CA

April 25, 2011

## Opening Point:

Removing the restrictions imposed on Super Liquor will put our neighborhood at risk by increasing the opportunities for assault, violence, drugs, prostitution, and gang activity. All of these frightening activities have been a documented ongoing problem at Super Liquor's property in the past.

Having imposed these restrictions have very slightly begun to mitigate these serious problems in our neighborhood. Removing them will make it easy for the patrons that frequent Super Liquor to commit dangerous activities and become violent close by again.

I have found numerous scientific papers focused directly on the negative impacts liquor stores have on communities and the cities they are located in (quoting just a few below):

- **Liquor stores – neighborhoods:**
  1. Liquor Stores and Community Health, Pacific Institute: *"A recent study across all California zip codes found that neighborhoods with a higher density of liquor stores had higher numbers of childhood accidents, assaults, and child abuse injuries. Liquor stores become places where social controls are weaker, increasing the likelihood of criminal and nuisance activities. A high density of liquor stores is linked to higher levels of crime and violence."*  
*"researchers found that the number of liquor stores was the single most important environmental predictor of why some neighborhoods have higher crime rates than others"*
- **Liquor stores – assault and violence:**
  2. The risk of assaultive violence and alcohol availability in Los Angeles County; Department of Preventive Medicine, University of Southern California, Los Angeles: *"Conclusions: These findings indicate that higher levels of alcohol-outlet density are geographically associated with higher rates of assaultive violence."*
  3. How Alcohol Outlets Affect Neighborhood Violence; Pacific Institute for Research and Evaluation: *"A number of studies have found that in and near neighborhoods where there is a high density of places that sell alcohol, there is a higher rate of violence."*

If numerous studies point to and validate the resounding negative effects liquor stores have on neighborhoods, why would you consider minimizing the existing restrictions placed onto Super Liquor, a deemed 'nuisance' liquor store?

## Closing Point:

During my research I found an alarming study completed through UC Berkeley:

**Do Liquor Stores Increase Crime and Urban Decay? Evidence from Los Angeles;  
Bing-ru Teh, University of California, Berkeley, December 11, 2007**

*"Does the presence of alcohol outlets actually cause crime and urban decay – as suggested by situational models of criminal activity... I find that while both types of outlets result in a displacement of property crime to the immediate vicinity of the outlet, the magnitude of this effect is bigger for outlets located in*

**Request to the City of Pasadena to Not Remove Restrictions Imposed on Super Liquor**

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*low-SES [low socioeconomic status (SES)] neighborhoods. Furthermore, additional outlets in low-SES neighborhoods appear to increase violent crime, and there is some evidence that this increase in violent crime is not contained within the immediate vicinity of the outlet but instead, spills over to locations further away... Together, these results indicate that policy makers should be mindful of the differences between the 'good' and the 'bad' outlets when formulating policy.*

TABLE I  
SAMPLE CRIME DENSITY MEANS IN 1992 BY TRACT LEVEL MEDIAN OUTLET NUMBER

	All LA (1)	Tracts with 0 outlets (2)	Tracts with 2 or less outlets (3)	Tracts with 5 or more outlets (4)
<i>Violent crimes</i>	9.6	1.6	5.0	16.2
<i>Assault with deadly weapon</i>	4.1	0.9	2.2	6.9
<i>Robbery</i>	5.5	0.7	2.8	9.4
<i>Property crimes</i>	16.0	3.1	9.3	24.5
<i>Burglary</i>	5.9	1.1	3.3	9.1
<i>Vandalism</i>	2.8	0.7	1.7	4.3
<i>Vehicle theft</i>	7.3	1.2	4.3	11.1

The entries correspond to the mean number of crimes per square mile per month in each census tract in the geographic subsample of downtown Los Angeles during 1992. We observe that census tracts with more alcohol outlets also have higher crime densities.

I implore you to take deep consideration in allowing Super Liquor to have these restrictions removed. Super Liquor claims to be a family owned and operated business with a high regard for safety. I contest that statement. Super Liquor has demonstrated zero interest in working with their residential and business neighbors to provide a safe and community oriented environment. Removing these restrictions will be putting your tax paying residents and families in immediate danger; and placing innocent children in increased exposure to gangs, drugs, prostitution, and violence.



## Liquor Stores and Community Health

Excerpted from:

*Measuring What Matters: Neighborhood Research for Economic and Environmental Health and Justice in Richmond, North Richmond, and San Pablo*

654 13th Street, Oakland, CA 94612  
[www.pacinst.org](http://www.pacinst.org)

In partnership with West County Toxics Coalition, Neighborhood House of North Richmond, Contra Costa Interfaith Supporting Community Organization, Historic Triangle Neighborhood Council, Morada de Mujeres del Milenio, North Richmond Shoreline Open Space Alliance, and Richmond Progressive Alliance

With support from The California Wellness Foundation, The San Francisco Foundation, East Bay Community Foundation, The Wallace Alexander Gerbode Foundation, Y & H Soda Foundation, Rose Foundation for Communities and the Environment, California Environmental Protection Agency, Firedoll Foundation, Robert & Patricia Switzer Foundation, and The California Endowment

The full report is available at [http://www.pacinst.org/reports/measuring\\_what\\_matters/](http://www.pacinst.org/reports/measuring_what_matters/)



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# LIQUOR STORES AND COMMUNITY HEALTH



*A liquor store across the street from Nystrom Elementary School in Richmond*

**A**n eighth grade Helms Middle School student sets out on his ten-block walk to school. He has an assignment to track what he sees on his walk. A block from his home, he stops at the first store to buy something to drink—it is a liquor store. He leaves with a soda. He has barely begun drinking it before he reaches the next liquor store. He decides to buy a soda at every liquor store he passes as an indicator of how prevalent these stores are in his neighborhood. He continues his walk to school. He does not go into a few of the liquor stores because he is nervous about the activity happening in front of them. By the time he gets to school, he has collected six soda cans over just ten blocks.<sup>1</sup>

High exposure to liquor stores and the easy availability of alcohol in the community affects this San Pablo eighth grader and the public health, safety, and quality of life of his community. On his walk to school, he may be exposed to public drunkenness, harassment of passers-by, and criminal activities—like gambling, prostitution, and drug dealing—that contribute to an environment of social disorder around many liquor stores. At the community level, these stores can act as magnets for crime and violence and expose residents to potential harm.

A high density of liquor stores can contribute to a variety of health and safety problems. Studies show that neighborhoods with higher concentrations of liquor stores also have higher rates of alcohol-related hospitalizations, drunk driving accidents, and pedestrian injuries.<sup>2,3</sup>

A recent study across all California zip codes found that neighborhoods with a higher density of liquor stores had higher numbers of childhood accidents, assaults, and child abuse injuries.<sup>4</sup> Liquor stores become places where social controls are weaker, increasing the likelihood of criminal and nuisance activities.<sup>5</sup> A high density of liquor stores is linked to higher levels of crime and violence.<sup>6,7,8</sup> A study conducted in Los Angeles found that each new liquor store in a neighborhood resulted in 3.4 more assaults per year.<sup>9</sup> In New Jersey, researchers found that the number of liquor stores was the single most important environmental predictor of why some neighborhoods have higher crime rates than others—a stronger predictor than unemployment rate or median household income.<sup>10</sup>

Since merchants often use storefronts to advertise alcohol products, the concentration of liquor stores also influences the amount of alcohol advertising in a community. This advertising can have a powerful impact over time, especially when the advertisements are located in areas where youth often congregate or pass by. Exposure to alcohol advertising on television has been related to youth having positive attitudes about the social uses of alcohol.<sup>11,12</sup> The influence of this advertisement is especially troubling for youth whose immediate physical and social environments are dominated by liquor stores and alcohol advertisements.

This high concentration of liquor stores and outdoor alcohol advertising disproportionately affects low-income communities of color. Research shows that black people face higher exposure to liquor stores in their neighborhoods than do white people, and similarly nonwhite youth live in neighborhoods with higher concentrations of liquor stores than white youth.<sup>13,14</sup> For example, a

study found that West Oakland—home to predominantly people of color—contains one liquor store for every 298 residents, while the largely white neighborhood of Piedmont has one liquor store for every 3,000 residents.<sup>15</sup> As a result, communities like West Oakland tend to have far more access to liquor stores and alcohol than to grocery stores and fresh produce.

