As required by the Alcohol Policy 19 Conference, we have signed a disclosure statement and note the following conflict(s) of interest:

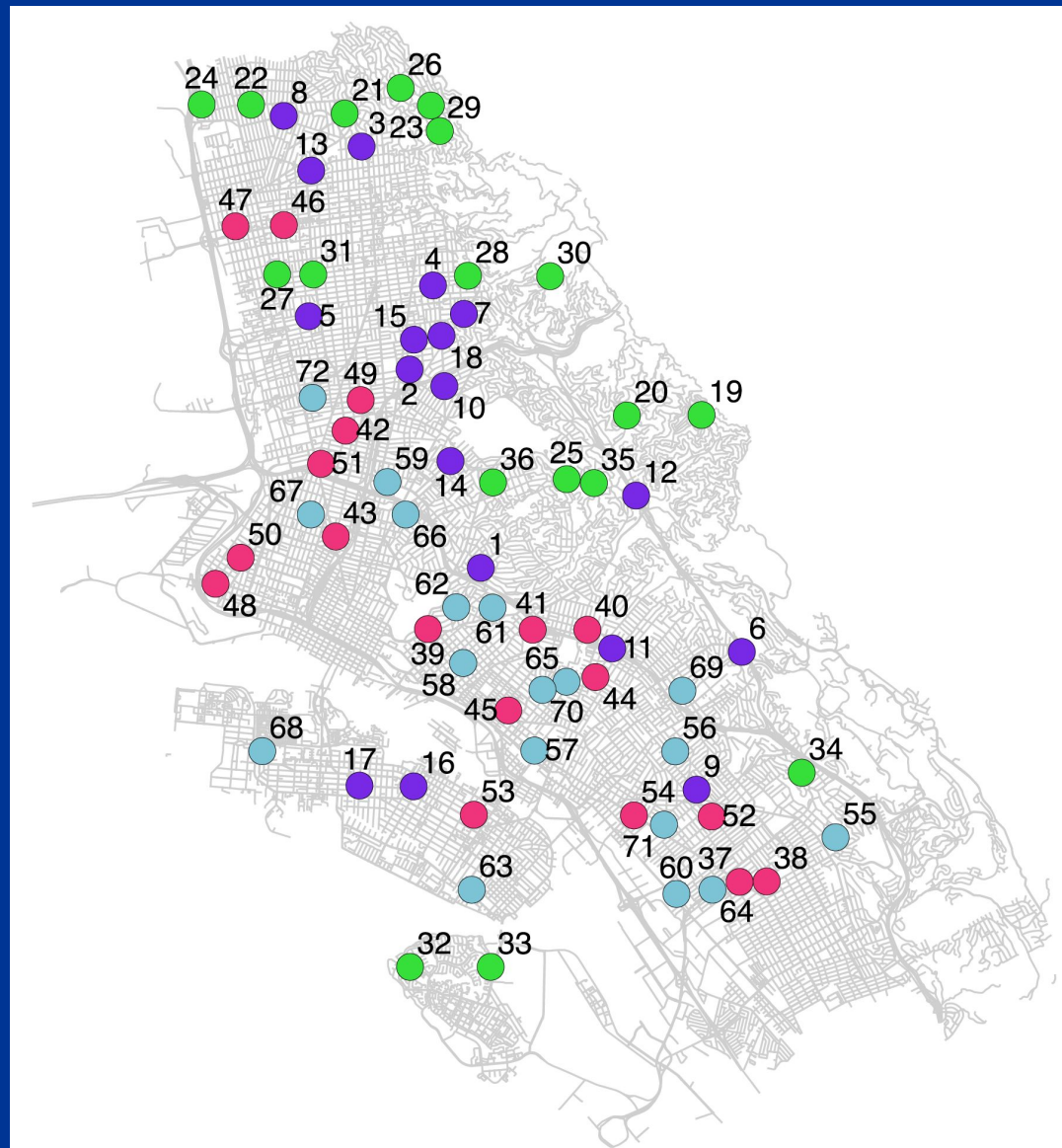None

Funding Sources

Aims: Off-Premise Outlets

- Test four hypothesized social mechanisms:

    1. Alcohol Availability

    2. Crime Attractors

    3. Social Disorganization

    4. Place Management

Data Sources

- Premise Assessment
- Crime Reports
- Neighborhood Survey
- Systematic Social Observation
- Ethnographic Interviews
- Ethnographic Observations

Survey Intersections

While there are more small independently-operated outlets than larger and chain outlets, larger outlets are more commonly used to purchase alcohol

Frankeberger J, Gruenewald PJ, Sumetsky N, Lee JP, Ghanem L, Mair C. Dual Use of Off-Premise Outlets for Alcohol and Grocery Purchases: Results From the East Bay Neighborhoods Study. Journal of Studies on Alcohol and Drugs. 2021;82(6):758-766.

