Measuring Alcohol Outlet Density in Wisconsin: Does Your Community Have a Problem?

I. SUMMARY

Measuring how closely alcohol retail businesses are located within a community and/or mapping the locations of alcohol retailers provides useful data to drive informed decision-making and to reduce alcohol use by reducing its availability, as explained in this summary by the Wisconsin Alcohol Policy Project. This document is a companion summary with Wisconsin-specific information that supplements the information found in the CDC's *Guide to Measuring Alcohol Outlet Density* (2017).

II. BACKGROUND

An alcohol outlet is any retail alcohol business that sells alcohol beverages of any sort to individuals to drink either at the business location or elsewhere. While most people think of bars, taverns, restaurants, liquor stores, breweries and wineries, other alcohol outlets may be grocery stores, supermarkets, pharmacies, convenience stores, movie theaters, sporting venues, painting studios, and hotels. Alcohol outlet density is a measure of how many alcohol outlets are in a defined area and how closely packed they are within that area. The Centers for Disease Control and Prevention (CDC) defines high alcohol outlet density "as a high concentration of retail alcohol outlets in a small area." (CDC, 2017, p. 1)

Issues relating to the number and location of alcohol outlets are often referred to as outlet density issues. The number, type and location of outlets selling and serving alcohol have a significant impact on community residents and businesses. Decades of research support the conclusion that an over-concentration of alcohol outlets increases the level of alcohol-related disorder and crime *even if* retailers comply with the law. Other studies show that local alcohol outlet density has an impact on individual alcohol consumption and risk of alcohol-related harm.

A large body of research conducted over many years produced compelling evidence of a causal relationship between a high concentration of alcohol retailers and higher levels of alcohol-related disorder. (Kerr et al., 2013) The Task Force on Community Preventive Services (Campbell et al., 2009) recommended that "limiting alcohol beverage outlet density—either by reducing density levels or limiting density growth—can be an effective means of reducing the harms associated with excessive alcohol consumption."

The term alcohol outlet refers to any location that sells or serves alcohol. Wisconsin divides alcohol licensees into two basic categories of premises licensees: Class A are off-premises licensees; Class B are on-premises licensees where alcohol is sold and consumed at that location. Class C licenses are available only to restaurants for the sale of wine. Holding Class C and Class B licenses simultaneously allows for the sale of beer and wine, but not distilled spirits in any form.

Any outlet density discussion relies heavily on two terms: cluster and over-concentration. Neither term is limited to on-premises or off-premises licensees. A cluster is a minimum

fermented malt beverages such as beer and alcopops, hard seltzers, and hard lemonades. There is no state imposed limit on the number of locations selling alcohol for off-premises consumption, such as liquor stores, grocery stores or convenience stores. The total number of these Class A off-premises retailers and beer-only bars is a municipal issue. However, outlet density is more than a number; location is also an important factor in assessing outlet density.

IV. CALCULATING LOCAL ALCOHOL OUTLET DENSITY

Before attempting to calculate local outlet density, everyone involved should review the CDC's *Guide to Measuring Alcohol Outlet Density* (2017), which contains step-by-step instructions. More comprehensive information is available in the CDC's newer publication, *Measuring Alcohol Outlet Density: A Toolkit for State and Local Surveillance*. (Fliss et al., 2021)

Understanding each method supplemented by discussions with elected community leaders and law enforceme[l)4 (0.71 0 Td)3 (m)4.1 6 (s)6 (i)n4.1 (i10 (ho)2 (e)13 (p)]TJ(e)3 (m)3 (a)1)4 (es)9 (e)-(m)3 e might produce more accurate results, but would require a higher degree of statistical knowledge.

V. Methods Used to Measure Alcohol Outlet Density

The CDC Guide for Measuring Alcohol Outlet Density outlines a choice of three approaches to calculating outlet density: A, container-based; B, distance-based; or C, spatial access st Mb -TqMr alc -32.

nine outlets) and their distance from a reference point. Calculate the distance from the reference point to the outlets using one of the three approaches outlined in distance-based measures: as the crow flies, roadway distance or travel time.

Next, calculate the *access potential,* the inverse distance from the reference point to the selected outlets. This is the most complicated calculation in this process, but step-by-step directions are in the *Guide.* The total of all the *access potential* results creates the *spatial availability score* or index. Because this approach does not average the distances, a higher number suggests a possible outlet cluster. The CDC *Guide* includes simplified examples that can demonstrate how to identify clustering using this method (page 18).

When comparing the municipalities or regions, population weighting illustrates the number of individuals directly exposed to these outlets, a factor that distance alone cannot reflect. There is some evidence that population weighting avoids underestimating alcohol-related illness and other harms. (Lu et al., 2018)

While many of the articles discussing outlet density rely on intimidating formulas, Sacks et al., (2020) provides simple arithmetic formulas with illustrations making these complicated methods very easy to understand.