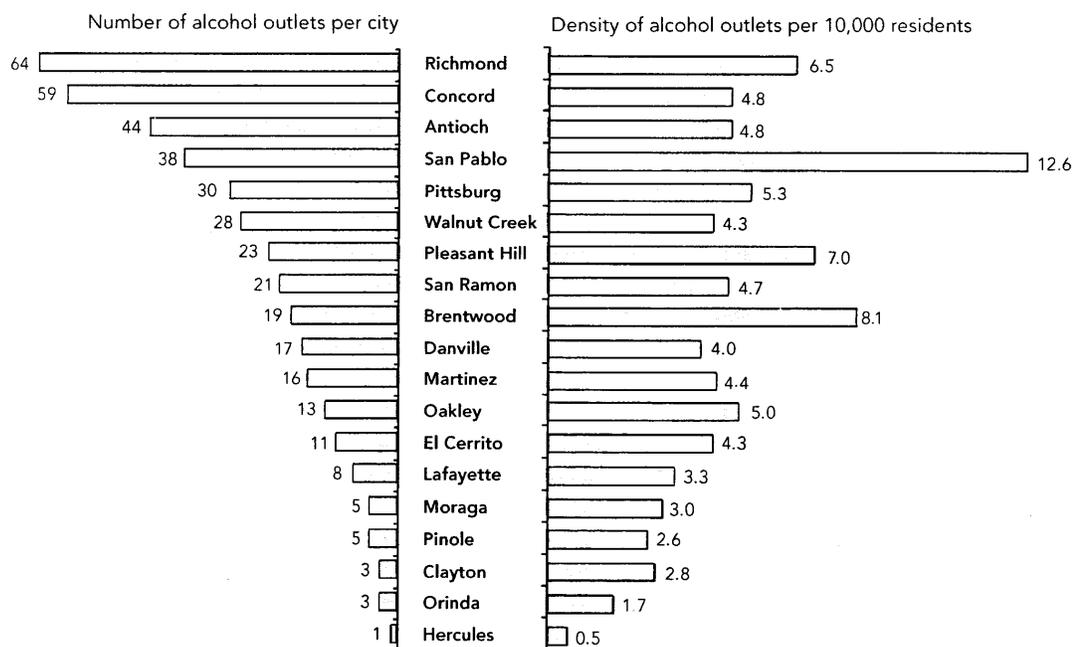
A high density of liquor stores also contributes to economic and social disintegration.<sup>16</sup> Similar to power plants and refineries, alcohol outlets represent a form of locally unwanted land use that conflicts with desirable land uses such as schools, parks, and residences. The over-concentration of liquor stores increases the perceived lack of safety and limits walkability in the community. Moreover, concentrations of liquor stores in a neighborhood can constrain economic opportunities for current and new businesses and therefore are both a symptom and accelerator of economic decline.

## WHAT DID OUR RESEARCH FIND?

We looked at two indicators of youth and resident exposure to liquor stores: 1) liquor store density and 2) proximity of liquor stores to schools or parks. We looked only at alcohol outlets that are not grocery stores and that sell liquor for consumption off the premises. Similar to

most of the studies cited above, we did not look at full-service grocery stores that sell alcohol, as these stores do not present the same types of risks (easy access to liquor, storefront advertising) as liquor stores.

Figure 1. NUMBER AND DENSITY OF ALCOHOL OUTLETS PER CITY, CONTRA COSTA COUNTY, 2006<sup>17,18</sup>



Total off-site outlets in cities in Contra Costa County: 408

### Liquor Store Density

This indicator examines the number of liquor stores in an area in relation to the size of the population that lives there. It allows us to compare the density of liquor stores across Contra Costa communities of varying populations and determine the communities that have the highest concentrations.

### Richmond and San Pablo have 25% of Contra Costa County's liquor stores, but less than 14% of its population.

Figure 1 shows the number and density of alcohol outlets within each Contra Costa County city. The cities of Richmond, Concord, Antioch, and San Pablo have the most liquor stores. San Pablo and Richmond neighborhoods—comprised mostly of people of color (84% and 79% respectively)—have 12.6 and 6.5 liquor stores for every 10,000 residents. In contrast, neighboring Orinda and Lafayette—both 16% people of color—have 1.7 and 3.3 liquor stores for every 10,000 residents, respectively. In fact, Richmond and San Pablo are home to a quarter

(25%) of Contra Costa County's liquor stores, but represent less than 14% of the county population.

### Proximity of Liquor Stores to Schools and Parks

Land-use compatibility is an important component of the well-being and health of communities. Liquor stores in close proximity to schools and parks expose youth to the negative effects of alcohol outlets and advertising. This indicator measures the number of liquor stores within 1,000 feet of a school or park.<sup>19</sup>

Figure 2 shows the proximity of liquor stores to schools and parks in West County neighborhoods. Each school and park is encircled by a 1,000-foot radius (or buffer) to determine whether liquor stores are located within short walking distance. Almost 60% of West County schools and parks are within 1,000 feet of a liquor store. In fact, roughly 30% of parks and schools in West County are within 1,000 feet of two or more liquor stores.

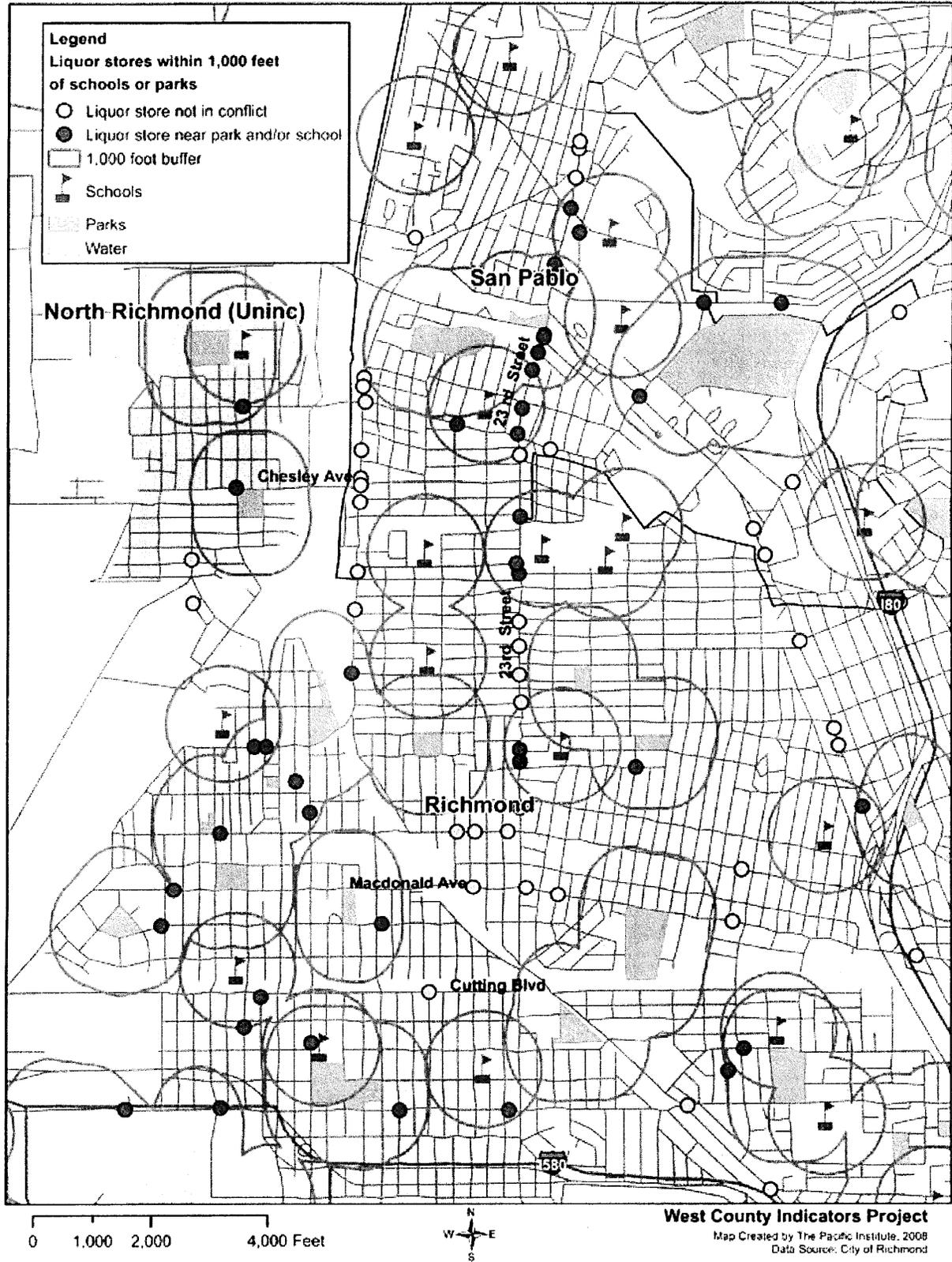
Table 1 shows, for each city in Contra Costa County (excluding the cities with zero liquor stores), the number of liquor stores located within 1,000 feet of any park or school, along with the median household income and the percentage of residents of color.

