

Report to the Governor and the General Assembly of Virginia

Key Considerations for Marijuana Legalization

2020



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JLARC staff

Hal E. Greer, Director

Justin Brown, Senior Associate Director
Mark Gribbin, Project Leader
Dan Hiller
Kapria Lee
Brittany Utz

Information graphics: Nathan Skreslet
Managing Editor: Jessica Sabbath

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Summary: Key Considerations for Marijuana Legalization

WHAT WE FOUND

Legalizing marijuana would require several legislative decisions

If Virginia legalizes marijuana, the General Assembly would need to make several policy choices. The General Assembly would need to determine legal limits on the amount of marijuana an individual could possess; where marijuana could legally be smoked or consumed; the legal age for marijuana use; and whether to allow individuals to grow their own plants. Legislators would also need to determine whether to adjust existing penalties for illegal distribution and possession above the legal amount. In addition, the legislature would need to address consequences for marijuana use in vehicles, driving under the influence of marijuana, and possession and use by youth and other individuals not of-age.

WHY WE DID THIS STUDY

SJ67 and HJ130 from the 2020 General Assembly directed JLARC to review how the state could legalize marijuana, with a focus on how the prior harm to disproportionately affected individuals and communities can be redressed through legalization.

ABOUT LEGALIZING MARIJUANA IN VIRGINIA

Because of its intoxicating effects, marijuana is an illegal substance under federal law. Medical use of marijuana is now legal in many states, including Virginia. Marijuana has been legalized for adult use in 15 other states and the District of Columbia, and most of these states have authorized commercial sale of marijuana.

Creating a commercial marijuana market would entail issuing licenses for five types of operations

The General Assembly could authorize the development of a statewide market for commercial adult use marijuana sales. Virginia would need to issue licenses for five types of major business operations that comprise the marijuana industry: cultivation, processing, distribution, retail sales, and testing.

Other states and countries have taken several approaches to structuring their commercial markets, and Virginia could use lessons learned from these experiences. Virginia could allow “vertically integrated” businesses, in which a single business can be licensed to cultivate, process, distribute, and sell marijuana at retail. Virginia could instead prohibit vertical integration by not allowing businesses with a retail license to obtain licenses for cultivation or processing. This could provide greater opportunity for small businesses to participate in the marijuana market. Regardless of the market structure chosen, licensed testing labs would be needed to test products for purity and quality. These labs should be independent of any other marijuana operations.

The number of licenses issued would depend on demand for legal marijuana. Based on the commercial marijuana markets in other states, Virginia could eventually issue between 100 and 800 cultivation licenses, 30 and 150 processing or distribution licenses, and 200 and 600 retail licenses. The size and number of cultivators would need

to be limited to prevent over-consolidation of the market and over-supply of marijuana. In addition, the number of retail licenses should be capped to prevent the over-proliferation of retail stores.

State could allow localities to opt out of commercial market, and current medical marijuana businesses should be allowed to participate

States with commercial marijuana markets typically give localities some authority over marijuana businesses. If Virginia created a commercial market, it could allow localities to opt out of it. A JLARC survey suggests that a majority of localities in Northern Virginia and Tidewater would be likely to participate in a commercial market, but localities in Southwest and Southern Virginia may be less interested in participating. Localities should be able to determine the number of marijuana retail establishments to license in their jurisdictions and be able to apply existing zoning processes and other local requirements that apply to businesses.

Virginia's currently licensed medical marijuana businesses should be allowed to participate in a commercial market but be required to meet the same requirements as other businesses. Medical marijuana businesses should not be allowed to enter the commercial market before other businesses, based on lessons learned in other states. Over the long term, the goal should be to merge the two markets under a single regulator, license structure, and set of regulations.

Virginia could choose to use legalization to address prior disproportionality in marijuana enforcement

Black Virginians comprise a disproportionately high percentage of individuals arrested and convicted of marijuana offenses. From 2010–2019, the average arrest rate of Black individuals for marijuana possession was 3.5 times higher than the arrest rate for white individuals (and significantly higher than arrest rates for other racial or ethnic groups). Black individuals were also convicted at a much higher rate—3.9 times higher than white individuals.

In other states that have created commercial marijuana markets, relatively few Black individuals have benefited from the establishment of commercial marijuana markets. Industry statistics show the vast majority of current marijuana business owners are white, and there are few Black-owned marijuana businesses.

To redress past disproportionality in marijuana enforcement and ensure Black Virginians have an opportunity to benefit from the new commercial market, Virginia could implement several “social equity” initiatives. Other states are increasingly attempting to achieve social equity goals through their commercial markets. No state, though, has been able to fully achieve these goals, and several are revising their approaches to improve their effectiveness.

The state could consider several approaches to address social equity. It could provide ownership opportunities for social equity businesses by establishing a licensing process and business assistance program needed for these businesses to effectively compete with well-established, larger marijuana businesses. The state could also take measures to maximize employment opportunities for social equity individuals in marijuana and other related businesses. Additionally, the state could allocate marijuana tax revenue to existing programs in communities most affected by drugs and the enforcement of drug laws or create a new community reinvestment program to fund initiatives in these communities. These options have varying potential benefits and costs (table).

State could address social equity through several options with varying benefits and costs

Program option	Number of beneficiaries	Magnitude of benefit per beneficiary	Costs
Marijuana business ownership: licensing structure and process & business assistance	○	●	\$\$
Marijuana industry employment	●	●	\$
Ancillary businesses	○	●	\$
Increase funding to existing community assistance programs using marijuana tax revenue	●	●	\$\$\$
Community reinvestment grants using marijuana tax revenue	●	●	\$\$\$
Benefit: ○ = Low; ● = Moderate; ● = High			
Cost: \$ = Low; \$\$ = Moderate; \$\$\$ = High			

SOURCE: JLARC summary analysis.

Virginia would need to take measures to mitigate unintended negative public health consequences

The full health implications of marijuana legalization are not fully understood, but marijuana use does present several public health risks. Marijuana is an intoxicating substance, and people who drive after using marijuana can be at an increased risk of a vehicle accident. People who overconsume marijuana can suffer from several temporary problems such as severe anxiety, vomiting, or drowsiness. Marijuana consumption may encourage the use of other substances, such as alcohol, which can compound marijuana's negative effects. Research shows likely associations between habitual marijuana use and several negative health outcomes ranging from physical health problems, such as mild respiratory issues, to cognitive and mental health issues.

If marijuana is legalized, Virginia would need to establish prevention efforts to inform both adults and youth about the risks associated with marijuana consumption. The state would need to develop regulations addressing product potency, packaging, and labeling. The state would also need to set restrictions on advertising. Product requirements and advertising restrictions should help to reduce the appeal of marijuana to

youth and help prevent accidental consumption and overconsumption. Other states have similar requirements, and they also typically conduct statewide informational prevention campaigns to deter youth use. Virginia could create its own statewide youth prevention campaign while also ensuring adequate funding is provided to community-based substance use prevention programs.

Virginia would need to grant regulatory authority to VABC or create a new agency to regulate the commercial marijuana market

Virginia should vest authority for regulating commercial marijuana with a single board and agency. Regulators in other states uniformly stressed that this is the best approach because it is simpler for both the regulator and the regulated industry. By having one main regulatory body, the state could eliminate duplicative oversight or potential gray areas with other regulators. It is also easier for the regulator to carry out basic functions, such as setting regulations and issuing licenses, because there is less need to coordinate with other regulators. The regulated industry benefits because license holders would not have to work with more than one regulator.

Virginia could grant regulatory authority for commercial marijuana to an existing agency—the Virginia Alcoholic Beverage Control Authority (VABC)—or it could create a new board and agency. There are tradeoffs to each approach (table). For example, because of its existing management and administrative infrastructure, VABC would need fewer additional staff than a new agency. VABC could need \$7–\$9 million annually to hire approximately 85 to 105 staff. Creating a new agency could require \$9–\$12 million annually to hire approximately 110 to 140 staff. VABC would also be able to implement its new responsibilities faster than a new agency.

A new agency would be solely focused on regulating marijuana. In addition, it could more easily provide the appropriate emphasis for a social equity program than VABC, which has a broad range of responsibilities. Moreover, a new agency could be directed to focus solely on regulatory compliance and not have law enforcement responsibilities, if the state prefers this approach.

Granting authority to VABC or creating a new agency both have advantages

	Virginia ABC	New board & agency
Lower operating costs	✓	
Readily available initial funding source	✓	
Less time to implement	✓	
Lower risk of unexpected delays	✓	
Marijuana regulation is primary mission		✓
Emphasis on special priorities, such as social equity		✓
Flexibility on governance structure		✓
Flexibility on enforcement approach		✓

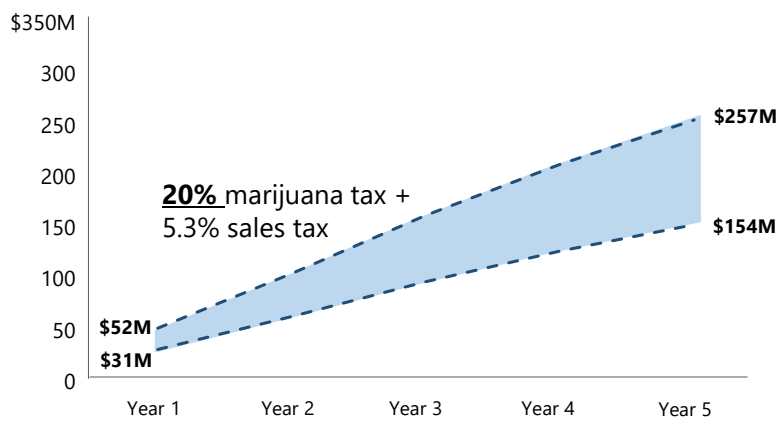
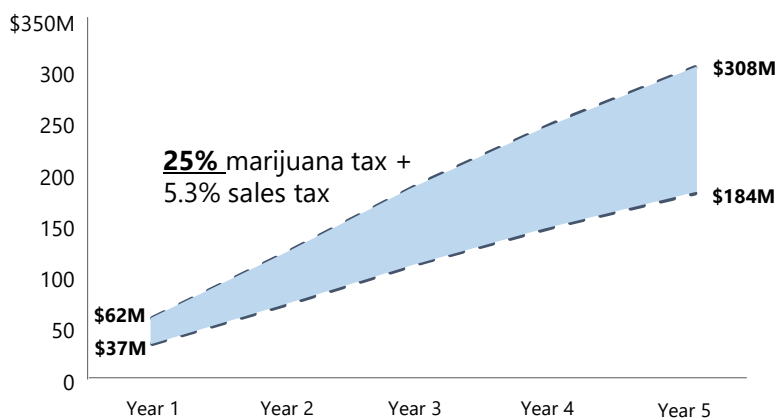
SOURCE: JLARC staff interviews with VABC and marijuana regulatory agencies in other states.

Taxing commercial marijuana sales would eventually produce substantial revenue

Most states with commercial marijuana markets tax marijuana retail sales, and total taxation is typically between 20 and 30 percent of the retail sales value. Virginia could implement a total combined tax rate of 25 to 30 percent comprising (i) a new 20 to 25 percent marijuana retail sales tax and (ii) the existing 5.3 percent standard sales tax. A total rate of 30 percent would be at the upper end of the range of other states' marijuana tax rates. Colorado, though, has a combined marijuana tax rate of around 30 percent and has a strong marijuana market. Virginia could also tax easier-to-consume products, such as edibles, and higher potency products at higher rates than marijuana flower.

A legalized commercial market could generate substantial revenue for state and local governments, once the market matures. Depending on demand and the tax rate selected, commercial marijuana could produce \$31–\$62 million during the first full year of sales, depending on the state's chosen tax rate (figure). By the fifth year of sales, commercial marijuana could produce \$154–\$308 million in tax revenue.

Revenue would increase as commercial market matures but would vary depending on demand in legal market and tax rate



SOURCE: JLARC analysis of projections by MPG Consulting.

A commercial marijuana market could create thousands of new jobs, many at lower than median wage levels

Virginia's marijuana industry could eventually be responsible for creating approximately 11,000 to more than 18,000 jobs (0.3 to 0.5 percent of the state's workforce). These jobs would not be created all at once; it would take several years to reach those employment levels. Marijuana industry employment would most likely be concentrated in the state's most populous areas.

Jobs in the legal marijuana industry can pay a wide range of wages, but the majority would likely pay below Virginia's median wage. Retail marijuana businesses would employ "budtenders," who sell marijuana to consumers. Cultivators and processors employ growers, technicians, and "trimmers," who trim and weigh marijuana plants. Given the number of lower wage jobs, the median wage in Virginia's marijuana industry would probably be less than Virginia's median wage.

Authorizing and implementing a commercial market would take two or more years, but revenue would far exceed costs after sales start

Depending on exactly how the state implements a commercial market, it would take about two to two-and-a-half years to do so after passing legislation legalizing marijuana. The regulatory agency would need to hire agency staff, draft regulations, and issue licenses. If a new regulatory agency were established, it would need additional time to hire its executive staff and establish basic organizational and administrative functions. Marijuana business license holders would then need to establish their operations.

As a commercial marijuana market matures, retail marijuana sales would produce substantially more revenue than associated state costs. The costs of a state regulatory agency, public health programs, and social equity programs could total approximately \$10–\$16 million annually. Retail sales would begin, at the earliest, two years after legislation is passed. In the interim, the state regulatory agency could raise several million in licensing fees that could partially offset operational costs. After commercial sales started, marijuana sales tax revenues could cover remaining costs. If the state set the marijuana sales tax at 25 percent, there would eventually be an estimated \$177–\$300 million in net tax revenue after operational costs (\$147–\$250 million if the marijuana sales tax rate was set at 20 percent).

RECOMMENDATIONS AND POLICY OPTIONS

JLARC staff developed recommendations and policy options for the General Assembly to consider if it legalizes marijuana. The complete list of recommendations and policy options for consideration is available on page vii.

Recommendations and Policy Options: Key Considerations for Marijuana Legalization

JLARC staff typically make recommendations to address findings during reviews. Staff also sometimes propose policy options rather than recommendations. The three most common reasons staff propose policy options rather than recommendations are: (1) the action proposed is a policy judgment best made by the General Assembly or other elected officials, (2) the evidence indicates that addressing a report finding is not necessarily required, but doing so could be beneficial, or (3) there are multiple ways in which a report finding could be addressed and there is insufficient evidence of a single best way to address the finding.

Recommendations

RECOMMENDATION 1

If marijuana is legalized in Virginia, the Virginia State Police and Department of Motor Vehicles should work together to train more officers to detect and enforce drug-impaired driving through the Drug Recognition Expert (DRE) and Advanced Roadside Impaired Driving Enforcement (ARIDE) training programs. (Chapter 3)

RECOMMENDATION 2

If marijuana is legalized in Virginia, the General Assembly may wish to consider allowing (i) marijuana possession and use by adults aged 21 and older, (ii) of-age adults to possess up to one ounce of marijuana flower, up to five grams of marijuana concentrate, and marijuana-infused products containing up to 500 milligrams of THC, (iii) of-age adults to possess marijuana paraphernalia, and (iv) of-age adults to share marijuana in amounts that are less than or equal to the possession limits. (Chapter 4)

RECOMMENDATION 3

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting marijuana use in public places, including any place, building, or conveyance to which the public has access and establish a small fine for violations of the prohibition. (Chapter 4)

RECOMMENDATION 4

If marijuana is legalized in Virginia, the General Assembly may wish to consider establishing clear, graduated civil or criminal penalties for possessing quantities of marijuana, concentrates, and infused products over a legal limit. (Chapter 4)

RECOMMENDATION 5

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting marijuana from being given as a gift in conjunction with the sale of another good, service, or membership agreement. (Chapter 4)

RECOMMENDATION 6

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting unlicensed individuals from using dangerous methods such as high heat, pressure, and flammable gases to manufacture marijuana concentrates. (Chapter 4)

RECOMMENDATION 7

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting on public roads and highways the (i) consumption of marijuana products by drivers or passengers in motor vehicles and (ii) the presence of open marijuana containers and partly consumed marijuana in the passenger area of motor vehicles. (Chapter 4)

RECOMMENDATION 8

The General Assembly may wish to consider amending § 18.2-250.1 of the Code of Virginia to clarify that juvenile marijuana possession offenses are delinquent acts that are *not* subject to (i) the requirement that marijuana possession offenses be charged by summons or (ii) the \$25 civil penalty associated with adult marijuana possession. (Chapter 4)

RECOMMENDATION 9

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales that the marijuana regulatory body issue licenses for marijuana (i) cultivation, (ii) processing, (iii) distribution, (iv) retail sales, and (v) testing. (Chapter 5)

RECOMMENDATION 10

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that only state licensed businesses are legally allowed to cultivate, process, distribute, sell, test, or otherwise transport or handle marijuana in amounts greater than the individual legal possession and cultivation limits set in state criminal laws. (Chapter 5)

RECOMMENDATION 11

If marijuana is legalized in Virginia, the General Assembly may wish to consider establishing a commercial licensing structure that either (i) allows vertical integration by authorizing marijuana cultivation and processing license holders to also hold a retail license, or (ii) prohibits vertical integration by forbidding any party that holds a marijuana retail sales license from also holding cultivation or processing licenses. (Chapter 5)

RECOMMENDATION 12

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body develop different tiers of cultivation licenses and set maximum size limits for each tier based on cultivation square footage or number of plants under cultivation. (Chapter 5)

RECOMMENDATION 13

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that (i) marijuana production by licensed cultivators be capped based on estimates of consumer demand, (ii) the marijuana regulatory body establish a regulatory process to annually adjust cultivation limits based on consumer demand, and (iii) the marijuana regulatory body establish the number of medium and large tier cultivator licenses that will be issued each year. (Chapter 5)

RECOMMENDATION 14

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body (i) award medium and large cultivator licenses through a lottery, (ii) set stringent qualification standards for applicants for medium and large cultivation licenses, and (iii) require license awardees to meet facility and operations compliance standards before cultivation can begin. (Chapter 5)

RECOMMENDATION 15

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body develop tiers or other categories of processor and distributor licenses that allow specialization and minimize the need for applicants or licensees to meet regulatory standards that do not apply to the specific products they are processing or distributing. (Chapter 5)

RECOMMENDATION 16

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop estimates of the number of stores each locality could support based on demand and share this information with localities. (Chapter 5)

RECOMMENDATION 17

If the General Assembly authorizes commercial marijuana sales, it may wish to consider authorizing localities to pass ordinances setting caps on the number of marijuana retailers that can be licensed to operate in their jurisdictions and require localities to pass ordinances and report caps to the regulatory body within a reasonable amount of time before the retail applications process begins. (Chapter 5)

RECOMMENDATION 18

If the General Assembly authorizes commercial marijuana sales, it may wish to consider prohibiting home delivery of commercially available marijuana and businesses that allow on-site consumption of marijuana until at least three to five years from when commercial sales begin at retail stores. (Chapter 5)

RECOMMENDATION 19

If the General Assembly authorizes commercial marijuana sales, it may wish to consider (i) requiring commercial marijuana products to be tested for safety and quality by licensed laboratories, and (ii) prohibiting businesses that hold a testing license from holding licenses to perform any other commercial marijuana operations. (Chapter 5)

RECOMMENDATION 20

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop regulatory standards governing product safety and quality sampling and testing. The standards could be specific to Virginia or could be national or other state standards. (Chapter 5)

RECOMMENDATION 21

If the General Assembly authorizes commercial marijuana sales, and the state adopts its own regulatory standards for product safety and quality, the Division of Consolidated Laboratory Services should develop and administer (i) a marijuana testing certification program that certifies that private laboratories meet Virginia standards, and (ii) its own secondary marijuana product safety testing program for products sold to consumers that the regulatory body suspects are contaminated. (Chapter 5)

RECOMMENDATION 22

If the General Assembly authorizes commercial marijuana sales, it may wish to consider expressly defining local authority in a commercial marijuana market by either (i) authorizing cities, counties, and towns to pass ordinances prohibiting all commercial marijuana operations within their jurisdictions, and thereby forgo any associated tax revenues or (ii) preventing any city, county, or town from using any existing or newly created local authority to prohibit commercial marijuana operations. (Chapter 6)

RECOMMENDATION 23

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales affirmation that local governments maintain their full powers to (i) require that commercial marijuana operations meet local zoning requirements, including local requirements for setbacks, signage, and hours of operations, (ii) inspect operation premises for building and fire code compliance, (iii) issue occupancy permits, and (iv) require operations to obtain general business licenses. (Chapter 6)

RECOMMENDATION 24

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales the authority for local governments to pass ordinances that restrict the number of licensed marijuana retailers that can operate in each of its zoning districts, in addition to ordinances that set caps on the overall number of marijuana retailers allowed in the locality. (Chapter 6)

RECOMMENDATION 25

If the General Assembly authorizes commercial marijuana sales, it may wish to consider authorizing the issuance of no more than five new medical marijuana licenses in the three to five years following commercial legalization. (Chapter 6)

RECOMMENDATION 26

If the General Assembly authorizes commercial marijuana sales, it may wish to consider merging the medical and commercial marijuana markets and regulations by (i) placing medical market authority under the regulatory body for the commercial market, (ii) generally conforming medical laws to commercial laws, while maintaining necessary medical laws, (iii) directing the regulatory body to generally conform medical regulations to commercial regulations, while maintaining necessary medical regulations, (iv) allowing licensed medical and commercial cultivators, processors, distributors, and testers to serve both the commercial and medical markets, and (v) requiring separate retail licenses for medical and commercial adult use, but allowing retailers to be dual-licensed to serve both markets from the same location. (Chapter 6)

RECOMMENDATION 27

If the General Assembly authorizes commercial marijuana sales, it may wish to consider waiting three to five years before merging the medical and commercial marijuana markets and regulatory structures. (Chapter 6)

RECOMMENDATION 28

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop regulations governing (i) the license application process, (ii) license qualifications, (iii) facility and operations compliance, (iv) compliance enforcement, (v) disciplinary process and sanctions, (vi) testing and sampling for product safety and quality, (vii) the legitimacy of marijuana businesses and legality of entering into contracts or providing goods and services to these businesses, and (viii) registration of marijuana business employees. (Chapter 6)

RECOMMENDATION 29

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the Virginia Foundation for Healthy Youth to coordinate a statewide media campaign targeted at preventing youth marijuana use and appropriating the funds necessary to develop and run the campaign. (Chapter 9)

RECOMMENDATION 30

If marijuana is legalized in Virginia, the General Assembly may wish to consider providing community services boards with an additional \$1 to \$2 million annually in funding for prevention because of the increased need following commercial legalization of marijuana. (Chapter 9)

RECOMMENDATION 31

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the marijuana regulatory body to establish regulations for products, packaging, and labeling, including but not limited to (i) product shape and appearance restrictions, (ii) serving size and THC potency limits for edible products (iii) packaging restrictions, (iv) health risk warning labels, and (v) marijuana content and THC potency warning labels. (Chapter 9)

RECOMMENDATION 32

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the marijuana regulatory body to establish regulations restricting advertising and promotion by licensed marijuana businesses, including restrictions on (i) storefront signage and window displays, (ii) outdoor advertising, (iii) media advertising, and (iv) promotional activities, especially use of social media. (Chapter 9)

RECOMMENDATION 33

If the General Assembly authorizes commercial marijuana sales, it may wish to consider assessing a tax on retail sales of marijuana at a rate of 20 to 25 percent of the sales price, which would be applied in addition to the existing standard retail sales tax. (Chapter 10)

RECOMMENDATION 34

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting responsibility for both *state* and *local* marijuana sales tax collection with either the Department of Taxation or the marijuana regulatory body and provide the designated agency with the staffing and resources needed to effectively collect taxes and audit taxpayers for compliance. (Chapter 10)

RECOMMENDATION 35

If the General Assembly authorizes commercial marijuana sales, it may wish to consider establishing state regulatory authority by either (i) granting regulatory authority to the Virginia Alcoholic Beverage Control Authority and its board or (ii) creating a new standalone regulatory agency and board solely focused on marijuana regulation. (Chapter 11)

RECOMMENDATION 36

If marijuana is legalized in Virginia, and the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider prohibiting VABC board members from having a financial interest in any marijuana business. (Chapter 11)

RECOMMENDATION 37

If the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider appropriating sufficient funds to VABC to establish its new regulatory functions. (Chapter 11)

RECOMMENDATION 38

If the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider directing VABC to develop and submit a detailed staffing and cost proposal to the governor and General Assembly. (Chapter 11)

RECOMMENDATION 39

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider (i) establishing a board appointed by the governor and confirmed by the General Assembly, (ii) requiring board members to have general business, government, or legal expertise, and (iii) prohibiting board members from having a financial interest in any marijuana business. (Chapter 11)

RECOMMENDATION 40

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider creating an agency that is either (i) within the executive branch and is headed by a director who is appointed by the governor and confirmed by the General Assembly, or (ii) an independent authority and is headed by a director who is either appointed by the governor and confirmed by the General Assembly or appointed by the board. (Chapter 11)

RECOMMENDATION 41

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider appropriating sufficient funds to the new agency to establish its new regulatory functions. (Chapter 11)

RECOMMENDATION 42

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider directing the agency to develop and submit a detailed staffing and cost proposal after it is created to the governor and the General Assembly. (Chapter 11)

RECOMMENDATION 43

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory board with the powers and duties to (i) promulgate all regulations necessary to ensure a safe and secure commercial marijuana market, including but not limited to regulations regarding licensure and enforcement, (ii) approve or deny licenses, and (iii) suspend, revoke, or otherwise sanction license holders for violations of rules. (Chapter 11)

RECOMMENDATION 44

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory agency with the powers and duties to (i) assist the board in the execution of its duties and (ii) perform all licensing and enforcement related functions that are necessary to carry out state laws and regulations related to the operations of the commercial marijuana market. (Chapter 11)

RECOMMENDATION 45

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory board with the power to set all fees, including application fees, license fees, and renewal fees. (Chapter 11)

RECOMMENDATION 46

If the General Assembly authorizes commercial marijuana sales, it may wish to consider granting the marijuana regulatory board a limited exemption from the standard rulemaking process. (Chapter 11)

Policy Options to Consider

POLICY OPTION 1

If marijuana is legalized in Virginia, the General Assembly could direct the Department of Criminal Justice Services to convene a workgroup to develop a model marijuana law enforcement officer policy and training curriculum. The workgroup should include commonwealth's attorneys, public defenders, and state and local law enforcement officers. (Chapter 3)

POLICY OPTION 2

If marijuana is legalized in Virginia, the General Assembly could allow of-age adults to cultivate a small number of marijuana plants at their primary residence out of public view but establish caps to limit the amount cultivated. (Chapter 4)

POLICY OPTION 3

If marijuana is legalized in Virginia, the General Assembly could reduce the severity of penalties for illegal distribution by (i) increasing the amount of marijuana required for a felony distribution charge, and/or (ii) eliminating mandatory minimum prison sentences for marijuana distribution without aggravating factors. (Chapter 4)

POLICY OPTION 4

If marijuana is legalized in Virginia, the General Assembly could reduce the severity of penalties for illegal marijuana manufacturing (cultivation) by increasing the number of marijuana plants required for a felony manufacturing charge. (Chapter 4)

POLICY OPTION 5

If marijuana is legalized in Virginia, the General Assembly could expunge individuals' criminal records for marijuana offenses that are no longer illegal. (Chapter 4)

POLICY OPTION 6

If marijuana is legalized in Virginia, the General Assembly could direct the Virginia State Police to establish and coordinate an automatic expungement process for criminal records of past marijuana offenses that are no longer illegal. (Chapter 4)

POLICY OPTION 7

If the General Assembly authorizes commercial marijuana sales, it could allow the smallest tier of cultivators to sell their own products at or near their licensed cultivation site without having to obtain a retail license to maximize revenue opportunities for small businesses. (Chapter 5)

POLICY OPTION 8

If the General Assembly authorizes commercial marijuana sales, it could direct the marijuana regulatory body to exempt the smallest tier of cultivators from production caps to increase opportunities for small businesses and address social equity. The regulator could also have the authority to temporarily suspend new license awards if it appears that the market is becoming oversupplied. (Chapter 5)

POLICY OPTION 9

If the General Assembly authorizes commercial marijuana sales, it could direct the marijuana regulatory body to set less stringent qualification standards for small cultivation applicants than for large and medium cultivation applicants and make license awards to all small cultivators who are qualified candidates to increase opportunities for small businesses and address social equity. (Chapter 5)

POLICY OPTION 10

If the General Assembly authorizes commercial marijuana sales, it could increase opportunities for small businesses and address social equity by directing the marijuana regulatory body to (i) set comparatively less stringent qualification standards for retail licenses than are typically set in other states but still require licensees to comply with more stringent requirements before sales begin, (ii) make license awards using a lottery instead of merit-based scoring, and (iii) make license awards gradually over three to five years. (Chapter 5)

POLICY OPTION 11

If the General Assembly authorizes commercial marijuana sales, it could allow localities to require that all marijuana operations within their locality be approved through a special use permit process. (Chapter 6)

POLICY OPTION 12

If the General Assembly authorizes commercial marijuana sales, it could automatically award provisional commercial *cultivation* and *processing* licenses to current medical marijuana license holders, contingent upon their operations remaining in compliance with medical marijuana regulations, at the same time awards are made to other cultivators and processors. These provisional licenses could be renewed annually until three to five years after commercial legalization, at which time medical cultivators and processors could be required to comply with commercial market regulations. (Chapter 6)

POLICY OPTION 13

If the General Assembly authorizes commercial marijuana sales, it could allow current medical marijuana license holders to apply for *retail* licenses with other applicants and limit vertically integrated operations to three licenses. (Chapter 6)

POLICY OPTION 14

If the General Assembly authorizes commercial marijuana sales, it could address social equity by requiring the marijuana regulatory body to impose less stringent initial licensing standards than those that have been commonly used in other states related to (i) ownership or leasing of property prior to a license award, (ii) financial assets, (iii) experience in the marijuana industry, and (iv) security or operations plans. (Chapter 7)

POLICY OPTION 15

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to consider criminal history in reviewing license applications but exclude from consideration any prior misdemeanor marijuana offenses and not automatically deny an application based on other prior criminal offenses. (Chapter 7)

POLICY OPTION 16

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to include a mandatory or optional requirement that applicants for a marijuana license submit a social equity plan along with their application. (Chapter 7)

POLICY OPTION 17

If the General Assembly authorizes commercial marijuana sales, it could address social equity by creating a social equity ownership assistance program consisting of (i) community outreach, (ii) application education and assistance, (iii) licensing fee discounts or waivers, (iv) business start-up assistance, (v) financial assistance through loans, and (vi) mentorship. The assistance program should have clearly defined eligibility criteria for participation. (Chapter 7)

POLICY OPTION 18

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to examine whether a preferential licensing program for retail marijuana licenses could be implemented successfully in Virginia, and, if so, design and implement the program. (Chapter 7)

POLICY OPTION 19

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory agency to (i) use community outreach efforts to connect marijuana businesses with prospective employees and (ii) request or require businesses applying for marijuana licenses to develop and submit social equity hiring plans. (Chapter 8)

POLICY OPTION 20

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory agency to apply elements of social equity programs to businesses that sell goods or services to marijuana businesses. (Chapter 8)

POLICY OPTION 21

If the General Assembly authorizes commercial marijuana sales, it could address social equity by dedicating tax revenue from marijuana sales to existing programs that seek to address the needs of communities that have been most adversely affected by the enforcement of drug laws. (Chapter 8)

POLICY OPTION 22

If the General Assembly authorizes commercial marijuana sales, it could address social equity by creating a community reinvestment grant program funded by marijuana tax revenue. The program could make grants to public or nonprofit organizations in communities that have been most adversely affected by the enforcement of drug laws. (Chapter 8)

POLICY OPTION 23

If the General Assembly authorizes commercial marijuana sales and creates a community reinvestment program, the legislature could require the program to have (i) clear guidelines for the number of grants to be awarded annually and the dollar amount of each grant, (ii) clearly defined criteria for grant eligibility, (iii) a well-defined and transparent process for receiving grant proposals and reviewing, scoring, and making grant awards, and (iv) ongoing monitoring and public reporting on the status and outcomes of projects that have received grant awards. (Chapter 8)

POLICY OPTION 24

If the General Assembly authorizes commercial marijuana sales and creates a community reinvestment program, the legislature could require the marijuana regulatory board to create a social equity advisory committee to help implement the program. (Chapter 8)

POLICY OPTION 25

If the General Assembly authorizes commercial marijuana sales and creates social equity programs, it could assign responsibility for implementation of the programs to the marijuana regulatory body, and assign responsibility for monitoring programs to the social equity advisory committee. (Chapter 8)

POLICY OPTION 26

If marijuana is legalized in Virginia, the General Assembly could direct the appropriate agencies to conduct media campaigns to raise awareness of the importance of keeping marijuana away from children and the potential negative effects of marijuana use, such as impaired driving, general health risks, and risks for pregnant women and people with a history of mental illness. (Chapter 9)

POLICY OPTION 27

If the General Assembly authorizes commercial marijuana sales, it could assess a marijuana sales tax consisting of progressively higher rates for more potent and easier-to-consume products to discourage overconsumption. (Chapter 10)

POLICY OPTION 28

If the General Assembly authorizes commercial marijuana sales, it could apportion revenue collected through a marijuana sales tax between the state and the locality in which retail sale occurs (in addition to the existing apportionment of the standard sales tax). (Chapter 10)

POLICY OPTION 29

If the General Assembly authorizes commercial marijuana sales, it could require sales to begin three years from the date that the authorizing legislation is passed. (Chapter 12)

1 Overview of Marijuana Legalization

SJ67 and HJ130 directed JLARC staff to review how Virginia should “legalize and regulate the growth, sale, and possession of marijuana.” The resolutions do not direct staff to determine *whether* Virginia should legalize marijuana, which is a policy decision for the General Assembly. The resolutions direct staff to (1) consider best practices that could be applied to Virginia; (2) address how to create a well-regulated commercial market for adults that protects minors, prosecutes illegal sellers, and maintains Virginia’s existing medical marijuana program; and (3) address equity and economic opportunity for communities disproportionately impacted by prohibition drug policies with an emphasis on ensuring equity in ownership in the marijuana industry. (See Appendix A for study resolution.)

To address the study resolution, JLARC staff conducted over 100 interviews with stakeholders in Virginia, including state and local officials, and other states that have legalized marijuana. Staff reviewed other states’ criminal and commercial marijuana statutes and their regulatory agencies and programs. Staff analyzed state arrests and convictions data for marijuana offenses and used data from other states to project the impacts on residents, law enforcement, and the criminal justice system if Virginia legalized marijuana. Staff reviewed over 100 academic research papers on public health and more than 60 on social equity. Staff also surveyed local governments about their perspectives on legalization. (See Appendix B for a detailed description of research methods.)

JLARC staff released a request for proposal for experts to assist with certain key aspects of the review. JLARC received 17 proposals and ultimately selected a team representing four organizations: MPG Consulting, the Rand Corporation, Kammerzell Consulting, and the Weldon Cooper Center at the University of Virginia. The team worked with JLARC staff to collect lessons learned from other states, including information on social equity programs. The consulting group estimated demand for legal marijuana in Virginia, how much tax revenue could be generated from sales, and the potential economic impacts, including job creation.

Concurrent to this JLARC review, the General Assembly directed the executive branch to create a stakeholder workgroup to also study options for marijuana legalization (HB 972 and SB 2, sidebar). The workgroup consists of representatives from four secretariats in addition to policy experts, health-care professionals, and citizens. This stakeholder workgroup was directed to submit a report by November 30, 2020 (two weeks after this report will be presented to JLARC).

Executive branch stakeholder workgroup. The JLARC study team interviewed certain workgroup participants during the course of its review (e.g. ABC, TAX, Virginia NORML). The JLARC project leader and associate director assigned to the study also periodically met with agency staff managing the workgroup to discuss topics being addressed in their respective efforts. JLARC staff also observed several workgroup meetings. However, due to the nearly identical timelines and JLARC’s protocol of not releasing preliminary findings, the two efforts were largely independent from each other.

Marijuana is an intoxicating cannabis plant

The cannabis plant genus includes three species: *C. sativa*, *C. indica*, and *C. ruderalis*. Countless hybrids and varieties of these species have been developed. Hybrids and varieties that are grown for their intoxicating properties are often called marijuana plants. Varieties that are non-intoxicating are often called hemp plants.

Virginia is already establishing hemp market regulations. Combining hemp regulation with marijuana regulation does not appear to offer advantages given the vastly different requirements that will be needed for each market.

Marijuana is one of the commonly used terms for referring to the intoxicating flower, bud, or other products derived from the cannabis plant, and is often used to refer to the plant itself (sidebar). Marijuana products include edibles, such as cookies and candies, vapable oils, and other concentrates.

Marijuana's intoxicating effects stem from the chemical tetrahydrocannabinol (THC) that is naturally produced in the plant. Individuals who smoke, vaporize, or consume marijuana can become intoxicated by THC. Marijuana also includes over 80 additional unique, naturally occurring chemical substances, called cannabinoids, whose properties and effects are not well understood. Aside from THC, the most well-known of these substances is cannabidiol, or CBD. CBD appears to have some non-intoxicating neurological effects. For example, it has been found to reduce the frequency and severity of epileptic seizures in some patients.

Hemp is another product derived from the cannabis plant, and the term is also often used to refer to specific varieties of cannabis. Unlike marijuana, hemp is already legal in Virginia and nationally. Consumption of hemp flower, bud, or other plant parts does not have intoxicating effects. Historically, hemp varieties of cannabis were grown for their stalks, which can be used as a raw material for rope, textiles, and paper. Today, hemp is often grown for its CBD content. CBD from hemp is chemically identical to CBD from marijuana and is used in many widely available wellness products. This study does not examine Virginia's newly established hemp market or its regulations (sidebar).

Marijuana is illegal federally but increasingly legal or decriminalized at the state level

Because of its intoxicating effects, marijuana is an illegal substance under federal law. Marijuana sale and possession have been effectively banned by the federal government since 1937. Stronger and more punitive marijuana laws were enacted as part of the 1971 Controlled Substances Act. The law strictly prohibits possession, cultivation, or distribution of marijuana, among many other substances.

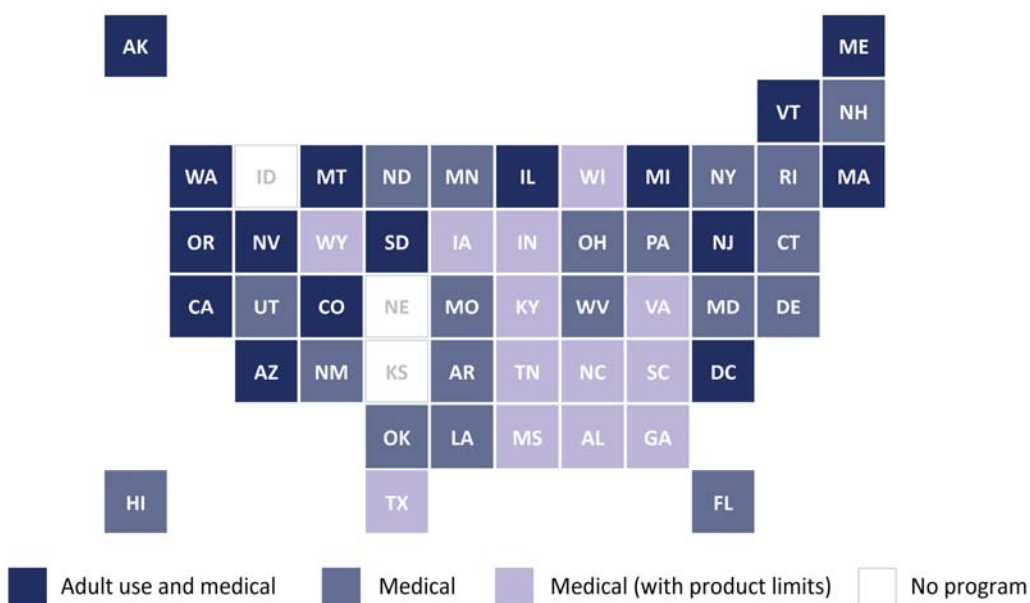
Despite federal laws, in the 1970s, several states decriminalized individual possession of small amounts of marijuana. In recent years many other states have followed suit. In 2020, Virginia decriminalized simple possession of marijuana. Even though simple possession is no longer a *crime* in Virginia, possessing marijuana remains an illegal *civil infraction*, and violators are subject to a \$25 fine. This \$25 fine is much lower than previous criminal fines, and offenders are no longer at risk of incarceration. The change in the law is similar to the difference between a driver receiving a speeding ticket (a civil penalty) or being charged with reckless driving (a misdemeanor crime).

Over the past two decades, almost all states, including Virginia, have gone a step further than decriminalization and have legalized marijuana to some extent (Figure 1-1). Legalization falls into three categories: adult use, medical use, and medical use with limits on the types of products that can be sold. All but three states have legalized medical use. Virginia is currently establishing its own limited, legal medical marijuana market that will allow the manufacture and sale of marijuana-derived products. Virginia's laws do not allow sale of marijuana flower. The laws allowing medical use were enacted in 2017, but the final regulations went into place in August 2019. Retail sales of medical marijuana are expected to begin in some parts of the state by the end of 2020.

"Medical marijuana" is a commonly used term and is adopted here.

There is increasing evidence that marijuana can be successfully used for therapeutic purposes but dose-response relationships have not been rigorously studied. There is only one clinically tested marijuana medicine on the U.S. market (Epidiolex, approved in 2018).

FIGURE 1-1
Most states have legalized marijuana to some extent



SOURCE: National Conference of State Legislatures, State Medical Marijuana Laws, as of March 10, 2020 and November 3, 2020 ballot measure results for Arizona, Montana, New Jersey, and South Dakota.

NOTE: Full medical use states allow sales of marijuana flower, as well as other marijuana-derived products, for therapeutic purposes and have few limits on THC content. Other states limit medical sales to specific types of products and do not allow sales of marijuana flower.

Despite the widespread legalization of medical marijuana, general adult use of marijuana is still illegal in the majority of states. Adult use for non-medical purposes is legal in 15 states and the District of Columbia (Washington, D.C.). In 2012, Colorado and Washington were the first states to allow adult use of marijuana and to establish commercial markets where marijuana can be sold to any of-age customer. Four eastern states have passed adult use legalization measures—Massachusetts, Maine, New Jersey,

and Vermont—but only Massachusetts and Maine have started their commercial markets. Adults can use marijuana in Washington, D.C., but there is no legal commercial market there either. All states that allow general adult use also allow medical use.

As marijuana has become legalized in more states, federal agencies have taken a hands-off enforcement approach to date that allows state commercial markets to operate. However, this approach is not set in law and could change at any time. This has created a tenuous uncertainty among the marijuana industry and regulators *within* states.

Despite the hands-off approach to legal commercial markets *within* states, transporting or distributing marijuana *across* state boundaries is still a federal crime. This federal restriction effectively makes each state with a commercial market its own, self-contained market. All marijuana sold on the legal market must be grown and processed within the state. Marijuana cannot be legally imported from, or exported to, other states.

Legalization is a substantial and complex policy decision

UMW's legalization opinion poll obtained telephone interviews with a representative sample of 1,009 adults, ages 18 or older, living in Virginia. Telephone interviews were conducted by landline (293) and cell phone (716) in September 2019.

There is interest in Virginia to legalize marijuana for general, adult use. In the executive branch, both the governor and attorney general have publically indicated they are willing to consider marijuana legalization. A majority of Virginians also appear to support legalization. A 2019 poll of 1,000 Virginia residents, conducted by the University of Mary Washington, found that 61 percent of respondents were in favor of legalizing marijuana for adult use (sidebar). This support for legalization is a change from previous polls, which have shown less support among Virginians for legalizing adult use of marijuana.

Legalizing marijuana for general, adult use and the creation of a commercial sales market would be a major, complex policy change that has substantial implications for the state. Virginia's legalization approach would need to account for the different viewpoints of its citizens and effectively balance competing goals and responsibilities. Legalization of marijuana would represent a substantial change in state policy because the state would allow the use and sale of an intoxicant that previously was a criminal offense and remains federally illegal. For Virginia's state and local governments, legalization would require changes to institutional practices and policies, especially in law enforcement. Virginia would need to create a new state agency to regulate a commercial sales market, issue licenses, and enforce compliance with laws and regulations.

Legalization offers potential benefits, such as new economic growth, increased state and local tax revenue, and an opportunity to improve social equity. However, the state is also responsible for protecting public health, and legalization could have negative effects in this area.

Legalizing marijuana would require changing state criminal laws

The first and most fundamental step in legalization would be to change state criminal laws to allow people to possess and use small amounts of marijuana without penalty. Virginia would also need to pass new laws establishing when and where marijuana use would be acceptable. Some marijuana crimes, such as illegal distribution, would need to remain in law, but the state could reduce penalties for violations. By changing these laws, the state would essentially treat marijuana similar to the way it treats alcohol. The main difference is that personal possession limits are still needed for marijuana because, unlike alcohol, it remains a federally illegal substance and there is a large illegal market for it.

As noted above, it is possible to legalize marijuana without creating a legal commercial market. Washington, D.C. and Vermont legalized marijuana for general adult use but do not currently allow commercial sales. Vermont does not have a commercial market because it chose to legalize marijuana incrementally. The state changed its criminal laws in 2018, and passed additional legislation to allow a commercial market in 2020 (pending the governor's approval). Washington, D.C., does not have a commercial market because Congress, which has authority to strike down any of the city's laws, has refused to allow a commercial market.

If Virginia legalizes marijuana, it would need to consider how legalization could affect public health and the criminal justice system. If Virginia chooses to use legalization to address prior harms that some individuals and communities have disproportionately experienced from the enforcement of marijuana laws—primarily Black individuals and communities—Virginia could also consider implementing social equity initiatives and programs (Figure 1-2).

Legalizing marijuana usually entails creating a commercial market

Most states that have legalized marijuana have also created a commercial market. These states have done this to create new, legal jobs and business opportunities, and generate tax revenue for state and local governments. They have also done this to acknowledge the incongruity of a product being legal but not for sale, which would perpetuate the existing, illegal marijuana market. Legalization without a companion commercial market further promotes illegal sales and can increase the likelihood that the existing illegal market will increase the amount grown to meet increased demand, either by increasing in-state cultivation or by illegally importing marijuana from other states.

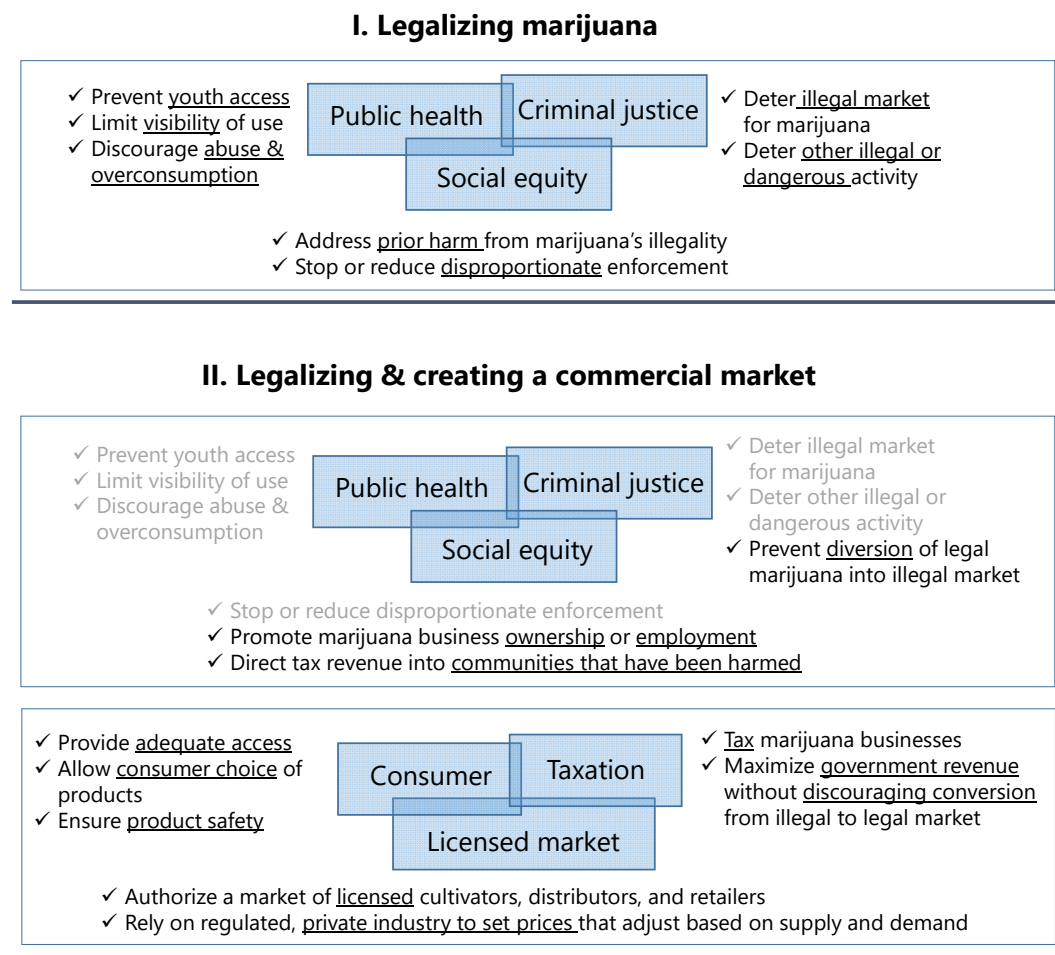
If Virginia establishes a new legal commercial market, the policy considerations to be addressed increase and are complex (Figure 1-2). The state will still need to ensure public safety and address criminal justice. Virginia will have the opportunity to try to promote social equity in the commercial market for individuals and communities that

have been harmed by enforcement of marijuana laws. The state can do this by promoting access to the market and providing assistance to help these individuals compete in the market. This would allow people and communities to benefit from the new commercial market by owning businesses or finding new employment. The state will also need to address considerations related to consumer access, business regulation, and taxation.

The remainder of this report is organized to highlight the most important considerations the General Assembly will need to address if it legalizes marijuana. The report incorporates lessons learned from the experiences of other states that have already legalized marijuana.

FIGURE 1-2

Virginia will need to address many policy considerations related to legalization



SOURCE: JLARC analysis of study resolution, other states' legalization approaches, and opinions of marijuana regulators and public health officials.

