

## Data Use Agreement

This Data Use Agreement (“DUA”) is between the State of Alaska, Department of Health Social Services (“DHSS”) and the Alcohol and Marijuana Control Office (“AMCO”) for the purpose of allowing DHSS to access Marijuana Enforcement Tracking Reporting & Compliance (METRC) data. These data will be used to inform programming planning and evaluation efforts and in DHSS evaluations and reports on marijuana use in Alaska. DHSS analysis and reporting of data will inform the Marijuana Control Board, providing information used in the board’s decisions regarding control of the cultivation, manufacture, and sale of marijuana in Alaska. The purpose, methods for accessing data, and expected deliverables are provided in detail in this DUA.

### Purpose:

The purpose of this DUA is to detail protocols and expectations of data use. Licensee confidentiality and consumer privacy is of paramount importance. All reports produced by DHSS using these data will be reviewed and approved by the AMCO Director before they are made public.

### Description:

DHSS-OSMAP is requesting one approved DHSS login to obtain controlled (read-only) access to METRC. Only the named and listed DHSS employee on this DUA may access and use the data. DHSS will not identify or contact any licensee whose data is included in the system. Data will not be manipulated nor linked to any other data set without prior written authorization.

### Measures DHSS will track and report:

1. Number and geographical density of de-identified licensees
  - a. Retailers licensed and making sales
  - b. Cultivators
  - c. Manufacturers
  - d. Testing facilities
2. Aggregated retail sales
  - a. Value of sales
  - b. Number of transactions
  - c. Number of products (e.g., total weight of usable, total packages of edibles)
3. Product pricing
  - a. Average/median price per gram usable
  - b. Price per other product types
4. Potency
  - a. Average % THC per gram usable
  - b. % of sales (or volume) that fall into high/medium/low categories (e.g., flower that is 20%+ THC)
  - c. Potency for other product types
5. Product type
  - a. # of transactions
  - b. Sales by product type
6. Enforcement
  - a. % sales during compliance checks (including number of total checks attempted)
  - b. Number of reported “theft” events

7. Testing

a. Reports of product contamination incidents

Intended audience and plans for publication:

See Appendix A for planned reporting. Annual public dissemination of the data intends to inform stakeholders (e.g., regulators, marijuana education program partners, and other state health departments) and the public on the patterns and trends of the retail landscape.

Privacy/Confidentiality protections:

The DHSS is a protected health entity as specified in the Health Insurance Portability and Accountability Act, Standards for Privacy of Individual and Identifiable Health Information, Final Rule (Privacy Rule) [45 CFR § 164.501]. The Office of Substance Misuse and Addiction Prevention (OSMAP) located within the DHSS enforce common privacy rules to ensure that as a protected health entity the protected health and identifying information (PHI) are controlled and maintained according to specified rules, regulations, and governing laws.

Datasets will be stored on a secured DHSS shared drive restricted to OSMAP. The approved applicant will be the only accessor of the datasets. Report for public dissemination will be provided to AMCO for review and approval. Only aggregate data will be reported, and data suppression protocols will be used when numbers are fewer than six (6). Data and the associated reports will not include any identifiers such as retailer or license name or number.

OSMAP shall report to AMCO any use or disclosure of data not provided for by this DUA, as it becomes aware. OSMAP may not identify or contact any licensee whose data is obtained.

Employee Access:

DHSS Employee Jessica Filley, Epidemiology Specialist II, will be the sole DHSS employee to have read-only access to Metrc data. Any desired change to another person will require an update to this agreement.

Term of agreement:

This agreement is effective upon the day and date last signed and executed by the duly authorized representatives of the parties to this Agreement and shall remain in full force and effect until either party terminates the agreement. This Agreement may be terminated without cause by either party upon 30 days written notice, which notice shall be delivered by hand or by certified mail to the address listed above.

Authorized by:

\_\_\_\_\_  
Eliza Muse, Acting Director, Office of Substance Misuse and Addiction Prevention

\_\_\_\_\_  
Date

\_\_\_\_\_  
Erika McConnell, Director, Alcohol and Marijuana Control Office

\_\_\_\_\_  
Date

# Cannabis Regulatory/Market Data for Public Health

June 18, 2019

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## Purpose

This report summarizes ideal data formats for cannabis regulatory/market data, and how they can be useful for public health monitoring purposes.

## Data formats

Cannabis regulatory/market data have been shared with public health systems in different ways by state, depending on provisions for business protection.