Dual Use of Off-Premise Outlets

- 73% of participants reported dual use of their most used outlet for groceries <u>and</u> alcohol
- Dual use = more frequent alcohol purchases (dual use of the most used outlet was associated with 0.77 more visits per 28 days)
- Convenience and time costs for purchasing alcohol encourage the dual use of outlets, particularly in high-income neighborhoods
- Most commonly used outlets: Trader Joe's

People in higher income neighborhoods consume more alcohol and experience more alcohol-related problems than people in lower income neighborhoods

Mair C, Sumetsky N, Gruenewald PJ, Lee JP. Microecological Relationships Between Area Income, Off-Premise Alcohol Outlet Density, Drinking Patterns, and Alcohol Use Disorders: The East Bay Neighborhoods Study. Alcoholism: Clinical and Experimental Research. 2020;44(8):1636-1645.

Off-Premise Outlets and Neighborhood- and Individual-Level Income

- Respondents in more affluent neighborhoods reported drinking twice as frequently as respondents in low-income areas
- People with higher incomes reported more frequent drinking even when they lived in lower-income areas
- People with lower incomes who lived in affluent neighborhoods drank more alcohol than people with similar incomes in more impoverished neighborhoods
- More off-premise outlets were <u>not</u> linked to heavier drinking or more problem drinking

Off-premise outlets are concentrated in lower-income communities of color, primarily as an artifact of racist historic housing policies rather than neighborhood alcohol use

Lee JP, Ponicki W, Mair C, Gruenewald P, Ghanem L. What explains the concentration of off-premise alcohol outlets in Black neighborhoods?. SSM-Population Health. 2020;12:100669.
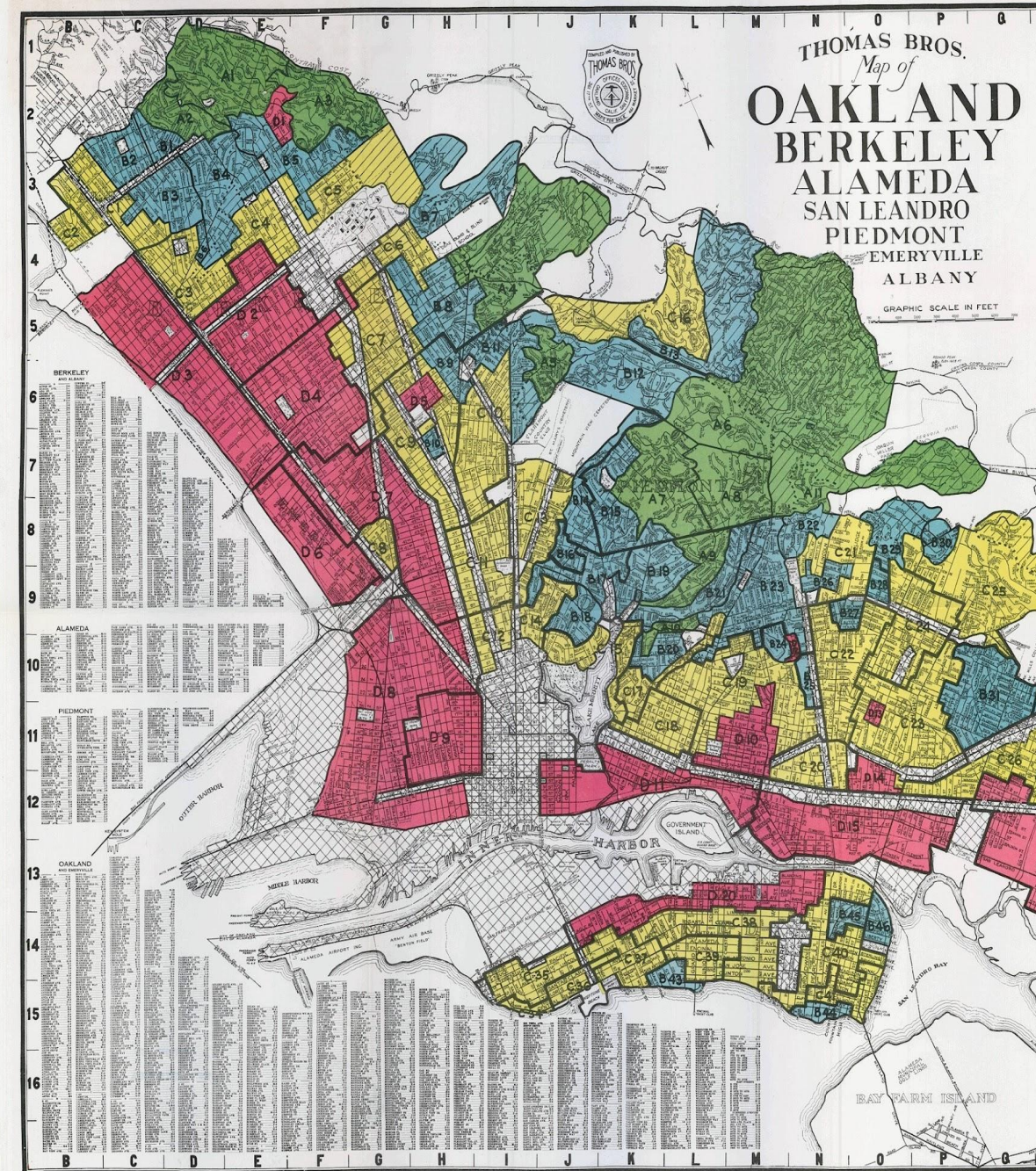
Redlining and Off-Premise Outlets