2 Marijuana Arrests and Convictions

A primary goal of marijuana legalization's proponents is to substantially reduce the number of people who are approached by police or punished by the criminal justice system for using marijuana. The number of people affected by legalization can be substantial, because historically thousands of Virginians have been arrested and convicted of minor marijuana offenses every year.

SJ67 and HJ130 specifically direct JLARC to “address the impacts of marijuana prohibition” on different populations and communities. Consequently, staff analyzed arrests for marijuana-related offenses by race to determine whether Black individuals or others have been disproportionately arrested or convicted of marijuana offenses (sidebar).

Recently enacted legislation to decriminalize simple possession will substantially reduce how many Virginians are arrested and convicted of marijuana offenses. If the state takes the further step of legalizing marijuana, additional reductions would likely occur. Trends observed in other states can be used to estimate the impacts of both marijuana decriminalization and legalization.

Vast majority of arrests have been for possession of small amounts of marijuana

Over the last decade, Virginia has made about 20,000 to 30,000 arrests each year for marijuana-related offenses. These arrests accounted for the majority of state drug arrests (sidebar). An arrest can have negative long-term impacts on individuals, even if they are not convicted. For example, an individual may be denied employment opportunities when the arrest appears on a criminal background check.

The vast majority of marijuana-related arrests have been for possession of small amounts of marijuana. From 2010–2019, there was an average of nearly 22,000 annual arrests in Virginia for marijuana possession. There were about 10 times as many arrests for marijuana possession as for distribution or other marijuana offenses (Figure 2-1). Men aged 18 to 24 accounted for most possession arrests, likely because they have higher rates of marijuana use.

Possession arrests have increased over time, but so has self-reported use of marijuana. The percentage of Virginians who indicated they had used marijuana in the past month increased from 5 percent to 7 percent over the past 10 years, according to a national survey. This roughly corresponds to the increase in possession arrests observed over that same time period. (The effect of marijuana legalization on marijuana usage is discussed in Chapter 9 of this report.)

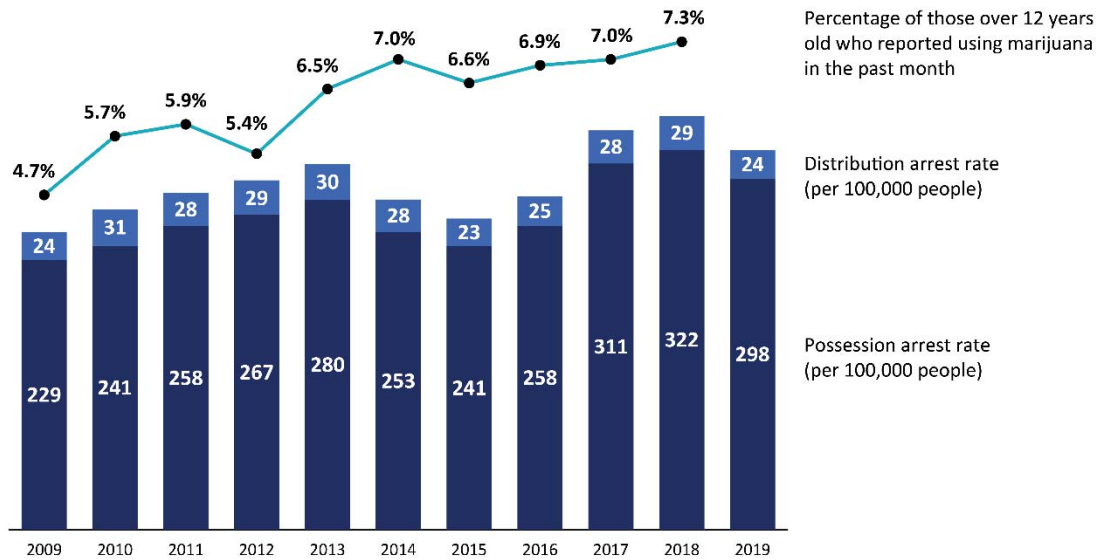
Adapting JLARC style guide to capitalize races and ethnicities: Many news organizations and writing style guides recently have been debating how to capitalize races and ethnicities in their publications. JLARC staff have been monitoring this debate to determine how to adapt the JLARC style guide. As of November 2020, JLARC staff have decided to capitalize Black when referring to race to reflect a generally shared culture and identity. JLARC will not capitalize white when referring to race because hate groups have traditionally capitalized white. This approach is used by the Associated Press and most major news organizations. JLARC staff will continue to follow this debate and adapt the JLARC style guide accordingly.

A large number of arrests in Virginia are for drug/narcotic violations. There were 44,040 arrests statewide for drug/narcotic violations in 2019. Marijuana arrests accounted for 55 percent of these arrests.

FIGURE 2-1

The vast majority of marijuana arrests have been for possession

In this report, the term **arrest** refers both to **custodial arrests** and **arrests by summons**. An arrest is when police detain a person in legal custody when a person is charged with a criminal offense. A custodial arrest is when police take someone into physical custody to be booked, processed, and fingerprinted. An arrest by summons is when police detain someone for a crime but release him or her after issuing a summons to appear in court. In 2019, 31 percent of marijuana arrests were custodial, and 69 percent were by summons.



SOURCE: JLARC analysis of incident-based arrest data from Virginia State Police; U.S. Census Bureau intercensal population estimates; National Survey of Drug Use and Health, 2008/09 to 2017/18.

NOTE: Possession arrests include arrests for possessing, using, or buying marijuana. Distribution arrests include arrests associated with marijuana distribution, sale, operations, transport, and cultivation.

Many marijuana charges do not result in a conviction, and the sentences for most recent convictions are not severe

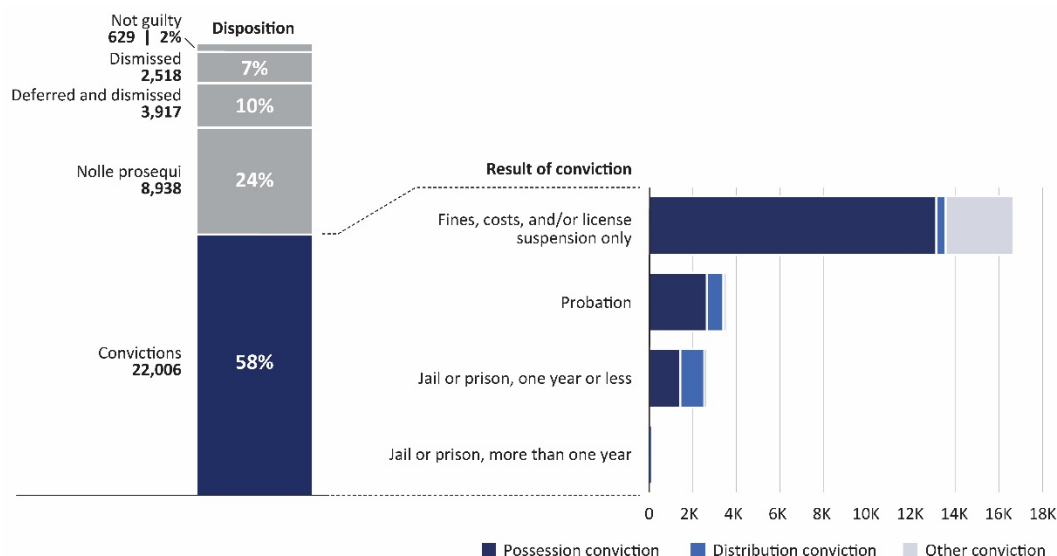
Virginia's first offender statute (§ 18.2-251) allows courts to defer and dismiss charges of first-time drug offenders. Courts defer proceedings for a probationary period. If defendants complete drug tests and assessments and community service, charges are dismissed. Some localities also have diversion programs that work in a similar way.

When someone is arrested for a marijuana offense, charges are filed in the court system. Prosecutors decide whether they will pursue or drop charges. People arrested and charged with marijuana offenses are sometimes charged with other offenses that also may or may not be pursued.

In 2018, prior to the decriminalization of marijuana, 42 percent of marijuana charges did not result in a conviction (Figure 2-2). Prosecutors dropped ("nolle prossed") 24 percent of charges, and 17 percent of charges were dismissed by the court—including at least 10 percent of charges that were dismissed under the first-time offender statute or local diversion programs (sidebar).

FIGURE 2-2

Most marijuana charges either did not result in a conviction or resulted in fines, costs, and license suspensions only (2018)



SOURCE: JLARC analysis of court data from general district court and circuit court case management systems, provided by the Office of the Executive Secretary (OES) of the Supreme Court of Virginia and Fairfax and Alexandria circuit courts.

NOTE: Nolle prosequi means prosecutors dropped charges. Total charges are more than arrests because arrests are counted as "marijuana arrests" only when marijuana was the most serious charge (multiple charges can be associated with the same arrest). Includes charges that were filed as or amended to marijuana charges in CY18 and have been resolved in either general district or circuit courts. Convictions are sorted based on most serious result; for example, if a conviction resulted in fines, costs, *and* probation, it was counted only in the "probation" category. "Other convictions" are mostly marijuana possession charges amended to paraphernalia charges at conviction. "Distribution" includes marijuana offenses that are not simple possession. "Probation" includes both supervised and unsupervised probation sentences but may undercount probation sentencing per discussions with court system staff. "Jail or prison" sentences shown here do not include instances when a person is detained in jail following an arrest but before sentencing.

More than half of marijuana charges (58 percent) resulted in convictions, but the consequences of the convictions were typically not severe. Most convictions resulted in fines, court costs, and driver's license suspensions (Figure 2-2, sidebar). A much smaller number of convictions resulted in probation, and an even smaller number also resulted in jail or prison time. A small number of charges (119) resulted in the offender being sentenced to incarceration for a year or more. All convictions that resulted in an effective prison sentence of a year or more were for other offenses more serious than simple possession, such as distribution of large amounts of marijuana.

Most of the people sentenced to jail or prison time on a marijuana charge, or who spent time in jail after a marijuana arrest, were also charged and/or convicted of one or more additional offenses. In 2018, fewer than 7 percent of marijuana offenders who spent any time in jail or prison were there solely because of a marijuana possession, based on data from jails and prisons. The remaining 93 percent were charged or convicted of more serious marijuana offenses and/or additional offenses, such as possessing or distributing other drugs, illegal weapons possession, or violating probation.

Some court costs and fees are required in statute. For example, § 16.1-69.48:1 of the Code of Virginia requires that courts assess a \$136 fee for a misdemeanor drug conviction (which is no longer assessed for marijuana possession under decriminalization). Judges may also impose separate fines as punishment for a conviction.

About half of those who spent time in jail for only marijuana charges were briefly detained after being arrested, rather than being sentenced to jail time as part of their conviction.

Black individuals have been arrested and convicted at a much higher rate for marijuana offenses

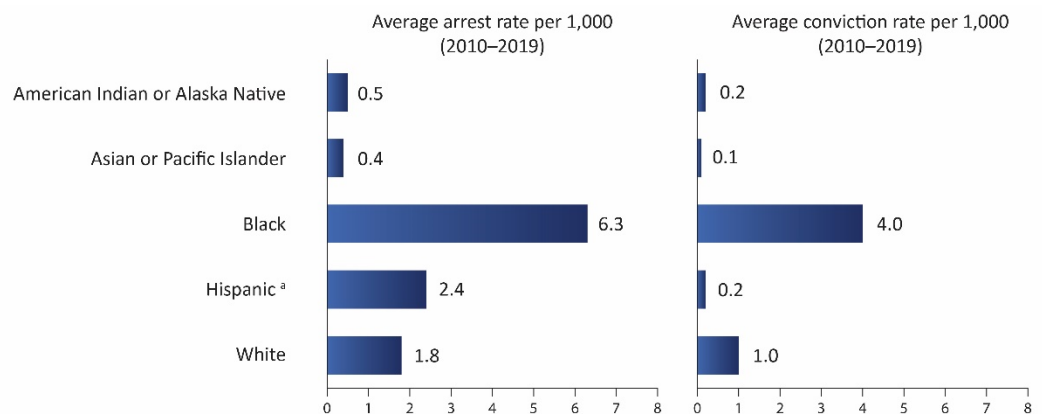
Statewide, Black Virginians have historically been arrested and convicted of marijuana crimes at a disproportionately high rate. From 2010 to 2019, the average annual arrest rate for marijuana possession for Black individuals was 6.3 per 1,000. This rate was 3.5 times higher than the arrest rate for white individuals and substantially higher than arrest rates for other racial or ethnic groups (Figure 2-3). The same trend holds true for marijuana possession convictions. The conviction rate of Black individuals was 3.9 times higher than the rate for white individuals (sidebar). Black individuals were also several times more likely to be arrested and convicted for more serious marijuana crimes, such as misdemeanor or felony distribution.

The higher arrest and conviction rates for Black individuals are not attributable to differences in rates of marijuana use. National surveys consistently show that marijuana use is similar among Black and white individuals. For example, in the most recent survey, 6 percent of white Virginians and 7 percent of Black Virginians reported using marijuana within the past month. Similarly, 46 percent of white Virginians and 43 percent of Black Virginians reported having tried marijuana.

In this analysis, conviction rate refers to the number of marijuana possession convictions per 1,000 residents for each race or ethnicity. It does not refer to the likelihood that a case involving marijuana charges will result in a conviction.

FIGURE 2-3

Marijuana possession arrest and conviction rates are higher for Black Virginians



SOURCE: JLARC staff analysis using arrest data from the Virginia State Police and conviction data from the Office of the Executive Secretary of the Virginia Supreme Court.

NOTE: ^aSeemingly large differences in Hispanic arrest and conviction rates may be a result of variations in how data is entered across datasets. Arrest data has separate variables for race and ethnicity, while conviction data includes race and ethnicity together as one variable, which may result in an undercount of Hispanic convictions. Disproportionality in conviction rates is most likely a reflection of the disproportionality in arrest rates. JLARC staff did not collect or analyze information about reason for differences in arrests and convictions by race.

Racial disproportionality in marijuana law enforcement was found in every Virginia locality where there was sufficient data to make an assessment. Local-level disproportionalities were measured using marijuana possession arrests and cases that were prosecuted or otherwise proceeded in court for the last five years (sidebar). Localities were deemed disproportionate if Black individuals were more likely to be arrested or have their cases proceed in court than white individuals, after accounting for differences in populations. For example, in Chesterfield County, the arrest rate for marijuana possession for white individuals was 2.5 per 1,000 residents and the rate for Black individuals was 10.1 per 1,000 residents. Black individuals in the county were four times more likely than white individuals to be arrested for marijuana possession over the past five years.

Racial disproportionalities in marijuana possession arrests were found in all 88 localities where there was sufficient data. The rate of disproportionality varied by locality (Figure 2-4). For example, in Petersburg, Black individuals were 2.3 times more likely to be arrested for marijuana possession, whereas in Arlington they were 14 times more likely. Black arrest rates were especially high for some localities with small Black populations, particularly along major interstates. Some of the disproportionality in these localities is likely overstated because many of the people arrested for marijuana possession were not residents of that locality. The analysis partially controls for this effect but cannot eliminate it. However, even if disproportionality is overstated, arrest rates in these localities still appear to be disproportional to some extent.

For marijuana possession cases that were prosecuted or otherwise proceeded in court, cases of Black individuals proceeded forward at a higher rate than white individuals in all 83 localities with sufficient data (sidebar). This is most likely a reflection of the disproportionality in arrest rates and does not appear to be a result of any additional disproportionality in prosecutorial decision making. Like the arrests, the rate of disproportionality varies among localities (Figure 2-4). Disproportionalities ranged from a low of 1.7 in Martinsville to a high of 11.8 in Wythe County. Similar to the arrests analysis, disproportionalities could be overstated in localities where a large portion of cases are not of local residents. The analysis partially controls for this effect but cannot eliminate it. However, even if the effect is overstated, these localities still appear to be disproportionate.

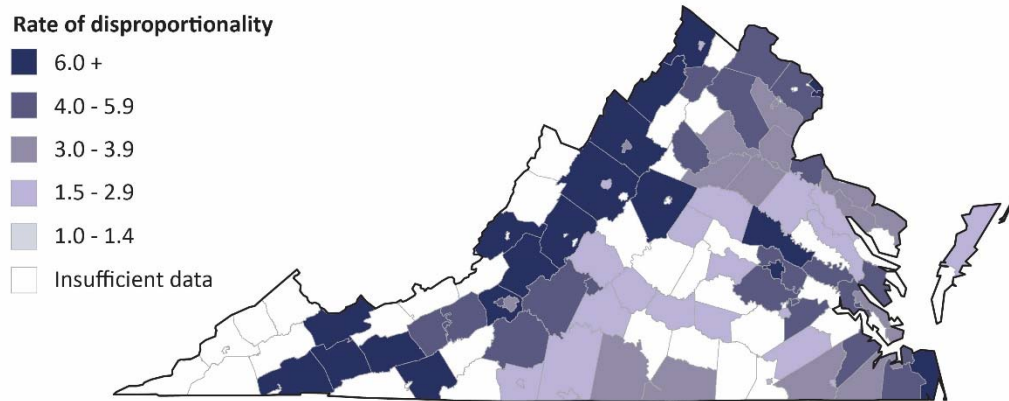
Some localities with small Black populations had disproportionate rates but few overall arrests or cases that proceeded in court. For example, in Augusta County, Black individuals were over six times more likely to be arrested for marijuana possession than white individuals. However, only 12 Black individuals were arrested per year, on average, in Augusta. In contrast, several localities had less disproportionality but arrested many more people. For additional information on the rates of arrests and cases that proceeded in court across localities, see Appendix D.

For local-level analysis, cases that proceeded in court were used instead of conviction rates because they are a better indicator of how strictly a locality is enforcing the law. For example, some commonwealth's attorneys have implemented policies not to prosecute possession cases, and these decisions would not be adequately captured in conviction rates. Additionally, there are relatively few convictions in many localities, so there is not sufficient data to assess if conviction rates are disproportionate.

This analysis includes all cases with a final disposition on the merits (including dismissed cases), but excludes "nolle prossed" cases. Nolle prossed cases are those in which prosecutors requested that the charges be dropped.

FIGURE 2-4

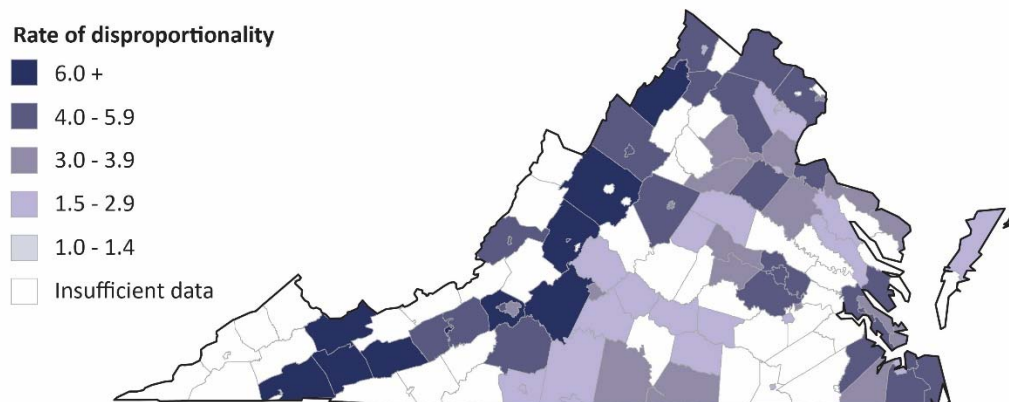
Eighty-eight localities had disproportionate arrest rate ratios of Black to white individuals for marijuana possession from 2015–2019



SOURCE: JLARC staff analysis using arrest data from the Virginia State Police.

NOTE: The rate of disproportionality was calculated by dividing the locality arrest rate of Black individuals per 1,000 by the locality arrest rate of white individuals per 1,000. Localities were categorized as having insufficient data if they had less than 30 percent resident arrests and/or fewer than 10 Black arrests per year. Many localities with disproportionate arrest rates are along the I-81 corridor, which make it appear as though most arrests are of travelers along the interstate. However, the localities that include portions of I-81 had an average of 55 percent resident arrests from 2015–2019.

In 83 localities, cases of Black individuals proceeded in court at a higher rate than cases of white individuals (likely stemming from disproportionate arrest rates)



SOURCE: JLARC staff analysis using general district court data from the Office of the Executive Secretary of the Virginia Supreme Court.

NOTE: The rate of disproportionality for cases that were prosecuted or otherwise proceeded in court was calculated by dividing each locality's rate of cases for Black individuals per 1,000 by the locality's rate of cases for white individuals per 1,000. Localities were categorized as having insufficient data if they had less than 30 percent resident cases and/or fewer than 10 Black cases per year. This analysis includes dismissed cases but excludes "nolle prossed" cases (in which charges were dropped by prosecutors) to determine how strictly any given locality is enforcing the law. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but was not possible to conduct given an insufficient number of nolle prossed cases to draw any reliable conclusions at the locality level.

Marijuana law enforcement may also be disproportionate for Hispanic individuals, but data limitations, at both the state and local level, make it difficult to determine the extent of disproportionality. From 2010–2019, the average annual arrest rate for marijuana possession for Hispanic individuals was 2.4 per 1,000, or approximately 1,800 arrests per year. This arrest rate was 1.3 times higher than the white arrest rate, which indicates some disproportionality, but not to the same extent as the disproportionality observed for Black individuals. The conviction rate appears to be much lower, at 0.2 per 1,000, but Hispanic convictions may be undercounted due to data limitations (sidebar). Additionally, because there are fewer overall arrests of Hispanic individuals, data were insufficient for determining disproportionality at the local level.

Hispanic convictions for marijuana possession may be undercounted because of differences in how ethnicity is recorded across datasets. Arrest data has separate variables for race and ethnicity, while conviction data includes race and ethnicity together as one variable.

Marijuana’s decriminalization and potential legalization would reduce arrests of Black individuals but may not resolve disproportionality. Racial disproportionalities in arrests could continue even for minor offenses, as has been the case in other states. For example, in Colorado, the total number of marijuana arrests dropped by 56 percent after legalization, but Black individuals remain nearly twice as likely to be arrested on marijuana charges as white individuals.

Decriminalization and legalization would reduce criminal marijuana arrests and convictions

Changing criminal laws can affect how many people are arrested for and charged with criminal offenses, as well as the outcomes individuals face in the criminal justice system. Far fewer Virginians will face arrest and criminal conviction now that the state has decriminalized marijuana and treats simple marijuana possession as a civil offense. Legalizing marijuana would likely further reduce criminal marijuana arrests and convictions, based on the experiences of other states.

It is difficult to accurately predict the extent to which arrests and convictions will decline under decriminalization or legalization. Several factors can affect this, especially how Virginia implements decriminalization laws and how laws change and are enforced under legalization. The following analysis projects likely outcomes based on Virginia’s historical marijuana arrest and conviction trends and other states’ experiences. Legalization could also affect *overall* crime rates and arrests, but that impact is not yet clear. (See Appendix E.)

Decriminalization will likely substantially reduce marijuana arrests

Decriminalization, which went into effect July 1, 2020, will result in a significant drop in marijuana arrests. People found in possession of small amounts of marijuana are now issued a summons for civil possession instead of arrested, and the only consequence is a \$25 civil penalty. Decriminalization could reduce marijuana-related arrests by about 60 percent, based on the average decline in states that have decriminalized simple possession (though some states have seen arrests decline by more or less than 60 percent). This change will result in fewer arrests of Black Virginians, though it is

not feasible to accurately project the exact impact decriminalization will have on any specific group.

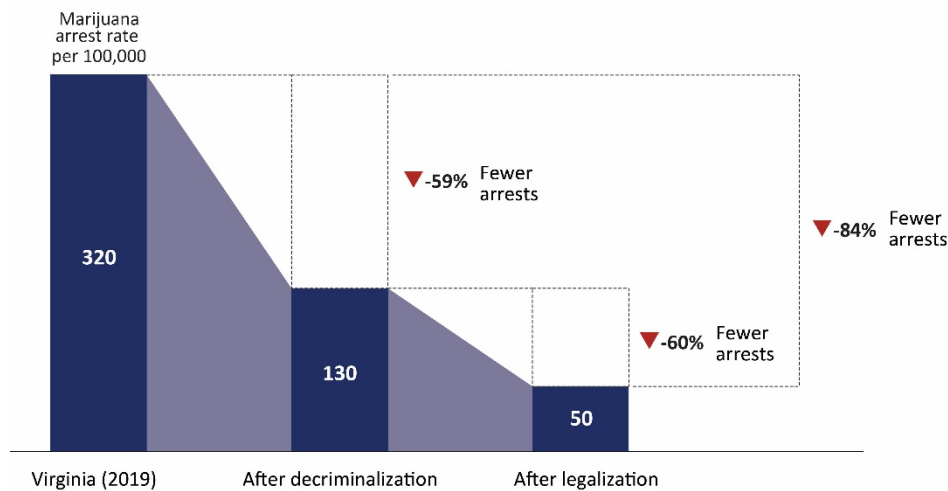
Decriminalization could also reduce arrests for more serious criminal marijuana offenses, such as illegal distribution. Serious offenses account for a relatively small portion of marijuana crimes. However, these crimes carry more substantial penalties and therefore have a bigger impact on the people who are arrested for them. Other states have seen arrests for marijuana distribution decline by 34 percent on average in the year following decriminalization.

Legalization would further decrease marijuana arrests but to a lesser degree

Marijuana legalization would further reduce the number of Virginians arrested for marijuana offenses. Arrests for possession offenses would likely decrease further like they have in other states. Arrests for more serious marijuana crimes would also likely decline because a new commercial market could put many illegal distributors out of business. With fewer illegal marijuana operations, fewer people will be arrested for more serious offenses. Taken together, legalization and decriminalization could reduce marijuana arrests by more than 80 percent (Figure 2-5).

FIGURE 2-5

Legalization and decriminalization will substantially reduce marijuana arrests, based on average changes observed in other states



SOURCE: JLARC analysis of arrest data from Virginia State Police; Uniform Crime Reporting data from Federal Bureau of Investigation, 2010–2018; U.S. Census Bureau, State Population by Characteristics: 2010–2019.

NOTE: Arrest rates for number of reported arrests where marijuana was the most serious offense per 100,000 residents. Average percentage change calculated using rate in year after marijuana policy change was made in states that decriminalized or legalized marijuana from 2010 to 2018. See Appendix B for more detail.

Legalization would also eliminate the current civil penalties for marijuana possession, with a few exceptions. Consequently, fewer people would be issued a summons and charged civil penalties. However, some people would presumably continue to be issued

citations for offenses such as underage possession (e.g., by someone aged 18 to 20) or use of marijuana in public.

Although criminal arrests would decline after legalization, people would continue to be arrested for violating criminal marijuana laws. For example, people who illegally cultivate marijuana or sell it to minors would presumably still be in violation of criminal distribution laws. Some states have even seen an increase in certain offenses (sidebar). In addition to keeping some existing marijuana laws, the General Assembly would also presumably enact new laws to discourage dangerous behaviors. For example, the General Assembly might prohibit consuming marijuana in a vehicle to discourage impaired driving. Arrests for violations of any new marijuana laws could offset some of the decline in other marijuana arrests.

Illegal cultivation reportedly increased in Colorado shortly after legalization. Much of the marijuana grown by illegal cultivators was reportedly intended to be sold out-of-state, in places where marijuana is still illegal.

Decriminalization will reduce the number of people criminally fined, sentenced to probation, or jailed for minor offenses

Decriminalization will result in a substantial decrease in the number of people convicted of minor marijuana offenses. Prior to July 1, 2020, most people convicted of minor marijuana offenses were assessed fines and/or costs or put on probation. Under decriminalization, most of these people will now be issued a summons and charged a \$25 civil penalty, or charges will be dismissed. The \$25 civil penalty is much smaller than what offenders would pay for a criminal misdemeanor drug conviction, which includes \$136 in statutorily required court costs and any potential fines. Offenders will not be sentenced to probation for simple possession, which should eliminate most probation sentences.

Decriminalization should reduce the number of individuals who spend time in jail for simple possession to zero. In 2018, 404 individuals spent time in jail before trial solely for a marijuana possession charge (typically one or two days). In the same year, about 1,300 marijuana possession convictions resulted in jail or prison time, with a median sentence of 10 days. Under decriminalization, none of those individuals would spend time in jail for a marijuana charge, either before or after trial.

Legalization would further reduce the number of people convicted and sentenced for marijuana crimes

Legalization would eliminate any punishment for small amounts of simple marijuana possession by of-age adults consistent with personal use. Legalization could also reduce the number of people on probation or incarcerated in jail or prison for more serious marijuana offenses (more than simple possession), and the amount of time they are sentenced to serve. This would occur because arrests for more serious marijuana offenses, such as distribution, are expected to decrease following legalization. However, any reductions might be relatively small given that the vast majority of people incarcerated or under state supervision were also charged with, or convicted of, additional crimes.

3 Legalization and the Criminal Justice System

Changes to marijuana laws would have implications for the state's criminal justice system. As described in Chapter 2, legalizing simple marijuana possession would reduce the number of people who are ticketed or arrested by state and local police. This has the potential to reduce law enforcement's workload and costs. Legalizing marijuana may also require changes to law enforcement procedures and training. Any changes would apply to the Virginia State Police, Virginia's 185 local police departments, 123 sheriff's offices, and other state and local law enforcement organizations.

Fewer arrests, charges, and convictions would also reduce demands on the court system, prison system, and regional and local jails. Marijuana legalization could affect court caseloads at the state's 124 general district and 120 circuit courts. In addition, it could affect Virginia's 26 state correctional centers, 60 local and regional jails, 43 state probation and parole operations, and 37 local probation agencies.

Legalization unlikely to substantially reduce police workloads, but procedures and training would change

Virginia police departments reported that marijuana crimes are not a substantial focus of their law enforcement efforts. However, enforcing marijuana laws factors into state and local police work in many ways. For example, patrol officers frequently find violations of marijuana laws during patrol or traffic stops or when responding to service calls. Investigators may find the suspects or criminal enterprises they are investigating are involved in marijuana distribution, especially if they are also involved in distributing other illegal drugs. These encounters often lead to arrests for violations of marijuana criminal laws.

Legalization would eliminate some of the state's marijuana laws and likely lead to the enactment of some new ones. These changes would decrease some aspects of police workloads while increasing others. The changes could also affect the way officers carry out their jobs.

Legalization is unlikely to measurably reduce police workloads

Legalizing marijuana would have a limited impact on the time police spend making arrests, because marijuana arrests do not take up a significant share of overall police time. Issuing a marijuana summons takes officers about 15 to 40 minutes. A custodial marijuana arrest takes about two hours, though more complicated arrests can take more time. Analysis of total state and local police staffing finds that about 0.1 percent

of staff time is spent specifically on marijuana arrests (Table 3-1). Criminal incidents resulting in marijuana seizures represented just 0.6 percent of all service calls at the Virginia police departments that reported the most marijuana seizures.

TABLE 3-1

Marijuana arrests take at most 1/10th of a percent of police officer time

	Low estimate	High estimate
Statewide police hours spent on marijuana arrests (Equivalent number of full-time officers)	12,000 (≈6 officers)	43,000 (≈21 officers)
Marijuana arrest time as % of all state and local police staff time	0.03%	0.10%

SOURCE: JLARC analysis of incident-based arrest data from Virginia State Police; 2019 dispatch data from a large police department in Virginia; and interviews with Virginia law enforcement. See Appendix B for more information.

Marijuana legalization does not appear to have substantially reduced police workloads in other states. Under legalization, some marijuana laws in other states remained in place, and some additional laws were enacted. For example, laws against illegal distribution remained, while new restrictions on public use of marijuana and consumption in vehicles were enacted. Three-quarters of surveyed police agencies in Washington and Colorado reported that their enforcement needs increased or stayed the same after legalization. Police in some states also reported spending more time responding to nuisance calls related to marijuana and investigating allegations of illegal cultivation. Police in several states made enforcement of DUI laws a priority following legalization, which increased time and resources dedicated to these efforts. Drug-impaired driving arrests typically take officers longer than alcohol-impaired driving arrests.

Police would need training on changes to law

Legislation enacted during the 2020 special session restricts searches based on the smell of marijuana. HB 5058 and SB 5029 state that police may not “lawfully stop, search, or seize any person, place, or thing solely on the basis of the odor of marijuana.”

If Virginia legalizes marijuana, law enforcement officers would need training and guidance on how to apply the new and revised laws and how the changes would affect police procedures. For example, patrol officers may no longer be able to use the smell of marijuana as the only reason for probable cause to search a vehicle (sidebar). There may be fewer instances where current drug dogs, which are trained to smell marijuana and do not discern between marijuana and other drugs, can be used. Legalization may limit situations in which investigators can use potential marijuana charges as leverage to expand criminal investigations. Police would need to be aware of changes to enforcement procedures for marijuana possession, cultivation, and use.

If marijuana is legalized, it could be beneficial to convene a workgroup to coordinate the development of a model curriculum and operating guidance to prepare officers. The Virginia Department of Criminal Justice Services (DCJS) could convene the workgroup because of its current role in law enforcement academy certification and training and model policy development. Other states that have legalized marijuana could be a useful resource for developing model training curriculum and guidance.

Colorado, for example, developed new law enforcement training materials to adapt to legalization.

Whether or not the state convenes a workgroup, the state would need to provide training to additional officers to address marijuana-impaired driving. There are currently two main types of training that are available in addition to basic academy training on how to perform standardized field sobriety tests.

- **Drug Recognition Expert (DRE) training.** This is 56 hours of classroom training and 40–60 hours of field training to help officers recognize the physical and behavioral symptoms of drug use, identify the categories of drugs that would induce observable signs of impairment, and describe the involvement of drugs in impaired driving incidents.
- **Advanced Roadside Impaired Driving Enforcement (ARIDE) training.** This is a 16-hour training course on how to observe, identify, and articulate the signs of impairment related to drugs, alcohol, or a combination of both. The program was created as an intermediate step between standardized field sobriety testing and the DRE program.

Although Virginia officers already have access to DRE and ARIDE training, the state currently has far fewer officers with these certifications than other states. Virginia currently has 0.3 officers with DRE training per 100,000 residents, while the median for all states is 3.4. In the last five years, states that have legalized marijuana have trained eight times as many officers through the ARIDE program as Virginia.

Research on legalization and marijuana-impaired driving is not conclusive, but marijuana-impaired driving may increase following legalization, making DRE and ARIDE trainings more important. Even if legalization does not increase the number of impaired drivers, forensic data and surveys about the prevalence of marijuana use indicate that Virginians are already using marijuana and driving more frequently than in the past.

Because legalization could potentially lead to more marijuana-impaired driving and a relatively low number of Virginia law enforcement officers have specialized drug recognition training, the state should provide DRE and ARIDE training to more officers if it legalizes marijuana. The states should consider providing this training to additional officers even if marijuana is not legalized because evidence shows more Virginians are using marijuana and driving.

Although there have been some efforts to increase the number of officers trained through the DRE and ARIDE programs in recent years, obstacles remain. Trainings take significant officer time, which may deter state and local agencies from sending officers to trainings or hosting them. Delays caused by the coronavirus and vacancies at the Department of Motor Vehicles (DMV), which coordinates grants for training programs' expenses, recently reduced DMV's ability to schedule and coordinate trainings (though DMV has filled vacant positions). Finally, DRE officers are needed to

host ARIDE trainings, so Virginia's small number of DREs has limited its ability to host more ARIDE trainings. If marijuana is legalized, the Virginia State Police and DMV should continue to work together to increase the number of law enforcement officers trained in DRE and ARIDE. The Virginia State Police have indicated that increased training efforts would likely entail additional costs.

POLICY OPTION 1

If marijuana is legalized in Virginia, the General Assembly could direct the Department of Criminal Justice Services to convene a workgroup to develop a model marijuana law enforcement officer policy and training curriculum. The workgroup should include commonwealth's attorneys, public defenders, and state and local law enforcement officers.

RECOMMENDATION 1

If marijuana is legalized in Virginia, the Virginia State Police and Department of Motor Vehicles should work together to train more officers to detect and enforce drug-impaired driving through the Drug Recognition Expert (DRE) and Advanced Roadside Impaired Driving Enforcement (ARIDE) training programs.

Legalization would slightly reduce court filings and could slightly reduce fines and fees revenues

Marijuana filings represent a small share of court filings, and most require minimal court time. Most marijuana charges are filed in general district courts, where they represented 5.4 percent of all criminal filings in 2019. (General district courts also hear non-criminal cases.) Most of those filings are for marijuana possession, and each possession charge takes relatively little court time. Felony marijuana charges are initially filed in general district courts but tried in circuit courts. They are not filed as often (1.4 percent of circuit court felony filings) but take more time than misdemeanor possession cases.

Legislation enacted during the 2020 special session could reduce judge and clerk time spent on marijuana possession filings. SB 5013 makes \$25 civil marijuana possession charges pre-payable so that defendants are not be required to appear in court. This will likely reduce the amount of time judges and clerks spend on each marijuana possession filing.

Before the effects of legalization can be considered, it is important to understand how *decriminalization* will affect court workloads and revenues collected. Overall court filings may not decrease following decriminalization, because civil penalties continue to require court filings. However, legislation passed during the 2020 special session is intended to reduce the time courts spend on civil marijuana possession charges (sidebar). Decriminalization will likely reduce state revenues from fines and fees, regardless of whether workloads are reduced. Courts assessed \$7–\$9 million annually in fines and fees for marijuana offenses from 2016 to 2018. While not all of the assessed fines, fees, and costs are paid, a substantial portion of them are. The amount of fines, fees, and costs assessed will be reduced by an estimated \$5–\$7 million under decriminalization, according to JLARC's analysis. The amounts will decrease because the new civil penalty is much lower than the fines and court costs that were previously assessed for

misdemeanor marijuana possession charges. Now a simple possession conviction results in a \$25 penalty and no court costs. Previously, a misdemeanor conviction for simple marijuana possession resulted in at least \$136 in required costs and any potential fines assessed.

Though courts assess fines and fees, they are not used to fund the court system. Fines, fees, and costs assessed by courts for marijuana charges are deposited into the state's General Fund, Drug Offender Assessment and Treatment Fund, and other special funds (and sometimes local funds). The General Assembly separately appropriates judicial branch funding for the court system.

Legalization would almost certainly decrease marijuana possession-related court filings, but these reductions are unlikely to translate to any reductions in court staffing needs. Marijuana charges represent a small percentage of work completed by judges and clerks, and any reductions would be spread out across the state.

Legalizing marijuana might cause the amount of court-assessed fines, fees, and costs to decrease by an additional \$1–\$2.5 million. These potential reductions could have a very small effect on the General Fund, Drug Offender Assessment and Treatment Fund, and other funds into which court fines, fees, and costs are deposited. Additionally, new marijuana laws could generate some new fines and fees that would offset some of the anticipated reductions.

Legalization could marginally reduce costs associated with statewide corrections

The costs associated with incarcerating or supervising marijuana offenders is relatively low because offenders with only marijuana convictions make up a relatively small portion of offender populations. Marijuana offenders represent less than 1 percent of jail and prison populations (as measured by offender days) and less than 3 percent of state probation placements. Marijuana offenders have recently accounted for approximately one-quarter of placements in local probation programs, however, most local probation placements were for marijuana possession, which has now been decriminalized. Legalization is therefore not likely to have a significant impact on the operating costs of Virginia's many correctional institutions and programs.

Before the effects of legalization can be considered, it is important to understand the effects that *decriminalization* is expected to have. After decriminalization few (if any) offenders will be assigned local probation for marijuana possession offenses. This could decrease local program caseloads by 25 percent, or about 6,000 placements. Decriminalization is expected to have a much less dramatic effect on incarceration. Overall prison populations are *projected* to decrease by 0.1 percent, and jail offender days are projected to decrease by 0.5 percent (assuming declines proportional to projected declines in arrests). Decriminalization is projected to reduce overall state probation placements by 0.7 percent.

A recent study from Washington state found that legalizing marijuana had little aggregate impact on jail bookings, suggesting that legalization may not lead to a decline in jail populations.

Legalizing marijuana would generally have less impact on correctional programs than decriminalization. Similar to decriminalization, legalization is *projected* to cause overall prison populations to decline by about 0.1 percent, jail offender days by about 0.3 percent, and state probation placements by about 0.7 percent (again assuming declines proportional to arrests). Even this small impact on jails could be overstated, because jail populations in some states have not declined at all as a result of legalization (side-bar).

The potential annual cost reductions from decriminalization and legalization for jails, prisons, and supervision programs is projected to be about \$8.8 million (Table 3-2). Some of these cost reductions could be over- or understated because it is uncertain exactly how correctional populations would be affected. These cost reductions would be spread out among 166 state and local institutions and programs. The costs also represent a small portion (less than 1 percent) of most institution and program operating budgets. Consequently, any changes caused by legalization are projected to lead to only marginal savings for state and local correctional systems.

Local probation agencies would likely see some cost reductions. However, those reductions would come from already-passed decriminalization legislation, not from any future legalization efforts. Additionally, DCJS staff indicated that projected savings from decriminalization may not be realized because of other recent legislative changes that could increase local agencies' workloads.

TABLE 3-2
Corrections costs could marginally decline following decriminalization and legalization

Corrections function	Estimated marginal cost related to marijuana offenses ^a	<i>Projected cost reductions</i>		
		Decriminalization	Legalization	Total
Local ^b				
Jails	\$1.4M	-\$0.7M	-\$0.4M	-\$1.1M
Probation	\$5.6	-\$5.4	-\$0.1	-\$5.5
State				
Prisons	\$1.1	-\$0.4	-\$0.4	-\$0.8
Probation	\$2.0	-\$0.7	-\$0.7	-\$1.4
Total	\$10.1	-\$7.2	-\$1.6	-\$8.8

SOURCE: JLARC analysis of general district and circuit court sentencing data from Office of the Executive Secretary of the Supreme Court of Virginia and Fairfax and Alexandria circuits; prison and state supervision data from DOC; local probation data from DCJS; and pretrial jail data from the Compensation Board. Arrest data for projections from FBI UCR database and U.S. Census Bureau. Operational staffing costs for local probation from DCJS; marginal cost data for jails and prisons from DPB and DOC, respectively.

NOTE: Projections assume unit costs associated with each corrections function decline proportionally to the average decline in marijuana arrests seen in states that decriminalized or legalized marijuana. See Appendix B for more detail on methods. ^a CY18, FY19, or CY19 used as a baseline for estimates based on data availability. ^b A share of local probation and jail costs are paid from state-funded sources. The state pays \$4 per jail day for local responsible offenders and \$12 per jail day for state-responsible offenders held in local and regional jails. DCJS directs state-funded grants to local corrections agencies for probation operations.

4 Required Statutory Changes to Legalize Marijuana

If Virginia chooses to legalize marijuana, the General Assembly will need to make a number of key legislative decisions that will involve many statutory changes. Marijuana is still illegal in Virginia (even though simple possession was decriminalized on July 1, 2020). Individuals in possession of marijuana are now in violation of civil law, not criminal law, and can be issued a summons and fined \$25. Other marijuana violations remain criminal offenses, including distribution of marijuana. Individuals involved in the illegal distribution of marijuana can be arrested and charged with criminal misdemeanors or felonies, depending on the amount (Table 4-1). Persons convicted of criminal offenses are subject to significant fines and incarceration in jail or prison.

TABLE 4-1
Virginia's primary marijuana laws

Violation	Type of charge	Maximum penalties
Simple possession	Civil violation (non-criminal)	\$25 penalty
Distribution of 1 ounce or less	Class 1 misdemeanor	1 year in jail, \$2,500 fine
Distribution of 1 ounce to 5 pounds	Class 5 felony	10 years in prison, \$2,500 fine
Distribution of over 5 pounds	Felony (not classified)	5 ^a -30 years in prison
Manufacture not for personal use	Felony (not classified)	5 ^a -30 years in prison, \$10,000 fine

SOURCE: Code of Virginia § 18.2-248.1 and 18.2-250.1.

NOTE: This table is a simplification of Virginia's marijuana laws. See Appendix F for more detail. "Manufacture" includes growing marijuana. Distribution violations include sale of marijuana and possession with intent to distribute. Simple possession is a delinquent act for those under 18.

^a Mandatory minimum sentence.

Based on how others states changed their laws to legalize marijuana, legislative decisions would need to be made about how to amend the Code of Virginia to address: possession and use, home cultivation, production and distribution, age restrictions, and driving (Figure 4-1). A comparison of other states' marijuana laws is provided in Appendix G. The legalization of marijuana has implications for other areas of law. For example, the state would need to determine the extent to which landlords can restrict marijuana use by tenants. Appendix H contains additional examples of other areas of law that may need to be considered.

States that legalize marijuana typically expunge past arrests and convictions for marijuana possession from criminal records. States expunge marijuana offenses from criminal records in recognition that the activity is now legal and no longer results in an arrest or conviction. This chapter includes information about how Virginia could expunge convictions for marijuana possession (sidebar).

Legislation introduced in the 2020 special session of the General Assembly (HB 5146 and SB 5043) would have expunged criminal records for various offenses, including some marijuana offenses, but did not pass.

FIGURE 4-1

General Assembly would need to address a number of issues through legislation if it legalizes marijuana for adult use



Possession and use

- Set minimum legal age to 21
- Limit possession to one ounce of marijuana flower (or its equivalent)
- Allow paraphernalia possession
- Allow small amounts to be shared by of-age adults
- Limit use in public places



Home cultivation

- Determine whether to allow adults to grow marijuana at home
- Cap at a small number of plants if allowing home cultivation



Illegal production and distribution

- Keep or ease penalties for illicit distribution and cultivation
- Establish penalties for possessing large amounts
- Prohibit “gifting” to limit evasion of distribution laws
- Prohibit hazardous THC extraction methods



Juveniles and underage adults

- Maintain but clarify possession laws for juveniles or adults 18-20



Use by drivers or in vehicles

- Keep current DUI laws
- Restrict consumption and presence of marijuana in vehicles

SOURCE: JLARC staff.

Virginia would need to establish limits for legal possession and use

Drug paraphernalia, including marijuana paraphernalia, is prohibited from being possessed or distributed (§ 18.2-265.1, § 54.1-3466). Individuals are sometimes convicted under this statute after being charged with marijuana possession.

All states that have legalized marijuana set limits on who may legally possess it and the amounts they can have. One of the main considerations is the minimum legal age to possess marijuana. All states have set the minimum legal age for marijuana at 21, which matches the minimum age for alcohol and tobacco. This age limit helps prevent minors and young adults from having easy, legal access to marijuana. Virginia should adopt the same minimum age. If marijuana is legalized, the minimum age should also apply to possession of marijuana paraphernalia, such as smoking pipes (sidebar).

Virginia should also limit the amount of marijuana that a person can legally possess. Possession limits are needed to help prevent illegal distribution. Other states set the “personal use” possession limit at one to 2.5 ounces of marijuana flower. Larger amounts can be considered evidence the person is intending to distribute. Virginia

should set its possession limit at one ounce, which is the presumed personal use possession limit under current law. This amount of marijuana equates to a month or more supply for all but the most frequent daily marijuana users. The state could also allow of-age adults to share marijuana with each other in amounts lesser or equal to the possession limit.

Marijuana can also be concentrated in vape oils and infused into edibles, so the state would need to enact possession limits on these products as well. The limits should be roughly equivalent to the one-ounce flower limit. One ounce of flower is roughly equivalent to five grams of an oil concentrate or 500 milligrams of THC in infused products such as edibles. Possession limits on infused products could be difficult for law enforcement to enforce and expensive for forensics to test, especially for home-made edibles or commercial products that have been removed from their original packaging. However, the state should still set limits on edibles to deter illegal distribution.

RECOMMENDATION 2

If marijuana is legalized in Virginia, the General Assembly may wish to consider allowing (i) marijuana possession and use by adults aged 21 and older, (ii) of-age adults to possess up to one ounce of marijuana flower, up to five grams of marijuana concentrate, and marijuana-infused products containing up to 500 milligrams of THC, (iii) of-age adults to possess marijuana paraphernalia, and (iv) of-age adults to share marijuana in amounts that are less than or equal to the possession limits.

Virginia should also enact laws that prohibit public use of marijuana. Restrictions should prohibit use in any place that is generally accessible to the public, including stores and restaurants. Other legalized states also prohibit public use of marijuana, and Virginia has restrictions on the use of alcohol and tobacco in some public places (sidewalk). When establishing the public use law, the state would need to clearly define what constitutes a public space and what constitutes use of marijuana (e.g., smoking, vaping, eating).

The state would need to establish penalties for people who violate marijuana public use laws. The state currently treats most marijuana *possession* violations as a civil infraction punishable by a small fine. This same punishment could be applied to violations of public use laws. If this is not a sufficient deterrent, the state could instead impose a penalty of \$100 (the maximum fine in most states) or reclassify public marijuana use as a Class 4 misdemeanor, like drinking in public.

Virginia law penalizes smoking and drinking alcohol in some public places. It is a Class 4 misdemeanor under §4.1-308 of the Code of Virginia to drink alcohol or offer alcohol to another person in a public space, such as a park or sidewalk, and a \$25 penalty to smoke in certain public areas after being asked to stop under §15.2-2824 of the Code of Virginia.

RECOMMENDATION 3

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting marijuana use in public places, including any place, building, or conveyance to which the public has access and establish a small fine for violations of the prohibition.

Virginia should determine whether to allow home cultivation

Virginia would need to determine whether to allow home cultivation of a small number of marijuana plants if marijuana is legalized. Home cultivation would allow users, including medical patients, to have their own low-cost marijuana supply. These allowances would be similar to state laws that allow home brewing of beer. The chief drawback of home cultivation is it would draw some consumers away from a taxed and regulated commercial marijuana market (if one were to be created). Home cultivation is unlikely to perpetuate the illegal market or create challenges for law enforcement as long as the state sets clear and reasonable limits. Ten of the 12 legalized states allow home cultivation.

If Virginia allows home cultivation, it should limit the number of plants individuals can grow, prohibit pooling of plant allowances, and require that plants be out of view and secured. Other states allow of-age adults to have four to six plants per person. Colorado and most other states also cap the maximum number of plants allowed per dwelling, which keeps any single location from growing a large amount of marijuana. Home cultivation should be restricted to a person's primary residence to keep people from growing marijuana at multiple locations. Individuals should not be allowed to pool cultivation allowances with others, because this can result in large-scale, unregulated cultivation. For example, for several years Colorado allowed medical patients to pool their home cultivation allowances with a medical caregiver. This resulted in the emergence of unregulated, large-scale cultivation operations that resembled commercial enterprises. Because they were not closely regulated, some operations may have been diverting marijuana to the illicit market. All states require that plants be out of view of the public and reasonably secured to prevent access by children or the public.