## Aggregate Monthly Retail Sales data

Ideally, it is useful to have retailer-specific information about sales numbers, value of sales (gross or after tax), by product type. Monthly aggregate data have proven very useful. If retailer-specific data are not provided, then data may alternatively be aggregated by city/county (see example below).

If any information is available to describe price (e.g., values that could be used to calculate price per gram of flower) or THC (e.g., average THC per gram of flower), that is also of interest; however, it appears to be difficult to generate in the current tracking systems. Alternatively, a breakdown of products as “higher” or “lower” potency (using some determined threshold) may be helpful.

*Example: Oregon sales file (note this is collapsed by city/county, but month-specific information by retailer is preferred)*

|    | A            | B     | C    | D                         | E            | F          |
|----|--------------|-------|------|---------------------------|--------------|------------|
| 1  | Jurisdiction | Month | Year | ProductCategory           | SalesDollars | CountSales |
| 2  | Albany       | 2     | 2017 | Capsule                   | 954.04       | 19         |
| 3  | Albany       | 2     | 2017 | Edible                    | 5213.79      | 184        |
| 4  | Albany       | 2     | 2017 | Extract                   | 21677.06     | 592        |
| 5  | Albany       | 2     | 2017 | Plant                     | 1443.71      | 36         |
| 6  | Albany       | 2     | 2017 | Topical                   | 696.5        | 13         |
| 7  | Albany       | 2     | 2017 | Usable Marijuana          | 92624.29     | 2851       |
| 8  | Albany       | 3     | 2017 | Capsule                   | 763.08       | 30         |
| 9  | Albany       | 3     | 2017 | Concentrate               | 672          | 14         |
| 10 | Albany       | 3     | 2017 | Edible                    | 26972.11     | 1052       |
| 11 | Albany       | 3     | 2017 | Extract                   | 90565.19     | 1847       |
| 12 | Albany       | 3     | 2017 | Plant                     | 4225.35      | 116        |
| 13 | Albany       | 3     | 2017 | Tincture                  | 1413.74      | 35         |
| 14 | Albany       | 3     | 2017 | Topical                   | 2627.43      | 56         |
| 15 | Albany       | 3     | 2017 | Usable Marijuana          | 292261.99    | 10447      |
| 16 | Albany       | 4     | 2017 | Capsule                   | 965.8        | 33         |
| 17 | Albany       | 4     | 2017 | Concentrate               | 6504.51      | 137        |
| 18 | Albany       | 4     | 2017 | Edible                    | 30460.8      | 1088       |
| 19 | Albany       | 4     | 2017 | Extract                   | 94846.64     | 2115       |
| 20 | Albany       | 4     | 2017 | Other Cannaninoid Product | 1345.34      | 60         |
| 21 | Albany       | 4     | 2017 | Plant                     | 7856.19      | 195        |
| 22 | Albany       | 4     | 2017 | Seed                      | 130          | 3          |
| 23 | Albany       | 4     | 2017 | Tincture                  | 2256.87      | 46         |
| 24 | Albany       | 4     | 2017 | Topical                   | 1994.73      | 48         |
| 25 | Albany       | 4     | 2017 | Usable Marijuana          | 318207.03    | 12622      |
| 26 | Albany       | 5     | 2017 | Capsule                   | 529.02       | 19         |
| 27 | Albany       | 5     | 2017 | Concentrate               | 7117         | 192        |
| 28 | Albany       | 5     | 2017 | Edible                    | 24986.69     | 914        |
| 29 | Albany       | 5     | 2017 | Extract                   | 96769.05     | 2204       |
| 30 | Albany       | 5     | 2017 | Other Cannaninoid Product | 1588.6       | 53         |
| 31 | Albany       | 5     | 2017 | Plant                     | 10867.78     | 246        |
| 32 | Albany       | 5     | 2017 | Seed                      | 195          | 4          |
| 33 | Albany       | 5     | 2017 | Tincture                  | 1981.49      | 44         |

## Examples of reports using regulatory/market data

The following are examples of actual reports generated using cannabis regulatory data from Washington and Oregon.

Data summaries are intended to show patterns in retail market exposure for the purpose of identifying health risks, and potentially addressing them through regulatory policies.

*Note: No individual retailers are ever identified in these reports.*

Figure 1: Monthly Number of Retailers, Statewide (Washington)

One simple and useful measure is the number of retailers making sales in the state per month. Because retailers might obtain a license but not yet be making sales, it's important to have both sales information and license information.