Not everyone in the group needs to help with the calculations, but most should be able to explain the results.

VI. Addressing Outlet Density in Your Municipality

Bars and alcohol retailers are sometimes viewed, incorrectly, as drivers of growth and prosperity in some communities. Another misperception leads local officials to mistakenly believe that once a location has been approved as a bar, it should stay a bar even if ownership changes. These misperceptions can slow or even block efforts to limit outlet density. Finally, some municipalities approve applicants because they fear the applicant will pursue litigation if denied. Together, these three misperceptions and fears lead to poor decisions based on outdated or incorrect information. If you experience pushback to calculating or evaluating density, determine if any of these three assumptions are involved.

Throughout the process of calculating alcohol outlet density, avoid laying blame on past leaders and decisions. When a community has an over-concentration of alcohol outlets, the consequences of outlet density were probably unknown by local leaders and staff until long after the negative consequences emerged. Statewide, the total number of alcohol outlets has been relatively stable for nearly 20 years although the type, size and locations of outlets has shifted over time. (Wisconsin Environmental Public Health Tracking Program, 2021)

not include the building) is usually contingent on the proposed buyer securing a license prior to the current licensee surrendering that license. The new owner is a new applicant, although some communities call it a transfer. In Wisconsin, an alcohol license can only be *transferred* to another person under *a very limited* set of circumstances (death of the licensee, bankruptcy, etc.). In general, a *transfer* refers to a different location than the location on the original license. While municipalities often give deference to the recommendation of the current licensee, in fact the new owner is a new applicant, which requires the same municipal approval as someone opening a new location.

The sale provides the municipality an opportunity to review the new applicant (potential licensee) with an eye to what the community wants at that location. New applications should be tabled or deferred until the applicant and municipality agree on the maximum occupancy, a security plan, and related concerns. This is especially important if the outlet was the focus of past problems.

Alcohol license conditions can change the occupancy number; limit the number of special events or address neighborhood concerns. Agreements can be conditions attached to the license or drinking, the new owner-applicant could be asked to accept license conditions limiting sale of products that appear to contribute to local problems. If noise was a problem under an earlier licensee, new owner-applicants may be asked to accept a license condition prohibiting amplified music outdoors. The applicant can always clusters, the importance of a better application review policy becomes apparent. Managing the community alcohol environment demonstrates fiscal responsibility and stewardship of the community for future generations.

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Giesbrecht N, Hauguet N, Ogden L, Kaplan MS, McFarland BH, Caetano R, Conner KR, Nolte KB. (2015). Acute alcohol use among suicide decedents in 14 US states: impacts of off-premises and on-premises alcohol outlet density. *Addiction*. 110(2):300-7.

Kerr, W. C., Greenfield, T. K., Patterson, D., Reiman, A., Bohling, J.; National Alcohol Beverage Control Association. (2013). Alcohol policy research and alcohol beverage control systems: annotated bibliography and review : prepared for the national alcohol beverage control association (nabca) (Third). National Alcohol Beverage Control Association (NABCA).

Livingston M. (2011) A longitudinal analysis of alcohol outlet density and domestic violence. *Addiction*. 106(5):919-25.

Lu H, Zhang X, Holt J, Kanny D, Croft JB. (2018) Quantifying spatial accessibility in public health practice and research: an application to on-premises alcohol outlets, United States, 2013. *International Journal of Health Geography*. 17(23).

Rowland B, Toumbourou JW, Livingston M. (2015) The Association of Alcohol Outlet Density with Illegal Underage Adolescent Purchasing of Alcohol. *Journal of Adolescent Health*. 56(2):146-52.

Sacks JJ, Brewer RD, Mesnick J, Holt JB, Zhang X, Kanny D, Elder R, Gruenewald PJ. (2020). Measuring Alcohol Outlet Density: An Overview of Strategies for Public Health Practitioners. *J Public Health Manag. Pract.* 26(5):481-488. doi: 10.1097/PHH.0000000000001023. PMID: 32732722; PMCID: PMC7263305.

Schofield TJ, Donnellan MB, Merrick MT, Ports KA, Klevens J, Leeb R. (2018) Intergenerational Continuity in Adverse Childhood Experience and Rural Community Environments. *American Journal of Public Health*. 108(9):1148-52.

Slutske WS, Deutsch AR, Piasecki TM. (2018). Neighborhood density of alcohol outlets moderates genetic and environmental influences on alcohol problems. *Addiction*. 114(5):815-22.

Wisconsin Environmental Public Health Tracking Program, Environmental Public Health Data Tracker (2021) Wisconsin Department of Health Services. https://dhsgis.wi.gov/DHS/EPHTracker/#/chart/Alcohol/alcoholStateIndex/NOTRACT/Alcohol/alcoholStateIndex5.