Virginia should limit home cultivation to two to six plants per person with a cap of six to 12 plants per dwelling at any given time. These limits would be similar to those in other states and should allow a person to grow enough marijuana to sustain personal consumption. Two plants grown at home can typically yield eight to 16 ounces of marijuana per year, which would be enough for a moderately heavy user. Extending the limit to four to six plants per person would give home cultivators a buffer against crop failures and also account for any male plants that may need to be removed. (Male plants are often disposed of because they do not produce THC-rich flower buds.) If home cultivators were unable to produce enough marijuana to meet their needs, they could purchase additional marijuana from the commercial market (if one were to be created).

POLICY OPTION 2

If marijuana is legalized in Virginia, the General Assembly could allow of-age adults to cultivate a small number of marijuana plants at their primary residence out of public view but establish caps to limit the amount cultivated.

Virginia would continue to need laws to deter the illegal marijuana market

All states that have legalized marijuana continue to have laws that prohibit illegal distribution and cultivation of marijuana, and other illegal market activities. These laws are intended to deter criminal enterprises and prevent illegal marijuana sales. Violators can be arrested and prosecuted and are subject to civil and criminal penalties.

Virginia should keep criminal laws for marijuana distribution but could choose to reduce penalties

Virginia should keep its current *criminal laws* against distribution and other illegal market activities as a deterrent if marijuana is legalized. The state could also keep its current *penalties* for violations, because they are within range of the penalties set in other legalized states. Alternatively, the state could choose to reduce penalties for some or all of these crimes to more closely match penalties for illegal distribution of alcohol or tobacco.

If Virginia wishes to reduce criminal penalties for marijuana distribution, the state has two primary options: increase the threshold required for felony distribution charges and/or remove mandatory minimum sentences. These changes would make penalties for illegal marijuana market activities more consistent with penalties for unlicensed alcohol and tobacco sales, which are generally less severe. For example, selling alcohol without a license in Virginia is currently a misdemeanor, but it is a felony to sell over one ounce of marijuana. However, Virginia should not reduce penalties by too much, or they may cease to be effective deterrents.

- Virginia could increase the current threshold required to charge someone with felony distribution. If the state wanted to eliminate most marijuana felony charges, it could increase the felony distribution threshold from one ounce to five pounds. Very few people are charged for distributing more than that amount, so this change would eliminate almost all felony distribution charges. However, this change would make Virginia among the least punitive states in the country.
- Virginia could eliminate mandatory minimum prison sentencing for distributing large amounts of marijuana and for subsequent felony marijuana offenses. Currently, a conviction for selling more than five pounds of marijuana, or a third or subsequent felony marijuana offense, must result in a prison sentence of at least five years. Removing mandatory minimums would give judges more discretion to impose lesser sentences in these cases.

POLICY OPTION 3

If marijuana is legalized in Virginia, the General Assembly could reduce the severity of penalties for illegal distribution by (i) increasing the amount of marijuana required for a felony distribution charge, and/or (ii) eliminating mandatory minimum prison sentences for marijuana distribution without aggravating factors.

Virginia should clarify personal possession laws

The state should set clear penalties for of-age adults found to possess more than the legally allowed one-ounce of marijuana. Current law does not establish any clear penalties for simple marijuana possession other than a \$25 penalty, even for larger amounts of marijuana. Penalties for marijuana possession above amounts needed for personal use may help deter illegal distribution. All states that have legalized or decriminalized marijuana establish specific civil and/or criminal penalties for possessing marijuana over the limit. Table 4-2 below shows an example of one state's (Colorado) marijuana possession laws, though Virginia need not follow Colorado's law as a precise guide.

TABLE 4-2**Colorado maintains penalties for possessing large amounts of marijuana**

Amount of marijuana	Maximum penalty
1 ounce or less	No penalty
1–2 ounces	\$100 “petty offense” fine
2–6 ounces	0–12 months in jail, \$700 criminal fine
6–12 ounces	6–18 months in jail, \$5,000 criminal fine
More than 12 ounces	1–2 years in prison, \$100,000 criminal fine

SOURCE: Colorado Revised Statutes Title 18. Criminal Code § 18-18-406.

NOTE: Colorado also maintains penalties for possessing large amounts of marijuana concentrates.

To further reduce illegal distribution, Virginia should prohibit marijuana from being given as a “gift” alongside the sale of a different good or service or as part of a membership agreement. Other states have similar laws to prevent unlicensed businesses from acting as marijuana retailers.

RECOMMENDATION 4

If marijuana is legalized in Virginia, the General Assembly may wish to consider establishing clear, graduated civil or criminal penalties for possessing quantities of marijuana, concentrates, and infused products over a legal limit.

RECOMMENDATION 5

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting marijuana from being given as a gift in conjunction with the sale of another good, service, or membership agreement.

Virginia should keep cultivation laws but could reduce penalties

Virginia should keep its existing marijuana cultivation law (called marijuana “manufacturing” in current statute). This law is needed to deter unlicensed cultivation, which has been a problem in other states that have legalized marijuana. However, the state could reduce its penalties for illegal cultivation to better align with other states.

Under current Virginia law, growing any amount of marijuana that is not for personal use is a felony offense with a mandatory minimum prison sentence. Virginia’s penalties are severe relative to most other states that have legalized marijuana, which only punish unlicensed cultivation as a felony offense when cultivation exceeds a specific number of plants. For example, adults can grow up to four plants in Oregon without penalty, five to eight plants is a misdemeanor, and more than eight plants is a felony.

Virginia could create graduated criminal penalties for cultivating marijuana, similar to those established by other legalized states, with a higher threshold to be considered felony offenses. This threshold would need to account for any legal home cultivation that Virginia allows. Setting the felony threshold at 12 plants would place Virginia in the middle of other legalized states and would not conflict with the home cultivation options presented in this report.

POLICY OPTION 4

If marijuana is legalized in Virginia, the General Assembly could reduce the severity of penalties for illegal marijuana manufacturing (cultivation) by increasing the number of marijuana plants required for a felony manufacturing charge.

Virginia should prohibit unlicensed, dangerous marijuana processing methods

Finally, Virginia should prohibit unlicensed individuals from using dangerous methods to process marijuana into concentrates, such as hash oil. All legalized states prohibit people from using dangerous methods such as high heat, pressure, and flammable gases to extract THC because these methods can cause fires and explosions. Only properly licensed businesses are allowed to use these techniques.

RECOMMENDATION 6

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting unlicensed individuals from using dangerous methods such as high heat, pressure, and flammable gases to manufacture marijuana concentrates.

Virginia should add new laws that prohibit marijuana use in vehicles

Marijuana use can impair motor vehicle drivers and increase the risk of an accident. Virginia police arrest marijuana-impaired drivers, but they make up a relatively small

portion of total arrests for driving under the influence (DUI). Virginia law enforcement officers expressed concern that legalization could lead to an increase in marijuana-impaired driving and more marijuana-related vehicle accidents.

§ 18.2-266 of the Code of Virginia sets explicit blood concentration limits for alcohol, cocaine, methamphetamine, PCP, and MDMA over which a driver is presumed to be intoxicated. An offender can also be convicted if he is under the influence of drugs and/or alcohol to a “degree which impairs his ability to drive or operate any motor vehicle, engine or train safely.”

Currently, a driver may be charged and prosecuted for driving under the influence of marijuana if the driver is found to be affected to a “degree which impairs his ability to drive or operate any motor vehicle, engine or train safely” (sidebar). There is some disagreement among commonwealth’s attorneys about current DUI laws for marijuana. While the number of marijuana DUI prosecutions may be low, some commonwealth’s attorneys in Virginia indicate that cases can be successfully prosecuted based on a combination of police officer testimony, dash camera footage, and blood-THC level. Other commonwealth’s attorneys indicated they would like to have “per se” THC blood content limits, similar to Virginia’s blood alcohol limits.

Some states that have legalized marijuana have adopted “per se” THC blood content limits, but there is no scientific basis for these limits. Per se laws make it illegal to drive with a specific amount of drug in the body. These laws have questionable scientific basis for marijuana, because THC blood content is not a reliable indicator of impairment. A 2017 National Highway Traffic Safety Administration report examined recent scientific research on the subject and concluded that per se limits in states that have such laws for marijuana “...appear to have been based on something other than scientific evidence.” Toxicologists from the Virginia Department of Forensic Science confirmed that blood-THC levels are not good indicators of impairment level. Law enforcement officers with advanced impaired-driving training in Virginia do not support a per se standard for marijuana.

§ 18.2-323.1 of the Code of Virginia prohibits drivers from consuming alcohol while driving and creates a rebuttable presumption that the driver was consuming alcohol if an open container of alcohol is found in the passenger area of the vehicle or the driver appears to have consumed alcohol. Violations are a Class 4 misdemeanor.

To help deter marijuana-impaired driving (if marijuana becomes more available through legalization or commercial sales), Virginia should enact new laws to penalize marijuana consumption in motor vehicles and place restrictions on its presence in the passenger area. For example, along with prohibiting consumption the state could prohibit open marijuana containers and partly consumed marijuana products from being present in the passenger area. Doing so would align marijuana treatment with the state’s open container alcohol law (sidebar). All states that have legalized marijuana prohibit consumption or the presence of marijuana in motor vehicles to some extent. These laws may help prevent impaired driving and appear to be enforceable, according to Virginia prosecutors and court filings from legalized states.

RECOMMENDATION 7

If marijuana is legalized in Virginia, the General Assembly may wish to consider prohibiting on public roads and highways the (i) consumption of marijuana products by drivers or passengers in motor vehicles and (ii) the presence of open marijuana containers and partly consumed marijuana in the passenger area of motor vehicles.

Virginia should maintain its current marijuana possession laws for young adults and juveniles

All states, including those that have legalized marijuana, prohibit marijuana possession and use of marijuana by people under the age of 21. This includes underage adults who are 18 to 20 and juveniles 17 and under. Virginia's laws need to clearly define the penalties for underage possession and should be sufficiently stringent to deter use but not be overly punitive.

Virginia's current marijuana possession laws for individuals under 21 are less punitive than possession laws for alcohol and tobacco (Table 4-3). For underage adults, marijuana and tobacco possession are both civil infractions, but the maximum fine for tobacco is four times as large and can require community service. Alcohol possession is a criminal offense with even larger fines and mandatory community service.

TABLE 4-3

Virginia's marijuana possession laws are generally less punitive than tobacco and alcohol laws

Dispositional options	Marijuana (17 & under)	Marijuana (18-20)	Tobacco (under 21)	Alcohol (under 21)
Violation type	Delinquency	Civil	Civil	Misdemeanor
Maximum fine	\$25 or \$500 ^a	\$25	\$100	\$500–\$2,500
Driver's license suspension	Yes ^b	No	No	Yes
Community service	Optional	No	20 hours	50 hours
Substance abuse education, counseling, or treatment	Optional ^b	No	No	Optional

SOURCE: Code of Virginia § 18.2-250.1, § 4.1-305, § 18.2-371.2, § 16.1-278.8, § 16.1-228, § 16.1-273.

NOTE: As a misdemeanor offense, alcohol remains a delinquent act for those under 18. Under Virginia law use of alcohol by individuals under 21 requires license suspensions and a minimum \$500 fine or 50 hours of community service. The law permits a fine up to \$100 or up to 20 hours of community service for tobacco possession. Potential fines and community service hours are higher for subsequent alcohol and tobacco offenses.

^a The current penalty for civil marijuana possession is \$25, while the maximum fine for a delinquent act is \$500.

^b Generally, delinquency charges permit a wide range of options. §16.1-273 requires a drug screening and assessment, and §16.1-278.9 requires license suspension for juveniles adjudicated delinquent for marijuana possession under § 18.2-250.1.

For juveniles, fines could potentially be higher in some cases, but there is no evidence to suggest that the maximum fine of \$500 permitted under Virginia's delinquency statute has been applied for marijuana possession. Additionally, unlike for alcohol and tobacco, juvenile marijuana laws appear to allow for more discretion for each individual case, though drug assessments and license suspensions are required in some cases.

Current marijuana possession laws do not appear to be overly punitive for people under 21. For underage adults, the \$25 civil penalty is about the same as a parking ticket. For juveniles, intake officers and judges have historically had significant discretion. Most juveniles are diverted into local programs that last eight to 16 weeks. Programs

vary by locality, but often include: (1) drug screenings to identify if there are other substance use issues the juvenile needs help with, (2) counseling or substance abuse treatment, and (3) community service. Relatively few cases result in probation (9 percent) and very few result in commitment to detention (0.2 percent). Juveniles who are prosecuted for marijuana possession offenses are found guilty at similar rates to juveniles who go to court for alcohol possession offenses.

Virginia would not necessarily need to immediately amend its penalties for possession by persons under 21 if marijuana is legalized. Underage adults could continue to be subject to the \$25 civil penalty that was enacted in 2020. However, the state may need to monitor trends in underage violations to determine whether this penalty is an effective deterrent or if changes need to be made, such as increasing the penalty amount or adding community service requirements.

Juvenile possession should continue to be handled through the juvenile justice system like other minor juvenile offenses. The Code should be amended to clarify this point. Currently, the Code could be interpreted as requiring that juveniles found to possess marijuana be fined \$25 instead of being sent through the regular delinquency and diversion process. This process is more appropriate than charging juveniles with civil penalties, because it can provide them with needed counseling and substance abuse services. The process should not result in detention or probation for minor marijuana offenses, unless there are aggravating circumstances.

RECOMMENDATION 8

The General Assembly may wish to consider amending § 18.2-250.1 of the Code of Virginia to clarify that juvenile marijuana possession offenses are delinquent acts that are *not* subject to (i) the requirement that marijuana possession offenses be charged by summons or (ii) the \$25 civil penalty associated with adult marijuana possession.

Virginia could expunge prior records if it legalizes marijuana

Expungement is a process used to remove a prior arrest or conviction from a person's criminal record. In Virginia, expunged records are sealed from the public but can still be viewed under certain circumstances. For example, state law allows law enforcement agencies, with a court order, to review sealed records for job applicants. In some other states, expunged records are completely destroyed.

States that have legalized or decriminalized marijuana often allow offenses that are no longer crimes to be expunged from criminal records. Typically, expungement of marijuana offenses is limited to simple possession offenses. Twenty-one states have established expungement processes specifically for marijuana offenses, and others have included marijuana offenses in broader expungement laws.

If Virginia wants to pursue records expungement as a part of marijuana legalization, it should expunge the record of any offense that is no longer illegal for an of-age adult. Presumably, this would include expungement of records for simple possession of marijuana. This is the general eligibility criterion most other states have adopted for their expungement programs.

Expungement can be beneficial to individuals with past marijuana convictions because they often face collateral adverse consequences due to their criminal records. Marijuana convictions can make it more challenging to find employment or secure housing and can make individuals ineligible to participate in many government programs. For example, individuals with marijuana possession convictions may be ineligible to receive federal student loans. The American Bar Association has documented over 400 collateral consequences in Virginia for individuals convicted of misdemeanors or controlled substances offenses (sidebar). Expungement of minor marijuana offenses allows people to avoid these and other consequences of having a criminal record.

The American Bar Association has created the National Inventory of the Collateral Consequences of Conviction as a comprehensive catalog of federal and state statutes and regulations that impose collateral consequences on persons convicted of crimes.

POLICY OPTION 5

If marijuana is legalized in Virginia, the General Assembly could expunge individuals' criminal records for marijuana offenses that are no longer illegal.

Expunging marijuana possession records could help address past disparities in enforcement

The state could help address past disparities in marijuana law enforcement by expunging simple possession offenses from criminal records. Black Virginians accounted for 45 percent of simple possession arrests and 53 percent of convictions over the past decade, despite only making up 19 percent of the population. Expungement would help to address the inequities resulting from the disproportionate enforcement of marijuana laws.

Expungement would likely benefit substantially more Black individuals than any other potential social equity initiatives. Over the past decade, there were nearly 120,000 marijuana possession convictions in Virginia, of which over 63,000 were of Black Virginians. By comparison, other social equity initiatives would likely benefit far fewer people (sidebar). Expungement can significantly improve economic opportunities for individuals with prior convictions through improved job prospects and increased access to state and federal assistance programs.

For a more detailed discussion of social equity programs within the commercial market, see Chapters 7 and 8.

Expungements of eligible marijuana offenses in Virginia should be automatic

Expungement can be done automatically or through a petition process. An automatic process is the more equitable and effective approach. Under this process, the state would proactively identify eligible records and automatically expunge them (sidebar). This process is the most equitable because it does not require individuals to invest time

An expungement process is considered to be automatic if no action is required by the individual to have his or her record expunged. However, this process can still require considerable time and resources for the state and local entities that must identify and expunge eligible records.

or money to expunge their records. Automation also more effectively achieves expungement, because there is no requirement for people to initiate or complete the process. An automatic process to expunge marijuana possession offenses works efficiently if expungement is limited to a single category of offenses and case-by-case decisions do not need to be made.

The alternative is to use a petition process. Currently, most of Virginia's expungements are done by petition. This process is designed for when individual merits of a case may warrant consideration. Consequently, it is not well suited for expunging records of an entire class of offenses.

The petition process places many demands on the petitioner looking to have his or her record expunged. The petitioner must obtain several documents (official copy of criminal record, fingerprints, etc.) and complete a petition form. They must file their petition in court, pay court fees, and attend a hearing for the judge to grant expungement.

A petition process for marijuana expungement would be under-used and could further exacerbate inequalities. The petition process can be time consuming and difficult to navigate without an attorney (sidebar). Many individuals likely do not have the time and resources to complete the process. For example, under Colorado's marijuana record expungement process, petitioners must obtain copies of their criminal records, file a motion with the court and pay a \$65 filing fee, and may be required to attend a hearing. The City of Denver implemented a special program in 2019 to help people navigate this process. Despite the additional assistance, including assistance with filing the motion and a filing fee waiver, only 45 people successfully used the program to seal their records.

Other entities that would be involved in an automatic expungement process include general district court clerks, law enforcement agencies, commonwealth's attorneys, the Department of Corrections, probation and parole, and local jails.

If Virginia decides to expunge criminal records for marijuana offenses, it should direct the Virginia State Police (VSP) to establish and coordinate an automatic expungement process. Although multiple agencies would be involved, VSP is best positioned to coordinate an automatic expungement process because it is the criminal history repository for the state and could therefore identify the records eligible for expungement. VSP would need to coordinate this process with relevant entities—including the Office of the Executive Secretary of the Virginia Supreme Court (OES) and any circuit court clerk who maintains a separate case management system (sidebar)—to ensure all eligible records are expunged accordingly.

POLICY OPTION 6

If marijuana is legalized in Virginia, the General Assembly could direct the Virginia State Police to establish and coordinate an automatic expungement process for criminal records of past marijuana offenses that are no longer illegal.

Automatically expunging criminal records of past marijuana offenses could entail considerable costs, although the costs may differ from those associated with automatic expungement proposed in recent legislation. A bill introduced during the 2020 special session (HB 5146) would have established an automatic expungement process for various offenses, including marijuana offenses. The estimated fiscal impact of this legislation primarily included information technology costs to modify existing systems at VSP and OES. However, the automatic expungement process proposed in this report would be a one-time records expungement and would not involve the creation of an

automated system for ongoing records (sidebar). Therefore, much of the effort associated with the process proposed in this report would entail staff time to expunge eligible records, including identifying and sealing any physical paper files. The exact costs of this effort are not yet certain and would depend largely on what offenses are to be expunged and any special conditions that are placed on expungement.

Eligibility criteria for automatic expungement should be simple to minimize administrative complexity

If Virginia pursues an automatic expungement process, it should not establish any additional eligibility criteria other than the specific offense. For example, some states have limited expungement to offenses where the person possessed under a specific amount of marijuana, or excluded offenses from being expunged if they were associated with a violent crime. While these additional criteria seem reasonable, they would likely not be practicable in an automatic expungement process. The data needed to verify additional criteria may not be recorded or linked in Virginia's criminal record systems. Consequently, adding criteria could greatly increase the complexity and time required to complete automatic expungement. Other states that have tried to use additional eligibility criteria have experienced these difficulties (Case Study 4-1).

A permanent, automatic expungement process for marijuana possession is likely unnecessary given that marijuana has been decriminalized, and there would be no new criminal records for marijuana possession that would need to be expunged in the future.

CASE STUDY 4-1

Automatic expungement in Illinois hindered by data limitations

Illinois pursued automatic expungement of simple possession offenses as part of marijuana legalization. However, offenses were eligible for automatic expungement only if they involved 30 grams of marijuana or less and did not occur in connection with a violent crime.

Staff from the Illinois State Police reported administrative difficulty in implementing the state's automatic expungement program, because the eligibility provisions outlined in statute did not align with how the data is organized in its system. Staff had to develop a decision matrix to align the statutory requirements for automatic expungements with how information is stored within their data system. Once the matrix was developed, staff used it to identify cases eligible for automatic expungement.

Although the state was able to proceed with its automatic expungement program, the initial disconnect between statutory criteria and data availability may mean the program was not implemented exactly as the legislature intended.

5 Commercial Market Operations and Licenses

Most states that have legalized marijuana have established a regulated commercial market. Commercial markets allow private businesses to legally produce and sell marijuana products to adults. Typically, all operations in a commercial market must be licensed by the state, and operations are regulated to ensure they comply with state requirements. Other states generally license and regulate five types of commercial marijuana operations: cultivation, processing, testing, distribution, and retail sales (Figure 5-1). The chapter is organized around these five types of operations.

FIGURE 5-1

A commercial marijuana market consists of five major operations



Cultivation

Cultivators grow and harvest marijuana plants, mostly at indoor facilities but also outdoors and in greenhouses



Processing

Processors convert raw plant material into products like vape oils and edibles



Distribution

Distributors wholesale, store, package, and transport marijuana



Retail sales

Retailers sell marijuana to consumers through single-purpose stores, like liquor stores, or home delivery services



Testing

Testing labs test products for contaminants and THC potency

SOURCE: JLARC analysis of other state marijuana markets, industry publications, and research literature.

Commercial marijuana market must be well regulated

If Virginia establishes a commercial marijuana market, it should require all commercial marijuana operations to be licensed by the state. Licensing would best protect the public because it would give the state the ability to regulate marijuana production and sales and take quick action against any businesses that present a risk to public health or safety. For example, if a retailer is found selling marijuana to underage consumers, the state could immediately suspend the retailer's license and stop underage sales. Virginia regulates the state's alcohol market for these same reasons.

In 2013, the **U.S. Department of Justice "Cole Memo"** outlined guidance to states regarding the federal government's position on marijuana enforcement. The memo was rescinded in 2018, but regulators in other states indicated they continue to use it as a framework for guiding regulation.

A commercial market would also need to be well regulated to reduce the risk of federal intervention. In 2013, the federal government indicated it would not interfere with state marijuana markets as long as they have regulatory structures to prevent distribution to minors, public health problems, and criminal activity (such as diversion of legal products to the illegal market and interstate trafficking). While the initial guidance has been rescinded (sidebar), the lack of federal intervention in other states suggests that intervention is less likely for states that follow this guidance.

A proposed commercial structure for Virginia is summarized in Table 5-1. This structure is based on lessons learned from other states and various other state structures. The proposed structure would ensure that all operations in a commercial marijuana market are properly licensed and allow these businesses to carry out activities that unlicensed businesses would not be allowed to do, such as growing a large number of marijuana plants and selling marijuana for profit. All licenses would be issued for one year and need to be renewed annually, which is the standard practice in other legalized states. (Additional details on license renewals are provided in Appendix I.)

The proposed structure would ensure that there are enough different types of licenses available to encourage a properly functioning market. For example, by dividing cultivation licenses into different tiers, the state would allow businesses of all sizes to grow marijuana. This is important because a market would need suppliers to fill different niches. The structure would set caps on some types of licenses to reduce risks to public health and safety. For example, cultivation caps can reduce the risk of an oversupply of legal marijuana that could be diverted to the illegal market. The key structural elements outlined in the table are discussed in detail in the remainder of this chapter.

The proposed structure also includes options for promoting small businesses and social equity goals, which are discussed in the remainder of this chapter. Chapters 7 and 8 address additional ways to promote industry diversity and other social equity goals through commercial legalization, including use of license preferences.

TABLE 5-1
Virginia should establish a well-defined commercial license structure

Operation	License structure
Cultivation ≈100–800 operations	<p>Types: Licenses divided into small, medium, and large tiers.</p> <p>Caps: License awards capped based on market demand. Awards made via lottery with stringent qualification standards for applicants.</p> <p>Options to promote small business & social equity: State can exempt small cultivators from license caps and award any qualified party a small cultivation license. Qualification standards for these licenses could be less stringent, but operations would not be allowed to start until all facility and operating compliance requirements are met. Small cultivators could also have special permission to sell their products from their own premises, for off-site consumption, without a retail license.</p>
Processing ≈25–100 operations	<p>Types: Licensees can process all types of products (edibles, vape oils, concentrates) or specialize in specific products. Licenses can be divided into different types or tiers to simplify requirements for specialized operations.</p> <p>Caps: No license caps, and all qualified applicants are awarded a license.</p> <p>Options to promote small business & social equity: The structure proposed above (specialized license types, no caps) would allow small businesses to enter the market and compete.</p>
Distribution ≈5–50 operations	<p>Types: Licensees can perform all types of distribution activities (wholesale, store, package, or transport raw or processed marijuana products) or specialize in specific activities. Licenses can be divided into different types or tiers to simplify requirements for specialized operations.</p> <p>Caps: No license caps, and all qualified applicants are awarded a license.</p> <p>Options to promote small business & social equity: The structure proposed above (specialized license types, no caps) would allow small businesses to enter the market and compete.</p>
Retail ≈200–600 operations (depending on caps)	<p>Types: Retail stores allowed but not home delivery services or on-site consumption venues. Home delivery and on-site consumption venues could begin 3 to 5 years after store sales.</p> <p>Caps: License awards capped by local governments, with local decisions informed by market data from the state. Awards made via a lottery.</p> <p>Options to promote small business & social equity: State can choose to prohibit “vertical integration” and forbid retailers from also holding cultivator or processor licenses. This would provide more opportunities for small businesses and diverse ownership.</p> <p>State can choose to set less stringent qualification standards for applicants to promote a larger and more diverse applicant pool. Operations would not be allowed to start until all facility and operations compliance requirements are met. Awards could be made gradually over a 3 to 5 year period, giving small businesses a chance to apply and establish their businesses, and state social equity programs a chance to build a diversified applicant pool and assist new business owners.</p>
Testing ≈5–20 operations	<p>Types: Testing labs must be independent. They cannot hold any other type of license. Testing labs must also be certified by the state’s Division of Consolidated Laboratory Services (DCLS).</p> <p>Caps: None.</p>

SOURCE: JLARC summary analysis.

NOTE: The range of potential licensees shown are estimates based on the license structure described above (including all types and caps), mature commercial markets in other states, and Virginia’s anticipated marijuana demand at market maturity.

RECOMMENDATION 9

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales that the marijuana regulatory body issue licenses for marijuana (i) cultivation, (ii) processing, (iii) distribution, (iv) retail sales, and (v) testing.

RECOMMENDATION 10

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that only state licensed businesses are legally allowed to cultivate, process, distribute, sell, test, or otherwise transport or handle marijuana in amounts greater than the individual legal possession and cultivation limits set in state criminal laws.

Many financial institutions do not provide services to marijuana businesses because of the risk of being charged with a federal crime. However, other states that have legalized marijuana have seen smaller, state-chartered banks and credit unions begin providing some basic services, such as checking. Staff with the Virginia State Corporation Commission indicated that Virginia laws would permit banks and credit unions to serve marijuana businesses if marijuana was legalized in Virginia.

The proposed commercial license structure could be affected if the federal government legalizes marijuana in the future, but the effect would depend on how federal legalization is implemented. The federal government could change marijuana's status as a controlled substance but continue to restrict interstate commerce. Under this approach, state markets would be largely unaffected. However, if the federal government did allow interstate commerce, states with legalized marijuana would need to re-think how cultivation, processing, and distribution businesses are licensed and if certain restrictions, such as marijuana tracking, remain necessary.

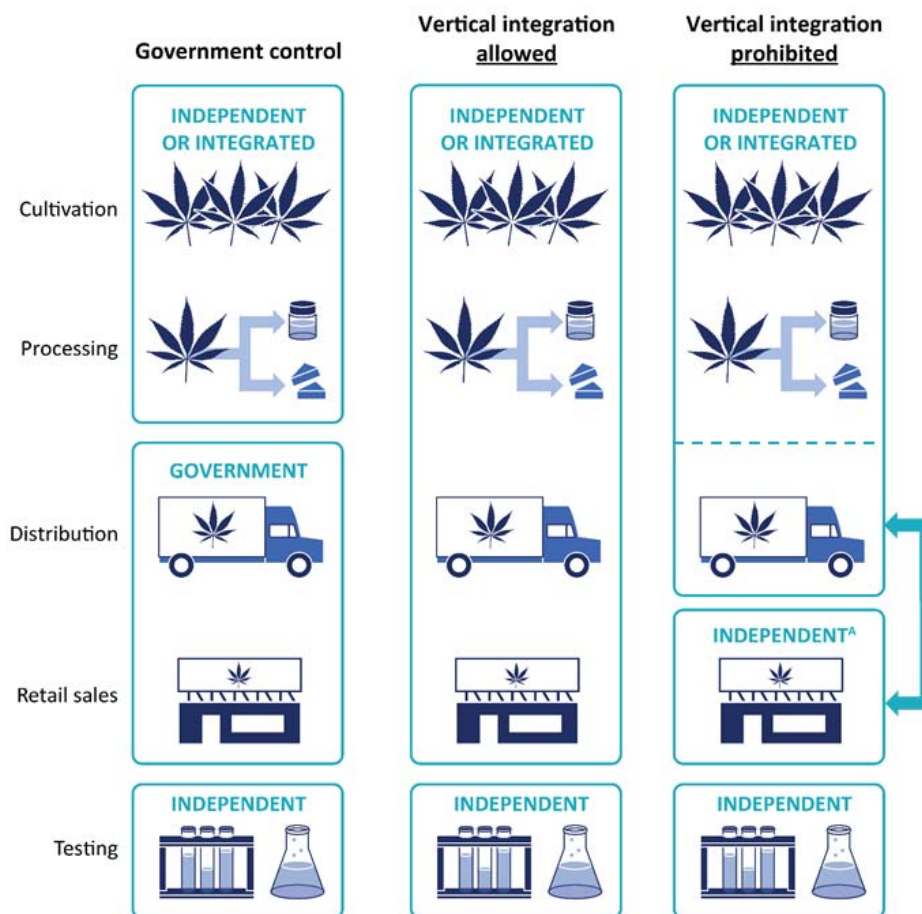
Federal legalization would also have some other effects on the industry. Most notably, it would likely encourage more financial services providers, including banks and credit card companies, to work with marijuana businesses (sidebar). This would make it easier for marijuana businesses to work with other businesses and serve customers because they could use credit and debit cards for transactions, whereas now they rely largely on cash transactions. Marijuana businesses would also have better access to loans and other basic banking services.

Commercial market could be structured in three different ways

Other states and countries with legalized marijuana markets employ one of three overarching structures for organizing their commercial operations: (1) government controlled distribution and retail, (2) vertical integration of operations is allowed, and (3) vertical integration of operations is prohibited (Figure 5-2). Of the three options, prohibiting vertical integration would best promote small businesses' access to the marijuana market and allow for industry diversity. This structure could also be slightly more protective of public health than if vertical integration were allowed.

FIGURE 5-2

Virginia can consider three structures for its commercial marijuana market



SOURCE: JLARC analysis of other state marijuana markets, industry publications, and research literature.

NOTE: ^a Under this structure, retailers would not be allowed to hold cultivation or processing licenses. They would be allowed to hold distributor licenses.

Government control of marijuana markets has not been attempted in U.S. and would be exceptionally challenging to implement

Government controlled distribution and retail has been attempted in Canada but not in the U.S. Marijuana is nationally legal in Canada, and the national government has allowed provincial governments to control distribution and retail. In Quebec, a province-owned corporation controls both distribution and retail. In Ontario, the province controls distribution, and private retailers are treated similarly to franchise owners. These arrangements are similar to how many U.S. states, including Virginia, control distribution or retail of alcohol.

One of the reasons that a government controlled system has not been tried at the state level in the United States may be that marijuana remains illegal federally. If a state government became involved in marijuana distribution or retail, it would become an

active participant in a federally illegal enterprise, instead of just acting as a regulator. Unless marijuana is legalized federally, any state that attempts this approach takes on additional risks of federal intervention and new legal challenges from residents and neighboring states. This approach also has significantly higher upfront costs, presents greater logistical difficulties, and is unlikely to generate any more net revenue for the state than fully private models. More information about government-controlled distribution and retail is included in Appendix J.

Allowing vertical integration could result in a more efficient market, but prohibiting it could better promote small business and social equity goals

Some states *require* vertical integration in medical markets, including Virginia. However, no states require vertical integration in their general commercial marijuana market. Requiring vertical integration is not recommended because it would concentrate the market under a few, large businesses.

States that have created legal commercial marijuana markets in the U.S. require all operations to be performed by licensed, private businesses. Colorado and most other states allow licensed businesses to be vertically integrated, which means a single business can cultivate, process, and then sell marijuana at a retail location. Vertical integration allows a business to control its entire supply chain, giving it a competitive advantage over smaller, single-purpose operations. This approach could promote a more efficient legal market that best competes with the illegal market and most likely would result in the lowest prices for consumers.

States can also choose to prohibit vertical integration. Under this approach, cultivators and processors are not allowed to be retailers. This approach is used by Washington for its marijuana market, and it most closely resembles how alcohol and tobacco are regulated in most states across the country. This approach could result in a less efficient market, but one that may be slightly more protective of public health. Prohibiting vertical integration would allow the state to better promote small business participation and achieve social equity goals.

Allowing vertical integration could result in a legal market that is best able to compete with the illegal market and would likely generate the most tax revenue

Allowing vertical integration can promote a more efficient market with slightly lower prices. Vertically integrated businesses can achieve economies of scale and internal efficiencies that drive down prices. For example, a business can grow a large amount of marijuana under its cultivation operation and ship it to its own stores at cost. This would allow the company to sell its products at lower prices. An industry with several vertically integrated companies could encourage a more efficient industry (up to a point) and potentially decrease prices. This would help the legal market compete with the illegal market for customers.

Lower prices would contribute to increased use. The primary consumers of marijuana are young adults and a small number of heavy, everyday users. These users are sensitive to small price changes and may consume more marijuana if prices are lower, which could negatively affect public health.

While vertical integration can result in slightly lower prices, prices are driven mostly by supply and demand. Prices in some states that allow vertical integration, like Massachusetts, have remained relatively high because of limited supply. In others, like Oregon, prices have dropped dramatically because of an overabundant supply.

While the vertical integration model is more likely to promote an efficient market, no commercial marijuana market structure guarantees success. Other factors can have a much greater impact on outcomes. For example, California has a vertical integration model, but its legal market is struggling to stay profitable and compete against the illegal market. California's challenges are due to factors other than its licensing model, including high tax rates, extensive local prohibitions that limit retail access, and marijuana law enforcement that has done little to dissuade illegal activity.

Prohibiting vertical integration could better promote small businesses and social equity and may slightly reduce negative public health impacts

Prohibiting vertical integration likely helps small businesses compete in the commercial marijuana market. Small cultivators are more likely to get their products in stores if all retailers are independent, because stores will be open to carrying all products (instead of just their parent company's products). Independent retailers would also be better able to compete because it would be easier for them to obtain stock to sell in their stores. They could also offer the same prices as competitors, because there would be no vertically integrated companies that could undercut them on sales price.

Prohibiting vertical integration promotes the emergence of independent distributors. Independent distributors can provide small cultivators and processors with key logistical services that can help them grow and improve their chances of success. A similar dynamic has been observed in the alcohol industry, where independent distributors played a key role in helping microbreweries get their products on store shelves.

Although small businesses have historically been able to compete in some vertically integrated marijuana markets, they may become less competitive as the industry matures. Colorado is the oldest vertically integrated market, and it has a large number of competitive, small-scale operations. However, the marijuana industry had just begun when Colorado legalized, so small operations were able to establish themselves before competing with larger competitors. In contrast, today there are many experienced multi-state marijuana businesses with substantial expertise and financial resources at their disposal. These businesses are looking to enter new state markets. If these large businesses are allowed to vertically integrate in new markets like Virginia, small businesses likely would have difficulty competing.

Vertical integration appears to be reducing opportunities for small businesses in several states that recently legalized marijuana. Regulatory officials in some of these states indicated that their commercial structure allowed the market to be dominated by a few large, vertically integrated medical marijuana companies. They indicated it will be difficult, if not impossible, for new and small-scale operations to enter their markets as

they mature. Similar concerns have been voiced by small cultivators in Oregon and Nevada. Cultivators in these states claim they have had difficulty selling their crops because vertically integrated companies are taking over retail operations and do not want to buy from outside suppliers. In addition, some retailers in Michigan faced supply shortages when the market opened because vertically integrated businesses supplied their own stores before others. This made it more difficult for independent retailers to enter the market and succeed.

A 2017 survey of diversity in the marijuana industry found 80 percent of owners and founders were white, and 74 percent were men.

If small businesses are unable to compete against large vertically integrated businesses, it would also be difficult for the state to address social equity. Industry statistics show the vast majority of current marijuana businesses in other states are owned by white men (sidebar). Many of these same businesses would enter the Virginia commercial market, which would result in a similar lack of diversity in Virginia. Consequently, if the state wanted to improve industry diversity, it would need to promote the inclusion of new marijuana businesses with more diverse ownership. New marijuana businesses, like new businesses in most other industries, are likely to begin as small startups with limited financial resources. Consequently, the more opportunities the state provides to small businesses, the better able it will be to diversify business ownership.

Prohibiting vertical integration may also result in slightly better public health outcomes. Without the ability to vertically integrate, prices should be slightly higher, which could result in slightly less consumption. Marijuana use correlates with several negative health outcomes, so lower use would have less of a negative impact on public health. (See Chapter 9).

A potential drawback of prohibiting vertical integration is that, by encouraging more and smaller businesses, the commercial market could become more difficult to effectively regulate. The higher number of small commercial operations there are, the more regulatory staff would be needed to ensure compliance and reduce the risk of marijuana being diverted to the illegal market. This risk is one of the reasons why states often allow vertical integration.

Virginia could choose a structure that can best achieves its main goals for the commercial marijuana market

The General Assembly could choose to allow or prohibit vertical integration, depending on its goals for the commercial marijuana market. Either approach could be successfully implemented. Allowing vertical integration could provide a more efficient market with fewer but larger businesses. Prohibiting vertical integration could result in a slightly less efficient market in which small businesses would have a better chance of succeeding and social equity could be better promoted. This commercial structure could also be slightly better for public health.

RECOMMENDATION 11

If marijuana is legalized in Virginia, the General Assembly may wish to consider establishing a commercial licensing structure that either (i) allows vertical integration by authorizing marijuana cultivation and processing license holders to also hold a retail license, or (ii) prohibits vertical integration by forbidding any party that holds a marijuana retail sales license from also holding cultivation or processing licenses.

Cultivation licenses can be tiered to prevent over-consolidation and capped to prevent over-supply

Cultivation involves the growing and harvesting of marijuana plants for sale in the commercial market. In other states, the majority of cultivation is performed in completely enclosed indoor facilities, often located in or near urban population centers. Some cultivation is also performed in greenhouses or outdoors in more rural areas. Small, outdoor cultivation sites can be simple low-cost operations that resemble a family farm. In contrast, large indoor cultivation operations can be multi-million dollar facilities with complex lighting, watering, and nutrient and temperature control systems. States with mature commercial marijuana markets have hundreds of licensed cultivators. This section provides an overview of key decisions relating to the structure of cultivation licenses.

Cultivation licenses can use size tiers to prevent over-consolidation and help small businesses compete

Cultivation licenses in other states are typically structured to have different tiers, based on the size of the licensed operation (sidebar). For example, Washington has a three-tiered system that divides cultivators into small, medium, and large operations. Most states direct their marijuana regulatory body to establish the cultivation tiers rather than setting them in statute. This approach allows state regulatory bodies to solicit input on appropriate tier levels during the regulation-setting process and gives them flexibility to adjust tiers in the future as needed.

Cultivation tiers are set in one of two ways. Some states set cultivation tiers based on the square footage of space devoted to growing plants ("canopy space"). Others set tiers based on the maximum number of plants that can be grown.

Cultivation tiers can be established to prevent over-consolidation

Virginia should consider setting size limits on large cultivators as a safeguard against a few large cultivators taking control of the market. Washington limits indoor cultivation operations to 30,000 square feet per license. An operation this size would meet around 2 percent of Virginia's market demand, leaving plenty of opportunity for other competitors. In contrast, Colorado does not have a size limit on cultivators and has the largest cultivation site in the U.S.: a 1.5 million-square-foot outdoor farm. This single operation could conceivably meet 25 percent of Virginia's legal market demand. Several large cultivators can be efficient and result in lower prices because of economies of scale, however, this situation risks granting too much supply and pricing power to a small number of firms. While no state with a mature market has been completely

overtaken by large cultivators, setting size limits would greatly reduce the chances of that happening.

If Virginia sets size limits on cultivators and takes additional measures to cap cultivation, the state could expect to have around 100 to 800 licensed cultivation operations of varying size at market maturity. Mature markets in Colorado, Oregon, and Washington each have around a thousand cultivation operations. However, these states also have greater consumer demand than is expected in Virginia.

RECOMMENDATION 12

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body develop different tiers of cultivation licenses and set maximum size limits for each tier based on cultivation square footage or number of plants under cultivation.

Virginia could allow small cultivators to sell their own products to help them compete with larger cultivators

If the state wishes to provide opportunities for small businesses, it could allow small cultivators to sell their own products without having to obtain a retail license. This approach would attempt to replicate Virginia's approach with microbreweries and homegrown distilleries. The state could take this approach even if it chooses to require independent retail. For example, while Virginia generally restricts liquor sales to bars and ABC stores, it also allows distilleries to sell their products directly to consumers. This same approach could be applied to small marijuana cultivators. One difference is that any marijuana products sold would still likely need to be consumed off-site.

POLICY OPTION 7

If the General Assembly authorizes commercial marijuana sales, it could allow the smallest tier of cultivators to sell their own products at or near their licensed cultivation site without having to obtain a retail license to maximize revenue opportunities for small businesses.

Cultivation caps are needed to prevent an over-supply of marijuana

Cultivation should be capped to prevent the over-supply of marijuana in the market. State marijuana markets are closed markets, which means excess supply can lead to significant problems. Supply that is well above market demand can result in price collapses. Low prices make marijuana more affordable for young people and can promote greater consumption by heavy users. Low prices also harm marijuana businesses because it is harder to be profitable. Additionally, if supply greatly exceeds demand, some cultivators may be unable to legally sell their products. These cultivators could look to divert their products to the illegal market.

Oregon did not initially cap cultivation and quickly had an over-abundance of marijuana, resulting in a 50 percent price drop and increased diversion to the illegal market. This excess supply prompted the U.S. attorney for the Oregon district to send the state a memo notifying it of the U.S. Justice Department's concern about diversion from Oregon to other states in which marijuana is not legal. The memo expressed that

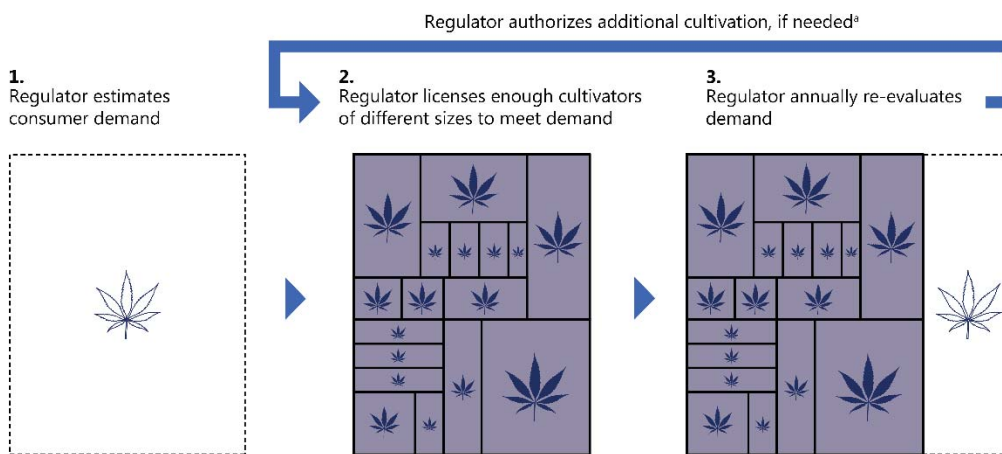
federal law is the supreme law of the land ... The fact that a State may pass a law that conflicts with, or reflects a different policy from federal law cannot nullify these principles or shield an activity from federal prosecution regardless of whether the substance of the law addresses marijuana, environmental protection, or any other subject.

Cultivation caps should be based on projected demand and adjusted annually

Cultivation licenses should be capped based on the state's estimated marijuana demand. Both Colorado and Washington use this approach. Under the approach, the state regulatory body estimates how much marijuana supply is needed to meet demand and how many cultivation operations are needed to supply that demand without greatly exceeding it (Figure 5-3). This is a complicated process that must account for the different sizes of cultivation operations and their anticipated production. For this reason, cultivation caps should be set annually by the marijuana regulatory body. Caps would gradually increase over time, assuming demand generally goes up and illegal market users shift over to the legal market.

FIGURE 5-3

Caps on cultivation licenses should be driven by estimates of supply and demand



SOURCE: JLARC analysis.

NOTE: ^a Regulator can authorize additional cultivation by issuing additional licenses or by allowing current licensees to increase the size of their operations or move up to a larger cultivation tier.

RECOMMENDATION 13

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that (i) marijuana production by licensed cultivators be capped based on estimates of consumer demand, (ii) the marijuana regulatory body establish a regulatory process to annually adjust cultivation limits based on consumer demand, and (iii) the marijuana regulatory body establish the number of medium and large tier cultivator licenses that will be issued each year.

Small cultivators could be excluded from caps to provide more opportunities for small businesses to enter the market

If the state wishes to provide increased opportunities for small businesses and address social equity, it should not place cultivation caps on the smallest tier of cultivators. Instead, caps could apply only to medium and large cultivators, helping encourage small cultivators to enter the market. This approach could still be effective at controlling supply, because medium and large cultivators produce most of the marijuana for state markets. For example, in Washington medium and large cultivators accounted for 98 percent of statewide cultivation.

There is a small risk that leaving small cultivator licenses uncapped could result in so many small cultivators that the market would become oversupplied. To guard against this risk, the marijuana regulatory body could be authorized to temporarily suspend new license awards for small cultivators if it appears the market is becoming oversupplied.

POLICY OPTION 8

If the General Assembly authorizes commercial marijuana sales, it could direct the marijuana regulatory body to exempt the smallest tier of cultivators from production caps to increase opportunities for small businesses and address social equity. The regulator could also have the authority to temporarily suspend new license awards if it appears that the market is becoming oversupplied.

Cultivation license awards could be structured to fully supply market while still promoting small businesses

Because the number of cultivation licenses would be limited by caps on all or some license types, the number of license applicants is likely to exceed the number of licenses available. Consequently, the state would need to establish a process to award these licenses.

Cultivation licenses should be awarded through a well-designed lottery with stringent qualification standards

The best way to award cultivation licenses—especially for medium and large operations—would be through a lottery system that sets relatively stringent qualification

standards for applicants. Selecting winners through a lottery provides all qualified applicants an equal chance of success and has a lower risk of lawsuits than merit scoring (sidebar). Lotteries would need to be well designed to keep applicants from “gaming the system” by submitting multiple applications. The state would also need to place restrictions on transferability of licenses to prevent applicants from entering the lottery with the intention of re-selling their license instead of establishing a business. (Additional information on this and other necessary license holder restrictions is provided in Appendix I).

Stringent application standards, such as requiring past experience and substantial financial holdings, would help ensure that the businesses receiving these licenses would also likely be able to meet appropriate facility and operations compliance standards. If these licenses were awarded using less stringent criteria, there would be increased risk that at least some licensees would not be able to begin operation in a timely manner. The state could then face supply shortages when the market opened, potentially reducing the ability of the legal market to effectively compete with the existing illegal market.

RECOMMENDATION 14

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body (i) award medium and large cultivator licenses through a lottery, (ii) set stringent qualification standards for applicants for medium and large cultivation licenses, and (iii) require license awardees to meet facility and operations compliance standards before cultivation can begin.

If small cultivators are excluded from cultivation caps, they would be excluded from the lottery and subject to less stringent qualification standards

If the state wants to promote small businesses, it should not place a cap on small cultivators and allow all qualified applicants to be licensed. In contrast with larger cultivators, the initial application qualifications for small cultivators could be less stringent to reduce the number of applicants who might be excluded (sidebar). This approach would give many small businesses the opportunity to enter the market and the assurance they need to find investors, lease property, and buy equipment. However, before a small cultivator could begin growing marijuana, it would need to be inspected and approved by the regulator. This second part of the licensing process would ensure small cultivators comply with facility and operations standards similar to those set for larger cultivators.

By preserving opportunities for small businesses to enter the market, the state could also address social equity through business ownership. Based on the current lack of diversity in the marijuana industry, the best way to promote diversity in Virginia’s commercial market would be by providing opportunities for new Black- and Hispanic-owned businesses. This structure would give individuals who are underrepresented in

Merit scoring is the main alternative to a lottery system. While it helps ensure qualified candidates are selected, it also increases the risk of lawsuits being filed against the state by applicants who were not selected. This is because merit scoring criteria, no matter how well devised, are somewhat subjective and open to interpretation. The differences between winners and losers are often small. Consequently, losing applicants are better able to make a case that they were not treated fairly.

Qualification standards can be made less stringent by not requiring past experience, minimum financial or property holdings, or other qualifications that may be more difficult for small businesses to meet. See Chapter 7 for additional discussion on how standards can be made less stringent.

the current marijuana industry the opportunity to compete. Additional social equity assistance programs could provide qualifying licensees with any knowledge and resources they might need to compete in the cultivation market. (See Chapter 7).

POLICY OPTION 9

If the General Assembly authorizes commercial marijuana sales, it could direct the marijuana regulatory body to set less stringent qualification standards for small cultivation applicants than for large and medium cultivation applicants and make license awards to all small cultivators who are qualified candidates to increase opportunities for small businesses and address social equity.