- To benefit wealthy White home values (green & blue zones), housing practices and city zoning assigned "nuisance" businesses, including alcohol outlets, to poor and historically non-White neighborhoods (red & yellow zones), as well high residential density

- Structural racism measured by historic federal land valuation (HOLC) zones predicted the collocation of contemporary off-premise alcohol outlet density with non-White non-wealthy areas

- Greater contemporary off-premise outlet densities in the lowest-valued HOLC zones vs. highest (median relative rate [RR] 9.6, 95% CI 4.8–22.1).

Six Cities Census Block Groups with Most-Prevalent HOLC Ratings and Off-Premise Outlet Locations

Sources: Esri, GEBCO, NOAA, National Geographic, Garmin, HERE, Geonames.org, and other contributors, Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

☐ Six City Boundaries
• Off-Premise Outlets
Block Group HOLC
Not HOLC Rated
HOLC Class 1 (Green)
HOLC Class 2 (Blue)
HOLC Class 3 (Yellow)
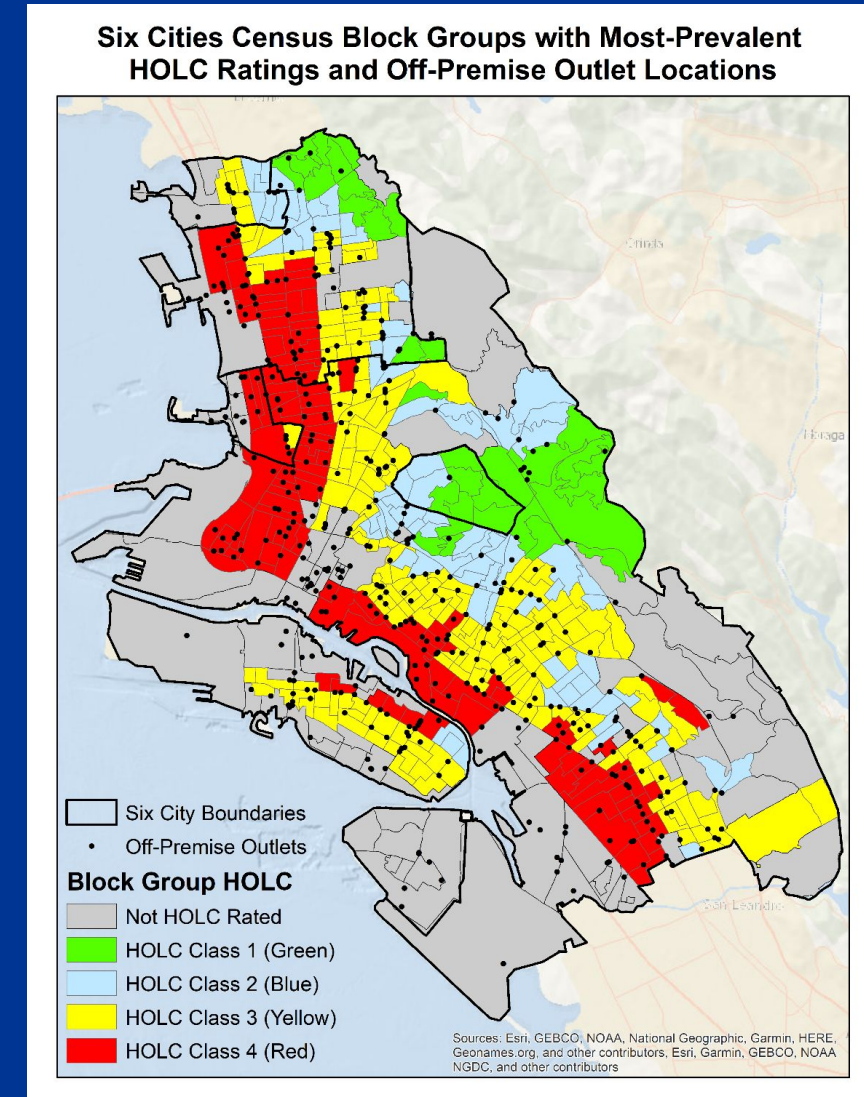HOLC Class 4 (Red)