Table 1. CITIES WITH ONE OR MORE LIQUOR STORE WITHIN 1,000 FEET OF ANY PARK OR SCHOOL, CONTRA COSTA COUNTY, 2006

City	Liquor stores within 1,000 ft of a park or school	Total liquor stores in city	Median Household Income (Census 2000)	Percent People of Color (Census 2000)
Moraga	1	5	\$ 98,080	22%
Pinole	2	5	\$ 62,256	52%
San Ramon	2	21	\$ 95,856	28%
Danville	3	17	\$ 114,064	17%
El Cerrito	2	11	\$ 57,253	46%
Lafayette	3	8	\$ 102,107	16%
Pleasant Hill	4	23	\$ 67,489	23%
Brentwood	5	19	\$ 69,198	37%
Walnut Creek	5	28	\$ 63,238	19%
Pittsburg	6	30	\$ 50,557	69%
Antioch	7	44	\$ 60,359	44%
Martinez	8	16	\$ 63,010	24%
San Pablo	14	38	\$ 37,184	84%
Concord	20	59	\$ 55,597	39%
Richmond	25	64	\$ 44,210	79%
Contra Costa County	113	388	\$ 63,675	37%

Note: Cities not listed were found to have zero liquor stores near schools or parks.

Figure 2. PROXIMITY OF LIQUOR STORES TO SCHOOLS OR PARKS IN WEST COUNTY NEIGHBORHOODS, 2006



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## WHAT DOES THIS MEAN FOR WEST COUNTY?

When we step back and compare the cities of Richmond and San Pablo to the surrounding county, we find that an unusually high number of schools and parks in these cities are within a short walking distance of a liquor store. The five cities with the highest numbers of liquor stores near parks and schools all have median household income below the county median of \$63,675.

It is evident that West County youth have far more liquor stores within their immediate environment compared to the rest of the county. In fact, 39 of the 113 (35%) liquor stores within 1,000 feet of a school or park in Contra Costa County are located within the cities of Richmond and San Pablo—the two cities in Contra Costa County with the highest percentage of nonwhite residents.

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## WHAT CAN WE DO?

In California, like many other states, the rules on issuing and revoking licenses to sell alcohol are set by the State; however, local governments have authority to regulate land use to protect the health, welfare, and safety of citizens. Many municipalities, including the cities of San Pablo<sup>20</sup> and Richmond,<sup>21</sup> have zoning ordinances in place that restrict the development of new liquor stores by enforcing minimum distance requirements either between outlets or between liquor stores and schools or parks. While these ordinances are successful at preventing the

establishment of new liquor stores, they do not address the health and safety problems associated with existing ones. Below are successful approaches carried out by other cities across the state designed to address existing liquor stores in their communities:

Enforce property maintenance and environmental design guidelines of liquor stores, particularly those in close proximity of schools and parks.

Environmental Prevention in Communities (EPIC) carried out a youth-driven survey of liquor stores in the city of Oakland. The survey assessed the number of outlets that were not in compliance with environmental design guidelines of the city. Results provided evidence for enforcement of design standards, including restrictions on storefront liquor advertising.<sup>22</sup>

Assist with conversion of liquor stores to other retail that meets community needs, such as access to healthy food. Because many liquor stores are also independently owned corner stores, they can transition to other forms of retail that are greater assets to the neighborhood. To facilitate this transition, cities and counties could provide redevelopment dollars, credit for repair and loans, and business plan development assistance.<sup>23</sup>

Enforce ordinances to restrict nuisance activities around liquor stores.

Both the City of Oakland and the City of San Francisco passed legislation that strengthens local control and holds liquor store owners accountable for addressing nuisance and crime issues connected to their stores, such as litter, loitering and graffiti, assault, and prostitution.<sup>24</sup> Liquor store permits are revoked if proof of serious issues is obtained and violations persist.



*Students walk home from Peres Elementary School in Richmond.*

## COMMUNITY RESOURCES FOR INFORMATION AND CHANGE

California Department of Alcohol Beverage Control

[www.abc.ca.gov](http://www.abc.ca.gov)

The Department of Alcohol Beverage Control (ABC) is the state agency responsible for "the protection of the safety, welfare, health, peace, and morals of the people of the State, to eliminate the evils of unlicensed and unlawful manufacture, selling, and disposing of alcoholic beverages, and to promote temperance in the use and consumption of alcoholic beverages... (for) the economic, social, and moral well-being and the safety of the State and of all its people."

City of Richmond City Council Meetings

[www.ci.richmond.ca.us/index.asp?NID=29](http://www.ci.richmond.ca.us/index.asp?NID=29)

Meetings are held on the first and third Tuesday of every month at City Hall, 1401 Marina Way South, Richmond CA 94804.

City of Richmond Neighborhood Council Meetings

Richmond Neighborhood Council meetings are typically held monthly in a community center in each

neighborhood. For a particular neighborhood council meeting time and location, visit:

[www.ci.richmond.ca.us/DocumentView.asp?DID=306](http://www.ci.richmond.ca.us/DocumentView.asp?DID=306).

San Pablo City Council Meetings

[www.ci.san-pablo.ca.us/main/citycouncil.htm](http://www.ci.san-pablo.ca.us/main/citycouncil.htm)

Meetings are held on the first and third Mondays of each month at 7:00 p.m. in the City Hall Council Chambers located at 13831 San Pablo Avenue.

The Marin Institute

24 Belvedere Street

San Rafael, CA 94901

415.456.5692

[info@marininstitute.org](mailto:info@marininstitute.org)

[www.marininstitute.org](http://www.marininstitute.org)

The Marin Institute works to protect the public from the impact of the alcohol industry's negative practices. The Institute serves as a resource for solutions to community alcohol problems by helping develop environmental prevention strategies, alcohol policy, and media advocacy. Access to fact sheets, community success stories, and other tools for success are also available through their website.

## RESEARCH METHODS

### Accessing Liquor Store Data

Information on the locations of businesses with licenses to sell alcohol comes from the California Department of Alcohol Beverage Control (ABC). To access a list of the current alcohol licenses in your city, go to the ABC website: [www.abc.ca.gov/datport/SubscrMenu.asp](http://www.abc.ca.gov/datport/SubscrMenu.asp). At this website, you may choose the type of information you would like to view by selecting from a list of reports available. For a list of the alcohol licenses in your city, select the "Query by City and License Type information" ad-hoc report near the bottom of the page. On the next page, you can select your city and the type of alcohol license you are interested in. For our research, we focused on "Active Off-Sale Retail Licenses," or businesses that sell alcohol to be consumed off the business property. If you select Active Off-Sale Retail Licenses, the next page will provide a full list of the businesses in your city with this type of license, including the addresses and owner name. By clicking on the license number of a specific store, you may also view detailed information about that business, including past violations of relevant laws. The laws and penalties related to

alcohol businesses are available on the ABC webpage: [www.abc.ca.gov/LawsRulesReg.html](http://www.abc.ca.gov/LawsRulesReg.html).