Processing and distribution license structures should be tailored by the regulator to allow specialization

Processors convert raw marijuana plant material into consumer products. Processors make products such as edible candies, brownies, and other marijuana-infused foods. They also make vape oils and other concentrated, smokable forms of marijuana such as hashish, “wax,” and “shatter.” Depending on their products, a processor can be large or small and its operations can be advanced or somewhat simple. Many cultivators would also want to be licensed as processors so they can process their own plant materials into value-added products.

Distributors are logistics companies that can wholesale, store, package, or transport raw or processed marijuana products. A distributor can specialize in one particular area or participate in all areas. Some licensees would want only to be distributors. However, cultivators, processors, or retailers that want to manage their own logistics would want to be licensed as distributors so they can package and transport marijuana. (This is the one other type of license that a retailer would be allowed to hold if vertical integration was prohibited.)

Unlike cultivators and retailers, there would be no need to cap the number of processor or distributor licenses. Consequently, no special awards process would be needed. Any business that meets the qualification standards could be licensed. Small businesses would be able to enter the market and compete. However, as with other operations, licensees would not be allowed to handle marijuana until after they have been inspected and approved by the regulatory body for compliance with facility and operations standards.

Processor and distributor licenses could be tiered so that applicants who wanted to specialize would not be required to meet qualification standards or requirements for other operations. For example, an applicant might want to specialize in edibles, which are easier to manufacture than vape oils and other concentrates. The applicant could apply for a license tier that requires them to meet only the standards for edible processing. This would reduce the regulatory burden, which can be significant for small

businesses, but would also benefit any large businesses that want to specialize. Appropriate tiers for processors and distributors could be established by the regulatory body through the regulation-setting process.

RECOMMENDATION 15

The General Assembly may wish to consider including a requirement in any legislation authorizing commercial marijuana sales that the marijuana regulatory body develop tiers or other categories of processor and distributor licenses that allow specialization and minimize the need for applicants or licensees to meet regulatory standards that do not apply to the specific products they are processing or distributing.

Retail licenses should be limited to stores and capped to prevent over-proliferation

Retail sale is the final sale of a commercial marijuana product to a consumer. All states with commercial markets award licenses to single-purpose marijuana retail stores (sometimes called dispensaries). These stores are similar in form and function to liquor stores; marijuana is their main product and they generally are not allowed to sell many other products. About half of states with commercial markets also allow retail home delivery services. These services allow customers to place orders over the internet or by telephone and have marijuana delivered to their residence. A few states allow retail venues that offer on-site sale and consumption. States with mature commercial marijuana markets have hundreds of licensed retailers.

FIGURE 5-4

Marijuana can be sold at retail in three different ways



Retail stores

Sell marijuana for off-site consumption, like a liquor store



Home delivery services

Take orders over phone or internet and deliver to a residence



On-site consumption venues

Sell marijuana and also allow it to be consumed on-site, like a bar or a "café"

SOURCE: JLARC analysis of marijuana retail licenses in other states.

Retail licenses should be capped to prevent an over-proliferation of stores, which could harm economically disadvantaged communities

Retail stores are more likely to over-proliferate than other types of marijuana operations because they are generally easier to establish and operate. Establishing a retail

store requires less technical skill and equipment than running a cultivation or processing operation. Retail also generally has a lower regulatory compliance burden. For example, unlike cultivators, retailers do not have to tag and track hundreds (or thousands) of plants.

Most states cap the number of retail licenses awarded, and the number of retail locations tends to increase as markets mature. For example, Oregon, which is one of the few states with no state or local cap on retail, has one store per 6,000 residents. Colorado has local caps and a ratio of one per 8,000 residents. Washington has state caps and a ratio of one per 16,000 (Table 5-2).

TABLE 5-2

States with mature markets have a high number of retail stores

	State	Retail stores (adult use)	Residents per store	Virginia equivalent stores (adjusting for population)
Mature markets (5 years or older)	Oregon	661	6,000	1,300
	Colorado	747	8,000	1,100
	Washington	482	16,000	550
Developing markets (less than 5 years)	Nevada	71	43,000	200
	California	663	60,000	140
	Michigan (New 2019)	167	60,000	140
	Massachusetts	75	92,000	90
	Illinois (New 2020)	67	189,000	45
Virginia comparison markets	Virginia ABC	377	23,000	-
	Virginia medical dispensaries (2020)	3	2,845,000	-

SOURCE: JLARC analysis of other state retail license data and state populations.

NOTE: (1) The year each state began commercial sales are as follows: OR 2015, CO 2014, WA 2014, NV 2017, CA 2018, MI 2019, MA 2018, IL 2020. (2) Table does not show Maine, which began commercial sales in October 2020, Vermont and D.C., which have not yet allowed commercial markets, or Arizona, Montana, New Jersey, and South Dakota, which passed legalization measures in November 2020. (3) Table does not show Alaska because its unique geography and small size make it difficult to compare to other states. Alaska started sales in 2016 and is close to being a mature market. Alaska has 134 retail stores, which is equal to 1 store per 5,500 residents. The number of Virginia-equivalent stores would be around 1,600.

If retail stores are allowed to over-proliferate, they could become concentrated in economically disadvantaged communities. This could increase marijuana use in those communities. Research has found retail stores in legalized states are more likely to be located in economically disadvantaged areas, often with majority Black and Hispanic populations, suggesting these communities would be most affected by over-proliferation. A recent study observed that people who live closer to marijuana stores consume more marijuana. This is similar to an established body of research on alcohol, which

shows a greater density of stores generally contributes to greater alcohol use in the surrounding area.

Over-proliferation of retail licenses could be generally detrimental to public health and safety. Retailers would be incentivized to compete for businesses by heavily promoting consumption through advertising and price discounts. Public health officials in Oregon, which has the most marijuana retailers per capita in the U.S., indicated this has been a significant problem in their state. Officials there and in other states expressed concern that highly visible stores and advertising normalizes marijuana and could ultimately increase use, over the long term. Additionally, retailers that struggle to compete in a saturated market have an incentive to sell to under-age customers and divert products to the illegal market.

States can keep retail from over-proliferating by setting caps on licenses. Retail license caps can be set by the state or local governments, but a hybrid approach would combine the advantages of each. If the state set caps, then its regulatory agency could use population and demand data to estimate how many stores each participating locality could reasonably support. If participating local governments set caps, they could be more responsive to residents. Under a hybrid approach, the regulatory body could estimate the number of stores each locality could support and share this information with the locality. The locality could then use this information to set its retail license caps.

RECOMMENDATION 16

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop estimates of the number of stores each locality could support based on demand and share this information with localities.

RECOMMENDATION 17

If the General Assembly authorizes commercial marijuana sales, it may wish to consider authorizing localities to pass ordinances setting caps on the number of marijuana retailers that can be licensed to operate in their jurisdictions and require localities to pass ordinances and report caps to the regulatory body within a reasonable amount of time before the retail applications process begins.

Retail license awards process could be designed to promote small business and social equity but could result in fewer retailers initially

If the state wants to reserve adequate opportunities for small businesses and address social equity, it should take a strategic approach to awarding retail licenses. When the retail license application process begins, many established, well-funded, and experienced marijuana businesses from other states would apply. Based on industry statistics,

Merit scoring favors large, experienced businesses. This approach scores applicants on the extent to which they meet specific criteria, such as the quality of operating plans submitted and past experience in the industry. By design, this favors businesses with the resources and expertise to assemble winning applications.

most of these businesses would be owned and operated by white males. These businesses would have an advantage in the awards process unless it is designed to provide at least equal opportunity for other applicants.

The state could take three steps to provide equal opportunity when making retail license awards. The state could (1) set less stringent qualification standards for all applicants than typically set in other states, (2) make license awards via lottery instead of using merit-based scoring (sidebar), and (3) make initial license awards gradually over three to five years instead of awarding all licenses at once. By taking these steps, the state could reduce (or at least delay) some of the advantages larger and more experienced businesses would otherwise have.

By setting less stringent qualification standards, the state could expand the pool of eligible applicants beyond large, experienced and well-financed enterprises. Other states reported it has been difficult to promote ownership diversity because applicants are required to secure real estate for their operation before they apply. This creates a significant barrier because applicants must lease or purchase a property while their application is pending approval, sometimes for months. Applicants risk losing money on these payments if their application is not approved. Other qualification requirements can also be difficult for small businesses to meet, such as requirements to have prior industry experience, have a minimum amount of financial assets, or submit detailed security and operations plans. (See Chapter 7).

Applicants for retail licenses could be held to less stringent standards without major risks to the state because additional checks would be in place later in the process before license holders could handle marijuana. Before a license holder could begin handling marijuana, it would need to have its facility inspected and operating plans approved by the marijuana regulatory body. This second part of the licensing process would ensure all licensees, large and small, comply with strict facility and operations standards.

Retail license awards could be made gradually over a period of three to five years, until local caps are reached. If all retail licenses were awarded in the first year, it would favor large and established businesses that can more quickly prepare and apply. A gradual approach would give small businesses time to prepare. A gradual approach would also give state social equity assistance programs time to educate and prepare potential applicants. (See Chapter 7.)

One risk associated with a lottery for retail licenses is that the state could have a shortage of retail establishments in the early years of commercial legalization. Many of the businesses would be inexperienced and might be unable to quickly comply with requirements and open their stores after receiving a license. Additionally, because licenses would be issued gradually, there would simply be fewer retail stores during the first few years of Virginia's commercial market. However, some experienced businesses would still be awarded licenses, which would make it highly likely that some retail stores would be able to open reasonably soon after they were issued licenses.

The lottery for retail licenses, like the lottery for cultivator licenses, would have to be well designed to keep applicants from “gaming the system” by submitting multiple applications. The state would also need to place restrictions on transferability of licenses to keep applicants from entering the lottery with the intention of re-selling their license instead of establishing a business. (Additional information on this and other necessary license holder restrictions is provided in Appendix I.)

POLICY OPTION 10

If the General Assembly authorizes commercial marijuana sales, it could increase opportunities for small businesses and address social equity by directing the marijuana regulatory body to (i) set comparatively less stringent qualification standards for retail licenses than are typically set in other states but still require licensees to comply with more stringent requirements before sales begin, (ii) make license awards using a lottery instead of merit-based scoring, and (iii) make license awards gradually over three to five years.

Allowing retail delivery and on-site consumption could benefit consumers but raises public health concerns and makes implementation more challenging

Retail home delivery can provide consumers with better or more convenient access to legal marijuana. Some consumers may live in remote areas or have mobility or transportation challenges that make it difficult to visit a retail store. Other consumers may simply find it more convenient. Because of the COVID-19 pandemic, some consumers may prefer home delivery to reduce the risk of exposure. Home delivery likely helps the legal market compete with the illegal market, because current users in the illegal market likely can get marijuana close to home.

Despite the potential benefits, home delivery of *commercial* marijuana has negative public health implications. Home delivery allows for easier access to marijuana, which could promote greater use. Allowing home delivery would also treat marijuana less restrictively than Virginia historically treated liquor. Home delivery of liquor was prohibited up until the COVID-19 pandemic.

The majority of legalized states have chosen to delay implementation of home delivery or still do not permit it. Colorado started retail sales in 2014 but did not allow home delivery until 2020. Washington still prohibits home delivery. According to regulators in these states, a gradual approach allows brick-and-mortar retailers to become firmly established and lets regulatory agencies focus on establishing strong controls over them. Allowing home delivery too early creates another new function to regulate, with its own additional regulations and enforcement needs.

Virginia should not allow home delivery of *commercial* marijuana, at least within the first few years of retail sales if marijuana is legalized. If the state wished to eventually allow home delivery of products, it could enact legislation that allows delivery but not

Direct delivery is preferable to third-party delivery because third-party services (1) reduce profitability of licensed stores, (2) can be used to get around advertising restrictions, (3) can create licensing confusion, and (4) have a history of delivering from unlicensed businesses.

until several years after the commercial market opened. Virginia could continue to allow home delivery of *medical* marijuana because it is used for therapeutic purposes, regardless of whether home delivery was allowed for commercial marijuana. If and when home delivery is allowed, it should be limited to direct delivery services, where a store directly delivers to a customer. Third-party delivery services, where a “middle-man” delivers for multiple partner stores, have several potential drawbacks (sidebar).

Similarly, Virginia should not initially permit venues that allow on-site consumption of marijuana. Few states allow on-site consumption venues, and most have chosen to wait several years before they began to allow them. For example, Colorado only began to allow on-site consumption in 2020. States have chosen to wait because of the added difficulty in regulating these venues, negative public perceptions of these venues, and the potential for these venues to contribute to marijuana-impaired driving.

Some social equity advocates have indicated that allowing public consumption venues could benefit residents of federally subsidized housing, who could face eviction if found using marijuana in their residences. While this is a reasonable assumption, there is limited research on how on-site consumption licenses could be structured to provide venues that serve this population. The state marijuana regulator could be tasked with examining how to structure licenses for on-site consumption venues in a way that would benefit these residents.

RECOMMENDATION 18

If the General Assembly authorizes commercial marijuana sales, it may wish to consider prohibiting home delivery of commercially available marijuana and businesses that allow on-site consumption of marijuana until at least three to five years from when commercial sales begin at retail stores.

Testing laboratories should be independent of other operations and licensed and certified by the state

Testing laboratories test marijuana for contaminants that are harmful to consumers. Labs also confirm the THC content of products. (THC is the intoxicating chemical compound found in marijuana.) Marijuana testing is needed to ensure products are safe to be consumed, and consumers know how much THC they are consuming. Testing also helps ensure that products meet the quality standards claimed on their labels.

Testing should be performed by private laboratories, licensed by the state’s marijuana regulatory body, instead of a state lab. Without a significant funding increase, testing cannot feasibly be performed centrally by a state lab because of the high volume of testing that would be required. Other states also rely on private, regulated labs for marijuana testing. The state’s marijuana regulatory body would need to license these labs to ensure they meet physical security standards, marijuana is properly tracked and accounted for, and test results are dutifully reported.

Testing laboratories should be independent of other licensed marijuana operations. For example, a business should not be allowed to hold a testing license if it is also licensed to perform other commercial marijuana operations. This structure helps avoid conflicts of interest and encourages transparency and accurate reporting of test results. All states with legalized, commercial markets require testing to be performed by independent laboratories.

In addition to being licensed by the state's marijuana regulatory body, testing labs would need to be accredited (sidebar) and/or certified to be in compliance with requirements established by the state's regulatory authority. Virginia would need to determine what contaminants marijuana products should be tested for, and the trace quantities of contaminants that are unacceptable. Most other states require products to be tested for biological contaminants, such as microbes, mold, and fungus, as well as chemical contaminants such as pesticides, herbicides, and heavy metals. States also typically require marijuana products to be tested for their THC content, to ensure consumers are provided with accurate information. The state would also need to define a process for collecting product samples. The key parts of that process would include the method for collecting product samples and the frequency of collection.

The state should direct the marijuana regulatory body to develop standards for product safety, quality, and sample testing. When developing these regulations, the regulatory body should consult with the Division of Consolidated Laboratory Services (DCLS) in the Department of General Services, the Virginia Department of Health, the Virginia Board of Pharmacy, the Department of Environmental Quality, and the Virginia Department of Agriculture and Consumer Services, and regulatory agencies in other states. The standards adopted could be Virginia-specific standards, national standards, or standards set by other states. For example, instead of setting its own Virginia-specific standards, the state could simply require labs to be accredited by a nationally accepted authoritative body. Additional details on potential testing requirements are provided in Appendix I.

If the state adopts its own product safety and quality standards, it would need to certify that licensed laboratories are meeting these standards. Responsibility for certification could be given to DCLS, which certifies private labs to perform drinking water and environmental testing. DCLS could also directly test samples of marijuana products already in circulation that the regulatory body suspects are contaminated or have had their THC or other content mislabeled. If DCLS was given these additional responsibilities, it would need additional staff, office space, equipment, and recognition by a nationally accepted authoritative body. DCLS staff indicated that certifications could be fee-based, so the certification program would be self-funded and not require general fund appropriations. However, there might be some upfront costs to establish the certification program.

Testing laboratories could receive accreditation to the International Organization for Standardization 17025 (ISO 17025) standard by a nationally accepted authoritative body such as the American Association of Laboratory Accreditation (A2LA) programs. ISO 17025 is a set of general requirements for the competence of testing and calibration laboratories.

RECOMMENDATION 19

If the General Assembly authorizes commercial marijuana sales, it may wish to consider (i) requiring commercial marijuana products to be tested for safety and quality by licensed laboratories, and (ii) prohibiting businesses that hold a testing license from holding licenses to perform any other commercial marijuana operations.

RECOMMENDATION 20

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop regulatory standards governing product safety and quality sampling and testing. The standards could be specific to Virginia or could be national or other state standards.

RECOMMENDATION 21

If the General Assembly authorizes commercial marijuana sales, and the state adopts its own regulatory standards for product safety and quality, the Division of Consolidated Laboratory Services should develop and administer (i) a marijuana testing certification program that certifies that private laboratories meet Virginia standards, and (ii) its own secondary marijuana product safety testing program for products sold to consumers that the regulatory body suspects are contaminated.

6 Local Authority, Medical Market, and Other Commercial Considerations

In addition to establishing the basic structure of the commercial market, the state would need to make decisions in three critical areas. First, the state would need to determine the level of authority localities should have over commercial marijuana operations. The state would need to consider whether localities should be allowed to prohibit commercial operations, and if commercial operations were permitted, the additional powers localities should be authorized to exercise over them.

Second, the state would need to determine how to incorporate the existing medical marijuana market into the general commercial market. It would need to determine how to maintain or expand key elements of the current medical market and how medical marijuana businesses could be allowed to participate in the new commercial market.

Third, the state would need to establish the basic rules that commercial operations must follow. The General Assembly should direct the marijuana regulatory agency to establish rules in these areas.

Virginia could give local governments authority to restrict some or all commercial marijuana activity

In Virginia, local governments have only the powers and authorities that are specifically granted to them by the state government (sidebar). Consequently, when establishing a new commercial marijuana market, the General Assembly could determine exactly what authority local governments should have over marijuana businesses operating within their jurisdictions.

Local governments in most other legalized states have substantial authority over the commercial marijuana operations within their borders. Local authority ranges from allowing prohibition of commercial operations to determining the zoning districts where they can be located. Some local governments have been granted their powers through the state's new marijuana laws, whereas other localities have historically broad powers and authority under their state constitutions.

Most states that have legalized marijuana have a large number of localities that have prohibited commercial activity

Virginia could allow localities to prohibit commercial marijuana activity within their borders. Virginia already has a precedent for this; it has allowed localities to prohibit liquor sales for several decades. Localities in states that have legalized marijuana also have the authority to prohibit commercial marijuana activity, to some extent. For ex-

Virginia is a “Dillon Rule” state where local governments only have the powers granted to them by the state (as well as those powers that are fairly implied from the express powers and those powers that are deemed essential to the operation of the locality). The “rule” is named after the judge whose 1868 rulings (and a later legal treatise) helped establish this interpretation of state and local authority.

Some states are “Home Rule” states where local governments can exercise powers without explicit state approval. Many western states that were the first to legalize marijuana for adult use are home rule states.

ample, Colorado law explicitly states that localities “may prohibit the operation of retail marijuana businesses through the enactment of an ordinance or through a referred or initiated measure.”

A 2019 opinion poll on legalization in Virginia found that 61 percent of residents support legalization while only 34 percent were opposed. The poll asked about legalization in general. It did not specifically ask respondents if they favored establishing a commercial marijuana market. The poll was conducted by the University of Mary Washington.

Allowing local prohibitions on commercial marijuana respects the views of different communities across the state. While Virginians appear to be generally supportive of legalization (sidebar), a majority of residents in some localities are likely opposed. For example, when Oregon legalized marijuana, 56 percent of voters statewide voted in favor. However, most voters in the state’s rural eastern counties voted against legalization. Nineteen of those counties later enacted prohibitions.

It is difficult to accurately predict which localities in Virginia would prohibit commercial marijuana operations, if they were granted that authority. JLARC surveyed local officials, and many were unable to say with confidence whether their locality would prohibit marijuana operations. One-third of survey respondents said this decision would be “too close” to predict.

Despite the difficulty in predicting local decisions, the opinions of local officials help illustrate what might happen (Figure 6-1). Generally, local officials in the state’s populous Northern Virginia region indicated their localities would probably allow commercial marijuana. In contrast, rural localities in the Southwestern and Southern Virginia regions generally responded they would probably prohibit it. These general trends do not apply throughout a given region, though. Within regions, there were localities reporting they would prohibit commercial marijuana adjacent to localities reporting they would allow it. There were even a few cases where a county said they would likely prohibit commercial marijuana, but a large town within the county said they would allow it (if given the choice).

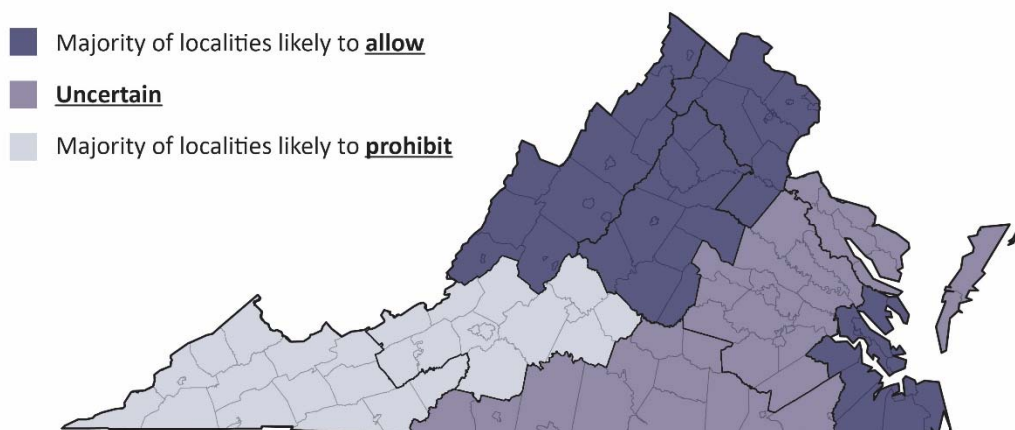
Based on survey responses, Virginia can probably assume local prohibitions would follow a pattern similar to Colorado, Washington, and Oregon if localities were given the authority to prohibit commercial operations. In these states, many less populous localities banned commercial marijuana while most of the more populous urban and suburban areas allowed it. Because larger localities elected to participate, these states have been able to establish viable commercial markets while also respecting local preferences.

Even though it appears many localities would allow commercial marijuana, if enough localities enacted prohibitions, it could reduce the ability of the new legal market to capture customers from the illegal market. This would in turn reduce the amount of state tax revenue from commercial legalization.

Localities that enacted prohibitions would likely continue to have illegal markets operating in their jurisdictions, and these could grow even larger following legalization. Legally purchased marijuana can easily be brought into localities that prohibit marijuana. This marijuana can then be *illegally* resold to local residents, perpetuating the illegal market.

FIGURE 6-1

Localities in Southwest and Southern Virginia may be more likely to prohibit commercial marijuana



SOURCE: JLARC survey of local officials in cities, counties, and large towns (towns with populations over 3,000).

NOTE: Local officials were asked if their localities would be more likely to allow or prohibit commercial marijuana operations. Moderate access means the allow responses were double or more of the prohibit responses. Low-to-moderate access means the allow and prohibit responses were about the same. Low access means allow responses were half or less of the prohibit responses. Locality-by-locality responses are not shown to protect the confidentiality of respondents. JLARC extended confidentiality to promote honest responses. Additional details on the survey and its methodology are provided in Appendix B.

The General Assembly should address the ability of localities to prohibit marijuana operations within their jurisdiction. This could apply to cities, counties, and towns. The state could allow a locality to prohibit marijuana operations (because of moral objections or other reasons). Allowing localities to prohibit marijuana operations would respect the views of communities that are opposed to commercial marijuana. Communities should not be allowed to choose which aspects of the commercial industry they like and which ones they do not. A locality that prohibits commercial marijuana should therefore be required to prohibit all types of commercial marijuana operations, including cultivation, processing, testing, distribution, and retail. Localities that chose to enact prohibitions would also forgo any direct tax revenues from commercial marijuana sales and businesses.

Prohibitions would need to be enacted before the state begins the license application process. The quickest way to enact prohibitions is through ordinances passed by local governing bodies. Some states, such as Massachusetts, allowed localities to enact temporary prohibitions to give localities more time to determine whether to allow commercial marijuana. Making prohibitions temporary would compel localities to revisit their decisions once the commercial market has started to mature.

If the state does not want to allow localities to prohibit marijuana, it would need to explicitly state this in law. Otherwise, localities could implement de facto prohibitions by using their existing powers over zoning or by using new powers proposed in this report, such as the power to set license caps.

RECOMMENDATION 22

If the General Assembly authorizes commercial marijuana sales, it may wish to consider expressly defining local authority in a commercial marijuana market by either (i) authorizing cities, counties, and towns to pass ordinances prohibiting all commercial marijuana operations within their jurisdictions, and thereby forgo any associated tax revenues or (ii) preventing any city, county, or town from using any existing or newly created local authority to prohibit commercial marijuana operations.

Virginia should give localities some authority over commercial marijuana operations, especially retail

Localities should be given some authority over the commercial marijuana operations located in their jurisdictions, subject to state limitations. Almost 90 percent of the localities responding to JLARC's survey indicated that it would be important for them to have authority over marijuana operations within their boundaries.

The main authority localities should have over marijuana operations is zoning. Localities should be allowed to use their existing zoning authority to limit the locations of different types of marijuana operations, set hours of operation, and place restrictions on signage, among other requirements. For example, localities could use their zoning authority to ensure marijuana operations are setback a certain distance from schools and other areas frequented by minors (e.g., public playgrounds, daycare centers). Allowing localities to use their zoning authority to set requirements for marijuana operations allows them to adjust for local needs. For example, one locality might want longer setbacks to reduce visibility of retail stores, whereas another might want shorter setbacks so there are more viable store locations available. Localities in most other legalized states have similar zoning authority over marijuana operations. Most Virginia localities responding to JLARC's survey indicated they would also like these powers.

In addition to zoning, localities should be allowed to apply their existing inspection powers to ensure marijuana facilities meet the basic safety standards set in state fire and building codes. Localities should also be allowed to require marijuana operations to obtain the same generic business licenses that are required of other commercial enterprises (sidebar).

Some Virginia localities require generic business licenses for most commercial businesses.

These licenses are mainly for tax purposes and do not require businesses to meet any special qualification standards.

Finally, localities should be allowed to set caps on the number of marijuana retailers in their borders and limit the density of retail stores. This power would allow localities to prevent over-proliferation and over-concentration of stores. Localities' authority to set caps on retailers and limit density would need to be consistent with the state's overall approach to commercial licensing (discussed in Chapter 5).

RECOMMENDATION 23

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales affirmation that local governments maintain their full powers to (i) require that commercial marijuana operations meet local zoning requirements, including local requirements for setbacks, signage, and hours of operations, (ii) inspect operation premises for building and fire code compliance, (iii) issue occupancy permits, and (iv) require operations to obtain general business licenses.

RECOMMENDATION 24

The General Assembly may wish to consider including in any legislation authorizing commercial marijuana sales the authority for local governments to pass ordinances that restrict the number of licensed marijuana retailers that can operate in each of its zoning districts, in addition to ordinances that set caps on the overall number of marijuana retailers allowed in the locality.

The state could grant localities additional authority by allowing localities to require that one or all types of commercial marijuana operations be approved through a local special use permit process. This would ensure all proposed operations receive close local scrutiny and allow public input into requirements for setbacks, hours of operation, and signage, among other restrictions. With additional authority from the special use permitting process, localities may be less likely to prohibit commercial operations (assuming local prohibitions are allowed). Some localities indicated they would prefer to have this option. However, the special use permitting process would likely prove burdensome for many businesses, and depending on how strict local requirements are, some businesses may have difficulty meeting additional local requirements. It could also extend the time it takes for a licensed marijuana business to begin operations by several months, which could then extend the time needed before the state could fully open its commercial market. Other states have experienced delays in the opening of commercial operations in many of their cities and counties because of similar local approval processes.

POLICY OPTION 11

If the General Assembly authorizes commercial marijuana sales, it could allow localities to require that all marijuana operations within their locality be approved through a special use permit process.

The state should not give localities the authority to establish their own licensing or regulatory structures. Some states have dual state-local regulatory systems for commercial marijuana, but Virginia generally does not allow dual regulation and it does not appear to offer any advantages.

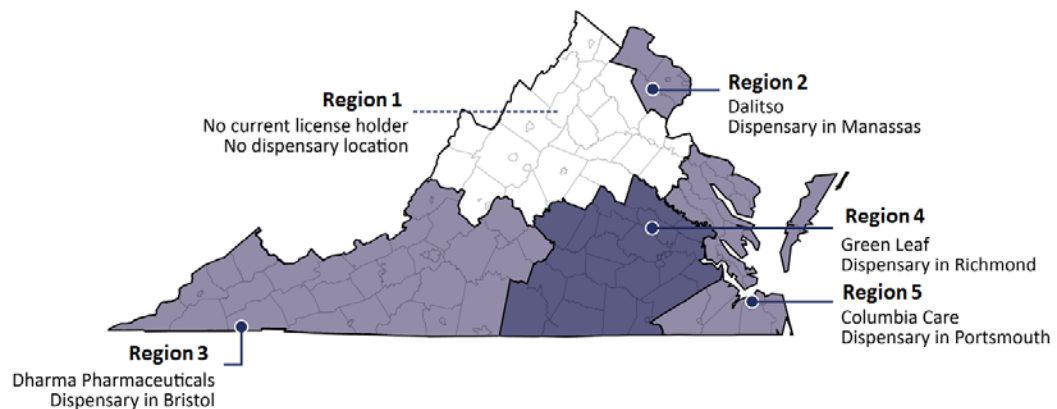
Medical and adult-use markets can be merged, and license holders could participate in both markets

Virginia is currently establishing a small and well-regulated medical marijuana market. Laws allowing a medical market were first enacted in 2017 and sales began in 2020. The medical market is regulated by the Virginia Board of Pharmacy within the Department of Health Professions (DHP).

Virginia’s medical marijuana laws allow five different “pharmaceutical processors” to be licensed to cultivate, process, and sell medical marijuana products. Each processor is allowed to operate in one region of the state and can have up to six retail dispensaries in that region. Processors can sell only refined products like vape oils, capsules, and edibles. They cannot sell unprocessed marijuana flower. To date, four processor licenses have been issued (Figure 6-2). Three of the four license holders have begun cultivation and are expected to start sales by the end of 2020. Conditional approval for the fifth license was rescinded earlier this year and was being rebid as of October 2020.

FIGURE 6-2

Licensed medical marijuana processors currently provide limited access in four regions of the state



SOURCE: Virginia Board of Pharmacy.

NOTE: Regions shown are the Health Service Areas defined by the Virginia Board of Health. Current Virginia law authorizes up to six dispensaries in each region, but so far no licensee has established more than one dispensary location. The Code of Virginia and DHP regulations refer to medical licenses as “permits,” but they are functionally the same as licenses.

Medical marijuana can only be purchased by certified and registered patients. Someone who believes they have a need for medical marijuana must receive a formal certification, similar to a prescription, from a doctor, nurse practitioner, or physician assistant. The patient must then register with the Pharmacy Board and is issued a registration

card. The doctors or practitioners who issue patient certifications must also be registered with the board in addition to holding a current license to practice their profession.

Virginia should not initiate commercial market early by issuing licenses to medical marijuana operations before other businesses

If Virginia creates a commercial marijuana market, Virginia's medical marijuana operations should be allowed to participate in the market but should not be granted a head start. Allowing current medical license holders to initiate Virginia's commercial marijuana market early would have some appeal. They already have operations in place that could be quickly adapted to provide and sell adult-use marijuana. Several other states allowed their medical license holders to enter the market before any other businesses. This approach allowed these states to begin adult-use sales more quickly than they otherwise would have been able to (sidebar). The approach also allowed some of these states to collect fee and tax revenue early to help pay for the costs of establishing new regulatory functions, and in one instance, to fund social equity programs. However, Virginia is not as prepared as these states to start its commercial market early.

If Virginia tried to initiate its commercial market early by relying on its medical licensees, it would likely fall well short of meeting consumer demand and miss a critical, initial opportunity to capture business from the illegal market. JLARC staff estimate that Virginia's four current medical licensees could meet 5 percent of Virginia's projected market demand. This is an optimistic estimate that assumes these brand-new operations would be able to quickly increase production from their current levels. Because the legal supply from medical operations would be so low, the state would bring very few illegal market participants over to the new legal market in the first one or two years of operations.

Current medical license holders will have few retail locations, which would make it even harder for the legal market to capture illegal market consumers. Under current law, the four license holders could have up to 24 retail locations among them. Even if all 24 locations opened, consumers in many parts of the state would have to drive long distances to purchase legal marijuana. Additionally, because one of the five medical licenses is being rebid, there would be no retail locations in an entire region for at least the first year of the commercial market. The state could amend its laws to let medical licensees have more retail locations, but this could ultimately take future commercial retail opportunities away from small businesses and restrict efforts to promote social equity in business ownership.

The four medical licensees would mean Virginia would (at best) have one-quarter of the cultivation capacity and one-third of the retail stores that Illinois had when it allowed its medical license holders to have an early start in the commercial marijuana market. Illinois has struggled with supply shortages throughout its first year, even though its 21 medical cultivators had been operating for several years. Shortages would

California, Colorado, Illinois, Nevada, and Michigan allowed medical operations early entry into the commercial marijuana market. Illinois and Nevada were able to start commercial marijuana sales within eight months of legalization being passed, whereas California, Colorado, and Michigan took 13–14 months.

States that did not allow early entry by medical operations took 11 to 24 months from the time legalization was passed to when sales began.

likely be several times worse in Virginia, where the few existing medical operations are just getting started.

Relying only on the medical licensees to participate in the initial commercial market could also result in shortages of *medical* marijuana products for registered patients. Shortages of medical products have occurred in other states, despite laws and regulations intended to protect against this. Because Virginia's supply shortages would be greater than other states have experienced, medical products shortages could be even more severe.

Rather than moving quickly to open the commercial market, Virginia should move prudently to ensure the new market is both strong and competitive. The state would also need time to establish its new license structure and social equity assistance programs, both of which are necessary if the state wants to effectively promote social equity goals. Additionally, the state would need time to establish youth prevention programs, and localities would need time to consider and enact potential restrictions on commercial operations.

State should grant medical marijuana licensees provisional licenses for cultivation and processing operations but not retail

If commercial sales are authorized, current medical marijuana license holders should be allowed to participate in the new market under provisional commercial licenses. Under this approach, medical operations would be granted temporary approval to cultivate, process, or sell marijuana for *commercial, adult use* as long as they remain in compliance with the requirements for their *medical* licenses. This provisional permission would keep medical operations from having to comply with separate medical and commercial requirements. However, any products that are produced for the commercial market should still have to meet the design, packaging, and labeling requirements set for that market.

The state could issue provisional licenses for *cultivation* and *processing* without crowding out small businesses or restricting efforts to promote social equity in business ownership, if it adopts the cultivation and processing license structures that are proposed in this report (see Chapter 5). These proposed license structures favor small businesses and would provide them opportunities to enter the market, even if current medical licensees were also allowed to participate.

Provisional licenses for cultivation and processing could be automatically awarded to medical operations at the same time regular license awards are made to other applicants. This approach would allow medical operations to contribute to the marijuana supply in the first few years of legalization. Medical operations would be able to contribute immediately because they would have already established their production lines by the time commercial marijuana sales start. (Note that medical operations alone would not be sufficient to supply the commercial market. Many additional cultivators and processors would be needed to meet market demand.)

The state could issue provisional licenses for *retail*, but this approach could crowd out small businesses and hinder efforts to promote social equity in business ownership. Unlike for cultivation and processing, any retail license that is awarded to a medical operation would reduce the opportunities available for small businesses because retail licenses would be capped somewhere between 200 and 600 licenses. Currently, state law allows up to 30 medical dispensaries. Assuming they could all be converted to commercial retail, medical operations could claim 5 to 15 percent of all retail licenses and 15 to 45 percent of those awarded in the first year. If the state issued additional medical licenses in the future, this would further reduce retail opportunities for any new businesses, including small businesses, which could hinder efforts to promote social equity in business ownership.

Medical operations would have competitive advantages over small, independent retail businesses because they are relatively large, vertically integrated companies. They could choose to supply their own retail stores before supplying others. Additionally, if the state prohibited vertical integration in the commercial market (sidebar), allowing vertically integrated medical operations to run retail stores would be in conflict with that market structure.

If the state allowed medical operations to have retail licenses, it should take several steps to promote fairness and mitigate negative impacts on small businesses and opportunities for social equity ownership. First, medical operations should be required to participate in the same award process as other applicants. For example, if other applicants could initially apply for only three retail licenses, the same limit should apply to medical operations. If licenses are selected via lottery, medical operations should be entered into the lottery pool alongside other applicants. Second, if the state prohibits vertical integration in the commercial market, it could allow an exception for current, vertically integrated medical operations to hold retail licenses. However, because these license holders would have a special exception that allows them to be vertically integrated, the state should limit the number of retail licenses that they could hold. A limit of three retail licenses per vertically integrated medical operation appears reasonable for reducing the risk that an operation could monopolize a region. (If the state allows vertical integration in the commercial market, there would be no need to grant a special exception or place a special retail license limit on vertically integrated medical operations that is any different from limits on other operations.)

Because medical operations would be allowed to participate in some or all sectors of the commercial market, the state should be cautious in how many additional medical licenses, beyond the current five, are awarded in the next few years. Issuing too many new medical licenses could undermine the proposed license structure for the commercial market. If there are only five medical operations and each was allowed to apply for up to three commercial retail licenses, small businesses should still have ample opportunity to obtain licenses. However, if there were 15 or 20 medical operations, each with several retail stores, medical operations could easily have half of all allowed commercial retail licenses before other businesses could even apply. This would leave

If vertical integration is prohibited, a retailer cannot hold a cultivation or processing license. This model is most favorable to small businesses and for achieving social equity in business ownership (see Chapter 5). This conflicts with the vertical integration model the state requires for its medical market. Virginia's medical license holders are *required* to perform all three functions (cultivation, processing, and dispensing).

substantially fewer licenses available to small businesses, and provide fewer opportunities for promoting social equity in business ownership.

RECOMMENDATION 25

If the General Assembly authorizes commercial marijuana sales, it may wish to consider authorizing the issuance of no more than five new medical marijuana licenses in the three to five years following commercial legalization.

POLICY OPTION 12

If the General Assembly authorizes commercial marijuana sales, it could automatically award provisional commercial *cultivation* and *processing* licenses to current medical marijuana license holders, contingent upon their operations remaining in compliance with medical marijuana regulations, at the same time awards are made to other cultivators and processors. These provisional licenses could be renewed annually until three to five years after commercial legalization, at which time medical cultivators and processors could be required to comply with commercial market regulations.

POLICY OPTION 13

If the General Assembly authorizes commercial marijuana sales, it could allow current medical marijuana license holders to apply for *retail* licenses with other applicants and limit vertically integrated operations to three licenses.

Medical and commercial marijuana markets should eventually be merged under the same regulations and regulatory body

Over the long term, states do not need to have separate medical and commercial marijuana markets or regulatory structures. While some legalized states have had separate markets, this was not by design. Separate markets were simply a by-product of medical marijuana being legalized before commercial, adult use marijuana. Regulators in these states universally recommended merging medical and commercial marijuana markets, and most have already taken steps to do so. For example, in 2018 Colorado merged its medical and commercial markets under the commercial regulatory agency. The state now has one set of laws and regulations governing all licensed marijuana operations.

Eventually merging the commercial and medical markets would benefit licensees and regulators. Licensees who want to participate in both markets could operate under a single set of rules enforced by a single regulatory body. The regulatory body would have full authority over all marijuana operations in the state, eliminating any duplicative oversight or potential gray areas with other regulators. The regulator could also track all commercial marijuana grown and sold in the state in a single system, reducing the risk of diversion to the illegal market.

The commercial and medical markets should be merged under a new marijuana regulatory body (discussed in Chapter 11), not DHP and the Pharmacy Board. The regulatory body that oversees medical and commercial markets would need to have a large

staff dedicated specifically to marijuana regulation. DHP and the board already perform many other duties, and full-scale regulation of all commercial marijuana does not clearly align with their missions.

Although regulation of the marijuana markets should eventually be merged, combining them too soon could disrupt development of the new medical market. The merger could result in changes to the rules that medical operations are required to follow. For example, they may be required to use a different marijuana tracking system or implement additional security requirements. This could be disruptive because most operations have only just come into compliance with the current medical regulations. Delaying the merger would also allow the new marijuana regulatory agency to focus on establishing the commercial market without additional responsibilities, such as registering medical patients.

The state should merge the medical and commercial markets three to five years after commercial marijuana is legalized. This delay would give medical operations and regulators adequate time to prepare for changes resulting from the merger. When the markets are merged, the laws and regulations for the medical market should generally be conformed to the commercial market. This would simplify the merger. However, any unique and necessary elements of the medical market should be protected.

After the markets were merged, there would be no need for separate medical and commercial licenses, except for retail. Marijuana cultivation, processing, distribution, and testing operations are essentially the same in both the medical and commercial markets. Consequently, marijuana licenses should allow each of these operations to participate in both markets. The state should continue to allow cultivators and processors to develop specialty products for the medical market, even if they cannot be sold on the commercial market. For example, the state may want to limit the THC content of commercial edibles to avoid accidental overconsumption but could allow high THC edibles to be sold on the medical market.

The state should maintain separate retail licenses for medical and commercial, adult use operations because of different requirements. Under Virginia's medical marijuana laws, a pharmacist must be on site at the medical dispensary to consult with patients. This would not be required at a commercial retail store. Medical retailers can also sell marijuana to patients aged 18–20 and must verify that patients are properly registered. They can also deliver to patients' homes. Given these and other differences in retail operations, the state should maintain separate retail licenses for medical and commercial adult use. However, the state should allow retailers to be dually licensed to serve both types of customers, as they are in Colorado.

RECOMMENDATION 26

If the General Assembly authorizes commercial marijuana sales, it may wish to consider merging the medical and commercial marijuana markets and regulations by (i) placing medical market authority under the regulatory body for the commercial market, (ii) generally conforming medical laws to commercial laws, while maintaining necessary medical laws, (iii) directing the regulatory body to generally conform medical regulations to commercial regulations, while maintaining necessary medical regulations, (iv) allowing licensed medical and commercial cultivators, processors, distributors, and testers to serve both the commercial and medical markets, and (v) requiring separate retail licenses for medical and commercial adult use, but allowing retailers to be dual-licensed to serve both markets from the same location.

RECOMMENDATION 27

If the General Assembly authorizes commercial marijuana sales, it may wish to consider waiting three to five years before merging the medical and commercial marijuana markets and regulatory structures.

Virginia would need to define other aspects of commercial market in law or regulation

Virginia would need to establish other new laws to ensure that the commercial market is well regulated. In some cases, the law should prescribe an exact process that must be followed or a specific requirement that a licensed marijuana operation must meet. However, in most cases, the law should simply direct the regulatory body to establish processes or requirements in a given area. The key areas where the state would need to pass additional laws for the commercial market are:

- license application, award, and renewal process,
- license qualifications,
- license holder restrictions,
- facility and operations compliance,
- compliance enforcement, sanctions, and disciplinary process,
- testing and sampling for product safety and quality,
- affirmation of marijuana business legitimacy, and
- registration of marijuana business employees.

Many laws the state would need to pass in these areas do not involve a policy choice and simply facilitate an efficient market and effective regulation. A few requirements would require some minor policy decisions. A detailed discussion of each of these areas, including recommended laws for the General Assembly to consider and regulations for the regulator to implement, is provided in Appendix I.

RECOMMENDATION 28

If the General Assembly authorizes commercial marijuana sales, it may wish to consider directing the marijuana regulatory body to develop regulations governing (i) the license application process, (ii) license qualifications, (iii) facility and operations compliance, (iv) compliance enforcement, (v) disciplinary process and sanctions, (vi) testing and sampling for product safety and quality, (vii) the legitimacy of marijuana businesses and legality of entering into contracts or providing goods and services to these businesses, and (viii) registration of marijuana business employees.

7 Promoting Social Equity in Marijuana Business Ownership

As directed by SJ67 and HJ130, the next two chapters propose strategies Virginia could use to redress historical negative impacts of marijuana’s prohibition if it creates a legal commercial market. This chapter addresses the resolutions’ direction to identify ways of “ensuring equity in ownership in the marijuana industry.” Chapter 8 outlines additional programs the state could implement to promote social equity through a commercial marijuana market (e.g., a community reinvestment grant program funded by a portion of marijuana tax revenue).

Social equity has recently become an area of keen interest in marijuana policy among states that have already legalized marijuana use as well as those that are contemplating legalization. In the context of commercial marijuana legalization, social equity typically refers to providing historically marginalized populations and communities with access to the economic benefits that come with legalization. Proponents of social equity argue that certain groups, such as Black individuals and residents of certain neighborhoods, have been disproportionately affected by the enforcement of marijuana laws, which has contributed to societal and economic hardships. Providing economic opportunities to these groups is seen as a way to help rectify these harmful effects.

Six other states have started social equity programs as part of their commercial marijuana markets. Their initiatives vary greatly in scope and ambition, depending in part on when the state started its commercial market. States that legalized most recently—Massachusetts, Michigan, and Illinois—made social equity a priority from the beginning and have developed multiple initiatives to try to achieve social equity goals. These initiatives range from reducing license fees for certain applicants to providing technical assistance and loans to startup businesses in the marijuana industry. States that legalized marijuana earlier—Colorado and Washington—did not initially consider social equity goals. These states are now trying to implement new social equity programs in their established markets. Another state, California, does not have a statewide social equity program, rather, the state provides grants to localities to run their own social equity initiatives.

The social equity programs discussed in this chapter and Chapter 8 have varying benefits and costs (Table 7-1). The General Assembly could choose to implement one of the programs, several, or even all of them. Alternatively, the General Assembly could choose to implement none of these programs; consequently, JLARC has categorized all social equity programs as policy options for consideration rather than recommendations. The General Assembly has already taken one step to help redress the negative impacts of disproportionate enforcement of marijuana laws by decriminalizing possession. Expungement of prior marijuana offenses from criminal records (see Chapter

This chapter uses the following terms:

Black Virginians have historically been arrested and convicted for marijuana offenses at higher rates than other races or ethnicities and are therefore emphasized in this chapter as targeted beneficiaries for social equity programs.

Disproportionately Impacted Areas (DIAs) are communities that have historically high rates of arrests and convictions for marijuana-related offenses, and which may have experienced more societal and economic hardships as a result.

Social equity businesses or individuals are eligible for program benefits outlined in this chapter, and who qualify at least in part because they have presumably been negatively affected by prior marijuana law enforcement.

4) would also be a substantial redress to the disproportionate enforcement of marijuana laws.

TABLE 7-1

State could attempt to achieve social equity through several options with varying benefits and costs

Program option	Number of beneficiaries	Magnitude of benefit	Costs
Marijuana business ownership: licensing structure and process & business assistance	○	●	\$\$
Marijuana industry employment	●	●	\$
Ancillary businesses	○	●	\$
Increase funding to existing community assistance programs using marijuana tax revenue	●	●	\$\$\$
Community reinvestment grants using marijuana tax revenue	●	●	\$\$\$
Benefit: ○ = Low, ● = Moderate, ● = High			
Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High			

SOURCE: JLARC summary analysis.

Social equity in business ownership could be promoted through license standards, assistance programs, and preferences

Other states have focused on social equity in business ownership in part because most marijuana business owners in the U.S. are white. A 2017 survey found that 81 percent of marijuana business owners and founders were white, 6 percent were Hispanic, and 4 percent were Black. This ownership trend would likely be seen in Virginia's commercial marijuana market without laws or programs designed to promote racial diversity in the industry. Because the marijuana industry is currently not diverse, businesses owned by Black individuals would need to be new businesses.

Virginia could seek to facilitate marijuana businesses ownership in proportion to the race and ethnicity of its population, or facilitate additional opportunities for ownership for those negatively affected by marijuana's prohibition. Promoting social equity business ownership in the marijuana industry could entail several approaches. Virginia could ensure the license qualification standards and award structure give new businesses the opportunity to compete with established, larger marijuana businesses. The state could also provide assistance to social equity businesses, both during and after the licensing process, to help them compete. For example, the state could provide technical assistance with completing license applications or loans to help with startup costs after licenses have been awarded.

The state could also consider providing preferential treatment to social equity applicants during the licensing process. These preferences could include setting aside a certain number or proportion of licenses for qualifying applicants. The few states and localities that have tried using preferences to promote social equity in ownership have so far been unsuccessful.

License structure and awards process could be designed to maximize opportunities for social equity businesses

The state could structure its commercial marijuana market, which is detailed in Chapter 5 of this report, to maximize the opportunities provided for social equity and small businesses in the industry (sidebar). One of the key aspects of this structure would be requiring retail license holders to be independent of cultivators and processors. Another key aspect would be using an impartial license award system, like a lottery, rather than attempting to use a merit system that awards points for meeting specific criteria. Licenses could be awarded gradually to give small businesses time to research, prepare, and decide whether to apply for licensure. A final aspect would be to not place caps on most license types. The limited research into this subject suggests that leaving licenses uncapped can successfully promote social equity, as long as there are also assistance programs to help social equity candidates.

Beyond the licensing structure discussed in Chapter 5, Virginia has several options to help achieve social equity goals. These actions include setting less stringent initial qualification requirements for applicants seeking a license, limiting the weight given to applicants' criminal history, and requiring license applicants to present a social equity plan.

Virginia could encourage a larger and more diverse applicant pool by imposing less stringent initial qualification standards for applicants

The state could set relatively less stringent application qualification standards than those used in other states to encourage more small businesses to apply for cultivator, processor, and retail licenses. This approach would give small businesses a better chance of meeting qualifications and becoming licensed, including social equity businesses. Once these businesses were licensed, they would have the assurances they need to find investors, lease property, develop plans, and buy the equipment needed to start their operations.

Several of the application qualification standards commonly used by other states favor larger and more experienced businesses (Table 7-2). One qualification standard that favors larger businesses is the requirement to secure real estate for a proposed operation before an application is submitted. Other states reported that this is a major hurdle to achieving social equity ownership because it creates a significant barrier for small businesses. Applicants must secure a property and make lease payments while their

Providing opportunities for small businesses to enter the commercial marijuana market would also maximize opportunities for social equity businesses, including many Black-owned businesses. Data from the U.S. Small Business Administration indicates that the majority of Black-owned businesses are also small businesses.

application is pending approval, which has taken months in some states. Other requirements also favor larger, established businesses, such as requiring applicants to have a minimum amount of financial assets, past marijuana industry experience, or detailed operations plans.

