How Denver uses data to regulate marijuana locations

Article submitted by Joey Peña. Joey can be reached at 720-865-2781 or joey.pena@denvergov.org.

This article originally appeared in the third quarter 2021 Denver Regional Data Consortium newsletter.

In Denver’s regulated marijuana industry, location matters — especially to a city agency trying to keep marijuana out of the hands of kids.

To limit youth exposure to marijuana outlets, the City and County of Denver requires certain marijuana businesses to be 1,000 feet from specific locations, dubbed “sensitive uses.” Sensitive uses include schools, childcare facilities, drug and alcohol treatment facilities, city recreation centers and outdoor pools and other marijuana businesses of the same type (store-to-store, for example).

Numerous public health, youth-serving and community organizations have expressed strong support for Denver’s proximity requirements, and public health data supports the approach. For example:

- Children and young adults who are exposed to marijuana outlets with prominent signage tend to engage in more frequent use and often have greater expectations of marijuana’s positive benefits (Shih et al).
- A 2020 study found an association between the density of licensed marijuana outlets with young adults’ marijuana use, heavy use and intentions to use. The density of unlicensed outlets was associated with young adults’ heavy marijuana use and symptoms of cannabis use disorder. (Pedersen et al)
- Research on the tobacco and alcohol industries also supports proximity requirements and limiting outlet density. (Finan et al; Gwon et al; Freisthler and Gruenewald; Chen, Grube, and Gruenewald; and Popova et al)

The city’s goals for restricting outlet density and proximity to sensitive uses can present a challenge for city employees, who use the city’s geographic information systems to determine whether an application for a new marijuana business is in compliance with proximity requirements.

Staff also use the systems to do preliminary, nonbinding proximity checks for new business owners to help them determine whether a location will comply with the proximity requirements. The service can save a new business owner time and capital during their search for a viable location.

To complete a proximity review, staff rely heavily on the 3-inch resolution imagery and planimetric data provided by DRCOG through contracts with The Sanborn Map Company and Kucera International, Inc.

City and County of Denver staff consider the data among the best available, and believe it would be difficult to capture better than 3-inch resolution imagery. The quality of the data helps the city provide more accurate proximity measurements during its quality control review of applications. The data also provides staff with building identification numbers, which are critical in analysis of a location.

In short, the data provided by DRCOG helps the city honor its commitment to its youth by limiting marijuana outlet density, which, in turn, limits youth exposure to marijuana commercialization and thus reduces the potential for negative health outcomes. It also helps the city provide a service to new marijuana business owners in search of a location.