The information on the density of liquor stores per 10,000 city residents was produced using the alcohol license data from ABC along with Census data on the number of residents per city. To obtain Census data on the total population per city and town in your county, follow the steps described in the Demographics Research Methods section on page 105. To calculate the number of liquor stores per 10,000 residents, use the following formula: number of liquor stores in the city, divided by the city's total population, multiplied by 10,000.

For our research on the number of liquor stores near parks and schools per city, we used the computer mapping software ArcGIS. The ArcGIS buffer analysis tool was used to identify the parks and schools within 1,000 feet of liquor stores. For detailed methods for our analysis with ArcGIS, please contact the Pacific Institute: [info@pacinst.org](mailto:info@pacinst.org); 510.251.1600.

## REFERENCES

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# Do Liquor Stores Increase Crime and Urban Decay? Evidence from Los Angeles<sup>†</sup>

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## Job Market Paper

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### Abstract

Liquor stores are a common sight in many distressed neighborhoods. But does the presence of liquor stores actually *cause* crime and urban decay – as suggested by situational models of criminal activity – or are liquor stores more likely to open in declining neighborhoods? In this paper, I use administrative data on the locations of alcohol outlets in the city of Los Angeles, merged with detailed incident crime reports and property transactions, to evaluate the effects of alcohol outlet openings and closings on local crime rates and property values. I specify an event-study framework to measure the changes in violent and property crimes just after the opening and closing of outlets. Both types of crime increase following an outlet opening, with larger effects in the immediate vicinity of the new outlet. The overall impact of new outlet openings is driven by effects in low socioeconomic status (SES) neighborhoods: openings in high-SES neighborhoods only have small effects on property crime. Outlet closings have smaller impacts, on average, although there is some indication that the closing of an outlet in a low-SES neighborhood reduces crime. A parallel analysis of residential property transaction values find that outlets located in low-SES neighborhoods are seen as a disamenity, whereas outlets located in high-SES neighborhoods are valued by homeowners. Overall, it appears that additional alcohol outlets – especially in lower-SES neighborhoods – contribute to both crime and urban decay.

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## 1 Introduction

Do increases in alcohol outlet density increase crime? The media and the general public certainly think so: One CBS 5 Investigates report documented how liquor stores that stay open late at night in downtown Californian neighborhoods tend to be a congregation place of gangs, leading to such stores becoming 'hot spots' for violent crime; Another report from the Sacramento Bee quotes Sacramento Police Captain Ted Mandalla commenting that "people purchase alcohol and consume it close by, and then they become bold enough to do things they wouldn't ordinarily do, or (they) consume alcohol and become prey". Subsumed within the larger umbrella of rational choice theory, a criminological theory that fits the above description is Cohen and Felson's (1979) routine activities theory, which states that crime results from a nonrandom convergence in time and space of likely offenders (drunkards and/or drug addicts), suitable targets (other intoxicated individuals or passer-bys) and the lack of able guardians (absence of a strong police presence).

Is the crime increase brought about by alcohol outlets confined to the immediate vicinity of the outlet? Or does the increased availability of alcohol also lead to an increase in alcohol abuse, thereby increasing crime in the broader neighborhood of the outlet as well? According to a Bureau of Justice Statistics 1998 report, 40% of criminal offenders report using alcohol during the time of offense, while 60% say they have been drinking regularly the year before the offense was committed. This suggests that alcohol consumption may play a role in crime, although the exact magnitude of its impact and the causal channels through which it operates, if any, remain unknown.

Possibly due to an increased awareness from media reports and growing frustrations of residents who live close to liquor stores, it has become increasingly common to see reports in local newspapers of residents uniting to either close down problem liquor stores or to prevent more liquor stores from opening in their neighborhood. However, while numerous studies find a correlation between alcohol outlet density and crime, to my knowledge, no study has shown a *causal* relationship between alcohol outlets and crime. Hence, although there is strong evidence that alcohol outlet density is related to crime, it remains inconclusive as to whether alcohol outlets themselves cause crime, result in a displacement of crime from surrounding areas, or

whether they simply tend to be located in areas that inherently have higher crime rates. In addition, in part due to a lack of readily available databases, many of these studies rely on crime data that has been aggregated to either the census tract level or municipality level, and limit their study to a single decennial census year (a cross-section) and a single category of crime (e.g., Scribner et al., 1995; Scribner et al., 1999; Gorman et al., 1998). Another potential impediment is the high costs involved in accessing and using geographical information systems (GIS) software and its associated spatial databases.

This study uses administrative historical liquor licensing data from the California Department of Alcoholic Beverage Control (DABC), incident crime reports from 1992-2004 with detailed location information from the Los Angeles Police Department (LAPD) and a database of all residential property transactions in Los Angeles County between January 1980 and June 2000 from DataQuick, together with census tract demographic data from the 1990 and 2000 decennial census, to understand the magnitude and spatial distribution of the effect of alcohol outlets on crime and urban decay.

The variation in the geographical allocation of off-sale retail alcohol outlets over time is used to identify the causal impact of alcohol outlets on crime and urban decay. More specifically, I look at the change in the number of violent and property crimes per square mile per month (from here on to be referred to as the crime density for simplicity) at varying distances (from 0 to 0.5 miles) away from the outlet 24 months before and after the opening or closing of the outlet. By limiting the sample to neighborhoods that experience at least one outlet opening (or closing) during the time frames of the crime (January 1992-December 2004) and residential property transaction (January 1980-June 2000) data sets, this event study (Fama et al., 1969; Binder, 1998) specification estimates changes in crime density across areas that are more similar to one another than to other areas in the city. Moreover, I allow for a different time trend before and after the event, outlet tract specific time trends, and include controls for the number of existing outlets in the neighborhood, time fixed effects as well as individual outlet fixed effects. While the original intent was to conduct an event study estimating monthly coefficients following Jacobson, LaLonde and Sullivan (1993), the noisiness of reported crime data led to the use of between one and four estimated coefficients to summarize the effect of alcohol outlet openings and closings over the 49 month interval that I study.

While the alcohol outlets that make the news are typically “mom and pop” liquor stores located in low socioeconomic status (SES) neighborhoods, the liquor licensing data<sup>1</sup> I use includes not only liquor stores, but also supermarkets, specialty wine stores, grocery stores and gas stations. Moreover, a liquor store located in a low-SES neighborhood is very different from a liquor store located in a high-SES neighborhood in terms of the physical appearance of the store interior and exterior, their clientele and the range of products sold. In view of the vast heterogeneity that exists between outlets located in different neighborhoods, I group outlets by using the average of the 1990 and 2000 levels of median household income of the census tract in which the outlet is located. I then considered outlets belonging to the top 2 and bottom 2 SES quintiles separately.

One common complaint against some alcohol outlets is that because they tend to be the only stores open till late at night or even into the early morning hours, they serve as a neighborhood congregation place for people involved in illicit activities. In addition, it is common knowledge that different types of crime occur at varying frequencies during different times of the day. To determine how an entry or exit of an alcohol outlet affects crime during different times of the day, I split up my crime database into four categories of equal time intervals.

Assuming externalities stemming from alcohol outlets are fully capitalized into property prices, we can use the change in residential property transaction prices as a measure of the costs (benefits) alcohol outlets impose on communities through urban decay (development). By integrating a difference-in-difference model into a hedonic regression framework, the marginal impacts of recent (within 12 months) alcohol outlet openings and closings on the residential property transaction values in its neighborhood are estimated. As before, I examine the differential effect of outlets in low and high-SES neighborhoods separately.

Upon the opening of alcohol outlets in low-SES neighborhoods, I find that the estimated increase in property crime density (number of property crimes per square mile per month) is much higher than when I considered all outlet openings together. Within 0.1 miles of new outlets in low-SES neighborhoods, property crime density increases as

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<sup>1</sup> Previous studies that examine the relationship between alcohol outlet density and crime (e.g., Scribner et al., 1995; Scribner et al., 1999; Gorman et al., 1998) do not distinguish between outlets situated in different neighborhoods.

long as there are less than 8 existing outlets in that 0.1 mile radius. Comparing the estimated percent change in property crime density in areas within 0.1 miles from the new outlet against that in areas between 0.1 and 0.25 miles away, we observe an interesting phenomenon: property crime is displaced from areas further away to areas closer to the new outlet. This suggests that property crimes are 'mobile' and are sensitive to the higher human traffic brought about by the opening of a new outlet. Conversely, the estimated increase in violent crime density within 0.1 miles from the new outlets is magnified by the presence of other outlets in the same area. Unlike property crimes, there appears to be agglomeration effects for violent crimes in low-SES neighborhoods.