If Virginia wants to promote social equity ownership within the commercial marijuana industry, it should limit the use of business license standards that could discourage small business participation.

TABLE 7-2**Certain qualification standards can hinder small businesses**

Qualification standard	Example
Applicants must secure real estate prior to license award	A retail applicant must have purchased or leased a property that meets state and local requirements for where a store can be located, such as being in an area zoned for marijuana retail and at least 1,000 feet from a school.
Applicant's current financial assets must meet certain thresholds	A processor applicant must demonstrate \$150,000 in capital assets, of which at least 25 percent must be liquid assets. Other assets may include real estate, equipment, or supplies for the business.
Applicants must have past experience	A cultivator applicant must demonstrate that the applicant, officers, or board members have prior business management, agricultural or horticultural, or other industry-specific experience.
Applicants must provide detailed operations and security plans for their proposed operation	A distributor applicant must provide a detailed plan that demonstrates ability to track and monitor inventory and prevent theft or diversion, including a description of the facility that will be used to store products and related policies or procedures to keep products secure.

SOURCE: JLARC analysis of application requirements for marijuana businesses in other states.

If the state used less stringent license application standards, Virginia could still ensure marijuana businesses meet state compliance standards before they begin operations. Before a license holder could begin growing or handling marijuana, it would need to have its facility inspected and its operating plans approved by the regulator. This second part of the licensing process would ensure all licensees regardless of size or experience meet required standards for facilities and operations.

Some licensed businesses likely would not initially have the skills and experience needed to comply with the state's facility and operating standards. The state could offer assistance programs to social equity businesses to help them comply with the standards and pass inspections (discussed later in this chapter).

POLICY OPTION 14

If the General Assembly authorizes commercial marijuana sales, it could address social equity by requiring the marijuana regulatory body to impose less stringent initial licensing standards than those that have been commonly used in other states related to (i) ownership or leasing of property prior to a license award, (ii) financial assets, (iii) experience in the marijuana industry, and (iv) security or operations plans.

Virginia could limit how criminal history is used during license process

All states require criminal background checks of business owners who are applying for marijuana licenses. A few states—like Colorado and Nevada—automatically disqualify applicants if they have certain past convictions. However, most do not. Instead, the state’s regulatory body takes an applicant’s criminal history into consideration when making its licensing decision. Most states allow the regulatory body to consider all of an applicant’s past arrests and convictions. However, a few states—like Massachusetts, Michigan, and Oregon—do not allow consideration of past marijuana offenses.

Virginia should require criminal background checks but could consider not automatically disqualifying applicants based on their record and not allowing misdemeanor marijuana offenses to be considered in license decisions. Because Black individuals in Virginia have historically been more likely to be arrested and convicted for marijuana offenses than individuals of other races or ethnicities (sidebar), the use of criminal records to automatically disqualify applicants for licensure could disproportionately preclude Black individuals from receiving a marijuana business license. Placing limits on how criminal records can be used would allow people who have been adversely affected by enforcement of marijuana laws, regardless of race, an opportunity to participate in the new commercial marijuana market.

Over the last 10 years, Black individuals in Virginia were 3.5 times more likely to be arrested for marijuana possession than white individuals, despite similar rates of use (see Chapter 2 for details).

POLICY OPTION 15

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to consider criminal history in reviewing license applications but exclude from consideration any prior misdemeanor marijuana offenses and not automatically deny an application based on other prior criminal offenses.

Virginia could require applicants to submit social equity plans

Other states have also tried to promote social equity in the licensing process by requiring businesses to submit social equity plans along with their license application. Social equity plans are business plans in which licensees agree to certain actions that promote social equity, such as donating a portion of total sales to a workforce development program that operates within a Disproportionately Impacted Area (DIA). The social equity plan is submitted along with the license application, and the business must provide evidence of progress on the plan when the license is renewed.

Several other states have provisions related to social equity plans—including Illinois and Massachusetts—but plan requirements vary. For example, Illinois required its initial license applicants to choose from one of several social equity plan options as a condition to have early access to the market. In contrast, Massachusetts requires *all* applicants to design and submit social equity plans.

Virginia could make social equity plans optional and incentivize businesses to participate, or it could make plans mandatory for certain marijuana business licensees. For example, Virginia could require any non-social equity business applicants located within a DIA to develop and implement a social equity plan.

POLICY OPTION 16

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to include a mandatory or optional requirement that applicants for a marijuana license submit a social equity plan along with their application.

Comprehensive assistance program could help social equity businesses enter and compete in the market

If Virginia creates a commercial marijuana market, small business ventures would be competing against experienced and well-financed competitors. Marijuana businesses with operations in other states would look to expand into Virginia. Some of these companies are extremely well-funded and many have experience gained through their operations in other states. Virginia could help qualifying small businesses compete against these larger competitors by offering a comprehensive social equity assistance program.

A comprehensive social equity assistance program maximizes social equity ownership by (1) promoting diversity of the license applicant pool and (2) improving the ability of qualifying small businesses to compete in the market after receiving a license. These objectives can be accomplished through six key program elements (Table 7-3). An assistance program is most likely to succeed if all six elements are implemented. A social equity assistance program would benefit a relatively small number of people because a limited number of marijuana business licenses would be available. However, compared to other social equity initiatives, the relative size of the economic benefit would be large because the beneficiaries would be business owners.

TABLE 7-3**Comprehensive assistance program needs several elements to promote social equity ownership in the marijuana industry**

Objective	Program element
Promote diversity of license applicant pool	1. Community outreach 2. Application education & assistance 3. Fee discounts and/or waivers
Improve ability of social equity businesses to compete in the market	4. Business start-up assistance 5. Financial assistance 6. Mentorship

SOURCE: JLARC analysis of other states' social equity programs and opinions of program administrators and social equity advocates.

A comprehensive and well-designed social equity program should help increase social equity ownership, but there are no guarantees of success. In the near term, small businesses would face stiff competition from experienced and well-financed competitors and some may not be able to succeed, even with state assistance. Over the long term, successful small businesses could be bought out by larger and less diverse businesses as the industry matures and consolidates.

Social equity assistance program needs to have clearly defined and effective eligibility criteria

Virginia would first need to define eligibility criteria for a social equity assistance program. The criteria would determine who is eligible for fee discounts, business assistance, loans, and mentorship programs. Other states and local governments have used or considered several different criteria for their social equity initiatives, including the applicant's: race, marijuana criminal history (sidebar), and residency in a designated DIA. Additionally, a combination of residency and marijuana criminal history could be used. Some of these eligibility criteria would likely be more effective than others (Table 7-4).

Using race as an eligibility criterion for social equity programs appears to be prohibited under law, and thus Virginia likely would be required to use other eligibility criteria. (The limitations of using race as a criterion are discussed more fully in the last section of this chapter on preferences.)

If Virginia decides to expunge prior criminal records for marijuana offenses, expunged records could still be made available to the marijuana regulatory body to determine social equity eligibility. For more details on expungement, see Chapter 4.

TABLE 7-4**Residency may be a more effective criterion for program eligibility than criminal history as an alternative to race**

Potential criterion	Effectiveness in achieving social equity policy goals
Race	May most closely target intended beneficiaries for assistance; however, likely not legal and is subject to challenges that could delay program implementation.
Marijuana criminal record	Somewhat effective but does not precisely target intended beneficiaries for assistance (e.g., wealthy college student arrested for possession receives the same benefits as a high school graduate from a low-income neighborhood).
Area of residency	Somewhat targets people harmed or in need of assistance, but imperfect (e.g., someone who moved into a gentrifying neighborhood could be eligible for same benefits as someone who has lived there for his or her entire life).
Area of residency + marijuana criminal record	More precisely targets those harmed by marijuana law enforcement or in need of assistance, but imperfect. May exclude individuals who were indirectly affected by prior marijuana law enforcement (e.g., eviction because of marijuana-related conviction of an immediate family member).

SOURCE: JLARC assessment of other states' social equity program eligibility criteria.

The residency criterion can help target the social equity program and its intended beneficiaries. A residency requirement can help ensure only residents of areas that were disproportionately affected by enforcement of marijuana laws (DIAs) are eligible for program benefits. However, this criterion would inevitably make some individuals living in the community eligible for the social equity program who had not been adversely affected by prior marijuana law enforcement.

Alternatively, combining the residency requirement with a requirement that the applicant have a criminal record with a prior marijuana offense would more closely target the program to people who have been negatively affected. The state also could incorporate additional criteria to further narrow eligibility. If the state used a residency requirement, it would need to determine the geographic areas to designate as DIAs based on history of marijuana arrests, convictions, and poverty. An approach that the state could follow to make these determinations is described in Appendix K.

Diversity of license applicant pool could be promoted through community outreach, application assistance, and fee waivers

An effective comprehensive social equity assistance program would need to have adequate community outreach. Community outreach could include efforts such as local television or newspaper interviews, discussions with community organizations, advertisements on social media, or targeted information sessions. Outreach could be used to spread awareness in DIAs of marijuana business ownership opportunities. Outreach efforts could provide community residents with information about the different types of marijuana businesses and the assistance programs offered by the state to help social

equity individuals open and run such businesses. Proactive outreach is important to engage individuals from DIAs, according to officials from other states. Some states have successfully used similar outreach efforts to educate and recruit potential applicants from these communities. Other states did not invest in community outreach and have been less able to effectively encourage participation (sidebar). Outreach efforts can also help keep social equity individuals from being defrauded by scams and counter misinformation about the licensing process (sidebar).

An effective social equity program would need to provide license education and application assistance. This assistance could include brochures and other informational materials made available on the marijuana regulatory body's website, as well as community workshops. Community workshops can provide information on the types of marijuana operations and how to establish and operate them. Workshops can also help potential applicants understand the application requirements for specific licenses, complete their applications, and qualify for fee reductions. The state could make many of these same materials available online for people who are interested in applying but cannot attend a community workshop. Additional resources, such as application checklists, could also be provided to help applicants through the process.

Some applicants may be unable to afford application and license fees. Application fees in other states range from \$250 to \$6,000 for the types of marijuana business licenses small businesses typically apply for. License fees, which are due if and when a license is awarded, range from \$1,480 to \$40,000. Virginia's application and license fees would likely be in the same range. Several states reduce these fees for eligible applicants. For example, in Michigan, applicants that reside in a DIA can receive a 25 percent reduction in application and license fees. Applicants are eligible for an additional 25 percent reduction if they have a marijuana-related misdemeanor conviction.

Start-up assistance, financial assistance, and mentorship programs would help eligible social equity businesses compete in the market

After licenses are awarded, the state could provide eligible social equity businesses with start-up assistance. Some licensees may be first time business owners and may need business assistance in areas like hiring and accounting. Others may be experienced business owners who have never owned a marijuana operation. These licensees might need assistance meeting the specific marijuana regulatory requirements for their operations. This start-up assistance is similar to what business incubators usually provide (sidebar).

State could provide start-up assistance for social equity businesses

The best way for the state to provide start-up assistance to social equity businesses is by contracting with one or more organizations with experience in business incubation and the marijuana industry. There are several nonprofit and private companies with experience in business assistance, and there is also a growing sector of marijuana start-up consultants. Contracting with one or more of these companies would be faster and

“ We didn’t have a lot of resources for outreach or communication. It was a game of telephone about what the policies were and how people could access them. Led to a lot of confusion... If we had more resources to go out into communities, that would have done a lot of goodwill. ”

– Massachusetts social equity program

Program administrators in Illinois were made aware of licensing scams in which bad actors, who were not affiliated with the state licensing agency, tried to guarantee licensure to social equity applicants in exchange for large sums of money.

A business incubator is a company or nonprofit that helps to speed development of new and startup companies by providing services such as office space or management training.

potentially more effective than trying to establish a business incubation function within the state regulatory body. Illinois has contracted out similar business assistance services, such as management training, to public and private organizations. (Virginia's Department of Small Business and Supplier Diversity also offers business assistance programs, but these primarily focus on state procurement.)

State could provide financial assistance for social equity businesses

Real estate costs tend to be higher for marijuana businesses than other businesses because of zoning requirements. Landlords and sellers are also known to mark up prices for properties that will become marijuana businesses because of security concerns and the potentially lucrative nature of the industry.

Social equity businesses may also need financial assistance. The costs of starting a new marijuana business are substantial. Business owners must buy equipment, install security systems, and obtain real estate (sidebar). Marijuana businesses are typically unable to access traditional bank loans because they deal in a federally illegal substance. Consequently, most banks are unwilling to take the risk of lending them money, leaving many businesses without any way to raise capital.

The state could establish its own direct loan program to provide start-up capital to eligible social equity businesses. The state would first need to appropriate funds for the loan program. Based on the \$15–20 million fund established by Illinois for its larger commercial market, a loan program in Virginia could require an upfront appropriation of around \$12 million. This upfront appropriation would most likely need to come from the general fund but could eventually be repaid using revenues from a new marijuana sales tax. Funding would need to be available shortly after initial license awards are made, which would be about one year after legalization is enacted.

Illinois's planned loan program will award businesses different loan amounts, depending on their license type. For example, businesses with a transporter license can receive up to \$50,000, and those with a retailer license can receive up to \$250,000.

The state would need to set rules for social equity business loan applications, amounts, and terms. Marijuana businesses can be risky ventures, and many businesses will not succeed. Virginia could structure loan parameters to minimize its risk, such as setting caps on the loan amount that a single business could receive (sidebar). Terms can also be structured to be more accommodating to social equity businesses and minimize the likelihood of default. For example, in Illinois, interest rates on loans are deliberately set below the market rate for the marijuana industry. Loan holders are also not required to make any payments for the first year.

Experience in other states suggests an effective marijuana business loan program needs to blend the characteristics of a typical lending program with an understanding of marijuana businesses and social equity. Though Illinois's lending program is separate from its marijuana regulatory agency, during interviews staff expressed that it may be more effective if the lending program were part of the regulatory agency, because the loan and license applications could be approved concurrently.

State could provide a mentorship program to assist social equity businesses

Finally, the state could create a mentorship program to encourage larger and more experienced businesses to assist social equity businesses. Under a mentorship program, large businesses are encouraged to share space and administrative support services, like information technology, with smaller counterparts. Large businesses are also encouraged to help smaller businesses learn how to comply with regulations and market

their products. In return, large businesses receive fee reductions and a few other benefits. Colorado has recently implemented such a program.

A mentorship program might not be implemented in time to assist the first round of social equity business licensees because the commercial marijuana market would need to be operational before there are established businesses available to serve as mentors. This is in contrast to other social equity assistance programs, which can be made available sooner to assist the first round of social equity licensees.

POLICY OPTION 17

If the General Assembly authorizes commercial marijuana sales, it could address social equity by creating a social equity ownership assistance program consisting of (i) community outreach, (ii) application education and assistance, (iii) licensing fee discounts or waivers, (iv) business start-up assistance, (v) financial assistance through loans, and (vi) mentorship. The assistance program should have clearly defined eligibility criteria for participation.

Virginia could give preferential treatment in license awards, but there would be significant challenges

Governments will sometimes grant preferential treatment to individuals or businesses to achieve certain policy goals. There are only a few governments to date, though, that have tried to use preferences in awarding marijuana business licenses to achieve social equity goals. Designing and implementing licensing preferences to award more licenses to social equity businesses has proven challenging for the three states (as well as localities in a fourth state) that have attempted to do so. Program administrators in these states interviewed by JLARC staff have cited problems with developing effective criteria, legal challenges, and susceptibility to fraud. While these challenges may not be insurmountable, there currently is not a clear and effective way to provide license preferences.

Several approaches could be attempted to provide preferential treatment to social equity applicants during initial license award

There are several options that could be used to grant licensing preferences to social equity applicants. The state could offer license set-asides, in which a specific number or type of licenses are reserved for certain groups. The state could also award licenses through a lottery system and give applicants that meet social equity criteria increased odds of winning the lottery. Additionally, the state could use a merit-based scoring system to award licenses and give additional points to applicants who meet social equity criteria.

If the General Assembly wants to provide preferential treatment to social equity applicants, license set-asides would probably be the most direct way to do this. The goal of set-asides would be to ensure that a certain proportion of licenses are awarded to

social equity businesses. Increasing lottery odds or awarding bonus points in a merit-scoring process might result in some social equity businesses being awarded licenses, but these approaches are less direct than set-asides and therefore do not guarantee that social equity businesses would receive a certain proportion of licenses.

Licenses could be set aside for social equity businesses in one of two ways. One way would be to set aside a certain percentage of planned license awards. For example, Chapter 5 proposes setting a cap on retail licenses, and the state could choose to reserve a set percentage of these licenses for social equity businesses. A second way would be to use license ratios to set aside some portion of licenses, regardless of whether there are license caps. For example, the City of Oakland requires that one of every two licenses awarded (or half of licenses) must go to qualifying social equity businesses.

Legal prohibition on using race as a criterion likely precludes targeting license awards directly to Black individuals affected by marijuana's prohibition

Court cases that set standards for race- and gender-specific preferences include *City of Richmond v. J.A. Croson Co.* (1989), which established that race-consciousness programs need firm evidence of past discrimination *within that specific industry* to be permissible.

Specific to the marijuana industry, Ohio attempted to set aside 15 percent of certain medical marijuana license types for specific racial groups (*Pharmaceuticals v. Ohio Dep't of Commerce*, 2018), but the provision was struck down as unconstitutional by the Ohio Court of Common Pleas.

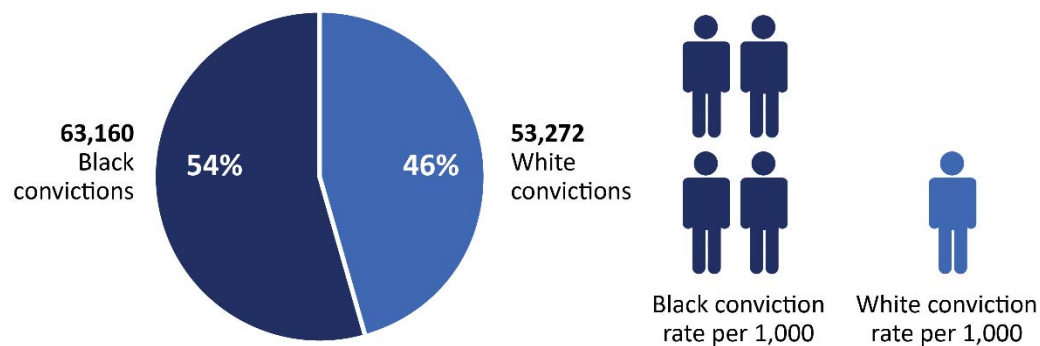
A fundamental impediment to redressing the disproportionate effects of marijuana's prohibition through licensing preferences is that race cannot be used as a criterion unless certain conditions are met. According to the U.S. Supreme Court, there must be evidence of prior discrimination or disadvantage based on race before race can be used to grant preferential treatment (sidebar). While there is clear evidence that Black individuals have been arrested for marijuana offenses at a disproportionately high rate compared with other races and ethnicities, a commercial marijuana market is a different enterprise. Separate from any previous disproportionality in law enforcement, a study would need to determine whether the marijuana industry discriminates against or disadvantages Black participants. A study could not be conducted until after Virginia's commercial marijuana market has been in operation. Evidence of discrimination or disproportionality in an existing market in another state would probably not provide adequate basis for the use of race preferences in Virginia.

Instead of providing preferences based directly on race, Illinois grants preferential status to applicants for cultivation and retail licenses if either the applicant or a family member (parent, spouse, or child) has previously been convicted of criminal marijuana possession. This approach links preferential treatment to people who have been directly or indirectly affected by marijuana's historical prohibition, but without regard to their race.

Giving preference to individuals with previous marijuana convictions would not necessarily result in a higher number of licensed businesses owned by Black individuals than without a preference. In Virginia, Black individuals have historically had higher rates of conviction for marijuana possession based on their proportion of the population. However, white individuals would still constitute a significant portion of those eligible for a preference based on prior marijuana convictions (Figure 7-1).

FIGURE 7-1

Using marijuana possession convictions as a criterion would include nearly as many white individuals as Black individuals



SOURCE: JLARC staff analysis using 2010-2019 marijuana possession conviction data from the Office of the Executive Secretary of the Virginia Supreme Court.

States have used geographic indicators for licensing preferences

As a workaround or proxy measure for race-based preferences, states have granted license preference to applicants from designated geographic areas. (Illinois does this along with its prior conviction criteria.) Geographic preferences are less directly linked to criminal marijuana convictions but do not face the same legal restrictions as preferences based on race.

The goal of using geographic criteria is to award at least some licenses to individuals who reside in communities disproportionately affected by prior marijuana law enforcement. Geographic areas with high rates of arrests and convictions for marijuana-related offenses, in addition to high unemployment rates or other measures of poverty, could be designated as Disproportionately Impacted Areas (DIAs) (sidebar). An applicant residing in one of these areas could be given a preference for a license. Locating businesses in DIAs can help to bring jobs and contribute to economic growth in those communities. However, an over-proliferation of retail stores within communities could be detrimental to public health and safety (sidebar).

DIAs are designated geographic areas that have historically high rates of arrests and convictions for marijuana-related offenses, and which may have experienced more societal and economic hardships as a result. A DIA is typically a part of a locality, such as a ZIP code region or census-tract.

For a detailed discussion of the negative public health impacts of marijuana legalization, see Chapter 9.

Licensing preferences have been vulnerable to misuse and have thus far been ineffective at improving social equity ownership

The few states and localities that have implemented licensing preferences for social equity applicants have found it challenging to prevent misuse of preferences. Programs in Illinois, Massachusetts, and local programs in California have experienced challenges with complex ownership structures that can result in unscrupulous businesses taking advantage of their programs. During interviews, program administrators and social equity advocates indicated they have seen instances where a social equity individual is reported to have majority ownership but has little control over the business or is bought out after the license is awarded. These jurisdictions have devoted additional

resources to investigate ownership structures or tried to place limits on how soon social equity licenses can be sold after being awarded, but indicated these efforts have been administratively challenging and are not especially effective. It is difficult to quantify the pervasiveness of the misuse of licensing preferences, but experiences of these jurisdictions suggest Virginia could face similar challenges if it implemented a preferential treatment program.

Because criteria for licensing preferences cannot specifically target people who have been disproportionately affected by the enforcement of marijuana laws, preference programs inevitably risk helping individuals who they were not intended to benefit. For example, if eligibility is based on DIA residency, someone who moved into a gentrifying neighborhood could be eligible for the same benefits as someone who has lived there for his or her entire life. If eligibility is based on a past marijuana conviction, there is no way to limit the benefit to Black individuals who were arrested and convicted at higher rates than others.

The few jurisdictions that have created marijuana retail license preferences have faced other challenges in promoting social equity ownership. License award processes can be subject to legal challenges or otherwise be delayed if the preferences do not effectively target intended groups. For example, license awards have been delayed in both Los Angeles and Illinois after allegations that the selection processes for their preferential treatment programs were unfair and favored large, predominately white-owned businesses. Significant delays may risk the ultimate chance of success of social equity programs. In Massachusetts, most social equity businesses have been thus far unable to open after being awarded provisional licenses. This is at least partially attributable to the state not providing social equity businesses with sufficient assistance to begin their operations (e.g., loans or technical assistance to help meet the state's regulatory requirements).

Additionally, the long-term impact of a license preference program could be temporary if Virginia's marijuana industry starts to consolidate. Experience of other legalized states suggests that commercial marijuana markets tend to consolidate as they mature, as businesses take advantage of economies of scale in production, distribution, compliance, and marketing. Consolidation would probably result in some social equity businesses being bought out by larger businesses.

Marijuana regulatory body could be directed to develop a program to provide preferential treatment to social equity businesses

If the General Assembly wants to implement licensing preferences for social equity businesses, Virginia would need to build on the experiences of other states and localities to design a preferential treatment program. Other jurisdictions have modified their license preference programs in response to early challenges, but it is too soon to determine whether these changes will result in more licenses being awarded to social equity businesses. There are several additional jurisdictions that are in the process of

implementing new preferential treatment programs—including Washington state, Detroit, and Sacramento—and it is also too early to evaluate the effectiveness of their approaches.

If the General Assembly authorizes commercial marijuana sales, it could direct the marijuana regulatory body to examine whether a preferential licensing program for retail marijuana licenses could be implemented successfully in Virginia, building from the experiences of other jurisdictions (e.g., lessons learned and practices that prove effective). This would allow additional time for recent changes in other states to be implemented and give better insight into their effectiveness. Because licensing preferences face significant challenges and have so far been ineffective in other states, the marijuana regulatory body might conclude it would be unwise to establish licensing preferences in Virginia.

The marijuana regulatory body would need to consider several factors in designing and implementing a license application process that included social equity licensing preferences. It would need to consult with other jurisdictions regarding (1) the criteria that should be used to most effectively target intended beneficiaries, including any criteria that should be avoided; (2) what aspects of their programs have been most susceptible to legal challenges and how Virginia could minimize its risk of such challenges; (3) how Virginia could minimize misuse of licensing preferences by ineligible businesses; and (4) what mechanisms could be used to promptly revise licensing preferences, as necessary, if the program faced challenges similar to those seen in other states.

POLICY OPTION 18

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory body to examine whether a preferential licensing program for retail marijuana licenses could be implemented successfully in Virginia, and, if so, design and implement the program.

8 Additional Options for Promoting Social Equity in a Commercial Market

SJ67 and HJ130 directing this study ask JLARC staff to identify how Virginia could “provide appropriate redress for the harm caused to communities most impacted by marijuana prohibition.” Chapter 7 of this report identifies ways of “ensuring equity in ownership in the marijuana industry.” This chapter identifies additional ways to “provide equity and economic opportunity for every community” and programs to “provide reinvestment in communities most impacted by marijuana prohibition.” This chapter uses several of the same terms that were defined in Chapter 7 (sidebar).

Five of the six other states that have started social equity programs have developed initiatives in addition to promoting marijuana business ownership. Massachusetts and Illinois offer various incentives to encourage marijuana businesses to hire employees from Disproportionately Impacted Areas (DIAs). Massachusetts has several additional training initiatives intended to help people from DIAs better compete for jobs in the marijuana industry. Massachusetts also provides training on how ancillary businesses, such as security companies or accounting firms, could be established or expanded to provide goods and services to the new marijuana industry. Illinois has established a community reinvestment fund to redirect a portion of marijuana sales tax revenues to communities with the highest rates of unemployment, poverty, incarceration, and gun violence.

The social equity programs discussed in Chapter 7 and this chapter have varying benefits and costs (Table 8-1). The General Assembly could implement one of the programs, several, or even all of them. Alternatively, the General Assembly could implement none of these programs; consequently, all social equity programs are categorized as policy options for consideration rather than recommendations. The General Assembly has already taken one step to help redress the negative impacts of disproportionate enforcement of marijuana laws by decriminalizing possession. Expungement of prior marijuana offenses from criminal records (see Chapter 4) would also be a substantial redress to the disproportionate enforcement of marijuana laws.

If a social equity program is established, initiatives would need to be effectively coordinated. This could be accomplished by centralizing programs under the marijuana regulatory body.

This chapter uses the following terms:

Black Virginians have historically been arrested and convicted for marijuana offenses at higher rates than other races or ethnicities and are therefore emphasized in this chapter as targeted beneficiaries for social equity programs.

Disproportionately Impacted Areas (DIAs) are communities that have historically high rates of arrests and convictions for marijuana-related offenses, and which may have experienced more societal and economic hardships as a result.

Social equity businesses or individuals are eligible for program benefits outlined in this chapter, and who qualify at least in part because they have presumably been negatively affected by prior marijuana law enforcement.

TABLE 8-1

State could attempt to achieve social equity through several options with varying benefits and costs

Program option	Number of beneficiaries	Magnitude of benefit	Costs
Marijuana business ownership: licensing structure and process & business assistance	○	●	\$\$
Marijuana industry employment	●	●	\$
Ancillary businesses	○	●	\$
Increase funding to existing community assistance programs using marijuana tax revenue	●	●	\$\$\$
Community reinvestment grants using marijuana tax revenue	●	●	\$\$\$
Benefit: ○ = Low, ● = Moderate, ● = High			
Cost: \$ = Low, \$\$ = Moderate, \$\$\$ = High			

SOURCE: JLARC summary analysis.

Virginia could maximize employment opportunities for social equity individuals in marijuana and other related businesses

The state could seek to address social equity by encouraging marijuana businesses to hire social equity individuals, as well as by promoting ancillary businesses that are owned by social equity individuals. Providing employment opportunities in the industry would benefit a much broader group of individuals than just owners. Employment in the marijuana industry could also provide individuals with the skills and experience needed to later establish a marijuana business. Promoting ancillary business ownership among social equity individuals could provide additional opportunities for those who may not want to own or work in a marijuana business. These are two of the lowest cost social equity programs the state could pursue, relative to other program options.

Employment opportunities in marijuana businesses could be promoted through incentive programs and community outreach

A new marijuana industry would be expected to create thousands of jobs by the time the market reached maturity. For social equity individuals who are unemployed or underemployed, these new jobs could create economic opportunities. However, these opportunities might be limited because many of these jobs would be lower-paying jobs. Workers at licensed marijuana businesses in Washington state earned a median wage of \$14.50 per hour (about \$30,000 per year), according to a recent study, which is lower than Virginia's median wage of \$20.30 per hour (about \$42,000 per year). For additional discussion on jobs and wages, see Chapter 10.

Virginia could promote employment opportunities by using community outreach efforts, implemented as part of a comprehensive social equity business assistance program (sidebar), to connect prospective employees and businesses. The goal of the outreach would be to provide DIA residents with information about opportunities in the new marijuana industry, including job opportunities. The state could also set up a registry for interested community members to provide their contact information, resumes, and areas of interest (cultivation, retail sales, etc.). This information could then be made available for license holders to fill their positions from a diverse applicant pool.

For additional information on a comprehensive social equity assistance program the state could implement, see Chapter 7.

Another way for Virginia to promote employment opportunities in the marijuana industry would be to require that licensees develop and submit social equity hiring plans as part of the licensing process. Several other states have made similar requirements for applicants. For example, Massachusetts requires every applicant applying for a marijuana business license to have a diversity plan to promote equity among minorities, women, veterans, people with disabilities, and people of all gender identities and sexual orientation. Virginia could make hiring plans optional and incentivize businesses to participate, or it could make plans mandatory for certain licensees. For example, Virginia could require that any marijuana business located within a DIA hire a certain proportion of its employees from that DIA or another DIA. The state would need to designate which communities this requirement would apply to. (See Appendix K).

POLICY OPTION 19

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory agency to (i) use community outreach efforts to connect marijuana businesses with prospective employees and (ii) request or require businesses applying for marijuana licenses to develop and submit social equity hiring plans.

An employee training program could also be implemented to promote employment opportunities, but the costs of these programs are high. Developing and implementing an employee training program would be outside the skill set of a regulatory agency, so the agency would need to contract with private training providers across the state. The training program would need to provide students with industry-specific skills in addition to basic job application skills, further increasing program costs. Private companies offer single-day, basic training seminars for marijuana industry employees, ranging from \$150–\$300 per person. Virginia could expect to incur similar, if not greater, costs if it decided to pursue its own in-depth training program.

Training programs are not certain to produce results. Some participants who enroll in training programs might not complete them, and there would be no guarantee of employment for those who do. Program participants could also take their expertise elsewhere, including the illegal market. Training would have to be limited to entry-level

positions because higher level positions generally require experience or a college degree. In addition, for jobs such as plant trimmers and “budtenders,” it is not clear whether training would make job candidates more competitive, as many skills can be learned on the job.

Virginia could promote opportunities in businesses that provide goods and services to marijuana industry

Most social equity programs focus on providing opportunities in licensed marijuana businesses, but this focus could be expanded to include other businesses as well. Many people who live in DIAs, or who have been arrested or convicted of marijuana offenses, might not be interested in owning or working for a licensed marijuana business but might be interested in developing a business that provides goods or services to the marijuana industry. The state could help these individuals establish ancillary businesses to the marijuana industry. Massachusetts has attempted to promote diversity among ancillary businesses through its social equity program.

Many types of businesses provide goods and service to the marijuana industry. Goods can include everything from plant growing equipment to cash registers and display cabinets. Services can range from specialty plant tracking systems to basic payroll services. Some businesses, such as security and horticulture supply companies, could specialize in serving the marijuana industry. Others, such as contractors and law firms, could simply count marijuana businesses as new clients.

The state could leverage other social equity programs to promote opportunities for ancillary businesses owned by social equity individuals. For example, if the state conducted community outreach as part of a social equity program, it could also market opportunities from these social equity programs to ancillary businesses. Similarly, the state could make these ancillary businesses eligible for a business start-up assistance program it creates.

POLICY OPTION 20

If the General Assembly authorizes commercial marijuana sales, it could address social equity by directing the marijuana regulatory agency to apply elements of social equity programs to businesses that sell goods or services to marijuana businesses.

Virginia could allocate marijuana tax revenues to social equity initiatives

Virginia could choose to devote some or almost all of new marijuana sales tax revenue, (see Chapter 10), to achieve social equity goals if marijuana is legalized. This approach would likely benefit the most people, but it might less directly benefit individuals personally harmed by past enforcement of marijuana laws. Depending on the funding allocated and the targeted programs, this approach could be equally or more effective

at achieving larger, community-wide social equity goals than options that focus solely on a new marijuana industry.

Virginia communities have been negatively affected by drugs and the enforcement of drug laws

Federal and state drug law enforcement—not just related to marijuana—has negatively impacted Virginia communities. Enforcement of marijuana and other drug laws became a priority in 1971 with the passage of the Controlled Substances Act. The law began the “War on Drugs” by expanding federal drug laws and enacting harsher penalties for violations. Most states, including Virginia, followed the federal government’s lead and enacted their own strict drug laws and penalties and expanded law enforcement efforts in this area.

Many communities in Virginia have been affected by drugs and the enforcement of drug laws. Over the past decade, the average annual arrest rate for drug crimes in Virginia was one arrest per 200 state residents. The arrest rate is much higher than average in some communities. For example, in one small Virginia locality, the average annual arrest rate was over four times higher than the statewide average during the same time period.

A growing body of research indicates that enforcement of stringent drug laws has had serious negative societal and economic impacts on communities across the U.S., and that low-income and Black communities have been most adversely affected. For example, research has shown that disproportionate enforcement of drug laws in low-income and Black communities has resulted in higher incarceration rates within these communities. This has had negative long-term impacts such as decreased family income and higher poverty rates. These negative impacts likely extend to many communities in Virginia.

The state could use commercial marijuana sales tax revenues to reinvest in communities that have been most affected by the enforcement of drug laws. Commercial marijuana sales have the potential to generate millions of tax dollars for the state. How the General Assembly directs this revenue is a policy decision. While much of this revenue could be directed to broad programs like education and public health (sidebar), revenue could also be directed to other smaller existing programs or newly created programs.

Achieving social equity goals through a community reinvestment grant fund would likely have higher costs than any of the other social equity program options presented in Chapter 7 and this chapter. However, community reinvestment would be a broader initiative, which would therefore benefit more individuals and communities than those aimed at promoting diversity in the commercial marijuana industry. Virginia could also use community reinvestment to direct benefits to communities affected by the War on

Broadly earmarking marijuana tax revenue for large programs like education could help fill budget gaps but would have little impact on any individual community. For example, if Virginia earmarked \$50 million for education it would work out to approximately \$40 per student, statewide.

Drugs more broadly, rather than limiting benefits to individuals affected specifically by prior marijuana law enforcement.

Revenue could be allocated to existing programs in communities with longstanding challenges

Some or almost all of the revenue collected through marijuana sales taxes could be dedicated to state or local programs that benefit individuals or communities. For example, these funds could be used in DIAs to:

- improve education for children in K–12 programs such as the at-risk add-on (which funds specialized instruction, afterschool programs, and drop-out prevention programs in high poverty school divisions);
- provide workforce training to unemployed or other workers;
- provide grants to students to help fund higher education at either two-year or four-year institutions;
- provide rental housing assistance;
- assist small businesses individually or local economies broadly through loan or economic development grant programs; and
- provide substance use treatment services through community services boards.

POLICY OPTION 21

If the General Assembly authorizes commercial marijuana sales, it could address social equity by dedicating tax revenue from marijuana sales to existing programs that seek to address the needs of communities that have been most adversely affected by the enforcement of drug laws.

Virginia could create a new community reinvestment grant program funded with marijuana sales tax revenue

Rather than earmark a percentage of marijuana revenue to existing programs, the state could also create a new community reinvestment program. Under a community reinvestment program, the state could issue grants to fund initiatives in communities harmed by drugs and drug enforcement. For example, the program could provide funding to a local nonprofit prisoner reentry program or to a university to offer a free legal clinic. Any public or nonprofit organization could be eligible for a grant.

Illinois has created a community reinvestment program that could inform a grant program created in Virginia (Case Study 8-1). The City of Portland has also implemented a similar, smaller scale program (Case Study 8-2).

CASE STUDY 8-1

Illinois R3 Program uses marijuana tax revenue to fund community reinvestment

Illinois established the Restore, Reinvest, and Renew (R3) Program as part of marijuana legalization. The R3 program receives 25 percent of net tax revenue from adult use marijuana sales, which amounted to \$32 million for the 2020 grant cycle and could eventually grow to \$125 million per year.

The program provides grants for initiatives related to (1) civil legal aid, (2) economic development, (3) prisoner reentry, (4) violence prevention, and (5) youth development. Initiatives must be targeted at communities with historically high incarceration rates and other societal and economic challenges.

Grant applicants must describe both the community need and how the proposed program or service will meet the community need. Priority is given to applicants who are from the community and who can therefore demonstrate knowledge of community needs and priorities.

Proposals are reviewed by the R3 board, which consists of the lieutenant governor, state agency leadership, legislators, and representatives from eligible communities (e.g. violence reduction experts and individuals who have previously been incarcerated). After projects are selected, grantees must provide data and other information to the board to ensure that grant funds are used effectively and efficiently.

CASE STUDY 8-2

Portland's community reinvestment program attempts to address negative community impacts that may have occurred from marijuana law enforcement

The City of Portland provides funding for initiatives aimed at addressing the negative outcomes of marijuana law enforcement. The program funds initiatives related to (1) criminal justice reform, (2) legal services and case management support, (3) workforce development, and (4) prisoner reentry housing support and services.

Portland's program does not predetermine where initiatives can be targeted. Portland's grants are for either one- or two-year periods. Offering one-year grants gives smaller organizations a chance to participate.

If Virginia established a community reinvestment program, it would need to make several policy choices. The state would first need to decide who is eligible for grants. Limiting grants to public and nonprofit organizations would ensure that funds are used for the public good instead of private gain. Other policy considerations include:

- the amount of marijuana tax revenue to dedicate to the community reinvestment program fund;

- the types of initiatives eligible for grant funding; and
- the types of communities served by grant-funded initiatives.

POLICY OPTION 22

If the General Assembly authorizes commercial marijuana sales, it could address social equity by creating a community reinvestment grant program funded by marijuana tax revenue. The program could make grants to public or nonprofit organizations in communities that have been most adversely affected by the enforcement of drug laws.

Grants program would need to be administered in a manner that ensures effectiveness

JLARC's prior evaluations of economic development grant programs have consistently found that effective programs have several common characteristics. An effective grant program needs to have specific grant award criteria that are well aligned with the program's goals and priorities. Grant programs need to have a robust proposal review process designed to award grants to projects most likely to be effective and have substantial impact. Over the longer term, grant programs need to track progress and effectiveness through periodic, quantitative evaluations.

If the General Assembly creates a community reinvestment grant program using marijuana tax revenue, it should establish clear guidelines for the number of grant awards and the dollar amount of each grant that could be issued over a certain period of time. The amount of marijuana tax revenue allocated to the grant program and the size of the individual grant awards would dictate the number of awards that could be made. The grant program could award fewer, large grants, or it could make more grants available in smaller amounts. Smaller grants might have a lower overall impact on any individual community, but could give more organizations an opportunity to participate.

A community reinvestment grant program would also need clear rules for grant applications, awards, post-award monitoring, and renewals. The program would need to have a well-defined and transparent process for receiving proposals and reviewing, scoring, and making grant awards. For example, grant proposals would need to be scored based on clearly defined criteria, such as quality of the project plan and scope of work. After grant awards are made, winning initiatives should be monitored to evaluate project outcomes and ensure grant funds are being spent appropriately. Award decisions should be transparent by publishing information about projects in an annual report, along with statistics about community impacts of funded projects.

POLICY OPTION 23

If the General Assembly authorizes commercial marijuana sales and creates a community reinvestment program, the legislature could require the program to have (i) clear guidelines for the number of grants to be awarded annually and the dollar amount of each grant, (ii) clearly defined criteria for grant eligibility, (iii) a well-defined and transparent process for receiving grant proposals and reviewing, scoring, and making grant awards, and (iv) ongoing monitoring and public reporting on the status and outcomes of projects that have received grant awards.

Marijuana regulatory board should be responsible for grant program and be assisted by a social equity advisory committee and regulatory staff

If the General Assembly creates a community reinvestment grant program using marijuana tax revenue, it would need to designate responsibility for administering the program. Giving responsibility for the grant program to the marijuana regulatory board would provide the necessary public accountability and transparency. Accountability is essential regardless of the amount of funding the grant program receives.

The General Assembly could require the board to create a social equity advisory committee to help administer the grant program. If a community reinvestment grant program is created, a social equity advisory committee could make recommendations about which grant proposals to fund. This would give the board access to expertise it may not have in its own membership. A social equity advisory committee to the state's marijuana regulatory board could be modeled after existing advisory committees in Virginia. For example, the Code of Virginia directs the Virginia Retirement System board to appoint an investment advisory committee to provide it with “sophisticated, objective, and prudent” advice.

The social equity advisory committee could work with regulatory staff to help select which projects to fund. The social equity advisory committee could review staff recommendations, ask questions, and ensure that the recommended grant recipients have proposed projects that are consistent with the grant program's intent. The advisory committee would then make recommendations to the board, which would need to approve the recommendations in its fiduciary role in managing the grant fund.

The board's social equity advisory committee should consist of seven to 11 members, exclude elected officials, and include individuals with needed expertise who are not subject to pressure or outside influence. Committee member expertise should be based on the types of grants being awarded. For example, if some grants could go to prisoner reentry programs, then the committee should include at least one member with expertise in this area. The composition of the social equity advisory committee should be mindful to not repeat mistakes by similar Virginia entities in the past. For example, JLARC evaluated the Tobacco Indemnification and Community Revitalization Commission (TICR) in 2011 and found significant problems with the administration of the program. TICR comprised 31 members at the time, and the review found that its “size

and composition contributed to awards being made to projects with only limited revitalization potential and that are not well-aligned with TICR’s mission.” Moreover, the ability of applicants to appeal decisions “contributed to the perception that awards are sometimes based on factors other than the merits.”

POLICY OPTION 24

If the General Assembly authorizes commercial marijuana sales and creates a community reinvestment program, the legislature could require the marijuana regulatory board to create a social equity advisory committee to help implement the program.

Virginia should centralize social equity programs related to marijuana legalization

Virginia should centralize any social equity programs related to marijuana legalization under the state marijuana regulatory body. If the state decides to implement all of the potential social equity programs discussed in this chapter, as well as those outlined in Chapter 7, there would be nine programs to coordinate (Table 8-2). These programs include licensing and six types of assistance programs, hiring plans, employee and business registries, and a grant program allocating millions of dollars annually. These programs all address social equity but have somewhat different focuses and structures. To implement these programs, the regulatory body may need 10 to 15 staff. The more social equity programs the General Assembly creates, the more coordination would be required among these staff to ensure effectiveness and consistency.

The state would also need to evaluate and revise these programs over time to ensure they are working as intended and policy goals are being achieved. Well-intentioned programs in other states have encountered unforeseen challenges that required changes after implementation. For example, Michigan encountered a problem early on where local prohibitions were affecting its ability to provide assistance to social equity businesses. Because the program was centrally administered by the state, and the rules were set in regulation instead of statute, it was able to quickly change the rules and address the problem. If Virginia had a central organization over social equity programs, it could help ensure challenges were successfully addressed.

If a social equity advisory committee is established, it could be responsible for monitoring all social equity programs and not just a community reinvestment program. The committee could be tasked with evaluating whether programs are achieving goals, such as diversity in business ownership and employment.

TABLE 8-2
Virginia's social equity initiatives would require coordination and oversight

Social equity program	Policy goal			
	Marijuana business ownership opportunities	Industry employment opportunities	Ancillary business opportunities	Community reinvestment
Ownership assistance programs				
Community outreach	✓	✓	✓	
Application education & assistance	✓			
Fee discounts and/or waivers	✓			
Business start-up assistance	✓		✓	
Financial assistance	✓			
Mentorship	✓			
Social equity hiring plans		✓		
Employee & ancillary business registries		✓	✓	
Grant program				✓

SOURCE: JLARC summary analysis.

NOTE: Social equity initiatives are categorized based on their primary policy goals, but some initiatives may also affect other goals indirectly. For example, programs that promote social equity ownership in marijuana businesses may have an indirect impact on industry employment more broadly, as research has shown that Black-owned businesses are more likely to hire Black employees in greater numbers than white-owned businesses.

Centralizing the state's social equity programs related to marijuana legalization would also facilitate stakeholder engagement. Appropriately engaging stakeholders would be increasingly important if multiple social equity programs are created. An effective business start-up assistance program, for example, would need to ensure that successful marijuana business owners are periodically included through workgroups or other forums. An effective financial assistance program or grant program would also need to find ways to appropriately include community stakeholders, especially those from DIAs that may receive grant funding.

POLICY OPTION 25

If the General Assembly authorizes commercial marijuana sales and creates social equity programs, it could assign responsibility for implementation of the programs to the marijuana regulatory body, and assign responsibility for monitoring programs to the social equity advisory committee.

9 Mitigating Negative Public Health Impacts from Legalizing Marijuana

Commercial marijuana legalization has some public health implications but they are not fully understood. Data on public health outcomes from legalization is only available for a handful of states, and even for these states, there are just a few years of data available. The research into the general health risks associated with marijuana use is also not conclusive, in part, because of marijuana's long-time classification as a Schedule 1 controlled substance (sidebar). The lack of conclusive research limits the ability to draw clear conclusions about the public health risks posed by commercial legalization of marijuana.

Despite research limitations, there is enough evidence to conclude that marijuana use poses some harm and that commercial legalization has implications for public health. If marijuana is legalized, the state will need to inform the public of the risks associated with marijuana use to dissuade potentially problematic use. The state will also need to determine how to regulate the commercial marijuana market to best protect public health.

Even though marijuana use poses some health risks, research indicates marijuana use can be beneficial for consumers with certain health conditions. These benefits were the primary reason why Virginia has already legalized medical marijuana. Research indicates that marijuana use can help ease conditions like nausea, vomiting, epilepsy, and pain. The research into potential health benefits of marijuana has the same limitations as research into health risks. While the body of research is growing, it is not yet conclusive. For example, only one marijuana-derived drug has undergone clinical trials to prove its effectiveness as a medication. More information on the potential medical benefits of marijuana can be found in Appendix L.

The Federal Controlled Substances Act of 1971 classifies substances by categories, or schedules, depending on the federal government's determination of the drug's acceptable medical use and the potential for problem use or dependency. The Act has significantly limited legal access to schedule 1 substances, including marijuana, even for research purposes.

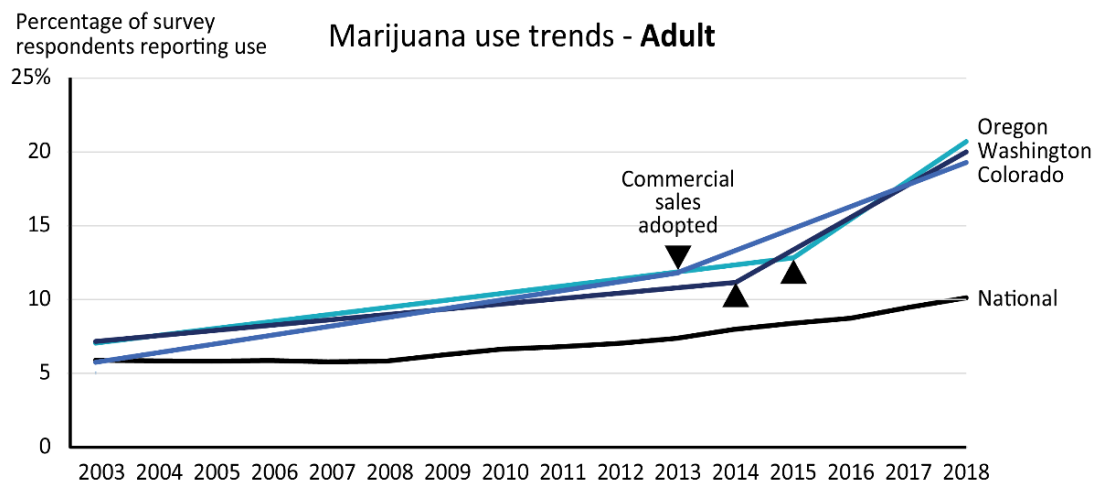
Commercial legalization of marijuana is likely to increase adult use and affect public health

Marijuana use among adults has been increasing nationwide for several years (Figure 9-1). The increase in use appears related to shifting public opinions about marijuana. National surveys show Americans are growing more favorable toward marijuana use and are less likely to view marijuana as a harmful substance. Legalization of marijuana in several states has also likely contributed to more recent changes in both use and perception.

Increased marijuana use presents several public health risks. Habitual marijuana use is associated with negative health outcomes. In addition, marijuana is an intoxicating substance, and people who drive after using marijuana can be at an increased risk of a

vehicle accident. People who overconsume marijuana can suffer from several temporary problems such as extreme anxiety, vomiting, or drowsiness. Marijuana consumption can encourage the use of other substances, such as alcohol, which can compound negative effects from marijuana.

FIGURE 9-1
Past month usage among adults 18 or older



SOURCE: Data from 2017–2018 National Survey on Drug Use and Health (NSDUH).

NOTE: Only three of the 10 states that have started commercial sales are shown here because there are not enough years of data to discern trends in more recently legalized states. NSDUH data combines two years of state-level survey responses in each report year, and the most recent responses are for 2017–18. This figure shows the three states that had established legal commercial markets and have at least three years of post-implementation use data available. Line is marked where commercial legalization sales started.