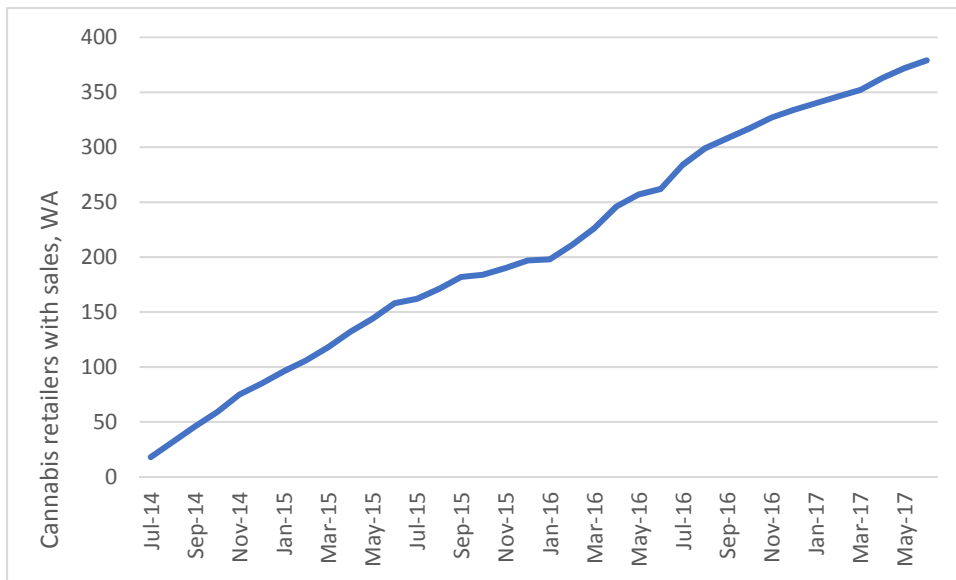
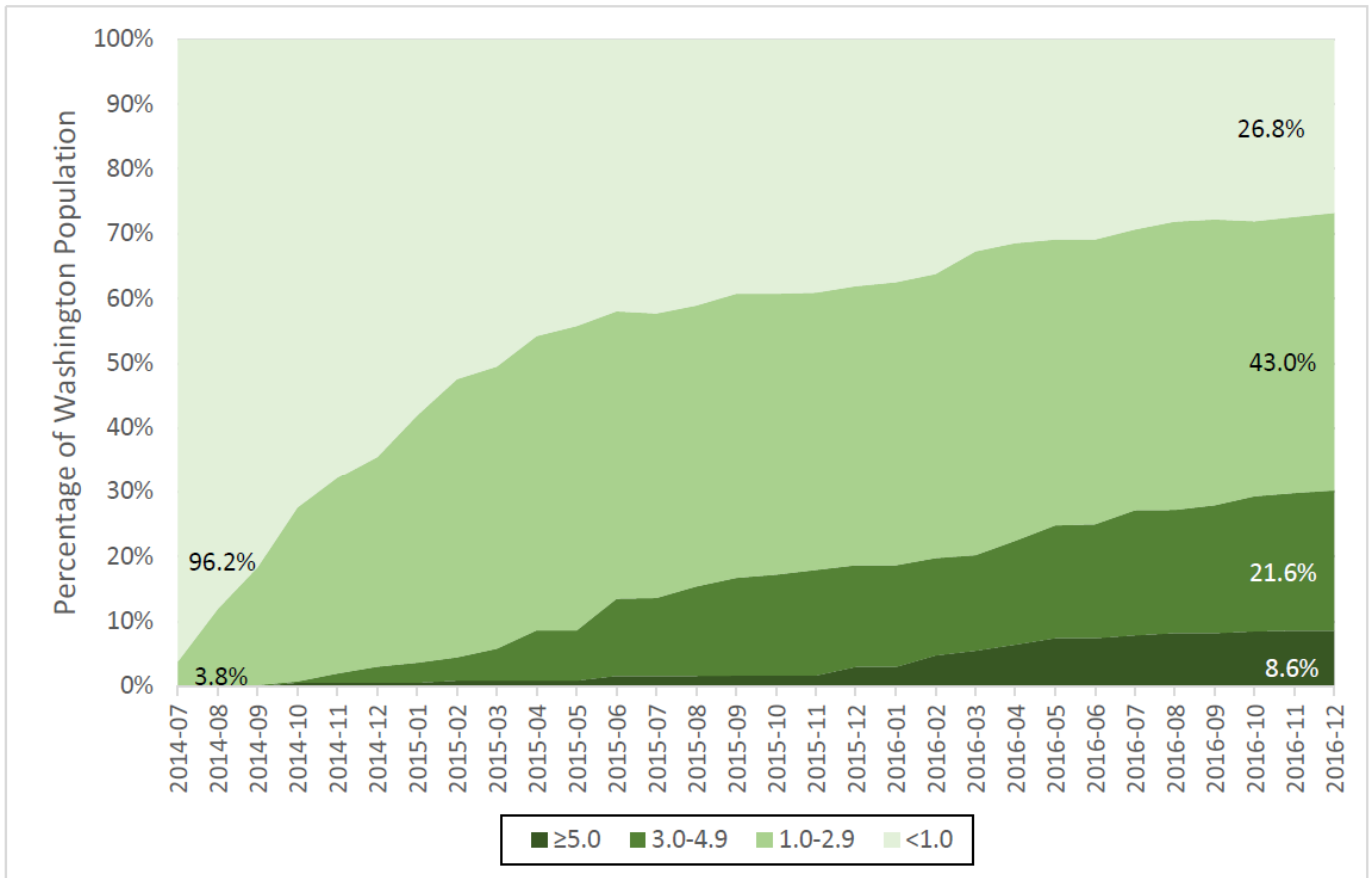