When I limit my sample to outlets located in high-SES tracts, I find that new outlets in high-SES neighborhoods cause property crime density to increase but on the other hand, appear to decrease violent crime density as well. This is not surprising since outlets in high-SES neighborhoods typically consist of supermarkets, specialty wine stores and grocery stores and these outlets will typically attract a clientele consisting largely of families and wine connoisseurs.

The closure of outlets in low-SES neighborhoods decreases property crime density in the immediate vicinity of the outlet. There is some evidence, however, that this decrease in property crime results in a corresponding increase further away. This is consistent with earlier findings that suggest that property crimes are displaced and are sensitive to changes in human traffic. The closure of outlets in low-SES neighborhoods has virtually no effect on violent crime density when there are other outlets around.

In contrast, the closure of outlets in high-SES neighborhoods appear to increase both property crime and violent crime. While the effect of a closure on violent crime is mitigated by the presence of other outlets, the increase in property crime density is magnified by the presence of other outlets. One plausible explanation for this is that the other outlets that remain after the outlet closure may be located in relatively lower-SES neighborhoods if the outlet that closed was situated near the edge of a high-SES tract. Another possibility is the business that replaced that particular alcohol outlet may not draw as desirable a clientele as the alcohol outlet.

In addition, I find that homes located within 0.5 miles from new outlets in low-SES neighborhoods sold for between 2 and 4 percent less on average but homes located

within 0.5 miles from new outlets in high-SES neighborhoods sold for between 0.75 and 1.6 percent more on average. Similarly, the closure of outlets in low-SES neighborhoods increases transaction prices by between 4 and 5 percent, while the closure of an outlet in a high-SES neighborhood led to a decrease of transaction prices by between 0.1 and 1 percent. These results suggest that outlets located in low-SES neighborhoods are seen as a disamenity, whereas outlets located in high-SES neighborhoods are valued by homeowners. Also, I observe that outlets in high-SES neighborhoods have a smaller effect on property prices than outlets in low-SES neighborhoods. This is consistent with the findings in the earlier parts of the paper where I find that outlets in low-SES neighborhoods have a relatively larger impact on crime.

The rest of the paper is organized as follows. In the next section, I present an overview of my conceptual framework. In Section 3, I describe the data used in this study and then in Section 4, I examine the relationship between alcohol outlets and crime, detailing both my empirical methodology and results. Section 5 looks at the relationship between alcohol outlets and urban decay as measured by the change in the transaction price of residential properties. It begins with an analytical model, followed by a description of the empirical methodology and results. Section 6 concludes.

## **2 Conceptual Framework**

Assuming criminals are utility maximizing agents whose decision to commit a crime is affected by the costs associated with punishment (Becker, 1968), why might crime be affected by the presence of alcohol outlets? One explanation is its alteration of routine activity (1979): Alcohol outlets serve as a congregation place for motivated offenders, increase human traffic and therefore the number of suitable targets (and possibly also the number of empty houses) and in the absence of a guardian, an opportunity for crime is created. Another associated strand of rational choice theory is situational crime prevention theory (Clarke, 1997) which posits that patterns in criminal activity are not solely determined by where criminals live, but also where opportunities for crime concentrate.

A related question is whether alcohol outlets displace crime or cause additional crimes. If alcohol outlets lead to either a temporal or geographical displacement of crime, the policy implications are very different than if it causes additional crimes that would not have occurred otherwise. By studying changes in crime patterns at varying distances away from an outlet due to changes in outlet density, I attempt to determine whether alcohol outlets displace crimes geographically.

To my knowledge, this is the first study to exploit both the time series and cross-sectional variation in the location of alcohol outlets on property and violent crime density. However, there are several studies that have exploited the cross-sectional variation alone: Scribner et al. (1995) uses cross-sectional data from 74 Los Angeles County cities in 1990 and find that a higher alcohol outlet density is associated with a higher rate of assaultive violence: For a typical Los Angeles County city, 1 outlet was associated with 3.4 additional assaultive violence offenses. However, a replication of Scribner et al. (1995) by Gorman et al. (1998) using a cross section of 223 New Jersey municipalities find that outlet density does not appear to significantly affect the explained variance. Since assaultive violence crimes may suffer from underreporting, Scribner et al. (1999) chose to use homicide rates as the outcome variable instead. Looking at 155 urban residential census tracts in New Orleans, they find that 10% higher off-sale alcohol outlet density was related to a 2.4% higher homicide rate.

An obvious drawback of the cross-sectional approach used in the existing literature relating alcohol outlets and crime is that the estimated parameters do not have an explicitly causal interpretation, making it less interesting for policy evaluation purposes. In addition, a common criticism of the existing literature is the exclusive use of aggregate data. Using counties, municipalities or census tracts as the unit of analysis ignores local variation, which is important for the purpose of this research question since alcohol outlets are not evenly distributed across the geographical units concerned and neither is crime. In fact, crime has been known to be concentrated in "hot spots" such as in bus depots and malls (Sherman et al., 1989). Hence, it appears that while it is generally well established that neighborhoods with more alcohol outlets tend to have a higher violent crime rate, it remains inconclusive as to whether alcohol outlets themselves create crime or whether they cause a redistribution of crime away from the surrounding areas. I

use variants of an event study framework to identify the causal impact of alcohol outlets on crime density, the details of which are explained below in Section 4.1.

Another issue that has not been addressed in the existing literature is the vast heterogeneity that exists between alcohol outlets. Alcohol outlets are not restricted to ‘mom and pop’ corner liquor stores, but also include supermarkets, specialty wines stores and grocery stores. While it is impossible to exactly identify the type of alcohol outlet from the alcohol licensing data, I overcome this problem by stratifying alcohol outlets by the socioeconomic status (SES) level of the census tract it is located in. In fact, grouping outlets by the SES level of their location may even be superior to separating alcohol outlets into their various types. This is because while there is typically a higher concentration of supermarkets and wine stores in high-SES neighborhoods and a higher concentration of liquor stores in low-SES neighborhoods, we also find liquor stores in high-SES neighborhoods and supermarkets in low-SES neighborhoods. Instead, the heterogeneity that exists between outlets usually stems from the *location* of the outlet: A liquor store in a low-SES neighborhood sells more single serving bottles of fortified wine and is generally characterized by a badly maintained building and iron bars across window panes. In contrast, a liquor store in a high-SES neighborhood sells more expensive bottles of red wine and generally has a nice and clean store front.

Turning to the estimation of the effect of alcohol outlets on residential property transaction values, I adopt the hedonic model framework. It is not unusual for home buyers to search for properties within a set of pre-selected neighborhoods that they consider to be a good match for their family’s needs. A recurring theme in this study is the importance of *location*. In this case, it is important because it determines, among many things, the schools your children go to, the length of your commute to work and how far you will have to drive to your favorite restaurant. These location specific amenities are traded in a “bundle”, along with the physical structure of a house in the residential property market. The hedonic model has been widely used to estimate the value of these non-market goods: Black (1990) uses house prices to estimate the value parents put on school quality while Linden and Rockoff (2006) use house prices to estimate the cost of perceived crime risk from living close to a sex offender. These “bundles” are generally heterogeneous in nature (Rosen, 1974; Witte et al., 1979; Epple,

1987; Sheppard, 1999) and it is difficult to separately identify the hedonic price function of each amenity because the variation in the amenity may be correlated with factors that are not observable. Hence, I integrate a difference-in-difference set-up into the basic hedonic framework to allow me to infer the value homeowners place on new and old alcohol outlets in their neighborhood. Furthermore, I group alcohol outlets by the SES level of the census tract they are located in as before, to estimate the difference between residents' marginal willingness to pay for a desirable outlet, and an undesirable one.

