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 number of alcohol outlets close to each other within a municipality or neighborhood. That number may be selected by the municipality based on its needs. Over-concentration may describe both an excessive number of outlets within the community or clusters. Broad numerical benchmarks that identify a cluster or an over-concentration of alcohol outlets are not yet established. In this document, over-concentration will be used to describe an excessive number of alcohol outlets within a defined area, usually a community.

III. ALCOHOL LICENSING AND DENSITY

In Wisconsin, alcohol licensing is a municipal responsibility. As a result, each Wisconsin municipality can decide on the number and placement of alcohol outlets.

Some communities set local limits to match the general state formula, or quota, of one Class "B"/ "Class B" (on premises – beer, wine, and spirits) alcohol licensee for approximately every 500 residents. The 500-person per license ratio was negotiated by the legislature and allows many more licensees per capita than are found in most states.

This numerical ceiling or quota was set long before research revealed that an over-concentration of alcohol outlets increases the amount of alcohol-related disorder and crime. It ignores some very important factors. For example, a small restaurant with 25 tables is treated for the purposes of the quota as equivalent to a nightclub with the capacity for 500 individuals.

Increasingly, municipal leaders carefully consider the potential impact of proposed licensees on both community safety and the municipal budget. License applications may be denied for many reasons, including enough licensees in the area. It is improper for a municipality to deny an application for discriminatory or arbitrary reasons, but concern for community safety or the impact of another outlet on the area are acceptable reasons to deny an application. Once awarded, a license can only be non-renewed, revoked or suspended for cause after allowing the licensee to respond to the charges. As a result, reversing excessive outlet density is a difficult and often costly task.

A review of local alcohol outlet density can form the basis for a community discussion about the community process for awarding alcohol licenses and, more importantly, the criteria, or lack of criteria, for awarding licenses. Community discussions about a desired alcohol environment or culture are a useful development. This paper is limited to alcohol outlet density, one topic within the larger community discussion of the local alcohol environment or culture.

Often, the first step in reviewing density and licensing policy is a moratorium on new alcohol

outlets. Reviewing the outlet density and determining if an over-concentration or clusters are present usually takes six to twelve months. During that time, the community can defer any pending applications. A moratorium is a serious policy decision. Once enacted, municipal leaders must be prepared to observe the moratorium faithfully. Inconsistent decision-making, not the moratorium itself, can create legal exposure for the community.

For many years, municipal leaders viewed new bars, taverns, and clubs as economic growth. When an increasing number of general retailers wanted to sell alcohol for off-premises consumption, there was little concern about unintended consequences. As a result, Wisconsin has a high number of alcohol outlets with expensive unintended consequences. Many local elected leaders are still unaware of the impact a high number of alcohol outlets will have on their community. Communities that experience increasing rates of alcohol-related disorder and underage drinking often increase police patrols and watch for poorly operated outlets. In retrospect, it appears many Wisconsin communities have suffered from an over-concentration of alcohol outlets for many years. Even a small number of outlets relative to the population of the area, clustered together, will create problems.

Even when local bars, taverns, restaurants, and retailers follow the law, alcohol-related crime and disorder is likely to increase when an over-concentration develops. Residents and businesses notice an increase in alcohol-related problems such as underage drinking, littering, vandalism, public intoxication, and urination. An excessive number of alcohol outlets may contribute to increasing levels of alcohol consumption. (Campbell et al., 2009) When alcohol is overly available, people tend to drink more alcohol.

Outlet density also increases the risk of harm to people who live in the area, whether or not they drink. Links exist between outlet density, underage drinking and self-harm. (Greisbrecht et al., 2015; Rowland et al., 2015) Australian research indicates that residents within one-half a mile of an off-premises location have a slightly greater risk of domestic violence. (Livingston et al., 2011) One study of twins and sibling groups with a genetic predisposition to alcohol use disorders indicated that living near ten or more alcohol outlets significantly increased the risk of alcohol problems. (Slutske et al., 2018) Alcohol outlet density also contributes to exposure to an increased number of adverse childhood experiences (ACEs), even when researchers controlled for socio-economic factors. (Schofield et al., 2018)

Wisconsin law places a numerical limit *on only one* specific type of licensee: locations that serve intoxicating liquor for consumption on-site (“Class B” liquor license – which cannot be granted unless municipality also grants a Class “B” fermented malt beverage/beer license). The state government’s numerical limit (the quota) on the number of those licenses is unrelated to public health or safety. The state does not limit the number of on-premises locations that only serve

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 enforcement agencies supports building a community consensus on the method, the data used and using the results. Early discussions can prevent errors and misunderstandings later. Consider supplementing your calculations with information provided by local law enforcement, the Community Maps information, and citizen comments. Just as people have many character traits, so do communities. Multiple sources of information can help you capture many of them. General acceptance of the data supports a productive community discussion about outlet density; however, the people involved must understand the calculations in general terms and be prepared to describe the process to others.