Figure 2: Percent state residents by exposure to community-level retailers (Washington)

The figure below was generated using geocoded retailers per month, linked to local area census data for Washington State, to show the change in exposure to cannabis retailers within communities over time.

**Figure 2: Percentage of residents living in areas of various categories of geospatial density<sup>a</sup> of recreational cannabis retailers, Washington State, July 2014 – December 2016**



<sup>a</sup> Geospatial density = sum of inverse-distances from home residence to the nearest five active retail locations. Data sources: Washington Office of Financial Management Small-area population estimates and Washington State Liquor and Cannabis Board BioTrackTHC sales data.

Figure 3: County-level cannabis retailers per capita (Oregon, Washington)

Similarly, the geocoded retailers per month were used to compare county-level cannabis retail density across states in Oregon and Washington (see below).

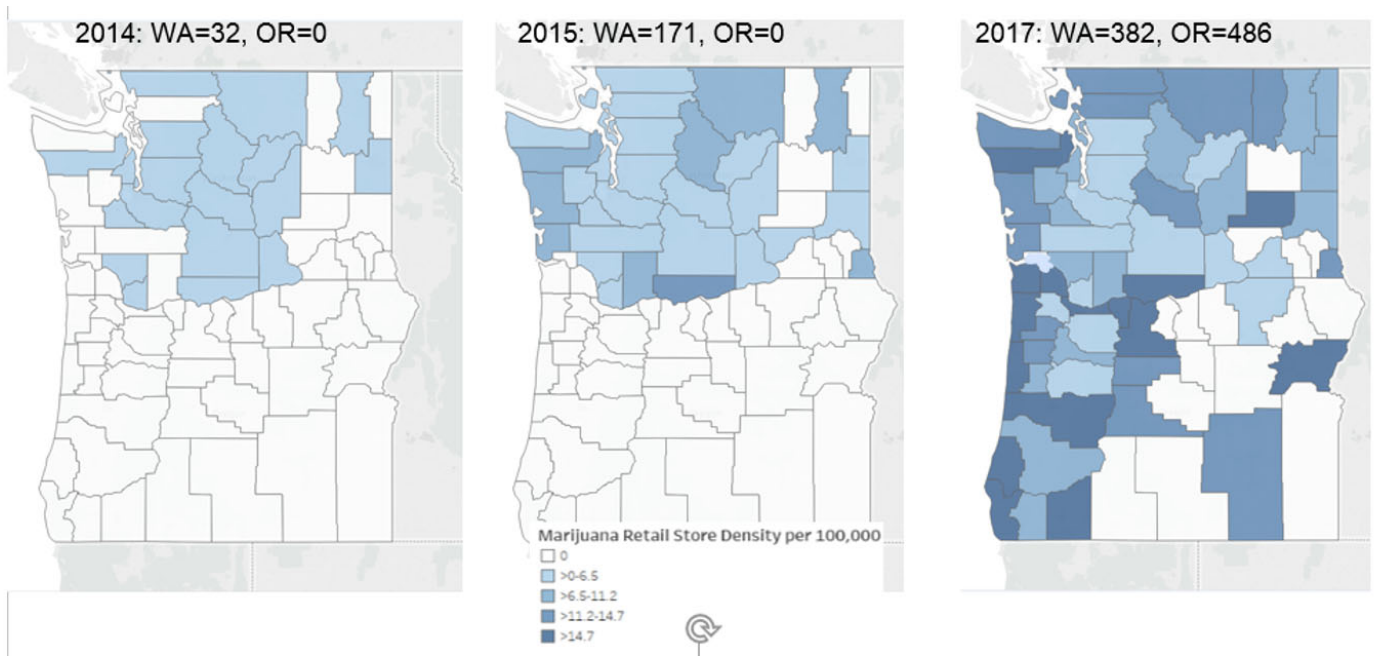
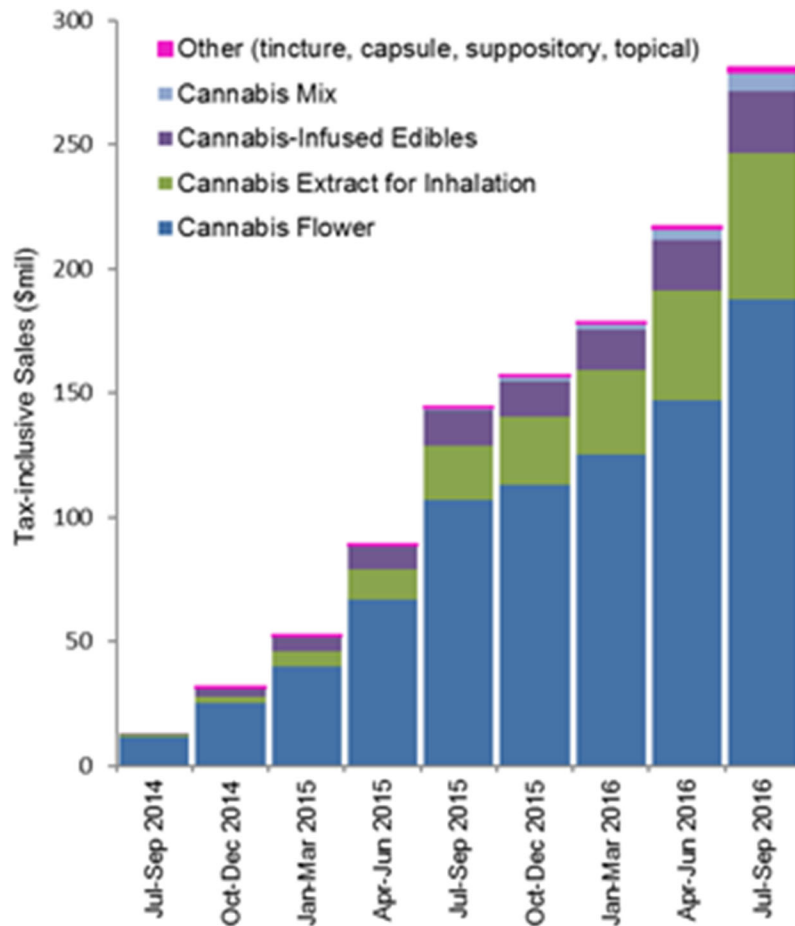


Figure 4: Total cannabis sales and product-specific sales per quarter (Washington)

Detailed sales information was used to describe trends in total sales by product type over time. The figure at left shows quarterly sales, but we analyzed monthly data. This is of particular importance for public health as we monitor sales of the relatively more risky “high potency” products (concentrates and edibles).