### **3 Description of Data**

Four data sets were used in this study: A historical panel of retail alcohol licenses from the California Department of Alcoholic Beverage Control (DABC), detailed crime reports from the Los Angeles Police Department (LAPD), residential property transactions data from DataQuick, a commercial company that provides real property and land data and demographic variables at the census tract level from the 1990 and 2000 decennial census.

The alcohol outlet data set consists of a panel of all 211,964 retail alcohol licenses that have been issued by the DABC over time and spans 31 license types, including off-sale beer and wine (type 20), off-sale general (type 21), on-sale beer (type 40), on-sale beer and wine eating place (type 41), on-sale beer and wine public premises (type 42) and on-sale general eating place (type 47). For the purpose of this study, I focus on the alcohol outlets with off-sale retail licenses (types 20 and 21). Type 20 licenses are typically held by convenience stores and gas stations while type 21 licenses are typically held by liquor stores and supermarkets. Other variables in this data set include the file number, file status (active, surrendered, canceled, revoked etc.), file status date, type status, type original issue date, premise street address, premise city, premise 5-digit zip code and DBA (doing business as) name.

The tenure of each active license is determined by its original issue date and the date the tape list was generated. The tenure of the rest of the licenses is determined by its original issue date and the file status date, which is the date of the most recent change in file status. Since license transfers between past and present owners operating at the same

premise are common, there are several cases whereby a few licenses correspond to the same premise address over different time periods. Hence, the data had to be sorted in a way to take into account repetitions of the same address several times over the years. I then looked at each unique premise address individually to determine the time frame during which each alcohol outlet was in operation. I individually looked up each ambiguous case using the DABC's License Query System available online at the DABC's website ([www.abc.ca.gov](http://www.abc.ca.gov)). The online License Query System also contains information on the disciplinary record of each alcohol outlet including the reporting agency, the type of violation, fines imposed, disciplinary action taken, and the date of the violation.

To my knowledge, this administrative database is the best available data set that can be used to determine alcohol outlet openings and closings. However, there are some limitations to this data set: The DABC switched over to a new database system during 1993 as a result of which some records of licenses that became inactive prior to the time of the transfer may have been lost. Some of the records of inactive stores that survived the transfer had missing file status dates and file statuses that were later imputed as January 1, 1994 and "automatically revoked due to non-payment" respectively. Hence, there are an unusually high number of outlets that appeared to have closed on January 1, 1994. To minimize the error from this imputation, these outlets were dropped from the data set when looking at the changes in crime level and residential property transaction values due to an outlet closure. However, these observations were preserved when determining the number of active alcohol outlets within an x-mile radius since dropping them may lead to erroneous under counting of alcohol outlets in several time periods.

For the part of this study that looks at the relationship between alcohol outlets and crime, only outlets situated within the boundaries of the city of Los Angeles were considered as detailed crime reports are only readily available for Los Angeles. The exception to the rule was when I was determining the number of active alcohol outlets within an x-mile radius. In that case, I included the outlets in the areas surrounding the city of Los Angeles as well.

One should be mindful that different subsets of the alcohol licensing data are used for different parts of the paper: The sections involving crime use data from 1992-2004, whereas the sections involving real estate transactions use data from 1980-2000.

Next, I geocoded the locations of these alcohol outlets onto a digital map by using a combination of ESRI's StreetMap USA database and the Census Bureau's Tiger Line Files. As with any low-cost street address database, both the versions I use have both missing and erroneously named streets. Thankfully, the alcohol outlet database was small enough for me to individually check each alcohol outlet the address locator was either unable to locate or matched with a very low score (below 40).

The Los Angeles detailed crime reports database<sup>2</sup> from January 1991 to October 2005<sup>3</sup> was obtained directly from the LAPD. This database contains detailed information on all reported crimes that violate the Californian Penal Code, including street intersection or zip+4 of the location of each crime, except for certain classes of crime (mainly rape, sex or abuse-related crimes) as it is against the Californian State law to disclose information that may allow for the identification of the victim of these crimes. Hence, I am able to locate individual crimes down to the street block level. In this study, I focus on crimes that occur at a high frequency and these crimes can be divided into two main categories: violent crimes and property crimes. The violent crimes I examine in this study are robbery and assault with a deadly weapon and the property crimes I examine are burglary, vehicle theft and vandalism<sup>4</sup>. While each of these five crimes is individually examined, for purposes of conciseness, I will only discuss results pertaining to violent and property crimes as a whole<sup>5</sup> for the remainder of this paper.

In addition, there is information on the exact date and time of the crime, which I use to group the data into monthly cells and to differentiate between crimes committed during the day and at night. There is also information on the reporting district of the crime, reporting division of the crime and the type of premise (for example a parking lot, a single family residence or a school) at which the crime was committed.

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<sup>2</sup> The retrieval process for this crime reports database is detailed in the appendix.

<sup>3</sup> It should be noted that only data between January 1992 and December 2004 were used in the study due to missing and/or incomplete data in the first and the last years of the data set.

<sup>4</sup> I am in the process of geocoding more crimes to be included in this analysis. However, I believe the present selection of crimes is good, especially considering that they appear to be among the most frequently reported set of crimes (Levitt, 1998).

<sup>5</sup> Estimation results of each of the 5 crimes are available from the author upon request.

One general concern with reported crime data is the presence of measurement error as a result of changes in crime reporting by victims over time and across neighborhoods. However, since crime density is the dependent variable in my study, and given that there is no obvious reason to believe that crime reporting changes as a result of an alcohol outlet opening or closing, it is reasonable to assume classical measurement error. Also, by using crime reports from only one police department, I can easily control for changes in police department reporting practices and changes in crime classification across jurisdictions over time with the inclusion of time dummies.

As with the alcohol outlet data, I also geocoded the locations of these crimes onto a digital map by using a combination of ESRI's StreetMap USA database and the Census Bureau's Tiger Line Files. However, given the considerable number of crimes in a city as large as Los Angeles, I was unable to individually check all crime locations that were either unmatched or matched with a very low score. Instead, I used the reporting district variable in the dataset to make sure that the crime was not geocoded to a location that was clearly incorrect. In the case of unmatched crime locations, this was typically a result of inherent errors in the data set, including, but not limited to spelling errors and incomplete street addresses. While it was possible to correct the spelling errors and re-geocode these crime locations, there was nothing much I could do for the other error types. Fortunately, I fail to match less than 4% of the data.

The DataQuick data consists of all residential real estate transactions in Los Angeles County from January 1980 to June 2000. Some variables of interest include the exact address of the property, the date of transaction, the transaction price, the assessed value of the property, the size of the property, the number of bedrooms and the number of bathrooms. A nice feature of the DataQuick data is the availability of the *actual* transaction price of the property, which gives us the true market valuation of the property, instead of the *assessed* value of the property, which does not necessarily reflect the market valuation of the property. While this data set included the whole of Los Angeles County, only transactions within the city of Los Angeles and transactions within a 2 mile radius of the boundary of the city of Los Angeles were considered. I also geocoded the locations of these transacted properties using the same street address databases as above. I utilized the same matching strategy for the transactions data as I did for the crime data.

For the residential property transactions data, I failed to match fewer than 1% of the addresses.

The census tract level demographic variables for both 1990 and 2000 are downloaded directly from the Census Bureau's website ([www.census.gov](http://www.census.gov)).

#### 4. Do Alcohol Outlets Increase Crime?

##### 4.1 Empirical Strategy

The approach I take in this study aims to exploit the strengths of my data— that it consists of a large number of individual crime reports with detailed information on the location and time of the crime and that it covers a long period of time, 1992-2004. I use an event study framework to identify the causal impact of alcohol outlets on crime density (number of crimes per square mile per month) as illustrated in Figure 1 below.