Begin by creating a map detailing the location of alcohol outlets throughout the community. Separately identify on-premises (Class B) and off-premises (Class A) locations. This will enable you to complete separate density calculations for on-premises (Class B) and off-premises (Class A) locations. Each type of licensee brings a different set of benefits and problems.

Note: Occupancy limits can also be compiled in the process of mapping the locations of the alcohol outlets. When reviewing on-premises locations, Class "B" and "Class B" licensees, the municipality can also compile the maximum occupancy allowed at each location. Collecting occupancy limits as part of your outlet review can help determine whether a local system for establishing maximum capacity exists and is working. Occupancy limits also provide a basis for considering the capacity of the sidewalks, parking, and emergency services. Many communities do not establish a separate occupancy limit as part of the alcohol license conditions, but instead rely on a number assigned by building or safety inspectors.

However, the basic outlet density calculations described in this summary do not account for occupancy. For their purposes, a location allowing 50 people would carry the same weight as a location allowing 500 people inside. More detailed calculations based on maximum occupancy

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-based. The three approaches are summarized below.

A. Container-Based Approach

The simplest approach is a *Container-Based* method. Its value is its simplicity, while its weakness is its inability to identify clusters. Container-based measurements reflect the number of alcohol licenses within the identified area, the container. If clusters are apparent through mapping or other means, a container-based approach may be the best approach for your community.

Within the general category of *container-based* approaches, the CDC identifies three ways to calculate the outlet density.

1) The first is the number of *outlets per person*, which provides the most general measure. Because this approach only produces an average value for density, it cannot identify clusters.

2) The second container-based measurement is *outlets per square mile*. In using this calculation, you can get a more accurate estimate of outlet density by not including in the overall landmass of the community areas where alcohol is not sold to consumers, such as undeveloped parkland, industrial parks, and bodies of water.

3) The third measurement is *outlets per roadway mile*. The total mileage of roads in the container is the denominator in this calculation. Eliminating industrial parks and undeveloped areas improves this measurement, but the result is an average that cannot identify clusters.

If the goal is a comparison over time, it is important for the container to remain consistent during the comparison period. Aldermanic or council districts may change after each decennial census. The municipal clerk or public library will have earlier maps that may help determine if this is a problem.

Census blocks are consistent, but they cross municipal boundaries. Census blocks are also an unfamiliar unit for law enforcement and most residents. Municipal boundaries are relatively

consistent but reduces the ability to identify clusters statistically. If clusters can be identified visually or through other methods, small communities may find the container method useful.

B. Distance-Based Approach

The second method, the *Distance-Based* measure, calculates the minimum, average and median distances between the selected outlets and a designated reference point, such as the central business distance, a local landmark or major intersection. If you decide to work with a selection of representative outlets, avoid distorting your results by carefully selecting outlets. Calculate the distance from each selected licensee to the reference point *in one* of three ways:

1) As the crow flies
2) Roadway distance
3) Travel time

The first method "as the crow flies" does not compensate for bodies of water, recreational areas and other geographic features that distort the distance. If your community has these features, *as the crow flies* may not be a good measurement. In those circumstances or in rural areas, road distance is more useful.

Websites such as Google Maps can quickly measure the roadway distance between the reference point and selected licensed outlets. With very little effort, these sites can also create a map illustrating your conclusions.

For the third measure, walking or driving time will vary depending on the day and time selected for the base measurement. In very rural areas, drive time might be the best measure for regional centers such as county seats. Again, residents have the best insight on this.

With the reference point and distance measures selected, the group can calculate the average (mean) and median distances from the reference point to each outlet. The lower the number the greater the likelihood of a cluster. If this is confusing, a simple chart illustrating the different calculations, can be found in Figure 2 of Sacks et al., (2020).

C. Spatial Access Approach

Spatial access measures are the most complicated to calculate, explain and understand. However, it is also the best method to identify outlet clusters.

In this approach, communities base their calculations on selected alcohol outlets (usually five to

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)

The consequences of excessive alcohol consumption, outlet density and the financial burden placed on communities in Wisconsin are well known. (Black and Paltzer, 2013) Outlet density effects the financial, safety and health well-being for every community. Municipalities without density problems should work to prevent them; while others may seek to stabilize or even reduce the number of alcohol outlets in some areas.

