



Performance Audit

Improving Cannabis Risk Management Tools Using Business Transaction Data

Washington voters legalized recreational use of marijuana in 2012, joining Colorado as one of the first two states to do so. Seven other states have followed and are looking to Washington and Colorado to learn from their experiences in this new industry. In Washington, the Liquor and Cannabis Board (LCB) administers cannabis business licenses, enforces relevant laws, and creates regulations related to the production, processing and sale of cannabis. Excise taxes collected on retail sales are forecasted to total \$740 million in the 2017-19 biennium.

This performance audit examined how LCB could build and automate risk management tools to ensure a tightly regulated cannabis market and the most efficient and effective use of its internal audit and enforcement staff. LCB management welcomed the audit's analysis, as it informed their decisions in how best to use the industry data it collects to identify areas of risk.

We completed this audit amid a number of changing events in the regulatory environment, both at the federal and state level. First, the audit took place during a federal policy reversal about the legalization of marijuana. In January 2018, the U.S. Department of Justice rescinded its previous policies on how it would enforce federal marijuana laws in states that had legalized cannabis. Prior to the audit, LCB began replacing its existing data tracking system, in part because it wanted greater data analysis capabilities. During the audit, LCB began implementing the new system. LCB faced multiple challenges as it did, including an incident in February 2018, when someone gained unauthorized access to the system. The audit did not address these events other than to recognize their presence.

A robust risk management framework is critical to ensuring LCB maintains a tightly regulated cannabis market

Because Washington was one of the first states to legalize marijuana, LCB had to create its regulatory structure before risk-management standards existed for the marijuana industry. However, government and industry sources offer guidance for effective risk assessment practices.

Audit and enforcement staff plan to use risk management tools to alert them to issues, such as non-compliant businesses, through the identification of irregular data entries by licensees. With the previous data tracking system, LCB audit staff reviewed marijuana transaction data periodically by manually generating and reviewing data reports. Enforcement staff typically responded to unusual activity brought to their attention by outside complaints. Using risk management tools that automatically alert agency staff to irregular data entries made by licensees reporting on their production, processing or retail processes can greatly improve LCB's regulatory efficiency – in both audit and enforcement efforts – while maximizing tax revenue for the state.

Cannabis licensees report data at every step of the process in LCB's tracking system

LCB created a data tracking system to record all cannabis inventory and transaction data from production through final retail sale. The system requires licensees to enter data at each step of cannabis production, distribution and revenue collection. The system was designed to meet enforcement priorities outlined in a 2013 U.S. Department of Justice memo written by Deputy Attorney General James Cole, which related to state-legal cannabis operations, and to ensure that all taxes owed are collected.

LCB began rolling out the new data tracking system in February 2018. Since then, the agency has been continuing to work on the system, its functionality and its implementation. Agency management said the system will ultimately provide more flexibility and reporting capabilities. With the new system in place, management said the agency plans to incorporate an automated risk assessment strategy.

Higher-risk steps of producing and selling cannabis occur in three areas

The audit identified three activities in the production and sale of cannabis that pose a higher risk for potential diversion of product, when cannabis might disappear from the regulated market. These occur when:



1. Licensees adjust cannabis quantity or weight. LCB said its new data tracking system allows producers, processors and retailers to adjust quantities of cannabis product at virtually any point in the process where data could be entered. Large adjustments could indicate a data entry error or that licensees are diverting product.
2. Product changes form, such as when producers harvest plants or cure flower. In fact, licensees use many different methodologies of extraction and end product creation. Low reported yields could indicate potential diversion. Likewise, low reported yields when processors convert cannabis to intermediate products (such as plant material to oil), or when they convert intermediate products to end products (such as oil to an edible candy) may also signal potential diversion.
3. Cannabis changes hands, such as at the retail level where products are sold to customers and, in some cases, where medical donations are allowed.

Establishing reasonable ranges at higher-risk steps can help LCB identify data entry errors indicating potential diversion of product

By developing tools that automatically notify staff of irregular data at high-risk points, the agency can focus its resources on specific, high-risk transactions and businesses. Reasonable data ranges can be calculated using standard statistical methods. Examples of these types of indicators include unusually large adjustments on data entries or abnormally high amounts of waste. (Appendix D in the audit report describes methods for calculating reasonable ranges.)

LCB's original data tracking system captured significant amounts of critical information from cannabis licensees, but was not designed with any automated tools to identify unusual transactions. By calculating reasonable data ranges for high-risk transactions, LCB staff will be able to pinpoint irregular data. Building automatic notifications into the system to alert staff to irregular data will allow LCB staff to be more efficient in selecting those licensees for audits or potential enforcement. Automatic notifications also can help minimize data errors or diversion of marijuana products, ensuring maximum tax revenues are collected.

Recommendations to the Liquor & Cannabis Board

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|  Develop reasonable ranges for data at the higher-risk transactions of the cannabis production, processing and retail processes |  Establish automatic notifications into its new tracking system that will alert staff when data at those higher-risk transactions fall outside established ranges, indicating potential data entry errors or product diversion |
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