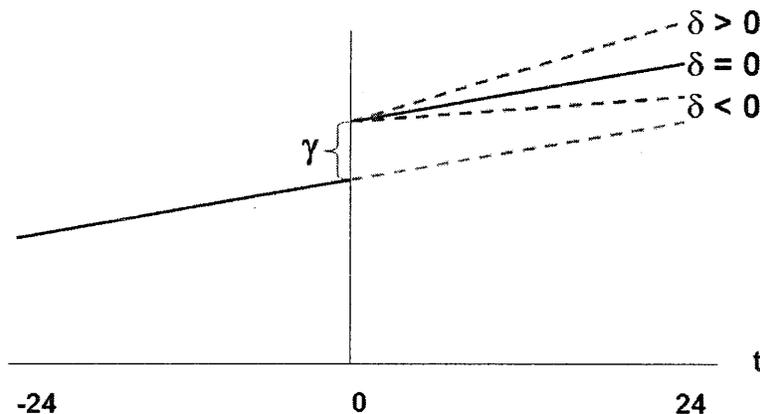


Figure 1

I limit the sample to neighborhoods that experience at least one outlet opening (or closing) during the time frame of the crime (January 1992-December 2004) data set so that this event study specification estimates changes in crime and transaction density pre and post event across areas that are more similar to one another than to other areas in the city. In addition, since the concept of a mile in a very densely populated area is potentially different from that in a relatively less densely populated area, I begin by limiting my analysis to only alcohol outlets located in “Los Angeles”, as indicated by

their postal address<sup>6</sup>. I begin by looking at whether there is a break in trend following either the opening or closing of an outlet with the following specification:

$$(1) \quad \text{Crime\_den}[p,q]_{it} = \alpha_i + \beta_{(c)} t_{i(c)} + \gamma 1(t_i \geq 0) + \text{Month dummies} \\ + \text{Year dummies} + \varepsilon_{it}$$

The subscripts  $i$  and  $t$  respectively index the outlet and time relative to the outlet opening or closing event, where  $t$  takes on the value of 0 at the time of the event.  $\text{Crime\_den}[p,q]_{it}$  is the crime (property crime or violent crime) density in the area between  $p$  and  $q$  miles away from outlet  $i$  at event time  $t$ . Although there are certainly concerns relating to the presence of underlying trends in crime, the property market and the local demographic composition, these trends should be smooth, especially in the short run. While I cannot directly control for changes in the demographic composition of the outlet's neighborhood since there is no demographic data available at a local level at a monthly frequency, the linear trend term,  $t_i$ , indirectly controls for these underlying trends that may be correlated to the opening and closing times of alcohol outlets. The coefficient of interest,  $\gamma$ , measures the change in crime density pre and post event time as a result of one additional or one less outlet. In addition, store level fixed effects control for time invariant characteristics particular to the specific location of the store, while month and year dummies<sup>7</sup> are included to control for time varying macroeconomic business cycles.  $\varepsilon_{it}$  is assumed to be a mean 0, normally distributed error term. Finally, to take into account that the error terms are not independent across neighborhoods, the standard errors are clustered at the store level. Together, this constitutes a natural experiment whereby the simultaneity of alcohol outlet location choice and the socioeconomic characteristics of the location itself are eliminated. I estimate equation (1) three separate times, with  $p$  and  $q$  taking on the following set of values: [0, 0.1]; [0.1, 0.25] and [0.25, 0.5]. By studying

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<sup>6</sup> This area is approximately the Southern half of the city. Unlike most other cities, the City of Los Angeles consists of around 37 other communities such as Venice and Tujunga. I am in process of geocoding crimes committed in these other communities of Los Angeles and will include these communities in the analysis for future versions of this paper.

<sup>7</sup> Equation (1) was also estimated using 156 time period dummies, one for each month instead of month and year dummies. The results were robust to this change in specification.

the estimated effect of a new or old alcohol outlet on crime density in areas that are of various distances away from the outlet, we can obtain a measure of the ‘sphere of influence’ of the outlet in question and determine whether there are displacement or agglomeration effects.

On the other hand, it is also conceivable that the total number of alcohol outlets in operation in the neighborhood also has a part to play in crime. Besides, it is reasonable to expect the event of opening the first outlet (or closing the last outlet) in the neighborhood to have a very different impact on crime than the opening of the 10<sup>th</sup> outlet in the neighborhood. Suppose crime and the total number of outlets are related in the following manner:

$$(2) \quad \text{Crime\_den}[p, q]_{it} = \alpha_i + \beta t_i + \xi f(\text{Outlets}[0, q]_{it}) + \varepsilon_{it}$$

where  $f(\text{Outlets}[0, q]_{it})$  is some nonlinear function of  $\text{Outlets}[0, q]_{it}$  and  $\text{Outlets}[0, q]_{it}$ , the number of outlets in operation at event time  $t$  (including the outlet  $i$ , that opened or closed at event time  $t=0$ ) within a  $q$ -mile radius from outlet  $i$ . However, since the number of outlets may be endogenous to other neighborhood factors, an ordinary least squares estimation of  $\xi$  will be biased. Let us now suppose that  $f(\text{Outlets}[0, q]_{it})$  is a quadratic function such that:

$$(3) \quad f(\text{Outlets}[0, q]_{it}) = a + b \text{Outlets}[0, q]_{it} - \frac{1}{2}c (\text{Outlets}[0, q]_{it})^2$$

Where  $c > 0$  and  $f(\cdot)$  is concave. Then  $df(\text{Outlets}[0, q]_{it})/d(\text{Outlets}[0, q]_{it})|_{\text{Outlets}[0, q]_{it} = (\text{Outlets}[0, q]_{it} - 1)} = b - c * (\text{Outlets}[0, q]_{it} - 1)$ . In other words, one will expect an effect of  $b - c * (\text{Outlets}[0, q]_{it} - 1)$  from a reduced form regression of crimes and outlet openings. Thus, I augment equation (1) with  $(\text{Outlets}[0, q]_{it} - 1) * 1(t_i \geq 0)$ , the corresponding number of outlets in operation within a  $q$ -mile radius from outlet  $i$  (in addition to outlet  $i$ ) post event time:

$$(4) \quad \text{Crime\_den}[p, q]_{it} = \alpha_i + \beta_{(c)} t_{i(c)} + \gamma 1(t_i \geq 0) + \varpi (\text{Outlets}[0, q]_{it} - 1) * 1(t_i \geq 0) \\ + \text{Month dummies} + \text{Year dummies} + \varepsilon_{it}$$

Next, returning to equation (1), I attempt to make my initial specification more flexible by adding  $t_i * 1(t_i \geq 0)$ , a term that allows the linear time trend,  $t_i$ , to shift following the event, to the equation.  $\delta$  is the measure of this shift in the time trend:

$$(5) \quad \text{Crime\_den}[p, q]_{it} = \alpha_i + \beta_{(c)} t_{i(c)} + \gamma 1(t_i \geq 0) + \delta t_i * 1(t_i \geq 0) \\ + \text{Month dummies} + \text{Year dummies} + \varepsilon_{it}$$

To account for the presence of other alcohol outlets in the vicinity, I combined equation (4) with equation (5), yielding:

$$(6) \quad \text{Crime\_den}[p, q]_{it} = \alpha_i + \beta_{(c)} t_{i(c)} + \gamma 1(t_i \geq 0) + \delta t_i * 1(t_i \geq 0) \\ + \varpi (\text{Outlets}[0, q]_{it} - 1) * 1(t_i \geq 0) + \text{Month dummies} + \text{Year dummies} + \varepsilon_{it}$$

Finally, returning to equations (2) and (3), I consider how crime density (i.e. the number of crimes per square mile per month) is affected by a change in the total number of alcohol outlets in operation in the neighborhood. I regress  $\text{Crime\_den}[p, q]_{it}$  on a second order polynomial of  $\text{Outlets}[0, q]_{it}$ . As before, I include a time trend, outlet level fixed effects and calendar time dummies since the number of outlets in the neighborhood may be endogenous:

$$(7) \quad \text{Crime\_den}[p, q]_{it} = \alpha_i + \beta_{(c)} t_{i(c)} + \text{Outlets}[0, q]_{it} + (\text{Outlets}[0, q]_{it})^2 \\ + \text{Month dummies} + \text{Year dummies} + \varepsilon_{it}$$

In an attempt to better control for any heterogeneity in underlying trends present at the local level, I also allow the time trend,  $t_i$ , to differ across outlets located in different census tracts,  $c$ , for equation (1) and equations (4) thru (7). The results of these 2 sets of

regressions (with and without outlet-tract specific time trends) are summarized in Tables II to V.