Cannabis use disorder is defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)-V as “a problematic pattern of cannabis use leading to clinically significant impairment or distress.” To be considered CUD, an individual must meet at least two of the diagnostic criteria within a 12-month period. Criteria include repeated failed efforts to discontinue or reduce the amount of cannabis used and continued use of cannabis despite adverse consequences from its use.

In addition to increasing the number of users, legalization could prompt current marijuana users to use it more frequently, especially habitual users. Current research on whether legalization affects usage frequency is inconsistent. One recent study found an increase in frequency in use among marijuana users, as measured by the prevalence of cannabis use disorder (CUD, see sidebar). No other studies have attempted to measure the prevalence of CUD since legalization, and research on the effect of medical marijuana laws on CUD prevalence has shown mixed results. Studies trying to understand the overall prevalence of CUD in the population have also shown mixed results.

Adult use increases after commercial legalization for several reasons. There are more users because legal penalties and social stigmas are removed, and marijuana becomes easier for new consumers to access. Additionally, consumer-friendly products become widely available, such as edibles and vape pens. One public health official in a state that has legalized marijuana stated: “The more available it (marijuana) is, the more appealing products you have, the more users you’ll have.” For existing users, marijuana can be more conveniently purchased in a legal commercial market, and the prices in some markets can be lower than the illegal market. These factors would lead to increased marijuana consumption by existing users.

Health problems associated with habitual marijuana use could become more prevalent following legalization

JLARC staff conducted a comprehensive review of the research literature examining the health implications of marijuana use. Research shows likely associations between habitual marijuana use and several negative health outcomes. Negative outcomes range from physical health problems, such as mild respiratory issues, to cognitive and mental health issues. The prevalence of these negative outcomes in Virginia residents could increase following commercial legalization, as more adults become habitual marijuana users.

The potential negative health outcomes from habitual marijuana use are summarized in Table 9-1. Habitual users, who consume marijuana most frequently and in larger amounts, appear to have the highest risk of experiencing these outcomes. Habitual users who are young or who have other risk factors, such as a personal or family history of mental illness, appear to be at increased risk for certain outcomes. Additional discussion of these and other health outcomes identified in research literature can be found in Appendix M.

JLARC staff reviewed 116 systematic reviews and articles examining the health outcomes associated with marijuana use and health impacts of marijuana legalization. For additional details on this review, see Appendix B.

TABLE 9-1
Marijuana use can increase the risk of several negative health outcomes among habitual users

Category	Health outcome	Additional risk factors (besides habitual use)
<i>Substantial or moderate evidence that marijuana increases risk</i>		
Respiratory	Coughing and bronchitis	
Pregnancy	Low infant birth weight	
Mental health	Schizophrenia, psychoses, and suicide	Personal or family history of mental illness
Substance use disorder	Development of cannabis use disorder ^a	Younger user
Cognition	Learning, memory, and attention deficits ^b	
<i>Some limited evidence that marijuana increases risk</i>		
Cardiovascular	Heart attack or stroke	
Respiratory	Chronic lung diseases	
Pregnancy	Pregnancy and post-natal complications	
Social attainment	Social and educational outcomes	Younger user

SOURCE: Adopted from the health endpoints presented in the National Academies of Sciences, Engineering, and Medicine comprehensive review on the effects of marijuana.

NOTE: ^a Cannabis use disorder is essentially a marijuana substance use problem. The disorder is defined by the DSM-5 as “a problematic pattern of cannabis use leading to clinically significant impairment or distress.” To be considered CUD, an individual must meet at least two of the diagnostic criteria within a 12-month period. ^b These negative health outcomes appear to be reversible with discontinued marijuana use.

While the research literature provides sufficient evidence of an association between habitual marijuana use and negative health outcomes, the research does not clearly show if marijuana use actually causes these outcomes. It is also unclear the extent to

which marijuana use can contribute to the prevalence or severity of these outcomes. For example, the research cannot conclusively determine if or how much marijuana use might contribute to the development of an individual's psychosis.

The potential health outcomes from habitual marijuana use do not appear as harmful as those for other substances. For example, researchers have looked at the likelihood of users of different substances developing a substance use disorder and found that marijuana users have a lower risk of developing a disorder than other substances such as alcohol. Additionally, a person cannot “overdose” by consuming a fatal amount of marijuana. While there have been a few, documented cases of individuals dying after having a psychotic episode related to excessive marijuana consumption, these instances appear to be rare.

Legalization could increase incidents of accidental ingestion and overconsumption

Other states that have legalized marijuana have seen increases in incidents of accidental ingestion and overconsumption. For example, from 2015 to 2018 Oregon saw emergency department visits for accidental marijuana ingestion and overconsumption increase from 3.5 per 1,000 visits to 6.3 per 1,000 visits. Similarly, Washington reported a 166 percent increase in poison control calls from 2014 to 2018. People who have consumed too much marijuana can experience a variety of generally non-life threatening symptoms, such as extreme anxiety, elevated heart rate, shortness of breath, vomiting, drowsiness, and a sense of losing touch with reality.

Accidental consumption incidents can increase following legalization because there are more edible marijuana products in circulation. These products often look similar to regular deserts or candies. Unwitting adults or children can accidentally consume the products and become intoxicated. People who know they are consuming marijuana can also overconsume it and become extremely intoxicated. For example, it is not uncommon for new consumers to accidentally consume an exorbitant amount of marijuana because they are not familiar with their tolerances.

While accidental ingestion or overconsumption can be frightening for the people involved, most incidents are resolved without lasting harm to a person's health. Researchers and public health officials indicated that the symptoms and outcomes of consuming too much marijuana are mild compared to overconsumption of alcohol or other drugs, which can be life-threatening. Marijuana overconsumption incidents also appear to be less frequent than other drug- or alcohol-related incidents, even after legalization.

Legalized states have seen the number of marijuana-related health incidents decline over time as they have instituted stricter product and packaging regulations, and consumers have become more aware of risks.

While marijuana use impairs drivers, legalization’s overall effect on traffic accidents is not clear

Marijuana use can cause cognitive impairment, and many studies have found increased accident risks for marijuana-impaired drivers. The National Academies reviewed and supported findings from a recent meta-analysis that shows driving under the influence of cannabis was associated with 20 percent to 30 percent higher odds of a motor vehicle crash. Legalization would increase marijuana use, which could result in more marijuana-related accidents.

When reviewing how legalization affects traffic accidents, it is important to consider not only the number of accidents involving marijuana-impaired drivers, but also whether accidents increase or decrease as a whole. This approach takes into account how legalization could affect driving habits and consumption of other substances, especially alcohol. Alcohol contributes to more and deadlier vehicle accidents than marijuana. If legalization decreases alcohol use, overall accidents could go down. But if legalization increases alcohol use, then accidents would likely increase.

Research on whether legalization results in more traffic accidents is inconclusive. Over 60 studies have examined this question, but there is no consensus on whether legalization has increased the number of accidents. Several systematic reviews have attempted to analyze these differences in outcomes, but data limitations and measures of impairment influence the ability to draw conclusive findings from their outcomes. A 2019 study that examined crash trends in states that had legalized marijuana found increased crash fatalities in one state, but not another. In contrast, a 2020 study using a similar study design and data source found no notable difference in crash trends: “While our results suggest that the marijuana legalization in Colorado and Washington did not lead to discernible increases in traffic fatalities, estimating the externalities of marijuana use and high driving is still crucial in determining future policy.” The lack of conclusive evidence is attributable to several data limitations.

State data on impaired driving has several limitations. Limitations include lack of accurate data on whether drivers involved in accidents were in fact impaired by marijuana, inconsistent definitions of impairments across years, limited years of post-legalization accident data, and difficulties accounting for the use of other substances.

Marijuana is less harmful than many other substances, but it is not clear if legalization increases or decreases use of other substances

Public health officials in Virginia and other states interviewed by JLARC expressed concern about marijuana’s health effects but were uniformly more concerned with the use of other substances. Other substances—such as alcohol, tobacco, and opioids—contribute to more fatal accidents and have other more serious long-term health consequences. For example, smoking cigarettes has been proven to increase risk of lung cancer and emphysema, whereas the cancer risks and respiratory problems associated with habitual marijuana use appear mild by comparison.

Researchers have been working to understand the relationship between marijuana legalization and the use of other substances. If the use of other substances decreases with legalization, then the net public health impact would be positive. For example, if many people switched from alcohol to marijuana, then there would be fewer drunk

drivers on the roads, and overall fewer fatal traffic accidents. However, if marijuana use increased and alcohol use did not decline, then traffic accidents would increase and public health would be negatively impacted.

Research on how marijuana policies affect the use of other substances is inconclusive. For example, early research studies showed declining opioid use in states that enacted medical marijuana laws, suggesting there is a substitution effect in which people use marijuana rather than opioids. However, those trends do not appear to be continuing and are inconsistent. Other studies have found that marijuana use does not affect whether a prescription opioid user changes his or her prescription, suggesting there is no strong substitution effect. Research on how marijuana use affects tobacco and alcohol use also shows mixed results.

Youth use might not increase in the near term but long-term use and other effects are less certain

Research studies suggest youth use may not increase in the years immediately following legalization, but limited data make these studies inconclusive. Research studies using survey and other data have generally found that youth use did not increase in legalized states, and in some cases may actually have decreased (Table 9-2). However, these findings were inconsistent across all data sources.

An analysis of youth health surveys conducted by the three states that first legalized marijuana—Colorado, Washington, and Oregon—also showed mixed results. According to these surveys, marijuana use by high school youth continued to decline after legalization in Colorado and Washington, but increased slightly in Oregon (Figure 9-2). Additional time is needed to determine if these survey responses represent a real change in youth use or if the variations are the result of the irregularities that can occur in survey responses.

It is difficult to isolate the impact legalization has on youth use of marijuana. Surveys suggest that it may have the effect of reducing use because some youth find it more difficult to obtain marijuana after commercial legalization, presumably because there are fewer illegal marijuana dealers, and legal stores are unwilling to sell to minors. Alternatively, as marijuana usage becomes more common under legalization, it may have the effect of encouraging use because youth can more readily access marijuana purchased by parents or other legal-age adults. Other national trends unrelated to legalization could have an even bigger impact on youth use. Youth use of other substances—like alcohol and tobacco—is declining, which indicates youth may simply be less willing to use intoxicating or age-restricted substances.

TABLE 9-2

Three recent studies examining youth use after adult use laws do not show substantial increases in youth use

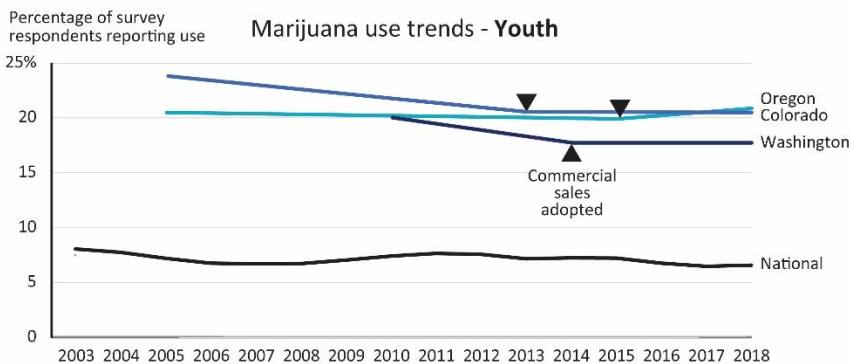
Study	Outcome(s) studied	Outcome
Association Between Recreational Marijuana Legalization in the United States and Changes in Marijuana Use and Cannabis Use Disorder from 2008 to 2016 (2020)	Youth use Prevalence of CUD Frequency of use	No change Small increase No change
Association of Marijuana Laws with Teen Marijuana Use: New Estimates from the Youth Risk Behavior Surveys (2019)	Youth use Frequency of use	Decrease in use No change
Prevalence of Cannabis Use in Youths after Legalization in Washington State (2019)	Use by 8th graders (Healthy Youth Survey) Use by 10th graders (HYS) Use by 8th graders (Monitoring the Future) Use by 10th graders (MTF)	Decrease in use Decrease in use Insignificant change Increase in use

SOURCE: JLARC analysis of research: Cerda 2020, Anderson 2019, and Dilley 2019

NOTE: CUD = Cannabis use disorder

FIGURE 9-2

Surveys indicate marijuana use by high school students continued to decrease in Colorado and Washington, but increased in Oregon, after legalization



SOURCE: Healthy youth surveys administered by states.

NOTE: Biennial state healthy youth surveys are similar to the National Survey on Drug Use and Health. However, these surveys are specifically targeted at persons 18 and under and typically have larger sample sizes of state youth. Each survey targets a slightly different age group: Colorado=9th-12th grade, Oregon=11th grade, Washington=10th grade. Lines are marked where commercial legalization sales started.

Youth health surveys are performed biannually by most states. Surveys ask questions about several issues, including substance use, mental health, and physical health. Surveys are typically targeted at high school students. These surveys typically have over a thousand state-level youth respondents, whereas other surveys have only a few hundred youth respondents.

Researchers caution that while marijuana use among youth may not increase in the near term, the long-term effects of legalization on youth use are unknown. Some researchers and public health officials cautioned that legalization can lead to a “normalization” of marijuana use, and that children who grow up in a legalized environment could be more likely to become marijuana users when they are older. Some recent studies suggest exposure to marijuana advertising in legalized states could increase

youth use. As more data becomes available, more conclusive findings on the long-term effects of legalization on youth use will be available.

Legalization could have other unknown effects on youth use. At least one study found legalization may be associated with youth trying marijuana at earlier ages, although more research is needed to confirm these findings. If true, these findings would be concerning because people who begin consuming marijuana at earlier ages are more likely to become habitual users. Another recent study's findings suggest that legalization could be associated with an increase in cannabis use disorder among youth. However, more research is needed to confirm these findings as well.

Legalization appears likely to increase incidents of accidental ingestion of marijuana by youth. Legalized states have experienced increases in these incidents, including an uptick in emergency room visits and calls to poison control centers. While concerning, incidents involving children appear to be declining and typically do not cause any permanent or lasting harm.

Prevention efforts can help prevent youth and problem use

Virginia, like most states, has substance use prevention programs and efforts that are intended to dissuade use of drugs, alcohol, and tobacco. Prevention efforts are intended to address substance use problems before they occur by increasing community awareness and reducing youth access. Current state prevention efforts are largely focused on alcohol, tobacco, and opioid prevention because there is federal and special funding dedicated to these efforts. If Virginia chooses to legalize marijuana, the state would need to increase its prevention efforts related to marijuana.

Officials in Virginia and other states indicated that increasing prevention would be a more effective way to mitigate or reduce marijuana use than treatment, if marijuana is legalized. While treatment programs do treat some patients for marijuana use, legalization is unlikely to increase demand for these services. Virginia public health officials said that most marijuana treatment is ordered by a court when someone is arrested or convicted of a marijuana offense. Because far fewer people would be arrested for marijuana offenses, legalization could in fact *reduce* demand for marijuana-related treatment services. Other states that have legalized marijuana have not needed to make significant structural or funding changes to their treatment programs and have not seen a notable increase in demand for treatment.

Prevention efforts targeting marijuana use are needed to help inform youth and adults about risks

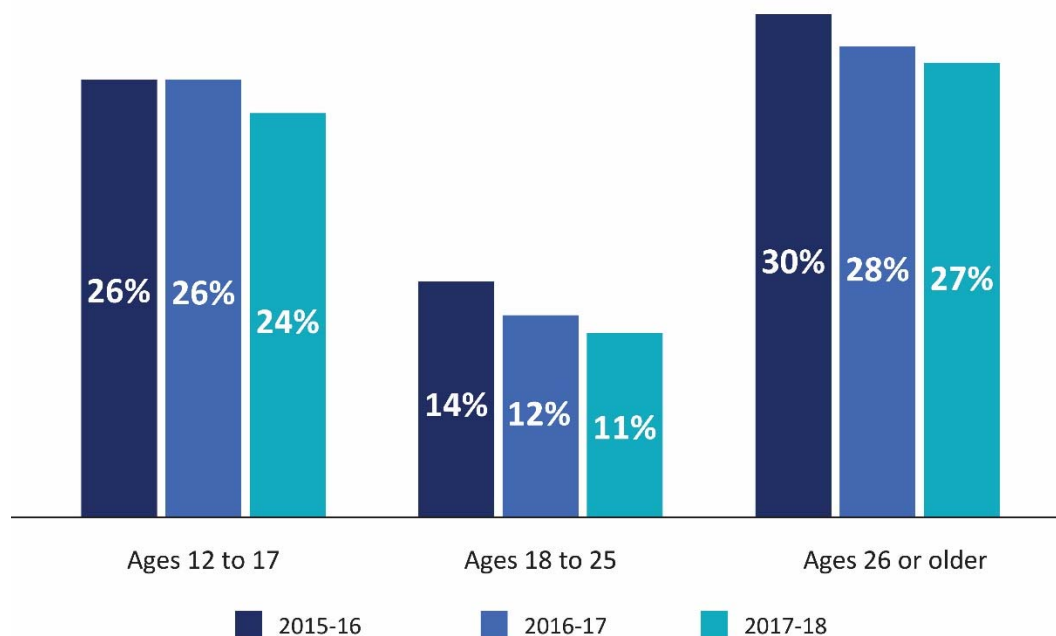
A robust prevention effort is needed to help inform Virginians on the risks associated with marijuana use. Surveys show that Virginians of all ages increasingly view occasional marijuana use as not posing a great health risk (Figure 9-3). Virginia public health officials find this trend concerning because it could be an indicator that more

young people are open to trying marijuana in the future. Effective prevention efforts can inform young people, and the public in general, about risks of marijuana use. Prevention efforts can also help counter the advertising and promotion messages that would emerge once a commercial market was established.

Studies have shown that research-based prevention programs can significantly reduce use of tobacco, alcohol, marijuana, and other drugs, especially among youth. The National Institute on Drug Abuse indicates that research-based strategies are “designed based on current scientific evidence, thoroughly tested, and shown to produce positive results.” The federal Substance Abuse and Mental Health Services Administration has identified 60 peer-reviewed evaluations that have demonstrated the effectiveness of research-based marijuana strategies designed to reduce or prevent use.

The state could pursue two complementary prevention efforts: an initial media campaign targeted at youth statewide and ongoing community prevention efforts designed to address the needs of different communities.

FIGURE 9-3
Perceptions of marijuana use as posing a great risk



SOURCE: Virginia data from 2017–2018 National Survey on Drug Use and Health (NSDUH).

NOTE: The question asks respondents whether they believe using marijuana once a month poses a great health risk. The figure shows the percentage of respondents who answered “yes”.

Media campaign could help educate youth and the general public

Other legalized states have used initial media campaigns during the first few years to help share messaging about risks associated with marijuana use before legalization occurs, and while it is being implemented. These campaigns have mostly targeted youth. Oregon's 2016 campaign was launched before commercial sales began and focused on discouraging use among young people under 21. Oregon later expanded that program to include resources for parents and educators about how to talk with children about the use of marijuana, nicotine, and vaping. Oregon's campaign uses a mix of website content, social media posts, digital and search engine advertisements, and billboards. Washington launched a media campaign before legal marijuana sales began that encouraged parents to talk with their children about the risks and consequences of using marijuana. Washington also placed flyers on bulletin boards and in waiting areas in clinics and doctors' offices with information about the harms of marijuana use for youth.

If Virginia chooses to legalize marijuana, it should launch its own media campaign to educate people on the risks of marijuana use before commercial sales start. Virginia should also target its initial campaign at preventing youth use. Studies have shown that media campaigns to prevent substance use can be effective if they are properly designed and targeted. Campaigns that use persuasive messaging and avoid scare tactics are more likely to be effective. Researchers conducted a pre/post evaluation to measure the effectiveness of Colorado's youth prevention campaign and noted an increased knowledge of marijuana information among youth.

Responsibility for the youth-oriented media campaign should be given to the Virginia Foundation for Healthy Youth (VFHY). Currently, VFHY collaborates with the Department of Behavioral Health and Developmental Services to offer training on youth prevention of substance use in Virginia. VFHY is experienced in developing public awareness campaigns and is familiar with campaign research and evaluation, media production, and Virginia's demographics. VFHY also has the capacity and knowledge to develop materials focused on youth prevention. VFHY staff indicated it would take a year or more to research, develop, and test the campaign. The campaign should be started at least a few months before commercial sales begin. VFHY staff estimated it would cost \$350,000 to prepare the campaign and \$2 million per year to run the campaign, including the cost of media placements and administration.

VFHY would need additional state funds because it cannot cover costs for a marijuana-related campaign from current funding sources. The state would need to determine the best source of funds for campaign efforts before commercial marijuana sales. After commercial sales began, campaign funding could be provided from marijuana tax revenues.

The media campaign could be for a limited time period, such as two years, or could be an ongoing effort. Public health officials in Virginia and other states indicated that ongoing, well-funded campaigns are likely to achieve better outcomes, because they

can provide youth with consistent messaging as they age through middle and high school and start considering experimenting with marijuana use.

RECOMMENDATION 29

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the Virginia Foundation for Healthy Youth to coordinate a statewide media campaign targeted at preventing youth marijuana use and appropriating the funds necessary to develop and run the campaign.

Virginia could also consider additional or subsequent media campaigns to address impaired driving, keeping marijuana from children, general health risks from habitual use, risks to people with a history of mental illness, and risks to pregnant women. These campaigns could be assigned to the appropriate state agencies. For example, responsibility for an impaired driving campaign could be assigned to DMV. Campaigns would need to be specially funded because the costs would be too large for most agencies to absorb.

POLICY OPTION 26

If marijuana is legalized in Virginia, the General Assembly could direct the appropriate agencies to conduct media campaigns to raise awareness of the importance of keeping marijuana away from children and the potential negative effects of marijuana use, such as impaired driving, general health risks, and risks for pregnant women and people with a history of mental illness.

Existing community-based programs should receive additional funds to increase prevention efforts before and after marijuana legalization

Ongoing community prevention efforts are important tools for preventing marijuana use, especially over the long term. In Virginia, community prevention programs are managed by local community services boards (sidebar). CSBs tailor prevention efforts to address local problems and often work with community organizations to implement programs. For example, CSB staff attend community events to educate community members about the harms of different substances. They also use local marketing campaigns to spread awareness and educate the community. CSBs also help individuals with substance use disorders through medication, therapy, and other forms of treatment.

Virginia currently has 40 CSBs that provide publicly funded behavioral health and developmental services. They are responsible for implementing local substance abuse prevention and treatment programs, among other programs.

Public health officials in Virginia and other states stressed the importance of providing regular, annual funding for community prevention. Currently, CSB prevention efforts are funded through an \$8 million federal grant spread out among 40 CSBs (not including separate, additional grants earmarked only for opioids and stimulants). Grant funds go to all types of prevention efforts, from alcohol to illegal substances.

The state could provide CSBs with an additional \$1 to \$2 million for prevention, which would boost prevention spending by 12.5 to 25 percent. This funding would pass

through the Department of Behavioral Health and Developmental Services, which oversees CSB prevention efforts. CSB officials said that Virginia is one of five states that does not currently provide state funding for prevention.

Effective prevention efforts would need to be funded and started before commercial marijuana sales began. The state would need to determine the best source of funds for prevention efforts that began before commercial marijuana sales started. After commercial sales began, prevention funding could be provided from marijuana tax revenues.

RECOMMENDATION 30

If marijuana is legalized in Virginia, the General Assembly may wish to consider providing community services boards with an additional \$1 to \$2 million annually in funding for prevention because of the increased need following commercial legalization of marijuana.

Product and labeling requirements are needed to inform consumers of risks and reduce youth appeal

If Virginia chooses to legalize marijuana, it should set requirements for how commercial marijuana products can be designed, packaged, and labeled to minimize use by youth and inform adult consumers of risks associated with marijuana. Virginia could model its requirements after other states' restrictions.

Other states have enacted requirements preventing marijuana products from being designed or packaged in ways that appeal to children. Prior to these states enacting these requirements, some marijuana products sold in other states looked like candy or other treats. Other states' products were also sometimes packaged using bright colors with cartoon imagery (Figure 9-4). These products made marijuana use more enticing for young people. The products were also often packaged and labeled in ways that made them difficult to distinguish from regular food and beverage products.

Other states have enacted special requirements for edible forms of marijuana because of problems that emerged shortly after legalization. Initially, some edible products had a very high THC content, and serving sizes, and THC amounts per serving were not clearly defined. Consequently, new consumers could easily consume too much THC and become highly intoxicated. Additionally, some consumers were not aware that the intoxicating effects of edible marijuana can be delayed for hours, and kept using marijuana even after they had already consumed a substantial amount.

FIGURE 9-4

Some THC product packaging can be appealing to youth and can be hard to distinguish from non-THC products



SOURCE: JLARC review of marijuana retail websites.

Labels on marijuana products can help ensure consumers are informed about the risks of marijuana use. Other states require marijuana products to be clearly labeled as containing marijuana and to clearly state the product's THC content, helping consumers understand the potency of marijuana products. Some states also require labels to warn consumers of the potential risks associated with marijuana use, including impaired driving, pregnancy risks, and risks of combining marijuana with other substances.

Some states have enacted requirements prohibiting businesses from making false or misleading claims on product labels. Marijuana businesses in some states used images such as medical crosses on their packaging or made false or misleading statements about marijuana's health benefits. States subsequently prohibited this kind of imagery and labeling.

Virginia could avoid, or at least reduce, many of the problems other states have encountered by setting strict rules on products, packaging, and labeling. These requirements are summarized in Table 9-3. Most other states that have legalized marijuana have enacted all or most of these product rules and requirements. The General Assembly should direct the marijuana regulatory body to establish regulations in each of these areas.

TABLE 9-3**Virginia should set requirements for marijuana products, labeling, and packaging to reduce public health risks**

Requirement	Prevents accidental consumption	Reduces youth appeal	Informs consumers of risk
Product shape and appearance cannot closely resemble existing products, especially candy or snack products marketed to children	✓	✓	
Edible products clearly separated into individual servings with a maximum THC limit of 10 mg per serving	✓		
Packaging is plain and should not use bright colors, cartoon images, or other imagery appealing to children	✓	✓	
Packaging is opaque so that product is not visible (at least for edibles)	✓	✓	
Packaging should be child-resistant (at least for edibles)	✓		
Products have standard, state-established warning label	✓		✓
Warning label describes specific health risks, as determined by the legislature or the regulatory body			✓
Labels clearly convey contents and THC potency per serving			✓
Labels cannot make false, unproven, or misleading claims, including claims about health benefits			✓

SOURCE: JLARC analysis of marijuana laws in other states.

RECOMMENDATION 31

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the marijuana regulatory body to establish regulations for products, packaging, and labeling, including but not limited to (i) product shape and appearance restrictions, (ii) serving size and THC potency limits for edible products (iii) packaging restrictions, (iv) health risk warning labels, and (v) marijuana content and THC potency warning labels.

Restrictions on advertising and promotion would be needed to discourage inappropriate use

Advertising includes store signage and displays, outdoor advertising (billboards, posters, yard signs, mass transit signs, mascots, etc.), ads in all types of media (print, radio, television, and internet), and direct mailings, among other forms.

State restrictions on advertising and promotion can help keep commercial marijuana businesses from encouraging marijuana use (sidebar). Marijuana advertising is problematic because it promotes consumption of an intoxicating, age-restricted substance.

Researchers and public health officials indicated that advertising promotes normalization of marijuana and could increase use, especially among young people. Several recent studies have found that adolescents who are exposed to marijuana advertising are more likely to be marijuana users or to view it more positively. Youth who have a positive view of marijuana are more likely to become consumers as minors or when they reach legal age.

The experiences of other states show that, if left unregulated, marijuana advertising can become prevalent and highly visible. For example, states that did not restrict signage and billboards have seen an abundance of highly visible advertising (Figure 9-5). Regulators in other states also reported having advertising that could be appealing to children, such as sign-spinning mascots and ads that use cartoon logos. Concerns about highly visible and controversial advertising have led many states and local governments to pass laws that place limits on what advertising that is allowed.

Promotions include a business's website and use of social media, flyers, sponsorships, partnerships, special events, and media guest appearances.

FIGURE 9-5

Loose regulations can lead to highly visible advertising and images that appeal to children



SOURCE: JLARC review of news articles and reports on controversial marijuana marketing.

If marijuana is legalized, Virginia should place restrictions on advertising by licensed marijuana businesses. Licensees should be required to comply with advertising restrictions as a condition of holding their commercial retail licenses. The types of restrictions the state should set are summarized in Table 9-4. The General Assembly should direct the marijuana regulatory body to establish regulations in each of these areas.

TABLE 9-4**Virginia could set limits on marijuana advertising and promotion to reduce public health risks**

Requirement	Reduce visibility to general public	Reduce visibility & appeal to youth	Prevent harmful or misleading messages
Storefront signage and window display restrictions, including number and size	✓	✓	
Outdoor advertising restrictions, including (a) bans on billboards and some types of outdoor displays (inflatable tube displays, live mascots, sign-spinners), and (b) limits on where ads can be located to reduce exposure to minors	✓	✓	
Media advertising restrictions, including (a) ban on television and radio ads, and (b) restrictions on the types of print publication and internet sites where ads are allowed to reduce exposure to minors	✓	✓	
Restrictions on promotional activities, including (a) age-restricted access to business websites, (b) prohibiting use of social media to engage with underage people, and (c) restrictions on using social media in ways that are likely to increase visibility to minors		✓	✓
Ban on any advertising or promotional materials that are visually appealing to minors, appeal to underage adults (such as college students), or that promote over-consumption		✓	✓
Ban on using certain images, such as cannabis leaves or symbols associated with medicine or medical professions (crosses, Rx symbol, caduceus)			✓
Ban on advertising or promotions that make false, unproven, or misleading claims			✓

SOURCE: JLARC analysis of marijuana laws in other states.

RECOMMENDATION 32

If marijuana is legalized in Virginia, the General Assembly may wish to consider directing the marijuana regulatory body to establish regulations restricting advertising and promotion by licensed marijuana businesses, including restrictions on (i) storefront signage and window displays, (ii) outdoor advertising, (iii) media advertising, and (iv) promotional activities, especially use of social media.

10 Taxation, Revenue, and Job Creation

If Virginia creates a commercial marijuana market, it needs to decide how to tax sales and at what rate. Governments often tax products that have historically been illegal when they become legal or commercially available (e.g. cigarettes, alcohol, gaming) and all states with commercial marijuana markets also tax it.

Marijuana taxes would generate additional revenue for state and local governments. The amount of revenue the state and localities collect would depend on the amount of marijuana sold in the commercial market, its sales price, and the tax rate. The amount of marijuana sold would depend on consumer demand and how effectively the legal market competes with the illegal market.

In addition to raising government revenues, a newly created marijuana industry would create new jobs and other localized economic benefits. Jobs would include both low- and high-paying jobs in several fields, ranging from wage-earning retail sales associates to highly paid executives. Because marijuana is federally illegal and cannot be transported across state lines, the economic benefits of legalization would be contained almost entirely within the state's borders.

Virginia should assess a special tax on retail marijuana sales

Creation of a commercial marijuana market would increase state and local tax revenues from existing sources. All retail marijuana sales would presumably be subject to the standard 5.3 percent sales tax (sidebar). New marijuana businesses and their employees would also pay state income taxes. At the local level, marijuana businesses would pay property taxes, as well as any local business taxes. For example, many Virginia localities require business owners in their jurisdictions to pay a Business, Professional, and Occupational License (BPOL) tax. This tax would also apply to marijuana businesses. Similarly, some localities charge a machinery and tools tax on manufacturing equipment. This tax could also be applied to some marijuana businesses, like processors.

In addition to levying existing taxes, Virginia should establish a special sales tax on marijuana. Virginia's tax approach should be relatively simple to administer and result in revenue for both state and local governments. Virginia would need to carefully consider its tax rate. A tax rate that is too high would hinder sales, make it more difficult for the legal market to compete with the illegal market, and could make it difficult for commercial licensees to be profitable. Conversely, a tax rate that is too low misses the opportunity to raise state and local revenue and can result in low *overall* prices (sales price plus tax) that promote greater use.

Several regions of Virginia apply additional sales tax to the base 5.3 percent sales tax rate. Northern Virginia, Hampton Roads and Central Virginia apply total sales tax rates of 6 percent. The Historic Triangle region applies a total rate of 6.3 percent.

Most legalized states have special state and local taxes on retail marijuana sales

Most states levy a special tax on retail marijuana sales, based on the sales price (Table 10-1). Taxes are charged at the point of sale, along with the state's regular sales tax. States use marijuana sales taxes because they are simple to implement and are transparent to consumers. Taxing at the final point of sale also allows the state to capture the full value of the underlying commercial activity that produced the product. That makes this approach more efficient than many others. Most states allow local governments to benefit from the state's marijuana sales tax or to levy their own.

Several states charge marijuana taxes at the point of cultivation, but this approach would likely have limited value and be difficult to administer. Cultivation taxes are similar to the "wholesale" taxes that Virginia levies on products such as alcohol, tobacco, and gasoline. Wholesale taxes can make tax collection easier because there can be fewer taxpayers. However, in a regulated marijuana industry, there are just as many cultivators as there are retailers, if not more. Taxing cultivators is therefore not any easier than taxing retailers. Additionally, other states found cultivation taxes difficult to administer. Washington recently eliminated taxes on both cultivators and processors in favor of a single marijuana sales tax.

TABLE 10-1
Most states tax marijuana at the point of retail sale and base tax on sales price

State	Point of taxation		Basis for tax		Level of government	
	<i>Cultivation</i>	<i>Retail sale</i>	<i>Weight</i>	<i>Sales price</i>	<i>State</i>	<i>Local</i>
Alaska	▪		▪		▪	
California	▪	▪	▪	▪	▪	▪
Colorado	▪	▪		▪	▪	▪
Illinois ^a	▪	▪		▪	▪	▪
Maine	▪	▪	▪	▪	▪	
Massachusetts		▪		▪	▪	▪
Michigan		▪		▪	▪	
Nevada	▪	▪		▪	▪	▪
Oregon		▪		▪	▪	▪
Washington		▪		▪	▪	▪

SOURCE: MPG Consulting, 2020.

NOTE: Does not show tax rates for states that have not yet started commercial sales (Arizona, Montana, New Jersey, South Dakota, and Vermont). ^a Illinois also imposes a tax based on the potency of the product.

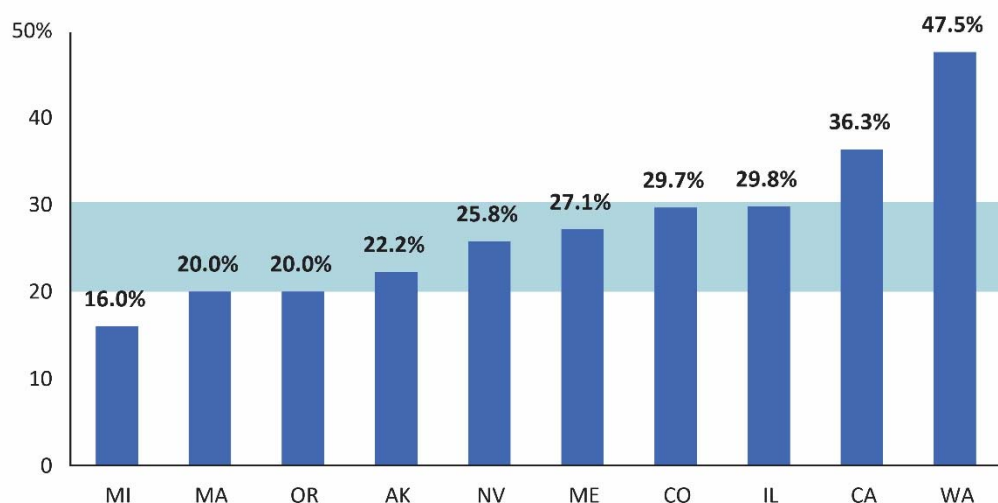
Most states apply a combined sales tax rate of between 20 percent and 30 percent to retail marijuana sales

Most states apply a combined tax rate of between 20 percent and 30 percent on retail marijuana sales (Figure 10-1). This combined rate includes (i) special marijuana taxes

(state and local) and (ii) standard sales taxes (state and local). The average combined rate in other states is about 27 percent. Michigan is the only state with a combined rate below 20 percent. Two states have combined rates that are over 30 percent: California and Washington. Washington has the highest rate by far due to both a high marijuana sales tax (37 percent) and a high standard sales tax (10.1 percent).

FIGURE 10-1

Most states apply a combined sales tax rate of between 20 percent and 30 percent on retail marijuana sales



SOURCE: MPG Consulting, 2020.

NOTE: This combined rate includes (i) special marijuana sales taxes (state and local), and (ii) standard sales taxes (state and local). Does not show tax rates for states that have not yet started commercial sales (Arizona, Montana, New Jersey, South Dakota, and Vermont). ^a Illinois taxes edibles at 39.75 percent and high-THC products at 44.75 percent.

Washington and California initially set their tax rates exceptionally high, which likely contributed to their failure to capture some illegal market participants. When its commercial market opened in 2015, Washington charged a combined tax rate of 60 percent, which included multiple wholesale and sales taxes. Initial legal market growth was slower than expected, so in 2015 Washington simplified its approach and reduced the rate to 47 percent. Commercial sales grew at a faster rate after this change. However, Washington does not appear to have captured as much of its illegal market demand as Colorado or Oregon, which legalized around the same time. California so far appears to have been the least successful at encouraging illegal market participants to enter the legal commercial market. Legal sales have stagnated since the market opened in 2018, with most consumers continuing to buy marijuana from illegal sources. Business owners and industry analysts indicate that one of the main contributing factors is its high tax rate (36.3 percent, on average, but can be higher or lower in a given locality because each locality sets its own local tax).

Virginia should aim for a combined sales tax rate of 25 to 30 percent, including a new marijuana sales tax and the standard sales tax

It is difficult to identify the ideal tax rate, but Virginia should aim for a combined sales tax rate of 25 to 30 percent based on other states' experiences. This would include (i) a new 20 to 25 percent marijuana sales tax and (ii) the existing 5.3 percent standard sales tax. A total rate of 25 percent would be in the middle of the range of other states rates. A total rate of 30 percent would be at the upper end of the range that most states fall within, but Colorado's experience strongly suggests a legal market can be successful at a 30 percent tax rate. Colorado has one of the nation's most mature legal commercial markets and has been among the more successful states at encouraging participants in the illegal market to convert to the legal market.

Applying both a new marijuana tax and the standard sales tax is consistent with how Virginia taxes alcohol and tobacco. A marijuana tax rate in the range described above would be similar to the 20 percent liquor sales tax and in the same range as the 10–40 percent effective tax on a pack of cigarettes. (Cigarette taxes vary by locality, depending on what taxes local governments charge). Marijuana would generally be subject to more regulation than these substances, so a tax rate on the higher end would be justifiable.

Illinois assesses progressively higher taxes on certain products. Illinois taxes edibles, gummies, and topical solutions at twice the rate of marijuana flower (20 percent vs. 10 percent). The state taxes high-THC content products, such as concentrates or vape cartridges, at 2.5 times the rate of flower (25 percent vs. 10 percent).

Virginia could apply progressively higher tax rates to dissuade use of more potent marijuana products that could lead to health problems. Virginia uses this same approach for alcohol; it charges a higher tax on liquor than it does for beer or wine. Virginia could also apply higher tax rates to edible products, because these are more accessible to new consumers and more appealing to young people. Illinois has adopted a tiered approach and sets higher tax rates for high-potency concentrates and edibles (sidebar). While it is too early to determine whether higher tax rates affect use or contribute to better health outcomes, Virginia could consider using a tiered approach. For example, Virginia could set a tax rate that is progressively higher than the standard marijuana tax on flower by charging a 35 percent rate on edibles and a 45 percent rate on concentrates.

The General Assembly could choose to direct all of the new marijuana retail sales tax revenue to the state, or it could choose to share a portion with the locality in which the sale occurred. The existing retail sales tax consists of a 4.3 percent state portion and 1.0 percent local portion. Using the same share as the existing retail sales tax would result in about 80 percent of the revenue going to the state and 20 percent going to localities.

RECOMMENDATION 33

If the General Assembly authorizes commercial marijuana sales, it may wish to consider assessing a tax on retail sales of marijuana at a rate of 20 to 25 percent of the sales price, which would be applied in addition to the existing standard retail sales tax.

POLICY OPTION 27

If the General Assembly authorizes commercial marijuana sales, it could assess a marijuana sales tax consisting of progressively higher rates for more potent and easier-to-consume products to discourage overconsumption.

POLICY OPTION 28

If the General Assembly authorizes commercial marijuana sales, it could apportion revenue collected through a marijuana sales tax between the state and the locality in which retail sale occurs (in addition to the existing apportionment of the standard sales tax).

State would need to determine which state and local agencies are responsible for tax collection

Virginia would need to vest a state agency with authority to collect marijuana sales taxes and ensure taxpayer compliance. Authority could be given to the Department of Taxation (TAX) or the marijuana regulatory body. TAX has experience in collecting similar taxes, including the standard sales tax and tobacco taxes. Regulatory agencies can also effectively collect taxes. For example, the Virginia Alcoholic Beverage Control Authority collects alcohol taxes. Other states use one or the other of these approaches. Colorado's marijuana taxes are collected by the tax collection unit in the Department of Revenue, whereas Washington's Liquor and Cannabis Board is tasked with directly collecting its marijuana taxes.

Virginia would need to provide the marijuana tax collection agency with sufficient resources to collect taxes and ensure taxpayer compliance. For example, Washington state has nine staff positions dedicated to marijuana tax collection and compliance.

Marijuana tax collection could be challenging in the early years of the commercial market. Banks and credit unions might need time to establish services for marijuana businesses (sidebar). Retailers who could not access banking services might need to remit their tax payments in cash. Cash tax payments in the first year of legalization could be in the millions of dollars. Virginia would need to have enough tax professionals to handle these payments. TAX staff noted that additional security measures may be necessary to ensure safety of these large amounts of cash. TAX also observed that cash payment of taxes would be in contrast to electronic filing and payment methods used by many Virginia businesses.

Virginia would also need to have a strong audit compliance function to ensure taxpayers are properly collecting and remitting taxes. Marijuana retailers make most sales in cash because the federal illegality of marijuana prevents credit card companies from handling their transactions (sidebar). This reliance on cash can make it easier for sales to be accidentally or purposefully misreported.

Small, state-chartered banks and credit unions provide basic financial services to marijuana businesses in legalized states, such as checking accounts. This allows marijuana businesses to pay taxes and other expenses without using cash. However, in some states, it took a few months before local institutions established services. Additionally, some marijuana businesses continued to operate with only cash because they did not want to pay the service premiums these institutions charged.

Many large financial institutions do not provide services to marijuana businesses because of the risk of being charged with a federal crime. This includes credit card companies and the national banks that partner with them.

Virginia would also need to determine how to collect the local portion of the marijuana sales tax. The state could collect the new marijuana sales tax in the same way it currently collects the existing standard sales tax. Businesses pay the sales tax collected to the state, which then sends the correct proportion to the locality. This is the most efficient approach because only one party needs to collect the tax and audit taxpayers for compliance. About one-third of localities responding to a JLARC survey preferred this option. Alternatively, localities could be tasked with directly collecting the local portion of the tax, like they do for local-only meals and hotel occupancy taxes. A slight majority of localities responding to JLARC's survey preferred this approach. However, small cities or towns may not have the staff or resources needed to collect tax revenue and ensure compliance. Additionally, this approach could create unnecessary burdens on businesses, which would now have to submit separate portions of the same tax to state and local governments. Businesses could also be audited for the same transactions by both state and local governments.

RECOMMENDATION 34

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting responsibility for both *state* and *local* marijuana sales tax collection with either the Department of Taxation or the marijuana regulatory body and provide the designated agency with the staffing and resources needed to effectively collect taxes and audit taxpayers for compliance.

Tax revenues from marijuana sales depend on several factors but could reach \$300 million annually at market maturity

Marijuana taxes would generate revenue for the state and local governments, with total revenue depending on the amount of marijuana sold, sales prices, and tax rates applied. Marijuana sales would depend on overall consumer demand and how effectively the legal market competed with the illegal market. Over time, the legal market would be expected to outperform the illegal market, and both sales and tax revenues would increase. Prices would be expected to be high at first, when supply is low, and gradually fall over the first few years as supply increased to meet demand. Once the market matured, and demand and prices stabilized, tax revenues would be expected to remain somewhat steady from year to year. There have been a few states that experienced oversupply early on and saw dramatic drops in sales prices and tax revenues in the early years.

Commercial marijuana sales would be driven by consumer demand and product prices

Consumer demand for *legal* marijuana drives commercial marijuana sales. Overall consumer demand for marijuana in Virginia appears relatively low compared with the nation as a whole, based on national survey responses (sidebar). About 7.5 percent of Virginia adults report using marijuana within the last month, compared with 10 percent of adults nationally. The legal market would compete for these customers against the illegal market.

Total marijuana sales in Virginia would depend largely on how many current users switched from the illegal market to the legal market. A substantial portion of Virginia's current marijuana users would continue to purchase marijuana through the illegal market in the early years of legalization. In other states, the legal market captured less than one-quarter of consumption by the end of the first year of commercial sales. As the legal market matures, it should capture more consumers. In Washington and Colorado, the legal markets had captured about two-thirds to three-quarters of consumption after five years. (Some portion of marijuana demand is attributable to underage consumers and would never be captured by the legal market.)

New consumers and out-of-state customers would also affect the size of Virginia's marijuana market. The state could expect to see a small but steady rise in new consumers. Survey data from legalized states indicates the number of legal-age adult users would increase by about 1 to 2 percentage points per year in the initial years of commercial sales, before leveling off. Out-of-state customers would also contribute to sales, because Virginia would be the only legal commercial market in the region (sidebar). These customers could increase Virginia's sales by 15 to 20 percent. However, these sales would decline if other nearby states also legalize commercial sales.

Virginia's medical marijuana market could slightly reduce sales that might otherwise occur under the commercial market. Most states saw medical enrollment growth stagnate once general commercial sales began. However, Virginia's medical market is much smaller and newer than markets in these other states. Therefore, the medical marijuana market should continue to grow at a moderate pace as long as medical marijuana is not subject to a commercial marijuana sales tax (and therefore could remain less expensive).

Price can also affect marijuana sales, especially when the illegal market price is substantially below the legal market price. Illegal market prices in Virginia are estimated to be about \$8 per gram. Experience in other states shows that the legal market price generally declines over time as supply increases to meet demand. Consequently, during the initial years of legalization, Virginia's legal average price could be twice the price of the illegal market (before taxes). By the fourth or fifth year of commercial sales, though, the legal price might be similar to or even less than marijuana prices on the illegal market before taxes. This would encourage more illegal users to convert to the legal market.

Questions about marijuana usage are included in the National Survey on Drug Use and Health. The survey asks a sample of the population about drug usage, including marijuana, during the prior month and year.

Three types of out-of-state customers would contribute to Virginia marijuana sales.

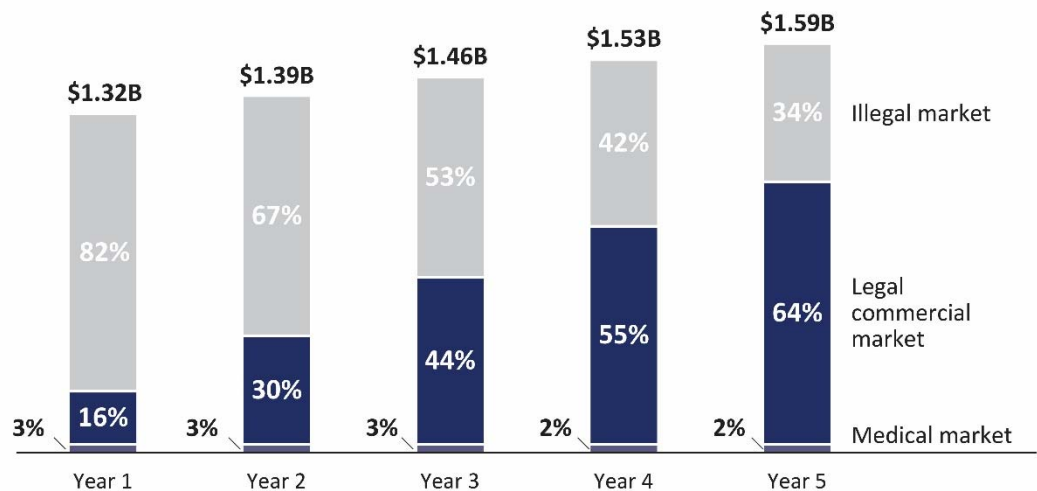
1. Residents of Washington, D.C., and the metro area in Maryland who purchase while in Virginia for work or other types of daily visits.
 2. Residents of counties near Virginia in other surrounding states (especially North Carolina, Tennessee, and West Virginia) who purchase during daily visits.
 3. Residents of any state who travel to Virginia and stay overnight.
-

Legal commercial marijuana sales would eventually be majority of total market

Based on projected demand in Virginia and the experiences of other states, a legal commercial marijuana market would likely capture about 16 percent of the total marijuana market in its first year. During this first year, it is highly likely the illegal market would still represent the vast majority of sales volume. In the third and fourth year, though, the legal commercial market would likely begin to surpass the illegal market as a percentage of total sales. In the fifth year, legal commercial sales could likely represent nearly two-thirds of all sales and have a value of more than \$1 billion. During this time period, medical program sales would likely remain a comparatively small share of total illegal and legal sales.

FIGURE 10-2

Legal commercial market sales would gradually grow to become larger than illegal market sales



SOURCE: MPG Consulting, 2020.

NOTE: Sales projections are based on assumed 25 percent marijuana sales tax and 5.3 percent standard sales tax on marijuana sales (a combined 30.3 percent effective tax rate). Totals do not add to 100 percent due to rounding.