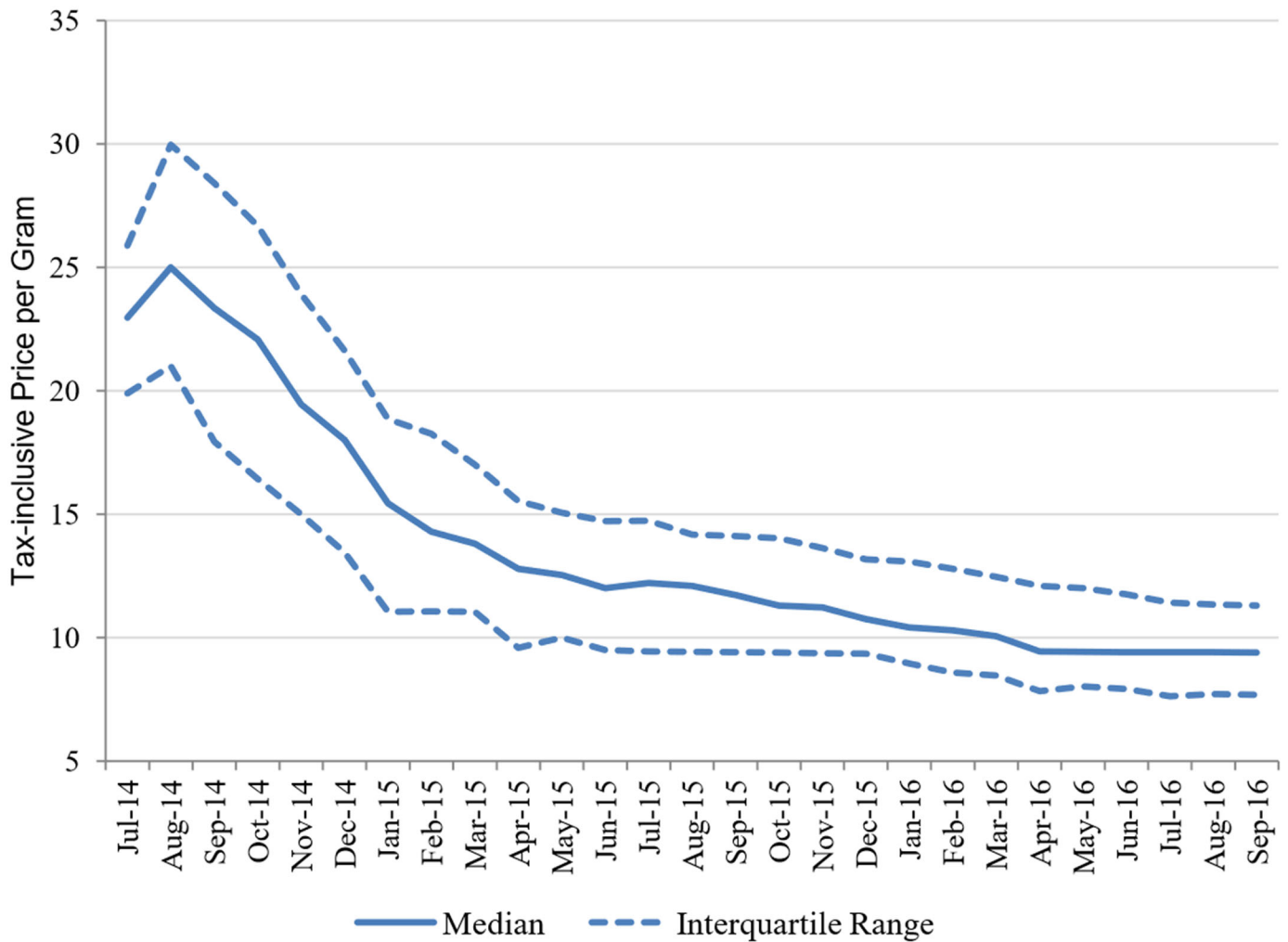
Smart R, Caulkins JP, Kilmer B, Davenport S, Midgette G. (2017) Variation in cannabis potency and prices in a newly-legal market: Evidence from 30 million cannabis sales in Washington State. *Addiction*.

<http://dx.doi.org/10.1111/add.13886>



Figure 5: Retail cannabis price per gram by month, statewide (Washington)

Similar to Figure 4, statewide summaries of the average price per gram over time provide information about accessibility of product.



Smart R, Caulkins JP, Kilmer B, Davenport S, Midgette G. (2017) Variation in cannabis potency and prices in a newly-legal market: Evidence from 30 million cannabis sales in Washington State. *Addiction*.

<http://dx.doi.org/10.1111/add.13886>

Figure 6: Association between cannabis retail presence and youth cannabis use (Washington, Oregon)

Finally, we have linked local retail density and sales with other data, such as school-based youth surveys, to show associations between the retail market and health-related measures like youth use.

The figure below shows a simple version of cannabis use among youth by monthly presence of cannabis retailers in school districts, but we have more detailed statistical models looking at monthly cannabis retail density and total sales as well.

**Figure 4: Current cannabis use among WA (10<sup>th</sup> grade) and OR (11<sup>th</sup> grade) youth, by school district-level presence of cannabis retailers after legalization.**