VII. Boundary Areas

In many parts of Wisconsin, municipalities developed side-by-side until one side of the road is in one municipality and the other side is in a second municipality. Border areas can present a problem when calculating outlet density. If your community is in a metropolitan area where borders are difficult to visualize, consider creating a unique container to calculate outlet density within the border area. Use one of the container measures to make a cross boundary assessment using that container. The calculation could help determine if cross border density is an issue. Often there are numerous cross boundary issues such as road maintenance, storm water responsivities and zoning. In general, boundary-related density issues take time to resolve. Consider what collaborative efforts between law enforcement agencies could mitigate the problem quickly.

VIII. Address Outlet Clusters

Once a municipality can identify areas with an over-concentration of outlets, consider setting out areas where new alcohol outlets will not be approved. Local licensees are unlikely to object to a plan prohibiting additional competition in the immediate area.

Solicit their long-term cooperation by identifying specific issues and encouraging their engagement in small ways, such as refusing to stock dangerous alcohol products or reducing outdoor advertising.

A municipality can always redirect applicants to other parts of the community, consistent with community goals. Enacting a moratorium in a specific neighborhood avoids a political fight on density whenever a new application is proposed. It can take years for the benefits of a moratorium to be evident; avoid sunset dates attached by opponents who do not want to give that approach time to succeed. Within the identified area, community leaders can concentrate on improving licensee operations, adding license conditions when possible, and specific law enforcement interventions to address specific issues such as underage drinking or overserving.

IX. When a Bar, Tavern or other Alcohol Retail Business is Sold

When a licensed establishment is sold, the offer to purchase the business (which may or may

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 reflected in a binding memorandum of understanding. Violating license conditions or similar agreements with the municipality could provide the rationale for later sanctions.

X. Does the Community's Alcohol Licensing Process Reflect Community Goals?

A municipal licensing process should align with community vision. Once outlet density is calculated, the type and location of existing alcohol outlets can be compared to the municipality's new or revised vision. There may be neighborhoods that already experience problems resulting from an over-concentration or cluster of alcohol outlets where a moratorium is appropriate. A municipality may deny all license applications within a specific neighborhood or area or enact a general moratorium. Of course, most communities will not simply forswear all future alcohol licenses, but with clear goals and criteria that support the goals, choices are easier.

A municipality also can give very specific guidance to applicants. For example, one community determined a specific area had an over-concentration of off-premises (Class A) licensees. It decided that only one additional Class A license would be awarded and only to a full-service grocery store in that area. Class A applications that are not part of a full-service grocery are denied. This approach requires political willpower and an engaged community.

Clear licensing criteria allows the community to handle each sale consistently and fairly. For example, a municipality may allow new licensees at existing locations, but require specific license conditions to address past problems. If specific products were linked to underage

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 walk away if the proposed license conditions are unacceptable to them, just as municipal leaders can deny a license application that is no longer beneficial to the municipality.

XI. Alcohol Licensing Guidelines or Criteria

Making informed decisions requires local elected leaders to have a wider range of information than many communities require on an alcohol license application. The state application form must be completed, and many communities require additional information such as business plans, management resumes, menus, security plans, blueprints, or floorplans for the interior and related information. Licensing criteria are only effective if the decision makers have sufficient information to apply them.

Some communities create specific criteria in municipal ordinances. Others adopt them as policy, but not municipal ordinance. The goal is a consistent transparent framework for considering new applications for alcohol licenses. Having *and using* license criteria makes it more difficult for a disappointed applicant to claim the denial was arbitrary or discriminatory.

Some criteria adopted include:

- Is the proposed licensee compatible with the neighborhood, previous occupants, etc.? This category may include a discussion of the architecture and exterior appearance of the area.
- Consider the background report on the applicant and other personnel.
- Impact on neighborhood and nearby businesses, including the impact on property values.
- Parking and roads – can the existing area handle the additional traffic by consulting enforcement and neighborhood interviews and consulting community maps.
- Ability of police, fire, and EMS to patrol/respond in an emergency to this location for a licensee this size.
- One community requires applicants to agree to a sober-server policy.

Once a municipality understands the ramifications of excessive alcohol outlet density and

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.

Wisconsin Alcohol Policy Project
Comprehensive Injury Center, Medical College of Wisconsin
Please contact us for questions, technical assistance, or training.

Maureen Busalacchi, Director, mbusalacchi@mcw.edu

Felice Borisy-Rudin, Policy Analyst, fborisyrudin@mcw.edu

https://www.mcw.edu/departments/comprehensive-injury-center/wi-alcohol-policy-project

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