Figure © PIRE

Neighborhoods with more off-premise outlets have more reported crimes, but this may be an artifact of neighborhood conditions marked by high densities of outlets, rather than the alcohol sales themselves

Mair C, Sumetsky N, Lee JP, Gruenewald PJ, Orkis LT. Features of off-premise alcohol outlets, neighborhood conditions, and violent crime. Under Review.

Types of Off-Premise Outlets

	Component 1	Component 2	Component 3	Component 4	Component 5
Component interpretation	"Corner stores"	"Chain stores"	"Liquor stores"	"Gas stations"	"Street bars"
Blunts sales	0.298	0.096	-0.145	0.076	0.016
Malt beverage sales	0.268	0.169	-0.080	0.038	-0.073
Cigarette sales	0.265	0.163	-0.165	0.100	0.000
Outside alcohol advertisements	0.234	-0.058	0.115	0.004	0.008
Miniature spirit bottles sales	0.227	0.010	0.255	0.153	0.104
Mixed spirits sales	0.210	0.283	0.009	0.048	-0.086
Chain outlet	-0.209	0.285	-0.052	0.060	0.129
Beer singles sales	0.169	0.270	0.029	0.022	-0.194
Craft beer sales	0.132	0.264	0.159	0.109	-0.200
Parking lot	-0.143	0.261	-0.030	0.096	0.226
Primarily alcohol sales	0.188	-0.185	0.271	0.184	0.209
Spirits sales	0.102	0.116	0.422	0.064	0.051
Wine sales	0.079	0.069	0.302	0.087	-0.204
Gas sales	-0.053	0.141	-0.329	0.215	0.283
Interior condition	-0.222	0.052	0.125	0.288	0.047
Exterior condition	-0.208	0.081	0.143	0.298	-0.024
Visiblity from outside	-0.143	0.047	-0.021	0.383	0.092
Loiterers	0.022	0.020	0.045	-0.322	0.251
Intoxicated customers	0.042	0.012	0.043	-0.264	0.126
Empty containers	0.115	0.070	0.016	-0.259	0.357
Security window	0.002	0.057	-0.196	0.130	0.243
On-premise alcohol consumption	-0.001	-0.018	0.041	0.068	0.284
Produce sales	-0.081	0.243	-0.140	-0.031	-0.186
Number of customers	-0.137	0.228	0.102	-0.105	0.072
Other outlets visible	-0.051	-0.017	0.171	0.025	0.237
"No loitering" sign	0.155	0.116	-0.014	-0.124	0.226
E-cigarette sales	0.155	0.155	-0.142	0.230	0.154
Additional exits are locked	0.122	-0.118	-0.144	0.133	-0.024
Fortified wine sales	0.196	0.071	0.103	-0.172	0.133
Near school	0.028	-0.010	0.075	-0.039	-0.159
Alcohol promotions	-0.115	0.115	0.212	0.119	-0.003
Security camera	0.056	0.258	0.048	0.020	0.028
Security guard	-0.138	0.169	0.105	-0.148	0.095
Cashier can see all areas inside store	0.160	-0.131	-0.173	0.173	0.095
Security sign	0.081	0.070	-0.002	-0.021	0.083
Snack sales	0.114	0.318	-0.070	-0.151	-0.123
Store name refers to alcohol	0.206	-0.149	0.233	0.153	0.128
Lowest beer price	-0.117	0.059	0.011	-0.005	-0.134
Number of staff	-0.166	0.157	0.112	-0.104	0.062
Number of exits	-0.180	0.138	0.169	-0.082	0.109