In order to determine whether alcohol outlets in different areas have different effects on crime, I separated the alcohol outlets in my data set into two groups—those located in high socioeconomic status (SES) neighborhoods and those located in low-SES neighborhoods. While the alcohol outlets that make the news are typically “mom and pop” liquor stores located in low-SES neighborhoods, the liquor licensing data I use includes not only such liquor stores, but also supermarkets, specialty wine stores, grocery stores and gas stations. Moreover, aside from their location choice, a liquor store located in a low-SES neighborhood is very different from a liquor store located in a high-SES neighborhood in several ways: The physical appearance of the store interior and exterior (stores in low-SES neighborhoods typically have iron bars over window panes and around the cash register to guard against potential robberies); their clientele and the range of products sold (single-serving bottles of fortified wine in outlets in low-SES neighborhoods compared to first growth Bordeaux reds in outlets in high-SES neighborhoods). In view of the vast heterogeneity that exists between outlets located in different types of neighborhoods, I group outlets by using the average of the 1990 and 2000 census tract level of median household income to separate outlets into two groups: those located in high-SES tracts (top 2 quintiles of average median household income) and those located in low-SES tracts (bottom 2 quintiles). I then re-estimated equation (1) and equations (4) thru (7) separately for outlets located in these two groups. Selected regression results of the subset of outlets located in low-SES tracts are presented in Tables VI and VIII, while the corresponding results for the outlets located in high-SES tracts are presented in Tables VII and IX.

Following that, to determine whether liquor stores cause more problems in the day or in the night and whether the number of different types of crimes tend to be affected differentially during different times of the day, I re-estimated equation (6) by replacing  $Crime\_den[p,q]_i$  with the density of crimes that occurred in the area between  $p$  and  $q$  miles away from outlet  $i$  at event time  $t$  between 0000 hours and 0559 hours, between 0600 hours and 1159 hours, between 1200 hours and 1759 hours and between 1800 hours and 2359 hours. This set of results is summarized in Tables X and XI.

## 4.2 The Effect of Alcohol Outlets on Crime Density

### 4.2.1 Alcohol Outlet Openings

Examining the regression results of equations (1), (4), (5) and (6) in Tables II and III, we see that the estimated jump in both property and violent crime density is always positive upon the opening of an additional outlet. Focusing on columns (1), (2), (4) and (5)<sup>8</sup>, we see that in general<sup>9</sup>, this jump decreases significantly in magnitude as we move from the immediate vicinity of the outlet to a distance between 0.1 and 0.25 miles away. Although the estimated jumps are not precisely estimated (possibly due to the noisiness of crime in small areas), the consistency of the magnitudes of these effects going from specification to specification is reassuring. Violent crime density is estimated to increase between 2.8 and 6 percent within 0.1 miles from the outlet following its opening and decreases to as low as 0.2 percent between 0.1 and 0.25 miles away from the outlet. The effect on property crime density is similar.

Turning to equations (4) and (6), we see that the effect of an additional outlet on crime density can either be muted or magnified when there are already other outlets in operation in the neighborhood. For example, when we allow for outlet-tract specific trends and a shift in trend following the opening time (equation (6) in Table III), if the additional outlet is the first outlet in the neighborhood, property crime density within the 0.1-0.25 mile radius ring increases by 0.38 crimes per square mile per month. However, if there were already 2 other outlets in the neighborhood, the effect drops to an increase of  $0.38 + 2*(-0.08) = 0.22$  crimes per square mile per month. Conversely, within 0.1 miles from the new outlet, property crime density increases by 1.09 crimes per square mile per month if the additional outlet is the first outlet in the 0.1 mile circle. If there were already 2 other outlets, the increase in crime density increases by  $2*1.47 = 2.94$  crimes per square mile per month.

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<sup>8</sup> As we move further away from the outlet, the spatial correlation problem is worsened and estimates are more likely to be confounded by multiple openings and closings in a larger geographical area. As a result, the standard errors of the coefficients presented in columns (3) and (6) are likely to be severely underestimated. In a future version of this paper, I plan to make the necessary corrections.

<sup>9</sup> This is not true for the property crime results of equations (4) and (6) in Table II. However, once outlet-tract specific trends were included, we observe the general pattern seen in the other regressions.

While the overall impact of all new outlets may be interesting, the estimated effects may be confounded by the vast heterogeneity that exists between outlets located in different neighborhoods and is therefore less valuable from a policy perspective. Considering only outlets located in census tracts belonging to the bottom 2 socio-economic status (SES) quintiles as measured by tract level median household income (Table VI), the estimated percent increase in property crime density within 0.1 miles of new outlets in low-SES neighborhoods is higher than the corresponding set of estimates presented in Table III. In fact, when the number of existing outlets is controlled for (equations (4) and (6)), the estimates for the change in property crime density within 0.1 miles of new outlets in low-SES neighborhoods is more than three times the size of the corresponding estimates for all the new outlets in my sample although the estimated impact of existing outlets on property crime density becomes negative. When we compare the estimated percent change in property crime density in areas within 0.1 miles from the new outlet against that in areas between 0.1 and 0.25 miles away, we observe an interesting phenomenon: property crime is displaced to areas closer to the new outlet. In the case of violent crime density, the estimated increase in crime density within 0.1 miles from the new outlets in low-SES neighborhoods is larger in magnitude than the corresponding estimates for the whole sample when the presence of other outlets is not controlled for. However, once I control for the number of existing outlets, the percent increase in violent crime density resulting from one additional outlet (if it is the first outlet within a 0.1 mile radius) becomes negligible. At the same time, the estimated impact of existing outlets on violent crime density more than quadruples. I find no evidence of violent crime being displaced. Using estimates from equation (7), we see that increasing the number of outlets from 2 to 3 in a 0.1 mile radius, results in a 7.2% increase in property crime density and a 0.6% decrease in violent crime density, although none of the estimates are statistically significant. Taken together, these results suggest that property crimes are more 'mobile' and tend to occur as a result of the higher human traffic brought about by the opening of a new outlet in a low-SES neighborhood. An additional outlet has a big impact (6-7% increase) on property crime density although this impact is diminished when there are other outlets around. The mechanism that drives violent crime, on the other hand seems to be slightly different: While increased human

traffic does seem to have a small effect on violent crime, this effect is magnified by the presence of other outlets in the vicinity. Unlike property crimes, there seems to be agglomeration effects for violent crimes in low-SES neighborhoods, the effects of which are magnified when new outlets provide more opportunities for conflicts to arise between intoxicated individuals.

Conversely, when I limit my sample to outlets located in high-SES tracts (top 2 quintiles), I find that overall, new outlets in high-SES neighborhoods have a small positive and sometimes negative effect on both property and violent crime densities. Estimates from equations (4) and (6) in Table VII suggest that a new outlet in a high-SES neighborhood decreases property crime density (~6.8%) if it is the first and only outlet within 0.1 miles from its location. However, if there are already outlets present within 0.1 miles, the overall impact on property crime density is positive. The opposite is true for violent crime: The overall impact of new outlets in high-SES neighborhoods on violent crime is negative when there are other outlets present. While the increase in human traffic increases the likelihood of property crime, it appears that it may actually reduce violent crime. Using estimates from equation (7), we see that increasing the number of outlets from 2 to 3 within a 0.1 mile radius from the outlet results in an 8.7% increase in property crime density and a 0.3% decrease in violent crime density. This is not surprising since outlets in high-SES neighborhoods typically consist of supermarkets, specialty wine stores and grocery stores and these outlets will typically attract a clientele consisting largely of families and wine connoisseurs.

In summation, the results from Tables VI and VII suggest that while new alcohol outlets located in lower-SES neighborhoods increases both property and violent crime density, new outlets located in high-SES neighborhoods may have an overall positive impact on the neighborhood: while property crime density may increase, violent crime density also decreases at the same time.

#### *4.2.2 Alcohol Outlet Closings*

Next, turning to Table V, we see that overall, the closing down of alcohol outlets appears to decrease property crime density by around 3 - 4% within a 0.1 mile radius.