Depending on demand and tax rate selected, commercial marijuana could produce \$150–\$300 million by fifth year of sales

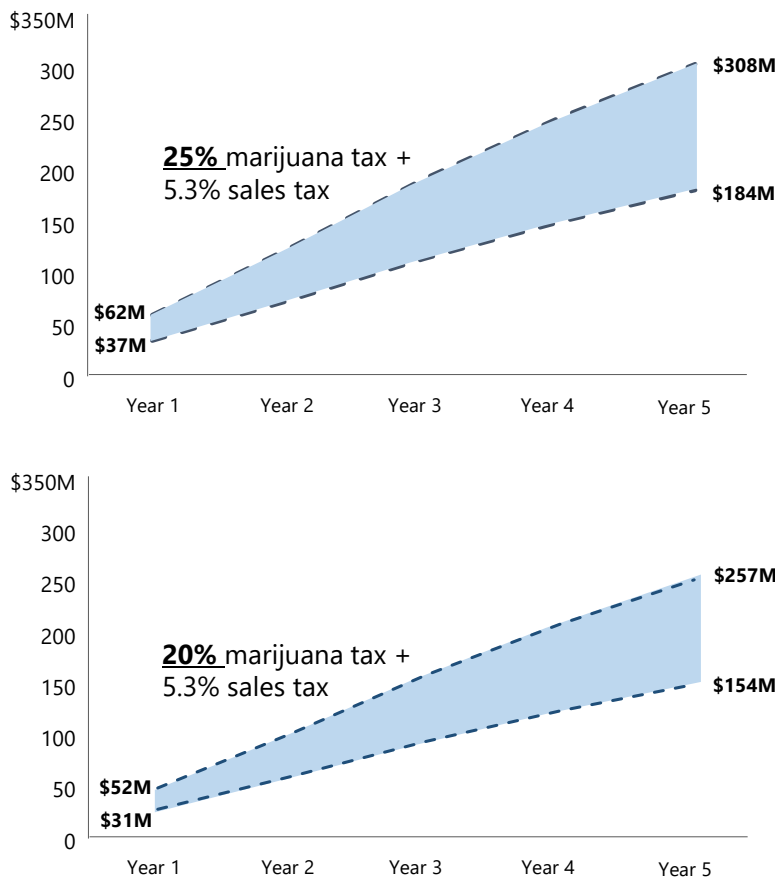
A legalized commercial market could generate substantial revenue for state and local governments, once the market matures. Many factors would affect sales and revenue, but legal market demand and the state's marijuana tax rate would be the two main factors. During the first full year of the commercial market, revenue from a 25 percent marijuana tax and the existing 5.3 percent state sales tax could produce \$37–\$62 million in revenue. As the market grows, revenue could range from \$184–\$308 million by the fifth year. A 20 percent marijuana tax rate and the existing state sales tax would produce less tax revenue each year and is estimated to be \$30–\$50 million less in the

fifth year (Figure 10-3). Different tax rates would increase or decrease projected revenues. (See Appendix N for examples of revenue projections under different rates.)

Although new marijuana sales tax revenues would be substantial, they would make up a small portion of the state's overall revenue. For example, the state portion of new revenues in year five would be equal to about 1 percent of the \$22 billion in general fund revenues collected in 2020.

FIGURE 10-3

Revenue would increase as commercial market matures but would vary depending on demand in legal market and tax rate



SOURCE: JLARC analysis of projections by MPG Consulting. Range shown based on applying tax rates to upper and lower bound of how legal demand could differ because of factors such as how quickly illegal market participants convert to the legal market.

NOTE: Excludes additional sales tax applied in certain regions of the state. Assumes Virginia does not allow medical license holders early entry into the commercial marijuana market. Under that scenario, initial year 1 sales would likely be lower, and year 5 revenues would probably not be achieved until year 6.

Commercial marijuana sales could affect alcohol and tobacco sales in Virginia, which would offset some of the gains from these new tax revenues. However, evidence is inconclusive about the impacts of a commercial marijuana market on tobacco and alcohol sales. A 2020 study analyzing alcohol consumption across all 50 states found

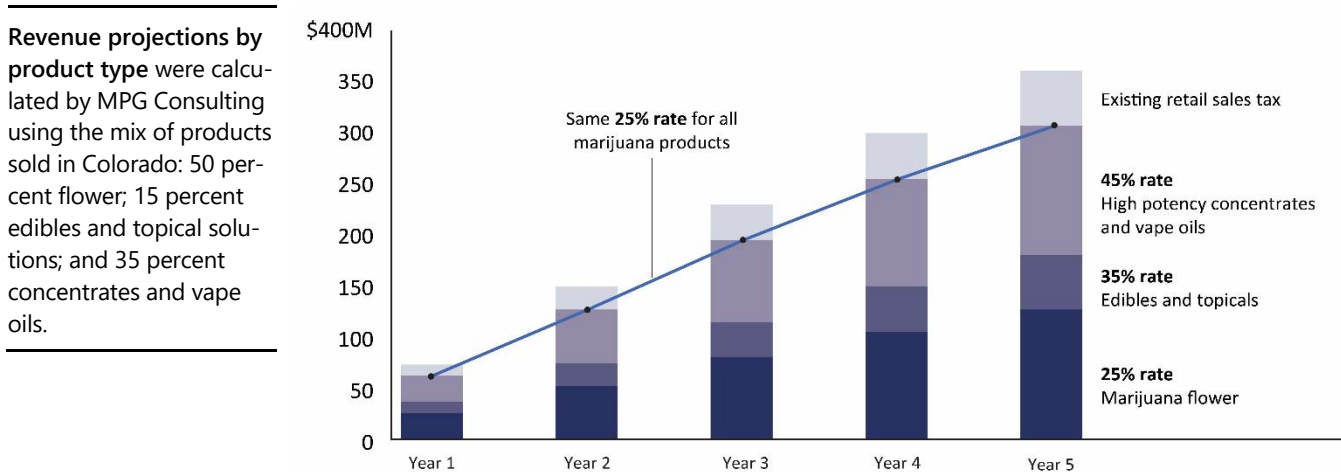
no discernable evidence of substitution away from alcohol towards marijuana. At least two studies concluded that legalization may reduce alcohol or tobacco sales, but these studies were of single states or a single county and had several methodological limitations.

Implementing progressively higher rates on certain products could lead to slightly more revenue than the same rate for all products

Tax revenues could be slightly higher if Virginia chose to apply progressively higher tax rates to certain marijuana products, but this would depend on the exact tax rates chosen. For example, the state could tax regular marijuana flower at 25 percent, edibles at 35 percent, and higher potency products, such as high-THC concentrates and vape oils, at 45 percent. Under this structure, tax revenue through the existing retail sales tax and new marijuana taxes could be about \$10 million more in the first full year of implementation. Revenue could be more than \$50 million more by the fifth year (Figure 10-4).

FIGURE 10-4

A progressively higher tax rate for different products could result in more revenue than if the same rate applies to all products



SOURCE: JLARC analysis of projections by MPG Consulting.

NOTE: Upper bound legal sales volume and upper bound of recommended tax rate (25 percent) used for simplicity of comparison. Tax revenue shown is estimate based on estimated sales volume of each product at the tax rates shown. Sales tax shown assumes same volume of sales as in other scenarios.

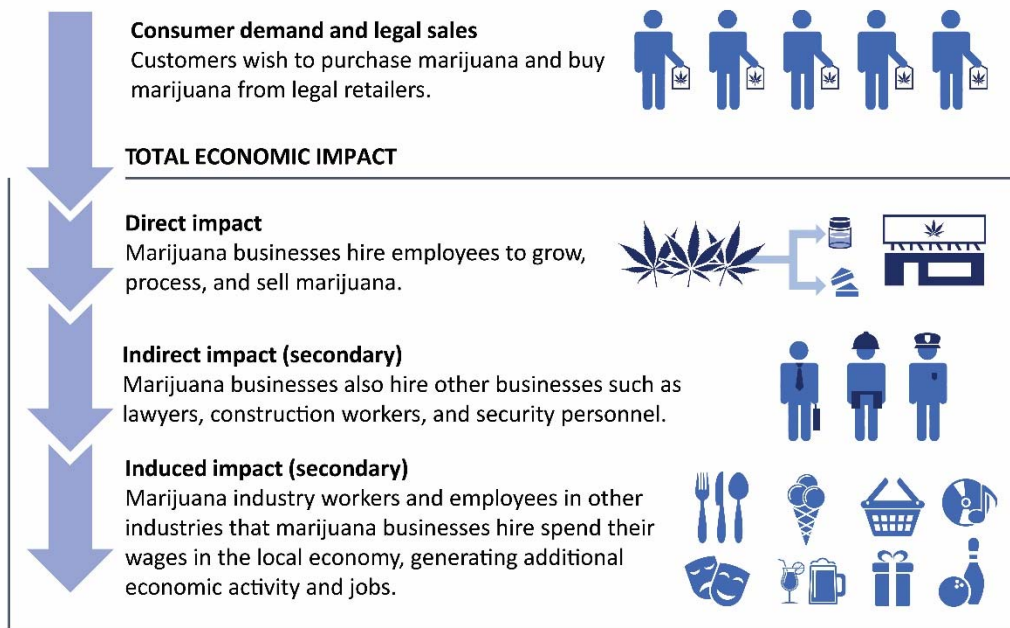
Commercial marijuana industry could employ thousands but share of economy would be small

Establishing a legal, commercial marijuana market in Virginia would have positive economic impacts on the state. It would directly create a new industry with several hundred new businesses and several thousand new employees. This would have a direct

economic impact on wages and investment. Spending by businesses could indirectly promote growth in other industries, further increasing employment and economic output. For example, marijuana businesses would purchase goods and services from several other industries, which could spur additional employment and new business creation. Consumer spending by marijuana industry employees would also contribute to the economy and could induce additional employment. The total economic impact of commercial legalization would include these direct and secondary economic impacts (Figure 10-5).

FIGURE 10-5

Consumer demand and legal marijuana sales would determine economic impact of the commercial market



SOURCE: JLARC and MPG Consulting, 2020.

The total economic impact of legalization ultimately depends on consumer demand for legal marijuana. The more marijuana businesses sell, the greater the economic impacts would be. Consumer demand can be increased by making legal products more appealing than illegal products, such as by charging lower prices or offering greater quality or larger variety of products. However, once the illegal market was captured, any additional growth would come only from increased consumer demand. Demand could fall if neighboring states create their own commercial markets, and consumers who were purchasing products in Virginia chose to buy their marijuana in their home states instead.

Commercial marijuana industry could eventually employ more than 11,000 Virginians

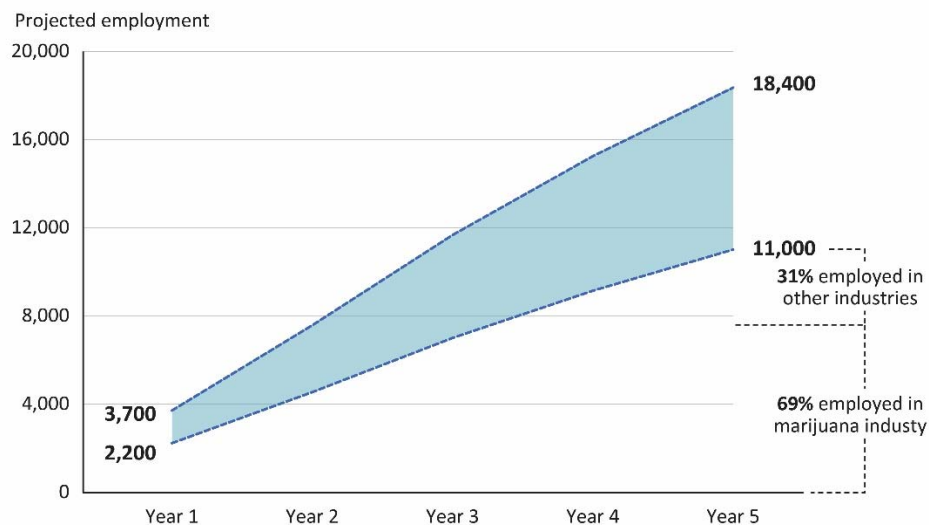
MPG Consulting (MPG) used an input-output model to estimate the economic impact of a legal marijuana market. The model, based on Colorado's marijuana industry, accounts for how spending by buyers and producers in different industries and at different stages of production affect aggregate job creation, business investment, demand, and further spending in the state.

Virginia's marijuana industry could eventually be responsible for creating 11,000 to 18,400 jobs, according to analysis by JLARC's consultant, MPG (sidebar). These new jobs would be equal to 0.3 percent to 0.5 percent of the state's workforce. These jobs would not be created all at once; it would take several years to reach the projected level of employment (Figure 10-6). In the first year of a commercial market, MPG projects that the industry would generate 2,200 to 3,700 jobs, or less than 0.1 percent of statewide employment.

New jobs would be split between the marijuana industry and other industries. MPG projects that 69 percent of jobs generated by the legal industry would be in the marijuana industry itself. The remaining 31 percent would be jobs created by the secondary economic impacts of the industry. Many of these secondary jobs could be in professional, IT, security, legal, and construction fields. Most of those jobs would probably be added several years after the legal market opens.

FIGURE 10-6

Legal market could be responsible for at least 11,000 jobs by year five



SOURCE: MPG Consulting, 2020. Range of potential economic impacts reflect MPG's high and low impact scenarios.

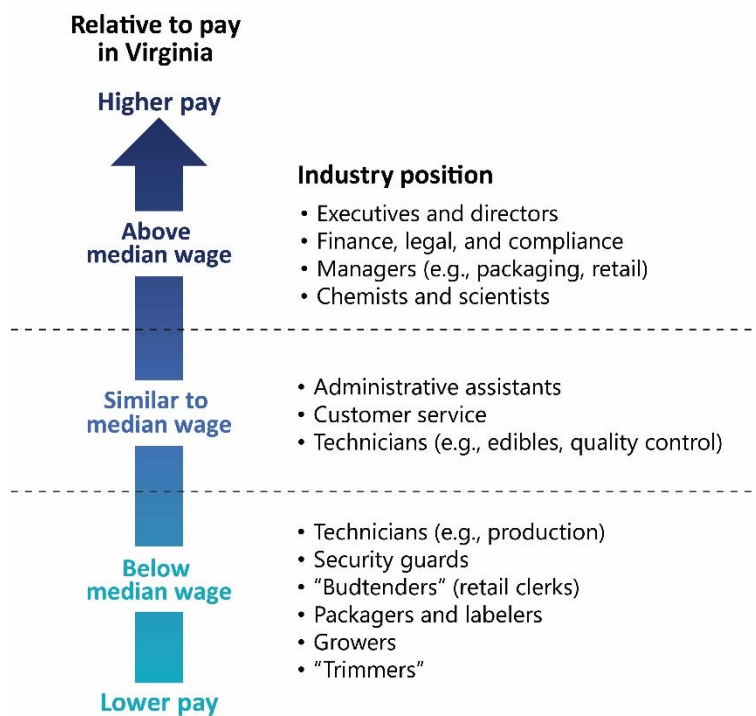
Legal marijuana industry jobs' wages vary, but majority of jobs would likely pay below Virginia's median wage

The legal marijuana industry would include a wide range of jobs. A recent survey of marijuana companies found there were 85 different positions in the industry, ranging from office jobs to production and retail. A majority of jobs would be lower-paying positions such as "budtenders" who sell marijuana to consumers in retail marijuana stores, cultivation and manufacturing floor workers such as growers and technicians,

and “trimmers” who trim and weigh marijuana plants. However, there would also be a smaller number of more specialized and higher-paying jobs, such as horticulturists, chemists, and food scientists. There would also be several types of office jobs in the industry, such as in accounting and finance, business management, and marketing.

Jobs in the legal marijuana industry can pay a wide range of wages, but the majority would likely pay below Virginia’s median wage. The median wage in Virginia in mid-2019 was \$20.30 per hour (about \$42,000 per year), while the median wage for workers at licensed marijuana businesses in Washington was \$14.50 per hour (about \$30,000 per year), according to a recent study. Management-level positions in the marijuana industry can pay as much as \$150,000 a year, whereas seasonal, hourly positions can pay as little as \$12 per hour (\$25,000 per year). Most positions in cultivation, manufacturing, and retail typically pay less than Virginia’s median salary or hourly wage and would likely represent the majority of industry jobs (Figure 10-7).

FIGURE 10-7
Jobs in a legal marijuana industry would pay a range of wages



SOURCE: JLARC review of VANGST Cannabis Industry Salary Guide, 2019; NCIA and FutureSense 2019 Cannabis Compensation Study; U.S. Bureau of Labor Statistics OES, May 2019.

NOTE: Cannabis salaries for a sample of common positions are largely sorted by median salaries reported by VANGST report. Positions and salaries are supplemented with additional information from the NCIA study and information from JLARC’s consultant. Salary is considered “similar” if median cannabis salary is +/- 10 percent of Virginia median annual salary.

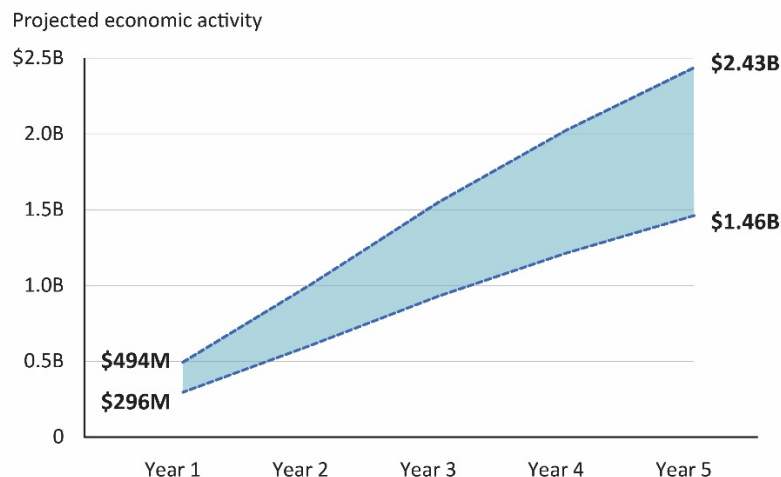
Similar to other industries, some marijuana industry jobs would come with benefits while others would not. Overall, about 70 percent of cannabis businesses offer medical insurance to employees, and about 78 percent offer paid time off, based on a recent survey. Experts indicate that front-line or floor-level workers in marijuana cultivation, manufacturing, and retail are more likely to be seasonal or part-time, and their positions may not come with benefits. This is consistent with other industries that employ people in these fields.

Employment in the marijuana industry would most likely be concentrated in the state's most populous areas. This is the pattern that has been observed in other states. For example, about half of Washington's marijuana industry jobs were located in its five most populated counties in 2016. Retail is concentrated in more heavily populated areas because there are more consumers, and many cultivation operations are indoor facilities that can also be located close to consumers. If marijuana industry jobs followed this pattern in Virginia, the state could see the majority of marijuana jobs in the more densely populated Northern Virginia, Hampton Roads, and Richmond metro areas.

New commercial marijuana industry could be responsible for over \$2 billion in economic activity, less than 0.5 percent of state output

A new commercial marijuana industry would be sizable but would represent a relatively small share of the Commonwealth's overall economy. The industry could account for \$1.46–\$2.43 billion in economic output once the market is mature, based on MPG estimates (Figure 10-8). This represents about 0.3 percent to 0.4 percent of Virginia's gross domestic product (GDP), a measure of total economic output in the state. About 40 percent of the economic impact would be directly from the new industry, and 60 percent would be from secondary impacts such as additional consumer spending and creation of jobs in other industries.

The upper range of the economic impact estimate of over \$2 billion likely overstates the *net* economic impact of a legal marijuana industry in Virginia. This is because some of this economic activity already occurs in the illegal marijuana market and would simply be converted to economic activity in the legal market. For example, those who currently sell marijuana on the illegal market use the profits they make to purchase goods and services, which already generates economic impact.

FIGURE 10-8**Legal industry could account for over \$2B in economic activity by year five**

SOURCE: MPG Consulting, 2020. Range of potential economic impacts reflect MPG's high and low impact scenarios.

Additionally, some factors could limit the economic impact of a legal marijuana industry. For example, some marijuana jobs would eventually be at risk if the federal government legalized interstate marijuana commerce, because marijuana cultivation and production could move to lower-cost states. The economic impact of Virginia's industry would also be reduced if neighboring states legalized marijuana, or if the legal industry was unable to displace the illegal market. The lower end of the range in Figure 10-8 reflects the potential adverse impact from these scenarios.

MPG projects that the impact of a dollar spent in the marijuana industry in Virginia could have a greater economic impact than a dollar spent in other industries. Based on an economic output multiplier of 2.4 estimated for Colorado's marijuana industry, MPG projects that for every \$1.00 that consumers spend on legal marijuana in Virginia, an additional \$1.40 would be generated for the state economy. This multiplier is large because the total economic impact of a legal marijuana market in Virginia would mostly be contained within the state.

Marijuana's economic impact would be largely contained within the state because the federal prohibition of marijuana prevents commerce from occurring across state lines. As a result, the marijuana supply chain—from cultivation to manufacturing to retail—would occur almost entirely in Virginia. These Virginia-based marijuana businesses and their employees would then generate additional economic activity in the state. Maintaining marijuana production in Virginia would make the industry different from most industries, which draw on supply chains that cross state lines and contribute to multiple state's economies. Industries which rely on products that are imported into Virginia do not contribute as much to the state's economy.

Additionally, long-term growth in the economic value generated by a legal marijuana market may be limited. MPG projects that rapid growth in legal marijuana sales in the

first five years of legal sales would initially drive significant growth in jobs and spending in the industry. As the state captured increased consumer spending on marijuana, the market would mature and any additional growth would be driven by broader economic trends after year five.

11 Regulatory Body to Oversee a Commercial Marijuana Market

If Virginia decides to establish a commercial marijuana market, the market would need to be well regulated or the state would risk federal intervention. One of the most critical aspects of establishing a well-regulated market is determining which government body sets and enforces the regulations.

Other states have given regulatory authority to one or more departments, boards, or commissions (Table 11-1). Some states have opted to delegate authority for regulating marijuana to existing agencies, while others have created new standalone agencies specifically for this purpose. In a few cases, regulatory authority has been divided among several different agencies. No matter where authority is vested, the role of the regulatory bodies is similar across all states.

TABLE 11-1

States vest regulatory authority with different departments, boards, and commissions

State	Regulatory body	Single regulatory agency?	Regulatory agency is new, standalone agency?
Massachusetts	Cannabis Control Commission	✓	✓
Nevada	Cannabis Compliance Board ^a	✓	✓
Alaska	Dept of Commerce, Community, and Economic Development	✓	
Colorado	Dept of Revenue	✓	
Michigan	Dept of Licensing and Regulatory Affairs	✓	
Oregon	Liquor Control Commission	✓	
Washington	Liquor and Cannabis Board	✓	
California	Dept of Consumer Affairs (DCA) Dept of Food and Agriculture (DFA) Dept of Public Health (DPH)		
Illinois	Dept of Financial & Professional Regulation (DFPR) Dept of Agriculture (DofA)		

SOURCE: JLARC analysis of other states.

NOTE: (1) In California, DCA regulates retail, DFA regulates cultivation, and DPH regulates processing. (2) In Illinois, DFPR regulates retail, and DofA regulates cultivation and processing. (3) Table does not show Maine, which began commercial sales in October 2020, or Arizona, Montana, New Jersey, South Dakota, Vermont, and D.C., which have not established commercial markets.

^a Nevada initially vested responsibility for regulating the commercial marijuana market with the Department of Taxation. It created the Cannabis Compliance Board in 2019.

Virginia could vest regulatory authority with VABC or create a new board and agency

Virginia should vest authority for regulating commercial marijuana in one board and agency. Regulators in other states uniformly stressed that this is the best approach because it is simpler for both the regulator and the regulated industry. By having one main regulator, the state could eliminate any duplicative oversight or potential gray areas with other regulators. It is also easier for the regulator to carry out basic functions, such as setting regulations and issuing licenses, because there is no need to coordinate or share information with others. The regulated industry benefits because license holders would need to work with only one regulator. A few states have divided regulatory authority among multiple agencies, but it appears this was done primarily for expediency.

The state's marijuana regulator would still need to coordinate with other agencies to a limited extent. For example, marijuana regulators in other states coordinate with partner agencies in areas such as tax collection, pesticide use inspections, and setting product safety and testing regulations.

In contrast with assigning the Virginia Lottery responsibility to regulate gaming in Virginia in 2020, (1) legislation has yet to be drafted to develop a commercial marijuana market, and (2) no state agency has publicly stated strong interest in responsibility for regulating a commercial marijuana market.

Virginia could grant regulatory authority for commercial marijuana to an existing body, or it could create a new board and agency. The two most viable options for regulating the commercial marijuana industry in Virginia are to (1) grant regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board or (2) create a new standalone board and agency specific to marijuana. Most other states initially chose to give regulatory authority to an existing body, but one—Massachusetts—created a new, independent commission. (A second—Nevada—created a standalone marijuana agency later on.) Each approach has tradeoffs that should be considered (Table 11-2).

VABC would represent an expedient and efficient choice. Granting VABC regulatory authority would cost slightly less than creating a new agency, largely because VABC's existing management and administrative structure would only need to grow slightly to accommodate this new function. This existing management and administrative structure would also allow VABC to implement the commercial marijuana market slightly faster (e.g. human resources staff to hire new staff, office space) and with less risk of delay than if Virginia created a new agency.

Creating a new agency would cost slightly more and take more time but would have several advantages over granting authority to VABC. A new agency would be able to focus its mission solely on the commercial marijuana market, which is a substantial and major effort in its own right. (VABC's existing mission is substantial and complex.) This singular focus could better enable the separate marijuana regulatory agency to ensure that special initiatives, such as a social equity program, are an agency-wide priority and receive top leadership attention. The General Assembly would have the flexibility to determine where to place the agency, by either creating a new agency within

the executive branch that is directly accountable to the governor or establishing it as an independent authority like VABC. Because the new agency would not have any pre-existing law enforcement function, it could potentially be easier for it to take a different enforcement approach if the General Assembly directed it to do so.

TABLE 11-2**Granting authority to VABC or creating a new agency both have advantages**

	Virginia ABC	New board & agency
Lower operating costs	✓	
Readily available initial funding source	✓	
Less time to implement	✓	
Lower risk of unexpected delays	✓	
Marijuana regulation is primary mission		✓
Emphasis on special priorities, such as social equity		✓
Flexibility on governance structure		✓
Flexibility on enforcement approach		✓

SOURCE: JLARC staff interviews with VABC and marijuana regulatory agencies in other states.

The General Assembly should consider these tradeoffs before deciding where to vest regulatory authority. The following sections provide additional information about how marijuana regulation would be established with VABC or at a new board or agency and the key tradeoffs associated with each.

RECOMMENDATION 35

If the General Assembly authorizes commercial marijuana sales, it may wish to consider establishing state regulatory authority by either (i) granting regulatory authority to the Virginia Alcoholic Beverage Control Authority and its board or (ii) creating a new standalone regulatory agency and board solely focused on marijuana regulation.

Vesting authority with VABC would reduce implementation costs and time

VABC is responsible for regulating the state's alcohol industry and for distributing and selling liquor. Given that VABC has experience regulating a commercial industry that is similar to marijuana and has relatively large and robust licensing and enforcement capabilities, it is the state agency that is best suited for regulating marijuana. Three other states—Oregon, Washington, and Alaska—have placed authority for marijuana regulation with their alcohol regulation agency.

Granting VABC regulatory authority would place this new function of government with a partly independent organization. VABC was removed from the executive branch and made an independent authority in 2018. The goal of this decision was to allow

VABC to be more flexible and efficient by freeing it from state personnel, information technology, and procurement requirements. These flexibilities were deemed important so that VABC can balance its regulatory role with its large distribution and retail operations. Although VABC is no longer part of the executive branch, VABC staff indicated they continue to communicate and work closely with the secretary of public safety and homeland security.

VABC structure may not need to change, but additional staff would be required

Under VABC, authority for setting marijuana regulations would be vested with the five-member VABC Board. As with many Virginia boards, VABC board members are appointed by the governor and confirmed by the General Assembly. The state would not necessarily need to make any changes to the board's membership or appointment process. VABC Board members are required to be Virginia residents with general experience in business or legal affairs. These qualifications are equally applicable to marijuana regulation as they are to alcohol regulation. Board members should *not* have a financial interest in commercial marijuana businesses because this would create a conflict of interest.

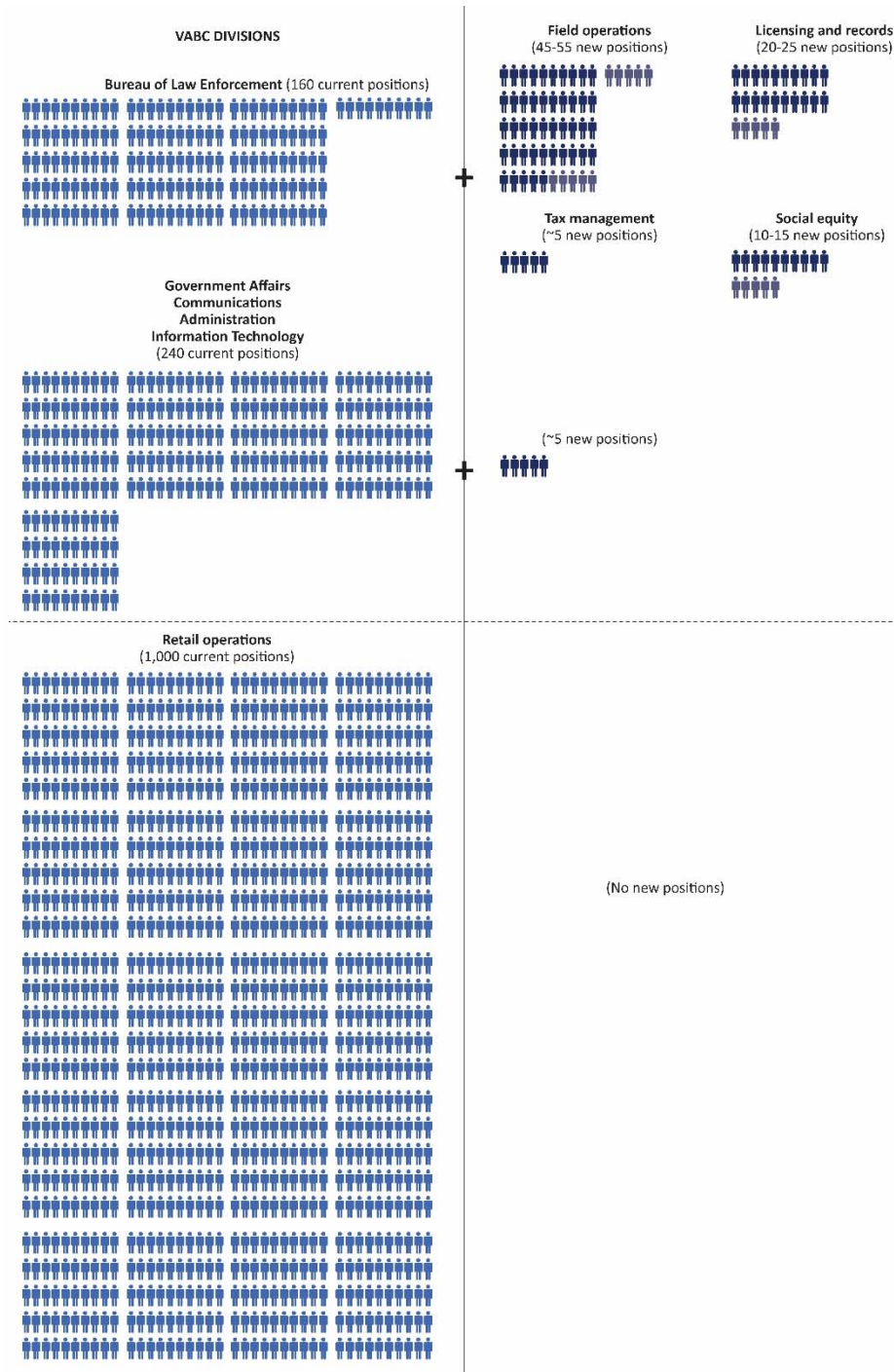
The VABC board does not currently have any advisory committees, but it could benefit from the creation of a marijuana advisory committee with expertise in cultivation, distribution, testing, and retailing. A social equity committee could also be created to advise the board and oversee social equity programs. (See Chapters 7 and 8).

A separate division specifically dedicated to marijuana regulation and enforcement could be created within VABC, or those functions could be integrated into the existing divisions that perform regulation and enforcement. When asked, VABC indicated it would likely (absent specific direction to not do so) incorporate new marijuana regulatory functions into its current structure instead of creating a new division focused solely on marijuana. VABC staff indicated this approach would best allow them to take advantage of their existing organizational capabilities and expertise. This same approach was used by alcohol regulatory agencies in Oregon and Washington when they were given responsibility for marijuana regulation.

Although VABC's structure might remain largely the same, it would need additional staff for its new responsibilities. JLARC staff estimate VABC's core licensing and enforcement staff would need to increase by about 80 to 100 positions, based on the regulatory staff employed by marijuana regulators in Colorado and Washington. (VABC staff indicated that they might need fewer new regulatory positions than JLARC estimated, based on their experience regulating alcohol.) The agency might also need five additional administrative positions in areas such as finance and information technology. Figure 11-1 includes the additional staff VABC might need to regulate a commercial marijuana market. This estimate includes the 10 to 15 staff that

could be needed if the General Assembly decided to implement the social equity programs discussed in Chapters 7 and 8. VABC would not need these additional positions if the General Assembly did not implement them.

FIGURE 11-1
VABC could need about 85 to 105 additional staff



SOURCE: JLARC analysis of VABC organizational structure and staffing for marijuana regulatory agencies in other states.

VABC could establish a commercial marijuana market at a lower cost than a new regulatory body. As an established organization, VABC would not need to hire all new executives and support staff. The agency would already have office space and IT infrastructure in place. VABC would need to hire additional licensing and enforcement staff, but it would probably not need as many as a new agency would. For example, some current licensing staff could be cross trained to handle marijuana license applications and renewals. Even though some costs would be lower, others would be the same. For example, VABC would need to purchase or contract for a new marijuana tracking system and hire all new staff for a social equity program.

VABC revenues from alcohol sales could be used to help cover the initial costs of establishing marijuana regulation. This funding approach was used in Oregon and Washington. However, this would slightly reduce the amount of revenue that VABC returns to the state's general fund.

VABC could implement its new responsibilities faster than a new agency and with less risk of unexpected delays

VABC's existing management and administrative infrastructure would allow it to more quickly undertake the tasks necessary to establish a commercial marijuana market. Soon after a legalization bill was passed, the existing VABC management could begin planning how to implement its new responsibilities and potentially designate staff to begin drafting regulations for the new commercial market. A few additional staff might be immediately needed to assist in planning and other early activities. But these staff could be hired by VABC's current human resources office, work in VABC's headquarters, and be supported by VABC's information technology and other staff.

Once VABC's efforts were underway, it could likely create necessary systems and procedures faster than a new agency could. For example, VABC staff indicated they could probably adapt the agency's existing IT licensing system for alcohol regulation to marijuana. This would prevent VABC from going through a lengthy process to procure a new system.

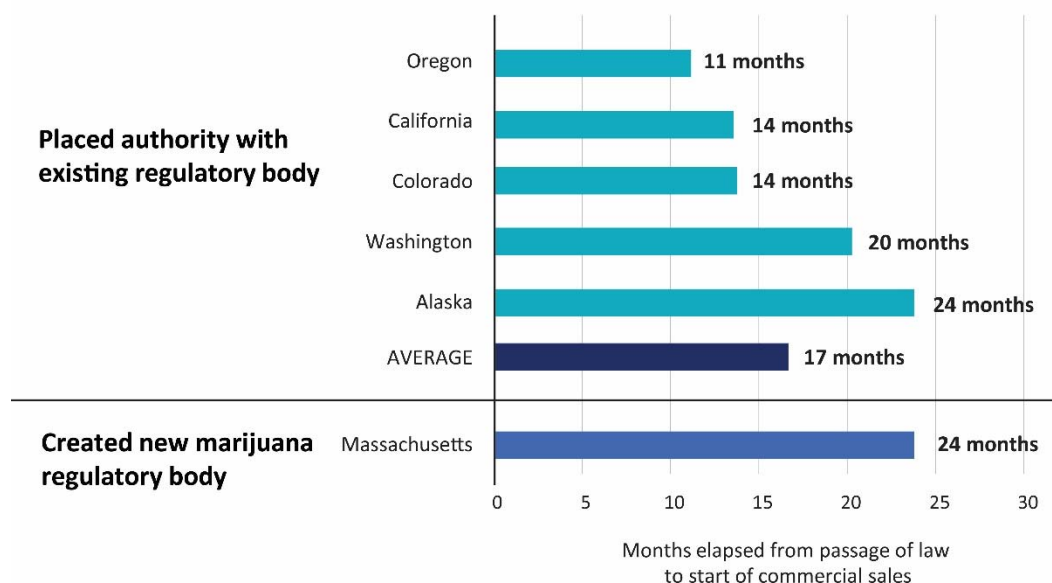
In contrast, an entirely new regulatory body would require additional time to undertake most tasks and would be more likely to face unexpected delays. The statute establishing the new agency would have to be enacted and funds appropriated before the agency could promulgate regulations for the new commercial market. With the tasks required to create a new agency, unexpected delays would likely occur, which could lengthen the timeline for implementing legalization. For example, if there was a delay in appointing the agency head or making key hires, it could take longer to establish the commercial market.

States that placed authority for marijuana regulation with an existing agency were able to open their commercial markets earlier than the one state (Massachusetts) that created a new agency (Figure 11-2). On average, these states took 16 months to open their commercial markets. JLARC staff estimate that VABC might be ready to open the

state's commercial market in about 24 months, and the new agency would take about 30 months. These longer timeframes account for Virginia's relatively lengthy regulation-setting process and the time needed to develop and implement a comprehensive social equity assistance program, if Virginia chooses to do so (see Chapter 12).

FIGURE 11-2

States that vested regulatory authority with an existing agency were able to more quickly open their commercial marijuana markets



SOURCE: JLARC analysis of other states' legalization timelines.

NOTE: (1) The start date used here is the exact day that the bill or referendum passed legalizing adult use. (2) Table does not show Illinois, Nevada, or Michigan because these states elected to start commercial sales early by allowing medical licensees to be the only initial license holders, which accelerated implementation. Table does not show Maine, which began commercial sales in October 2020, or Arizona, Montana, New Jersey, South Dakota, Vermont and D.C., which have not established commercial markets.

If the state vests marijuana regulatory authority with VABC, it could be directed through the Appropriation Act to use a relatively small portion of its alcohol sales revenue to fund new marijuana-related functions. If VABC moved quickly it could spend as much as \$2–3 million during the first full year of implementation. It might require \$5–6 million in the second year, and a total of \$7–9 million in the third year. First year costs could be paid entirely from alcohol revenues. By the second year, part of the funding could come from marijuana license fee revenues. By year three, commercial sales should begin, and regulation could be fully funded from a combination of license fees and marijuana sales tax revenues.

The exact funding VABC would need would depend on a several factors, especially the structure the General Assembly chose for its commercial market. If the General Assembly determined that VABC should serve as the regulatory body, VABC would need

to perform a more detailed analysis of its additional staffing needs and other potential costs, such as the cost of expanding licensing and other IT systems.

RECOMMENDATION 36

If marijuana is legalized in Virginia, and the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider prohibiting VABC board members from having a financial interest in any marijuana business.

RECOMMENDATION 37

If the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider appropriating sufficient funds to VABC to establish its new regulatory functions.

RECOMMENDATION 38

If the General Assembly gives commercial marijuana regulatory authority to the Virginia Alcoholic Beverage Control Authority (VABC) and its board, then it may wish to consider directing VABC to develop and submit a detailed staffing and cost proposal to the governor and General Assembly.

New agency could focus solely on marijuana regulation and social equity and have different governance structure and enforcement approach

Rather than grant VABC responsibility, Virginia could create a new board and agency to regulate the commercial marijuana industry. Regulating commercial marijuana is a large and somewhat specialized task that is significant enough to justify its own, dedicated agency. Only one state—Massachusetts—created a new regulatory agency at the same time it established its commercial market. Massachusetts regulators said it was challenging to establish a brand new agency while simultaneously setting up a new, highly regulated commercial marijuana market. However, Nevada recently moved responsibility for marijuana regulation from its tax department to a new, single purpose agency because of the advantages of this approach.

Virginia would need to create entirely new agency modeled on its own regulatory agencies and marijuana regulators in other states

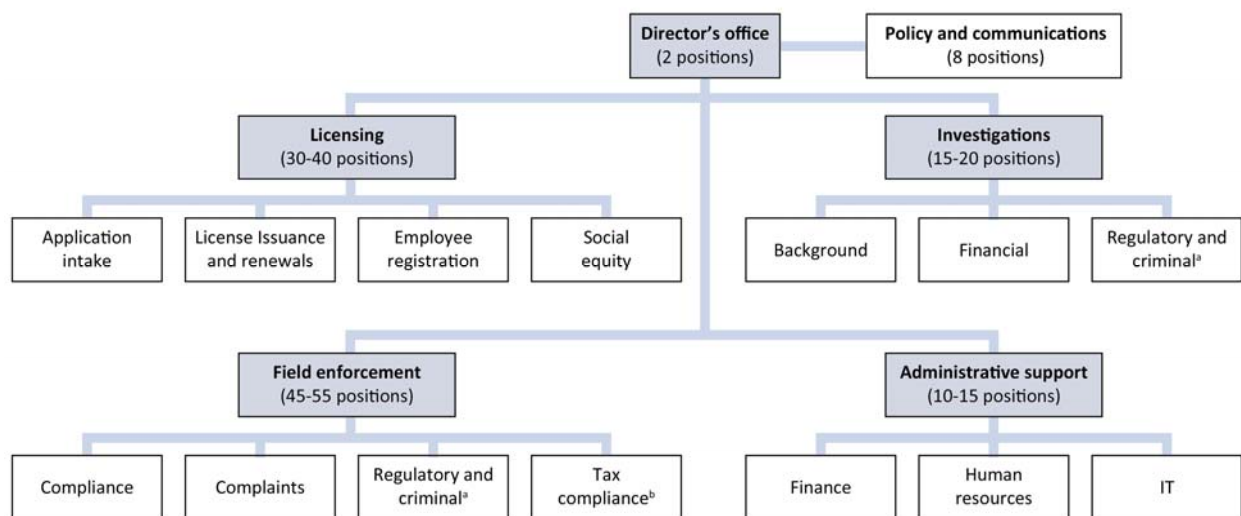
The new regulatory agency would be governed by a board, similar to other regulatory agencies in Virginia. The new regulatory board could resemble the VABC and the State Corporation Commission boards, with three to five members appointed by the governor and confirmed by the General Assembly. Board members should have general

business, government, or legal expertise. Board members with general expertise, instead of expertise in specific industries or areas, would help the board maintain a neutral position when making decisions. For example, if board members were drawn from the marijuana industry, or had a financial interest in a marijuana business, they would not be neutral and could make decisions that were in their own self-interest. Similarly, if board members were drawn from other areas, such as public health or safety, they could be biased toward particular outcomes or approaches.

However, board members would need ready access to experts to inform their decisions. Therefore, the board should have one or more formal advisory committees—with members representing the marijuana industry, public health, public safety, and medical patients—to ensure it could fully understand and effectively consider various stakeholder perspectives when making decisions. A social equity committee could also be created to advise the board and oversee social equity programs. (See Chapters 7 and 8).

FIGURE 11-3

New marijuana regulatory agency could be organized by four primary functions



SOURCE: JLARC analysis of other states' marijuana regulatory agencies.

NOTE: ^a Criminal investigations and enforcement would be needed only if the agency is given law enforcement authority. ^b Staff position counts includes five positions for tax collection and compliance audits. However, if this function is given to the tax department, this section and these positions would no longer be needed. The figure also assumes that Office of the Attorney General would provide the new agency with all legal services, which is the standard practice for state agencies.

The regulatory agency would need to be headed by a director who was either appointed by the board or appointed by the governor and confirmed by the General Assembly. The agency would need to be divided into several divisions, with each division dedi-

cated to performing one of the regulator's primary functions (Figure 11-3). The licensing division would be responsible for reviewing applications and issuing licenses. The investigations division would perform applicant background checks and investigate business financial structures to ensure they are legitimate and not tied to organized crime. That division could also lead major criminal investigations, if the state granted the agency this power. Enforcement would include enforcement staff at field offices throughout the state. These staff would inspect facilities and investigate complaints, such as allegations that a license holder is violating regulations. Field enforcement could also have the authority to make arrests and pursue criminal investigations, if the state granted the agency this power. Additional, detailed information on each division and its staffing requirements is provided in Appendix O.

The new agency could spend as much as \$3–4 million during the first year, and \$7–9 million during the second year of implementation. However, if the agency experienced delays, the total funding needed in the first two years would be less. If the agency was fully operational by the third year, it could spend as much as \$9–12 million. The ongoing funding required is estimated to be 33 percent more than would be required if for operations if the regulatory function was assigned to VABC. These projected costs are only estimates based on other states. The new agency would need to perform a more detailed analysis of its additional staffing needs and other potential costs, after it was created.

In contrast with giving marijuana regulatory authority to VABC, a new marijuana regulatory agency would not have a readily available funding source to pay for the initial costs of operation. To address this, the first two years of agency operations could be at least partially funded through a working capital advance from the State Treasury, through the Department of Accounts. The advance could be repaid with revenues from marijuana license fees and marijuana sales taxes. The agency would begin collecting license fees from applicants around the start of its second year. Initial fee revenues are expected to be in the range of \$2–\$6 million and could partially repay the advance. The state would begin collecting marijuana sales tax revenues in the agency's third year, after licenses had been issued and retail sales began. Initial revenues could be used to fully repay the working capital advance. Agency operations would then continue to be funded through a combination of marijuana license fees and tax revenues. Colorado used a similar approach to fund its medical marijuana regulation division (sidebar), and Virginia used this same approach to establish the Virginia Information Technologies Agency (VITA).

Colorado used a general fund loan to establish its medical marijuana program, which began in 2010. The Colorado General Assembly made a general fund loan of approximately \$1 million to create and stand up the initial Colorado Medical Marijuana Enforcement Division.

RECOMMENDATION 39

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider (i) establishing a board appointed by the governor and confirmed by the General Assembly, (ii) requiring board members to have general business, government, or legal expertise, and (iii) prohibiting board members from having a financial interest in any marijuana business.

RECOMMENDATION 40

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider creating an agency that is either (i) within the executive branch and is headed by a director who is appointed by the governor and confirmed by the General Assembly, or (ii) an independent authority and is headed by a director who is either appointed by the governor and confirmed by the General Assembly or appointed by the board.

RECOMMENDATION 41

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider appropriating sufficient funds to the new agency to establish its new regulatory functions.

RECOMMENDATION 42

If the General Assembly creates a new board and agency to regulate commercial marijuana, it may wish to consider directing the agency to develop and submit a detailed staffing and cost proposal after it is created to the governor and the General Assembly.

New regulatory agency would solely focus on regulating marijuana and could emphasize special priorities, such as social equity

Governments sometimes create relatively small agencies to focus on one mission without distraction. Though larger organizations with multiple missions are often more administratively efficient, it can be challenging for senior leadership to ensure that each aspect of the organization's mission receives appropriate attention and emphasis.

A new agency would be solely focused on regulating marijuana. Regulators in other states—including those where marijuana regulation was placed under an existing agency with other priorities—universally emphasized the importance of having a culture and staff that are focused on marijuana. Massachusetts's Cannabis Control Commission (CCC) is only responsible for regulating marijuana, and consequently its mission statement is exclusively focused on that goal:

The mission of the Cannabis Control Commission is to honor the will of the voters of Massachusetts by safely, equitably and effectively implementing and administering the laws enabling access to medical and adult use marijuana in the Commonwealth.

If the General Assembly makes social equity a top priority in the commercial market, a new agency, without multiple missions and responsibilities, may be better able to ensure that this gets proper attention as part of its regulation of the market. When the Massachusetts CCC was created, social equity was engrained as one of its top priorities. CCC staff indicated that this emphasis on social equity affects all aspects of what they do. For example, staff said marijuana offenses do not affect licensing decisions because they could have a discriminatory effect. Staff also said they do not have badged or armed enforcement officers because they want to build a rapport with the

industry, especially with people and communities that may be distrustful of law enforcement. Staff noted: “We want to be viewed as being here to help.”

The social equity program in a new agency would represent a fairly sizable portion of its staff, which would help ensure it remains a focus for the agency. The 10 to 15 staff needed to implement all the social equity programs discussed in Chapters 7 and 8 would represent more than 10 percent of the new agency’s total staffing. In contrast, they would represent less than 1 percent of all VABC staffing.

New agency could be independent like VABC or placed under the governor in the executive branch

If a new agency is created, the General Assembly could make it an independent authority or part of the executive branch. Each approach offers its own advantages.

If the agency was placed in the executive branch, agency leadership would be directly accountable to the governor. Creating a new agency under the governor would ensure an elected official was held directly accountable for implementation of commercial legalization. Given the high profile of commercial legalization, and the likelihood that it would be controversial in parts of the state, it may be useful to have implementation overseen by an elected official. Additionally, as long as marijuana is federally illegal, the state needs to tightly control its market, or it risks intervention from the U.S. Justice Department. Placing the regulatory agency in the executive branch would allow the governor to ensure any potential problems are addressed.

Placing the agency in the executive branch could have other benefits. Regulators in Massachusetts indicated that it would have been helpful to have support from executive branch agencies when establishing their agency. The new agency may also be better able to coordinate with other executive branch agencies in areas such as tax collection, pesticide use inspections, and the creation of product safety and testing regulations.

If the agency were independent, like VABC, it could have more flexibility to establish its operations. It would not be subject to state personnel, information technology, and procurement requirements, which might allow the agency to more quickly build and implement its operations. The agency might be able to hire staff more quickly and more easily offer competitive salaries because of its exemption from the Virginia Personnel Act. Additionally, because the agency would not be directly accountable to the governor, it would be less subject to political influence.

The primary drawback to an independent agency is that there could be less oversight and accountability, which may not be desirable for an agency charged with regulating a federally illegal substance. The General Assembly could create some accountability by requiring that the director be appointed by the governor and confirmed by the General Assembly (instead of being appointed by the board). The governor could also be given the power to dismiss the agency director for cause. The governor has the same authorities over VABC’s chief executive.

Newly created agency could take a flexible approach to enforcement

Creating a new agency could make it easier for the state to take a compliance-only approach to its enforcement responsibilities. Regulators in other states emphasized that marijuana does not need to be regulated like other industries, such as gambling and alcohol, and a new agency could be designed to regulate the marijuana industry differently. A new agency could focus solely on ensuring compliance with regulations, such as working with new businesses to correct compliance issues. It would not have to be given law enforcement responsibilities, such as the duty to investigate or address criminal activity.

Vesting VABC with authority over marijuana might entail giving regulators some law enforcement responsibilities. VABC employs 80 sworn police officers who help carry out its many enforcement functions, such as inspections and complaint investigations. This is not necessarily problematic; most marijuana regulators in other states also have law enforcement authority (sidebar). Additionally, VABC staff indicated that their enforcement staff are more focused on regulatory enforcement than law enforcement. However, if Virginia wants to fully separate law enforcement and marijuana regulation, it may be easier to accomplish that in a new agency that does not already have a law enforcement function.