"Corner stores"	"Chain stores"	"Liquor stores"	"Gas stations"	"Street bars"
Blunts sales	Mixed spirits sales	Primarily alcohol sales	Good interior condition	Empty containers
Malt beverage sales	Chain outlet	Spirits sales	Good exterior condition	Security window
Cigarette sales	Beer singles sales	Wine sales	Visibility from outside	On-premise alcohol consumption
Outside alcohol advertisements	Craft beer sales	Gas sales (NEGATIVE)	Loiterers (NEGATIVE)	Gas sales
Miniature spirit bottles sales	Parking lot	Miniature spirit bottles sales	Intoxicated customers (NEGATIVE)	Loiterers

Outlet Types and Crime

- More crimes near off-premise outlets with higher densities of other nearby outlets

- More violent crimes near outlets with "street bar" characteristics

- More burglaries near outlets with "chain store" and "gas station" characteristics

Openings and closings of off-premise outlets are unrelated to crime

Gruenewald PJ, Sumetsky N, Gaidus A, Ponicki W, Lee JP, Mair C. Assessing the impacts of alcohol outlets on crime as a natural experiment: agglomeration, churning and spatial effects. Addiction. 2022.
https://doi.org/10.1111/add.15914

Agglomeration, Churning, and Crime

- Outlets may "agglomerate" (open near to one another) or "churn" (replace one another)

- Churning: openings followed closings (RR=17.373, CI: 1.428-97.635).

- Agglomeration: Bars/pubs and restaurants agglomerated but off-premise outlets did not

- The openings of bars and restaurants were related to increases in assaults, robberies, and burglaries but openings and closings of off-premise outlets were unrelated to incidents of all three crime types

Small independent outlet managers have limited means to prevent and reduce crime in and around their outlets

Ghanem L, Lee JP, Sumetsky N, Pagano A, Gruenewald P, Mair C. Place management in off-premise alcohol outlets: Results of a multi-methods study in a six-city California area. International Journal of Drug Policy. 2020;80:102735.

Photo © PIRE

Place Management

- Small and independently operated off-premise outlets demonstrated fewer resources and more challenges to place management compared to large and chain establishments
- Problems most commonly cited by managers were theft and loitering
- Challenges to place management included physical and verbal threats from customers and intoxicated persons, and insufficient law enforcement. Managers evidenced some ability to assert authority over interior, private space, but less so over exterior, public space.

Conclusions

- More alcohol was purchased by more affluent drinkers and drinkers who lived in more affluent and more White neighborhoods

- More off-premise outlets were located in less affluent, less-White neighborhoods

- Although there were more small independent stores overall, large chain stores, particularly grocery stores, contributed more to community-level alcohol use and related problems

- On-premise outlets contribute to crime, but not off-premise outlets. Of the small number of off-premise outlets that contribute to crime, these are the type that are most like "bars," where people drink outside the stores.

- Small independent outlet managers are not really able to do much about area crime, including drinking outside stores

Policy Recommendations

- Limits on alcohol sales
  - Volume per exchange limit (like cannabis, Rx drugs)
  - Tax increase to reduce volume sales (like tobacco)
  - Limit sales of alcohol in grocery stores
- Reduce overconcentration of alcohol outlets
  - Eliminate grandfathering of alcohol licenses per parcels (reduce churning)
  - Restrict new licenses (like cannabis)
- Support small independent outlet managers in crime prevention and crime response
  - Rewards vs. penalties
  - Reconsider CUPs and DAOs

Acknowledgements & Contacts

- Co-authors: Andrew Gaidus, Natalie Sumetsky, Bill Ponicki, Jessica Frankeberger, Lina Ghanem, Lauren Orkis, Anna Pagano

- Thanks to:
  - Oakland Police Department (crime report data)
  - Study participants

- Contact:
  - Christina Mair: cmair@pitt.edu
  - Juliet P. Lee: jlee@prev.org

Data Sources

Sample Frame	Selection Process	Sample Size	Analyses Used For

6 Alameda County cities
510 Census Block Groups

Full Census →

491 Outlets →

Population Analyses

Stratified Random Sample (low/high outlet density/median HH income)

72 Neighborhoods

15/neighborhood →

1,080 individuals →

Survey-based analyses
Systematic Social Observations

Purposive

40 Sites

1/neighborhood →

40 outlets →

Ethnographic Interviews
Ethnographic Observations