Giving the marijuana regulator law enforcement authority has benefits, but it may not be necessary. Most marijuana regulators in other states have law enforcement authority and employ sworn officers. They said this allows officers to take immediate action if they find something during an inspection that could indicate illegal activity, such as “off books” marijuana plants. They also noted that sworn officers send a strong message to the public and licensees that deterring criminal activity is a top priority. However, law enforcement authority may not be essential. Massachusetts does not vest its regulatory body with this authority, and regulators reported this had not caused any problems. If its inspectors find something questionable, they report it to state or local police.

Not assigning criminal law enforcement duties to the marijuana regulator could have some advantages. Regulators in two states with law enforcement duties indicated that they were trying to take *less* of a law enforcement approach. They said changing their approach can help them build better relationships with people in the marijuana industry, some of whom are distrustful of police. This approach may also help encourage members of the general public with past marijuana offenses, and people working in the illegal market, to seek employment and business opportunities in the legal market (if those are policy goals).

A regulator could take a compliance-oriented approach even if it has law enforcement duties. VABC staff indicated that they emphasize education and compliance as part of their regulatory enforcement approach with alcohol license holders. VABC staff noted that if given responsibility for regulating marijuana, they would work with marijuana

Marijuana regulators with law enforcement authority are responsible for enforcing their regulations as well as criminal laws that fall within the area they regulate. These regulators typically employ sworn police officers who have the power to serve warrants, make arrests, and carry weapons in the line of duty. For example, a sworn officer can arrest someone they have reasonable cause to believe has sold marijuana to a minor.

license holders to educate them and allow them to correct problems rather than automatically charging them with crimes.

Regulatory body should be given the powers and duties needed to oversee the commercial market

After deciding whether to vest regulatory authority with VABC or a new regulator, Virginia would need to outline in law the basic powers and duties of the regulatory board and agency.

Regulator should be vested with a several general regulatory powers and duties

Virginia should give the marijuana regulator powers and duties that are similar to those it gives to other state regulators. Generally, Virginia gives regulatory boards the powers and duties to promulgate all necessary regulations, within the bounds set by state law. Board regulations should include everything from license qualifications to the rules that licensed operations must follow. Virginia also gives regulatory boards ultimate approval for licensing and enforcement decisions, including whether to deny a license application or to suspend or revoke an active license.

Virginia generally gives regulatory agencies (or the agency director) powers and duties needed to support the board. These include several powers related to licensing, such as the power to perform fingerprint background checks on license applicants. It also includes powers related to enforcement, such as the power to investigate complaints about licensees, inspect the records and premises of licensed businesses, assist in enforcement proceedings, and collect fines or levy other sanctions. Agencies typically have several additional, general administrative powers needed to carry out their duties, such as the power to hire staff and enter into contracts.

Other states vest their marijuana regulators with many of the same, standard regulatory powers and duties. They also typically give their regulators powers and duties that are specific to regulating the marijuana industry. For example, other states generally require their regulators to establish and monitor “seed-to-sale” marijuana tracking systems. These systems help prevent legal marijuana from being diverted to the illegal market. Regulators in other states are also often tasked with investigating applicant business structures for connections to organized crime, inspecting licensed facilities *before* operations begin, and collecting product samples for testing, among other duties.

Most state laws needed to empower the marijuana regulatory board and agency do not involve a policy choice. They simply ensure that the regulator has the basic powers and duties it needs to carry out its work. A detailed discussion of each of the basic powers and duties that should be granted to the designated marijuana regulatory agency can be found in Appendix P.

RECOMMENDATION 43

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory board with the powers and duties to (i) promulgate all regulations necessary to ensure a safe and secure commercial marijuana market, including but not limited to regulations regarding licensure and enforcement, (ii) approve or deny licenses, and (iii) suspend, revoke, or otherwise sanction license holders for violations of rules.

RECOMMENDATION 44

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory agency with the powers and duties to (i) assist the board in the execution of its duties and (ii) perform all licensing and enforcement related functions that are necessary to carry out state laws and regulations related to the operations of the commercial marijuana market.

Regulator should have authority to set fees

Marijuana regulators in other states typically have the authority to set fees. The regulatory body would need to charge several fees, including application fees when an application for a license is submitted, license fees when a license is awarded, and renewal fees when a license is renewed.

When deciding fee amounts, the state would need to determine if its main priority is to encourage broad participation in the commercial marijuana market or to fully recover regulation costs. In contrast with other regulated communities (e.g., health professionals), there would initially be comparatively few marijuana businesses to spread the costs of regulation over. Additionally, commercial marijuana markets are closely regulated, so regulatory costs would be relatively high. Consequently, fees might have to be set fairly high, potentially ranging from thousands to tens of thousands of dollars, to fully recover agency operating expenses. High fees could keep smaller businesses from participating in the market. Ensuring opportunities for small businesses could require charging lower fees that may not fully recover the cost of regulation. Any additional costs that are not covered by fees could be covered by marijuana sales tax revenues.

The exact fees Virginia should charge will depend on the license structure it selects, the number and mix of licensees it awards for different types of operations, and whether it prioritizes recovering costs or broad participation. The fee amounts charged by other states are generally not useful guides because of differences in each of these factors. Consequently, license fees in other states vary widely, from \$1,480 in Washington to \$300,000 in California for certain license types.

Virginia should establish its fees in regulation, rather than statute, to give the regulator the flexibility needed to match fees to state goals and to modify them over time as needed. The regulator could gather information to inform its initial decision on fee amounts through the public comment period of the regulatory process. Fee decisions

could also be informed by the regulator's projections on the number of future licenses, which would become more refined after legalization laws are passed. The regulator could then adjust fees over time, as needed. For example, if fees were initially set too high, and the regulatory body was collecting more revenue than needed, it could promptly lower fees to avoid overcharging licensees.

The state grants fee-setting authority to other business and occupational licensing agencies in Virginia (e.g., Department of Health Professions, Department of Professional and Occupational Regulation). While the regulatory process can be time consuming, Virginia regulators indicated the regulatory process is preferable to using the legislative process to establish and adjust license fees.

RECOMMENDATION 45

If the General Assembly authorizes commercial marijuana sales, it may wish to consider vesting the marijuana regulatory board with the power to set all fees, including application fees, license fees, and renewal fees.

Regulator should be granted a limited exemption from the state's standard regulatory process

Other states also have allowed their marijuana regulators to expedite the rulemaking process. Like Virginia, most states have a standard regulation setting process that is defined in law. Marijuana regulators in other states indicated it was important for them to be able to quickly amend their regulations in the early years of the new commercial market. For example, one regulator said that it needed to quickly enact new product restrictions to address unforeseen problems with accidental consumption. Another regulator said it needed to quickly amend policies for its social equity program because it inadvertently excluded many people from participating.

Virginia could expedite the regulation setting process so that initial commercial market regulations can be drafted in a timely manner. The state's standard regulation setting process can be lengthy, often taking two or more years to complete. To shorten the process, the General Assembly could exempt the marijuana regulator from the first stage of the standard process and from the requirement to have an economic impact analysis performed. The marijuana regulatory body would likely need this limited exemption for at least five years following legalization, but may need it for a longer time period depending on how quickly the commercial market matures and whether any issues arise that require revision of the initial regulations.

A limited exemption would allow the regulator to establish the initial regulations for the commercial market in about 12 months. Under this approach, the regulator would draft initial regulations, submit them for executive review, and then solicit public comment. Following public comment, regulations would be revised, submitted for final executive approval, and enacted. Provided the executive reviews did not take longer

than four months, the initial commercial market regulations could be drafted and enacted within 12 months.

Providing the regulator with a limited exemption, for the purpose of drafting initial commercial market regulations, is preferable to other options (sidebar). The regulator should not be completely exempt from the regulatory process because public comment would be a necessary and helpful part of drafting initial regulations. The fast-track process would not be the best approach because it is intended for noncontroversial regulations and can be stopped by objections from the public or General Assembly members. The emergency process could be used, but this could ultimately create more work and delay the enactment of final regulations. Emergency regulations can be quickly drafted with or without public input. However, after they are in place, final regulations would still have to be drafted through steps two and three of the standard process. If substantial changes need to be made at this point, it could delay opening of the commercial market.

RECOMMENDATION 46

If the General Assembly authorizes commercial marijuana sales, it may wish to consider granting the marijuana regulatory board a limited exemption from the standard rulemaking process.

Regulations in Virginia are created through a standard three-step process defined in the Administrative Process Act and an executive order. Exemptions can be granted from part or all of the regulatory process.

The standard process can be slow due to the first step, the "Notice of Intended Regulatory Action," which includes a solicitation of public input and multiple executive reviews before regulation drafting begins.

The fast-track process avoids the first part of the standard process and shortens the time to enact new regulations. However, if there are objections, regulations must instead proceed through the standard process.

The emergency process, further shortens enactment time, but these regulations must eventually be renewed and finalized through steps two and three of the standard process.

12 Legalization Timelines and Costs

Legalizing marijuana for adult use is a major policy change. The first, fundamental step in legalization is to amend state criminal laws to allow people to possess and use small amounts of marijuana without penalty. Amending criminal laws would require careful consideration, but changes can be made fairly quickly and at little cost. The second step that most states take is to create a commercial market where marijuana can be legally produced and sold. Creating a well-regulated commercial market is a much more complex endeavor that can require substantial time to implement properly. It would also entail upfront costs that the state would have to pay for from existing revenues or working capital advances, but costs could be recovered after commercial sales begin.

Criminal laws could be amended quickly but records expungement could take time and costs are unclear

Amending Virginia's criminal laws has many important ramifications that need to be carefully thought through, but the changes could be implemented fairly quickly. The changes proposed in this report are not expected to significantly increase workloads for law enforcement agencies or the courts, so there will not be the need for substantial additional resources or time to prepare for legalization. However, the state could provide law enforcement officers with additional training. First, the state could develop a standard, statewide training module to educate officers on the new laws and changes to police procedures. The cost of training police on new laws and procedures might be absorbed in existing agency training budgets but would require staff time. Second, the state could increase availability of existing programs that train officers on how to recognize drug-impaired drivers. Virginia State Police (VSP) staff indicated that increasing this training could entail additional costs.

If the state decided to automatically expunge past marijuana offenses from people's criminal records (sidebar), there would be a fairly significant one-time administrative effort. VSP would need to expunge offenses from its central state criminal record system, and the Office of the Executive Secretary of the Virginia Supreme Court (OES) would need to expunge court records maintained in its centralized case management system. Additionally, district and circuit court clerks would need to separately expunge their records, which would include identifying and sealing physical paper files. VSP or another state entity would need to coordinate with courts to ensure they complete this task. This one-time expungement effort would not likely require costly changes to data systems. However, it could be a labor intensive effort, and VSP, OES, and the courts might need additional staff, at least temporarily, to identify and expunge all eligible records.

An expungement process is considered to be *automatic* if no action is required by the individual to have his or her record expunged. However, this process can still require considerable time and resources for the state and local entities that must identify and expunge eligible records.

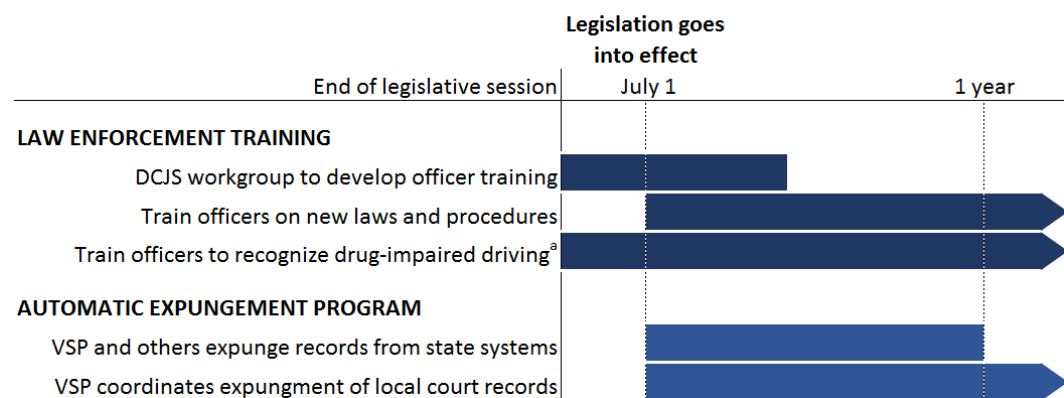
A permanent, automatic expungement process for marijuana possession is likely unnecessary given that marijuana has been decriminalized, and there would be no new criminal records for marijuana possession that would need to be expunged in the future.

The costs associated with automatically expunging criminal records of past marijuana offenses may differ from those associated with automatic expungement proposed in recent legislation. A bill introduced during the 2020 special session (HB 5146) would have established an automatic expungement process for various offenses, including marijuana offenses. The estimated fiscal impact of this legislation primarily included information technology costs to modify existing systems at VSP and OES. However, the automatic expungement process proposed in this report would be a one-time records expungement for marijuana offenses only and would not require a new automated system for expunging records moving forward (sidebar). Therefore, much of the effort associated with the process proposed in this report would entail staff time to expunge eligible records, including identifying and sealing any physical paper files. The exact costs of this effort are not yet certain and would depend largely on what offenses are to be expunged and any special conditions that are placed on expungement.

A timeline for the training and records expungement efforts associated with amending criminal laws is provided in Figure 12-1.

FIGURE 12-1

Training and expungement program could be implemented with amendment of criminal marijuana laws



SOURCE: JLARC analysis.

NOTE: ^a Drug-impaired driving training programs are already in place but could be expanded.

Establishing a commercial market would take at least two years and cost \$8–\$20 million upfront

If Virginia creates a commercial marijuana market, it should allow regulators to take the time needed to safely and responsibly achieve legislative goals. Creating a new, well-regulated commercial marijuana market is a complicated and time-consuming endeavor. The marijuana market requires many parties to work together to establish rules and processes for a new industry. Many other states rushed through this process because citizen ballot measures mandated quick action. By legalizing marijuana through

legislation, Virginia can take a more measured approach. Regulators in other states uniformly said they wished they had been able to take more time to establish a commercial marijuana market.

Virginia should not take shortcuts to open the commercial market, even if this could provide quick revenues. Both Illinois and Nevada moved exceptionally fast to open their commercial markets. Illinois' commercial market began before all formal regulations were in place. This allowed Illinois to collect and use marijuana sales tax revenues to fund the establishment of its regulatory functions. However, it also created challenges. For example, many of the state's laws that govern marijuana retail operations are so detailed that they are more similar to regulations. This could make it more difficult for Illinois to quickly change its rules and adapt to a changing marketplace.

Virginia would need at least two years to develop a well-regulated commercial market

By taking a measured approach, the state could thoroughly complete the many tasks required to establish a commercial marijuana market. The state would need to have a regulatory board and agency in place before it can draft regulations for the commercial market. Regulations would need to be drafted and approved by the governor before the state could start licensing businesses. Licensed businesses would need time to establish their operations and gain regulatory approval to open. Cultivators would need several months to grow marijuana for retailers to sell to the public.

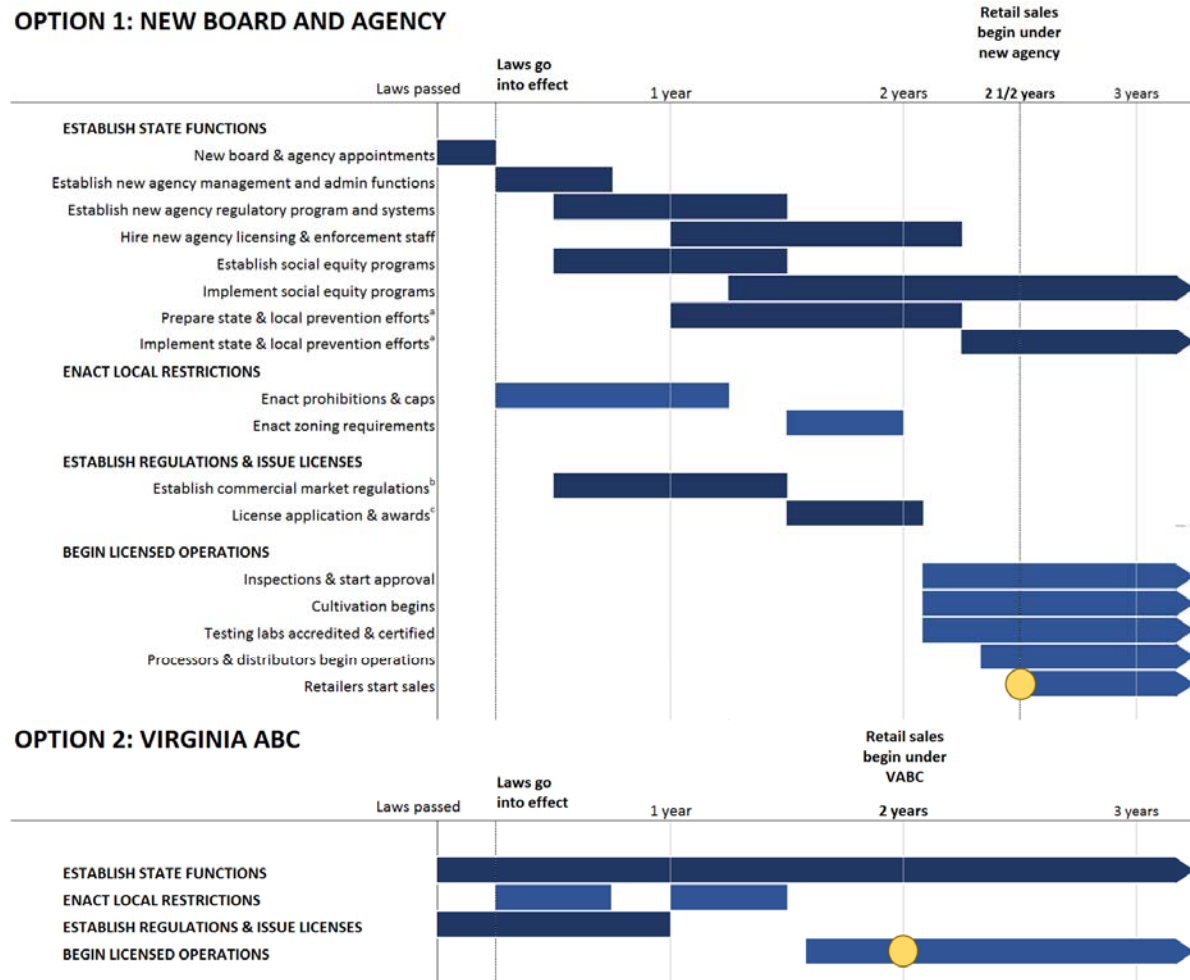
A measured approach could give the state enough time to take additional actions that may be needed to achieve other legalization priorities. If the state prioritizes promoting social equity and protecting public health, it should have social equity assistance and marijuana use prevention efforts in place before retail sales begin. Additionally, if Virginia allowed localities to enact prohibitions against commercial marijuana operations, those prohibitions would need to be in place before license awards are made. Otherwise, a licensed business might try to set up operations in a city or county that later bans commercial marijuana.

Under a measured approach, it would take Virginia at least two or two-and-a-half years to begin retail commercial sales, after legalization laws were passed. Commercial sales would take at least two years to start if regulatory authority were vested with the Virginia Alcoholic Beverage Control Authority (VABC) and at least two-and-a-half if a new board and agency were created (Figure 12-2). The creation of a new regulatory agency would take longer because it would need to have a director appointed, hire managers, and establish basic functions before it could create commercial market regulations. Any delays when establishing the new agency would lengthen the timeline. Delays in the regulatory process, such as especially lengthy executive reviews, could extend timelines regardless of where regulatory authority is vested. The start of commercial sales in some localities could also take longer if the General Assembly allows localities to use the special use permit process to approve marijuana operations.

Establishing a marijuana market in Virginia likely would take longer than other states. One reason is because Virginia's regulation-setting process is relatively lengthy. Under Virginia's standard regulation-setting process, a regulation package often takes more than two years to be approved. This report recommends the General Assembly grant the marijuana regulator with special exemptions from some parts of the process, which could realistically shorten the process to about a year.

FIGURE 12-2

Establishing a well-regulated commercial marijuana market would take two or more years



SOURCE: JLARC analysis.

NOTE: ^a State prevention efforts would include a statewide youth prevention media campaign and any other large-scale campaign the state implements. Local prevention campaigns would be implemented by community services boards and targeted at local community needs. ^b Regulations include the main commercial market regulations established by the marijuana regulator as well as regulations for testing standards established by DCLS. ^c License application and award period would be divided into two, three-month periods: (1) cultivation and testing licenses, and (2) processing, distribution, and retail licenses.

The proposed timeline in this report also assumes Virginia would want to establish and implement social equity assistance programs before the first round of license awards.

Creating and implementing these programs takes time and resources. Other states that opened marijuana markets more quickly established social equity programs as they legalized, but it appears those programs were not sufficiently developed or staffed when licensing began.

The General Assembly could also choose whether or not to include a deadline in statute to encourage the timely establishment of the commercial market. If the General Assembly creates a deadline, it should set a date that is approximately three years from when the bill is passed. This timeframe would allow for potential delays and give the marijuana regulator time to establish the new commercial market.

POLICY OPTION 29

If the General Assembly authorizes commercial marijuana sales, it could require sales to begin three years from the date that the authorizing legislation is passed.

Establishing a commercial market would cost \$8–\$20 million over two years, but costs could be fully recovered after commercial sales start

Establishing new regulatory capabilities and programs would cost the state an estimated \$8–\$20 million over the first two years, with most of the costs coming in the second year (Figure 12-3). Approximately \$8–\$14 million in costs would be attributable to the regulatory agency, social equity programs, and public health prevention efforts. Costs would vary depending on whether authority was vested with VABC or a new agency, how quickly new functions were established, and how much funding the state provided to prevention efforts. If Virginia established a social equity business loan program similar to the one created in Illinois, the state would likely need to make two, one-time payments of \$6 million to capitalize the fund (sidebar). The first payment would occur in year two, and the second payment would occur in year three.

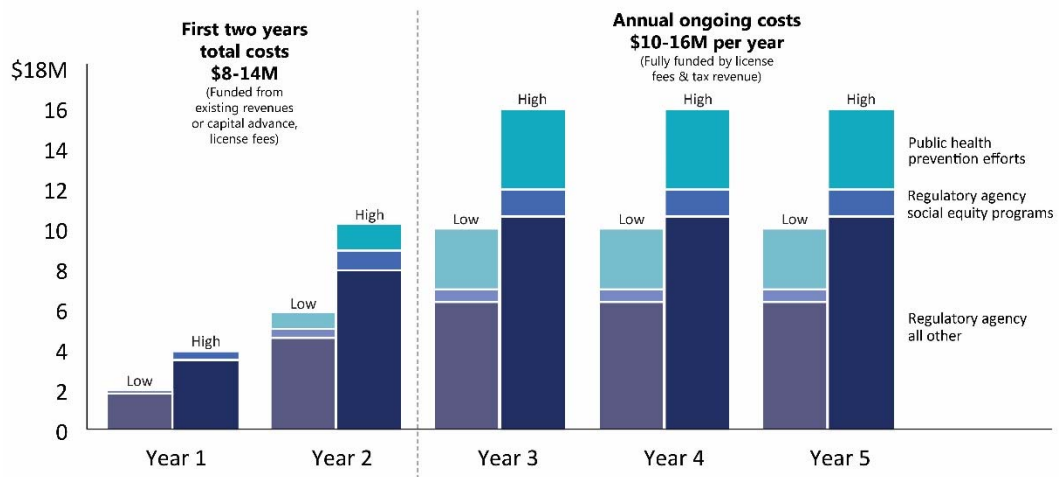
A social equity loan program would make small loans to qualifying, licensed marijuana businesses to help them establish operations. So far, Illinois is the only state to establish a loan program. A possible loan program is discussed in more detail in Chapter 7.

In the first two years, the state would need to use existing funding to cover costs associated with establishing a commercial marijuana market. There would be no new revenues in year one, so all first-year costs would need to be covered from existing sources. New revenues from marijuana license fees would start to be collected in the second year. Total revenue from licensing fees is estimated to be \$2–\$6 million but would likely not cover all costs. New revenues from marijuana sales taxes would not be collected until commercial sales begin in year three.

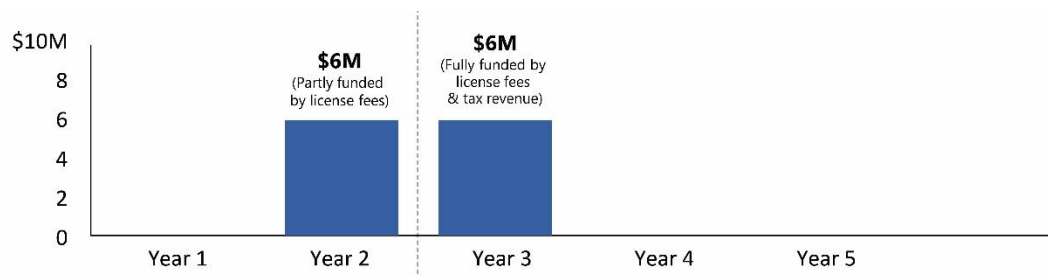
Initial funding for the first two years could come from one of two sources. If a new regulatory agency were created, all funding could come from a working capital advance that would be repaid with marijuana licensing fees and sales tax revenues. If regulatory authority is vested with VABC, funding could come from a mix of VABC revenues (for agency costs) and working capital advances (for public health prevention efforts).

FIGURE 12-3

Commercial legalization costs include those for the regulatory agency, social equity programs, and public health prevention efforts

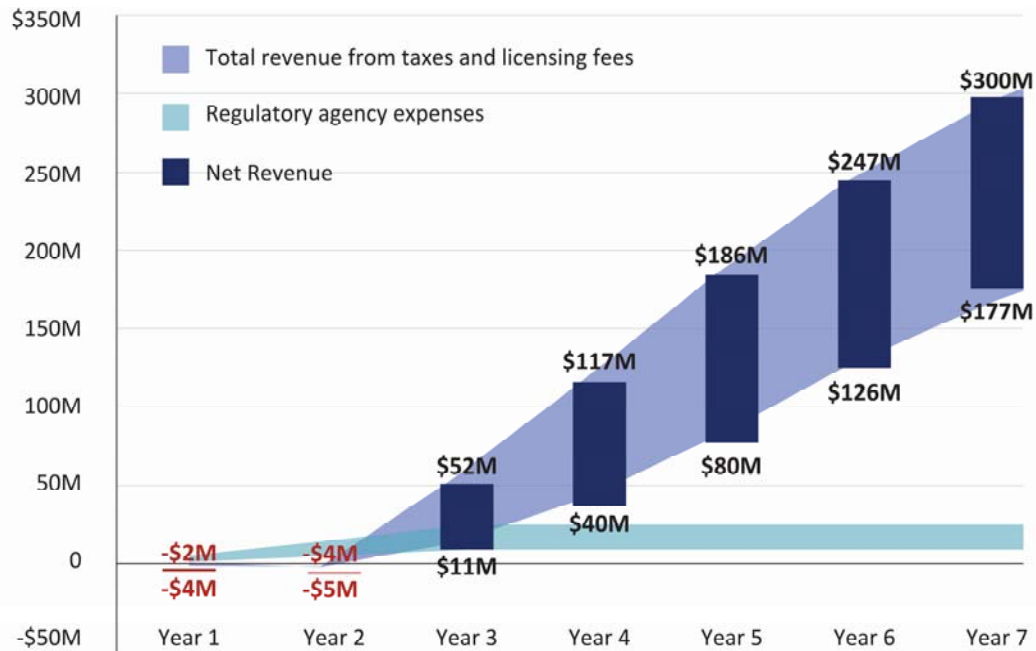


Social equity loan program would add additional one-time costs



SOURCE: JLARC analysis.

By year three, assuming the regulatory agency is almost fully staffed and operational and that prevention efforts are in place, annual ongoing operating costs would be an estimated \$10–\$16 million. Assuming a 25 percent marijuana sales tax rate in addition to the 5.3 percent sales tax, initial tax revenues in year three could be \$18.5–\$62 million, depending on whether sales start at the beginning of the year (as expected under VABC) or halfway through the year (as expected under a new agency). In either case, marijuana tax revenues and license fees would likely be sufficient to cover ongoing costs beginning in year three if a 25 percent marijuana sales tax rate is chosen (Figure 12-4).

FIGURE 12-4**Revenue would cover expenses beginning in third year of implementation**

SOURCE: JLARC staff analysis, MPG Consulting, 2020.

NOTE: For simplicity of illustration, revenue range shown assumes 25 percent marijuana tax and 5.3 percent sales tax. Revenue shown is total revenue from licensing fees and tax revenue, excluding any eventual share between the state and localities that choose to participate in a commercial marijuana market.

Creating a community reinvestment grant fund program to achieve social equity goals would require additional funding beyond these cost estimates. Costs to capitalize and operate a community grant fund program could be substantial. Illinois has implemented a program that allocates 25 percent of marijuana tax revenues to the grant fund. If Virginia were to allocate a similar proportion of revenue to grant program, \$14–\$17 million could be earmarked for the grant program in year three, when commercial market sales began. Funding for the program would increase in subsequent years as the commercial market matured and more revenue was collected.

Appendix A: Study resolution

SENATE JOINT RESOLUTION NO. 67 HOUSE JOINT RESOLUTION NO. 130

Directing the Joint Legislative Audit and Review Commission to study and make recommendations for how Virginia should legalize and regulate the growth, sale, and possession of marijuana and address the impacts of marijuana prohibition. Report.

Agreed to by the Senate, March 8, 2020

Agreed to by the House of Delegates, March 8, 2020

WHEREAS, the mechanisms and pathways for legalizing marijuana have not been fully vetted and analyzed in Virginia; and

WHEREAS, data and analysis including, but not limited to, Illinois, New Mexico, Colorado, and Washington, as states that have legalized recreational use of marijuana, can help inform the conversation in Virginia and also include a review of the costs, benefits, and societal impact; and

WHEREAS, the effects on all populations including communities of color, children, young and older adults, as well as students, and adults and youth in recovery should be considered; and

WHEREAS, consideration should be given to the specific impact of the criminalization of marijuana use and possession on communities of color, specifically the impact of incarceration on youth ages 18-24, neighborhoods or other geographic areas where impact has been the most disparate, and programs and policies that must be implemented to identify particularly disadvantaged areas and provide appropriate redress for the harm caused; and

WHEREAS, it is important to ensure that any market created for the regulated sale of marijuana assures that business opportunities are available to those people previously marginalized and geographic areas harmed by criminalization of marijuana possession and use;

WHEREAS, it is important to ensure that any regulating entity or group established to study regulation, sale, and possession of marijuana include those who have been impacted by the criminalization of marijuana use and possession;

Now, therefore be it RESOLVED by the Senate of Virginia, the House concurring, That the Joint Legislative Audit and Review Commission be directed to study and make recommendations for how Virginia should go about legalizing and regulating the growth, sale, and possession of marijuana by July 1, 2022 and address the impacts of marijuana prohibition.

In conducting its study, the Joint Legislative Audit and Review Commission shall (i) review Illinois' Cannabis Regulation and Tax Act and consider best practices that could be applied to Virginia including policies addressing the impact of marijuana prohibition on marginalized community members; (ii) review New Mexico's Marijuana Legalization Work Group Findings; (iii) make recommendations for a regulated, adult use market; and (iv) make recommendations for programs and policies that must be implemented to provide appropriate redress for the harm caused to communities most impacted by marijuana prohibition including the impact of incarceration on youth ages 18-24 and neighborhoods or other geographic areas where impact has been the most disparate. Recommendations should be inclusive of these five primary tenets: (a) maintain and expand Virginia's medical marijuana program; (b) install public safety protections to protect minors and identify and prosecute those who sell marijuana without

legal authority; (c) create strong testing and labeling; (d) provide equity and economic opportunity for every community, especially those disproportionately impacted by prohibition drug policies with an emphasis on ensuring equity in ownership in the marijuana industry; and (e) ensure racially equitable programs and policies exist that will provide reinvestment in communities most impacted by marijuana prohibition. In addition, the Joint Legislative Audit and Review Commission shall include in its study a review of the work of any work group on a related topic established by the General Assembly to study the development of a framework for regulated adult use of cannabis and the creation of a regulatory entity to oversee licensing and regulation of industrial hemp, medical cannabis, and adult use of cannabis.

All agencies of the Commonwealth shall provide assistance to the Joint Legislative Audit and Review Commission for this study, upon request.

The Joint Legislative Audit and Review Commission shall submit to the Division of Legislative Automated Systems a report of its findings and recommendations no later than December 1, 2020. The report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.

Appendix B: Research activities and methods

Key activities performed by JLARC staff for this study included

- Structured interviews with (i) Virginia state agency and institution leadership and staff, (ii) regulators, public health experts, and law enforcement in other states, (iii) academics and other experts in law, economics, public health, and crime, (iv) social equity advocates and program administrators, and (v) other state and national stakeholders and associations;
- a review of other states' criminal and commercial marijuana laws, regulations, regulatory structures, tax structures, and social equity programs;
- a contract with MPG Consulting—including team members from the Rand Corporation, Kammerzell Consulting, and the Weldon Cooper Center at the University of Virginia—to produce and assist with analyses on (i) key governance, regulatory, and administrative considerations for a commercial marijuana market, (ii) taxation approaches and estimates of potential tax revenue, jobs, and economic impact, and (iii) potential social equity approaches for addressing the negative impacts of marijuana's prohibition on individuals and communities;
- a survey of Virginia's localities concerning local perspectives of marijuana legalization, local authority over commercial marijuana businesses, and state and local taxation approaches;
- data collection and analyses, including on arrests, court filings, incarceration and supervision, police workload, and adult and youth substance use;
- literature reviews of the medical benefits of marijuana, the negative health effects of marijuana, and the public health effects of marijuana legalization; and
- a review of various other documents and data.

Structured interviews

Structured interviews were a key research method for this report. Over 100 interviews were conducted, predominantly over the phone or via video conference. Key interviewees included:

- executive, judicial, and legislative branch leadership and staff across Virginia state agencies and institutions;
- regulatory, law enforcement, and public health agencies in other states that have legalized adult use marijuana;
- experts in law, economics, public health, and criminology;
- social equity stakeholders; and
- other associations and stakeholders active in state and national discussions of marijuana policy.

State agency staff

JLARC conducted multiple interviews with the Alcohol Beverage Control Authority, Department of General Services (Division of Consolidated Laboratory Services), and Department of Taxation to inform options for regulating, testing and taxing a new commercial marijuana industry in Virginia. JLARC also interviewed staff at the Department of Health Professions to understand the status of Virginia's medical marijuana program and its regulatory process and structure.

To understand the state's current mental health and substance abuse programming and prevention efforts and to identify potential changes needed if the state legalizes marijuana, JLARC conducted multiple interviews with the Department of Behavioral Health and Developmental Services and with prevention program directors from community service boards. Staff also spoke to the Virginia Foundation for Healthy Youth about substance abuse prevention campaigns.

JLARC conducted interviews with various entities within the state's criminal justice system to understand the impact of marijuana on criminal justice institutions and individuals who interact with them, potential changes that could occur because of decriminalization and legalization, and expungement. JLARC interviewed staff at the Compensation Board, Department of Criminal Justice Services, Department of Forensic Science, Department of Juvenile Justice, Department of Corrections, Supreme Court of Virginia (Office of the Executive Secretary), Virginia Criminal Sentencing Commission, Virginia Indigent Defense Commission, Virginia State Crime Commission, and Virginia State Police.

JLARC staff interviewed attorneys at the Office of the Attorney General, including the solicitor general, to understand potential legal risks associated with legalizing marijuana. JLARC also spoke with the State Corporation Commission about banking in the marijuana industry and the Department of Motor Vehicles to understand Virginia's efforts to train police to recognize drug-impaired driving.

Other states

Interviews were conducted with state agencies in states that have legalized marijuana for adult use. JLARC staff interviewed officials at state agencies in

- Colorado
- Illinois
- Massachusetts
- Michigan
- Nevada
- Oregon
- Vermont
- Washington

The topics covered in most interviews with other states were best practices for the regulation of a commercial marijuana market, local authority, and social equity programs. As such, most interviews were conducted with the body (or bodies) responsible for overseeing the commercial marijuana market and/or social equity programs in each state.

JLARC staff also interviewed law enforcement agencies and public health officials in a smaller sample of states that have legalized marijuana (as well as the Rocky Mountain High Intensity Drug Trafficking Area/RMHIDTA). Finally, JLARC interviewed the chair of New Mexico's Marijuana Legalization Work Group about the work group's findings.

Academics and other experts

JLARC staff conducted interviews with national experts on a range of topics. Staff interviewed law professors, economists, public health experts, and criminal justice researchers. The primary topics covered in these interviews were the potential effects of marijuana legalization on adult and youth marijuana use, public health, and crime and law enforcement, as well as benefits and drawbacks of different approaches to commercial marijuana regulatory structures. Key interviews included individuals from:

- Carnegie Mellon University, College of Information Systems and Public Policy;
- Montana State University, Dept. of Economics;
- New York University School of Medicine, Dept. of Population Health;
- The Ohio State University, Moritz College of Law;
- University of Denver, Sturm College of Law;
- University of Washington, School of Public Health;
- Vanderbilt Law School;
- Virginia Commonwealth University, Center for Urban and Regional Analysis; and
- Washington State University, Dept. of Criminal Justice and Criminology.

Social equity stakeholders

JLARC staff conducted a subset of interviews with various social equity stakeholders, including advocates in Virginia and other states, as well as policy makers and program administrators in other jurisdictions that have implemented social equity programs as part of a commercial marijuana market. Interview topics included components of an ideal social equity program, what aspects of social equity programs have been implemented most successfully and any primary challenges or barriers to success, best practices for developing program eligibility criteria, and strategies for monitoring program effectiveness.

In total, JLARC staff conducted 23 interviews related to social equity, including with:

- The American Civil Liberties Union;
- California Cannabis Industry Association;
- City of San Francisco;
- City of Seattle;
- City of Portland;
- Code for America;
- Illinois Department of Commerce and Economic Opportunity;
- Illinois State Police Bureau of Identification;
- The Legal Action Center;

- Massachusetts Cannabis Control Commission; and
- Michigan Marijuana Regulatory Agency.

Other stakeholders and associations

JLARC conducted interviews with several other stakeholders and associations on a range of topics related to marijuana legalization.

JLARC staff interviewed the Virginia Association of Counties, the Virginia Municipal League, Virginia First Cities Coalition, and a town executive to gather information on the primary considerations and concerns of localities related to marijuana legalization such as zoning and taxes.

JLARC conducted interviews with law enforcement associations and agencies, commonwealth's attorneys, and other criminal justice associations to understand how legalization might affect the work of police, courts, and corrections. Staff interviewed the Virginia Association of Chiefs of Police, Virginia Association of Commonwealth's Attorneys, Virginia Community Criminal Justice Association, Virginia Court Clerks Association, Virginia Sheriffs' Association, Virginia State Police Association, and a small sample of local police chiefs, sheriffs, and commonwealth's attorneys.

JLARC also conducted interviews with the Community Coalitions of Virginia, DARE, NORML, Smart Approaches to Marijuana, the Virginia Cannabis Industry Association, and several of Virginia's medical marijuana businesses.

Review of other states' statutes, regulatory structures, and social equity programs

Adult use marijuana laws for individuals (Chapter 4 and Appendix G)

JLARC staff analyzed marijuana laws in states that have legalized marijuana possession for adults to inform Chapter 4 and Appendix G. Staff reviewed limits on activities involving marijuana for uncensured individuals in legalized states and criminal penalties and fines for violating such limits. Staff reviewed: (i) ballot initiatives, adult use marijuana acts, and key state statutes related to marijuana, (ii) informational web pages published by other states' governments, (iii) summary resources from other organizations such as the National Conference of State Legislatures (NCSL), National Alliance for Model State Drug Laws (NAMSDL), and the National Organization for the Reform of Marijuana Laws (NORML), and (iv) a limited number of academic studies on marijuana laws in states that have legalized marijuana. JLARC staff also spoke to law professors who specialize in marijuana policy, and for some areas, corresponded with officials in other states. For example, staff corresponded with Alaska, Washington, and Colorado to clarify laws and practices for juveniles and young adults in those states.

Commercial laws and regulatory structures (Chapters 5, 6, 11, 12)

JLARC staff analyzed marijuana commercial laws and regulatory structures in states that have established commercial markets to inform Chapters 5, 6, 11, 12 and Appendixes I, J, O, and P. Staff reviewed: (i) ballot initiatives, adult use marijuana acts, and key state statutes related to commercial marijuana, (ii) informational web pages, data files, and reports published by other states' regulators, (iii) summary resources from other organizations such as the National Conference of State Legislatures

(NCSL), the Congressional Research Service (CRS), and the National Organization for the Reform of Marijuana Laws (NORML), (iv) a limited number of academic studies on marijuana commercial laws, (v) reports and studies commissioned by states on economic and other impacts of legalization, including prospective and retrospective studies, and (vi) news articles from reputable sources, such as local and national news organizations. JLARC staff also spoke to study authors and others who specialize in marijuana policy and corresponded with, and collected additional information, from officials in several states. For example, staff interviewed and corresponded with authors of prospective legalization studies performed for Vermont and New Mexico, and regulatory staff in Colorado, Illinois, Massachusetts, Michigan, Nevada, Oregon, Vermont, and Washington.

Social equity programs (Chapters 7 and 8)

JLARC staff reviewed policies, regulations, and websites from other states and localities to catalog social equity program components. JLARC staff compared initiatives across all legalized states that have implemented social equity programs (or that have formally adopted programs awaiting implementation), including California, Colorado, Illinois, Massachusetts, Michigan, and Washington. Oregon currently does not have a statewide social equity program; however, the City of Portland was included in this analysis because it has created its own social equity program in the absence of a statewide program, funded by local marijuana tax revenues.

JLARC staff compiled information about other states' social equity programs to determine (1) what initiatives and benefits are being offered, (2) how individuals and/or communities are deemed to be eligible for benefits, (3) what funding and staff resources are needed to support the various initiatives, and (4) any mechanisms used to promote program accountability or improve effectiveness (e.g. periodic reviews, social equity advisory committees, etc.) JLARC staff cataloged this information for various social equity program initiatives, summarized in Table B-1.

TABLE B-1
Other legalized states have adopted various social equity initiatives

Social equity initiative	CA ^a	CO	IL	MA	MI	WA	City of Portland
Licensing preferences for adult use marijuana business licenses	✓		✓	✓		✓	
Fee discounts/waivers for adult use marijuana business licenses	✓		✓	✓	✓		✓
Marijuana business grant/loan programs			✓			✓	
Marijuana business owner and/or employee training programs			✓	✓	✓		
Marijuana business incubator programs		✓	✓				
Marijuana business license social equity plans			✓	✓	✓	✓	
Community reinvestment grant programs funded by marijuana tax revenues			✓				✓

SOURCE: JLARC summary analysis of other states' social equity programs.

NOTE: ^a California does not operate a statewide social equity program, rather, the state provides grants to localities to run their own social equity initiatives. JLARC staff did not conduct a comprehensive analysis of social equity programs in California localities; however, among localities that were reviewed (i.e. Long Beach, Los Angeles, Oakland, Sacramento, and San Francisco), all included licensing preferences and fee discounts. Individual localities may have additional social equity initiatives not reflected here, such as business loans or training programs.

Contracted with team of experts in marijuana legalization

JLARC staff released a request for proposal (RFP) for experts to assist with certain key aspects of the review. The RFP was posted on eVA and the JLARC website from early March 2020 to early April 2020. A one week extension was made to the proposal submission deadline because of the pandemic. JLARC received 17 proposals and reviewed each against the criteria included in the RFP. JLARC's evaluation panel consisted of the chief methodologist, chief economic development and quantitative analyst, a chief analyst, an associate director, and the director. Each evaluation panel member independently reviewed each proposal then the panel convened to discuss higher rated proposals and identify questions to ask a subset of bidders. Additional questions were sent to and follow-up interviews were conducted with three bidders.

After negotiating on contract terms and price, JLARC selected a team representing four organizations: MPG Consulting, the RAND Corporation, Kammerzell Consulting, and the Weldon Cooper Center at the University of Virginia. The consulting team included 10 researchers with expertise in commercial marijuana regulation, social equity policy in the marijuana industry, economic modeling of marijuana markets, and economic modeling of Virginia. The consulting team's work was conducted primarily between May 2020 and August 2020.

Commercial market structure and regulation (Chapters 5, 10, 11)

Consulting team members from MPG Consulting and Kammerzell Consulting provided information and insight into how other states structure and regulate their commercial marijuana markets. The consulting team provided JLARC staff with two main deliverables: (1) an assessment of a partly state-controlled commercial market model and (2) an assessment of different private market models and their key regulatory components, including how a regulatory agency could be structured. The consulting team also provided JLARC staff with some research documents, reviewed and provided comments on internal drafts of the JLARC report, and provided the JLARC team with insight and opinions during the course of the study.

Social equity (Chapters 7 and 8)

Consulting team members from the RAND Corporation assisted JLARC staff with social equity research. The primary objective of JLARC's social equity research was to identify realistic and effective approaches to address negative impacts of marijuana's prohibition on individuals and communities. The RAND team complemented JLARC's research by (1) conducting a literature review and outlining several frameworks for considering social equity in the context of marijuana legalization; and (2) assessing pros and cons of different components of a potential social equity program (e.g., criminal records expungement, licensing preferences for social equity businesses, etc.). The RAND team also assisted JLARC staff in jointly conducting a series of seven interviews with social equity advocates and policy makers at both the state and local level. These interviews were used to glean best practices from social equity programs in other jurisdictions, as well as any lessons learned that Virginia could apply in designing its own social equity programs.

Demand, legal sales, tax revenue, and economic impact estimates (Chapter 10)

Consulting team members including MPG Consulting and the Weldon Cooper Center at the University of Virginia developed proposed taxation approaches for commercial marijuana based on discussion with JLARC staff. The team members then estimated potential tax revenues and economic impacts from an adult use market based on information about Virginia and experiences of other states.

MPG first estimated consumer demand for marijuana and anticipated legal sales in Virginia because demand and sales constrain tax revenue and economic impact. MPG primarily used survey data from the National Survey on Drug Use and Health (NSDUH) on current levels of marijuana use in Virginia to estimate overall demand and to project demand trends. MPG then projected the value of legal marijuana sales in Virginia using legal and illegal market pricing data and expectations about how much of total demand would be captured by the legal market based on experiences in other states. MPG made adjustments based on expectations about demand from out-of-state visitors, market growth rates, and Virginia's medical marijuana market.

MPG projected potential tax revenue from commercial adult use marijuana based on two different tax structure approaches and four specific tax scenarios. First, MPG projected potential annual tax revenues for a simple ad valorem retail tax at a variety of tax rates. Second, MPG projected potential revenue from a hybrid potency/ad valorem tax, where flower would be taxed at 25 percent, edibles at 35 percent, and concentrates at 45 percent. MPG applied each tax scenario to estimates of legal sales to project potential annual revenue collections, while making adjustments in some scenarios based on

price elasticity assumptions for licit and illicit marijuana (45 percent ad valorem scenario) and marijuana product mix (hybrid scenario). JLARC staff then used MPG's estimates to present potential revenue from ad valorem tax rates across a range of tax rates to illustrate the revenue differential.

Finally, MPG projected the potential economic impact of a commercial marijuana market in Virginia. MPG used input-output assumptions derived from Colorado's marijuana industry to model (1) employment created by Virginia's legal marijuana industry and (2) the value of economic activity generated by a legal industry. As a product of the model's design, economic impact effects and jobs created are categorized as direct, indirect, and induced. MPG estimated three impact scenarios: high, medium, and low. The high scenario is based on MPG's primary projection of legal sales. Medium and low scenarios adjust legal sales assumptions (and resulting economic impact) down based on a set of risk factors.

Survey

JLARC staff surveyed local governments about several issues related to the establishment of a commercial marijuana market. The key topics were (a) citizen opinions on commercial marijuana, (b) likelihood of the locality prohibiting commercial marijuana, if local prohibitions were allowed, (c) authorities that local governments would like to have over commercial marijuana businesses, and (d) local preferences for how commercial marijuana could be taxed.

Surveys were sent to county administrators and city and town managers in all counties and cities and all towns with a population of over 3,000. Survey instructions asked the administrator or manager to complete the survey on behalf of their locality or to provide it to another person to complete, such as the mayor or their board or council chair. Respondents were asked to provide an informed opinion of what they believed their citizens and political bodies would desire, as well as their own opinions on what authorities and taxation approaches they would like to have. Respondents were given the option to answer that they were unsure what their citizens or governing bodies might think about commercial marijuana and were asked to rate how confident they were in their replies. The Virginia Association of Counties and the Virginia Municipal League assisted JLARC staff in sending out surveys and encouraging responses.

The survey was completed by 44 counties, 17 cities, and 15 towns. The overall survey response rate was 43 percent, but the responding localities represented 60 percent of Virginia's population. Respondents were geographically dispersed throughout all parts of the state and represented all sizes (large, medium, small) and types (urban, suburban, rural) of localities.

Document and research literature review

JLARC staff reviewed numerous other documents and literature pertaining to marijuana legalization, such as:

- Virginia statutes and regulations related to marijuana;
- other states' statutes and regulations;
- studies, reports, data, and website information on other state commercial and medical markets, regulatory structures, local authorities, and license holders;
- reports on the public health impact of marijuana legalization in states;

- studies on the impact of marijuana legalization on law enforcement in other states;
- reports on marijuana-impaired driving, data on number of police trained to recognize drug-impaired driving, and forensic data on marijuana and driving;
- surveys of employment and compensation in the legal marijuana industry;
- academic studies on marijuana policy changes and crime (Appendix E);
- academic studies on the therapeutic (Appendix L) and negative health (Appendix M) effects of marijuana use; and
- academic studies on prevention, media campaigns, and the public health effects of marijuana legalization.

Literature review on public health research (Chapter 9 and Appendix M)

JLARC staff conducted public health literature reviews focused on two primary areas: (1) the effects of marijuana use on the individual and (2) the effects of marijuana legalization on public health systems in states. JLARC staff collaborated with a research librarian from the Virginia Commonwealth University's Tompkins-McCaw Library for the Health Sciences to identify studies for review. The research librarian provided guidance on developing key words and identifying databases to search for relevant literature, and selected articles that fit the search parameters for JLARC staff to review. JLARC staff examined abstracts of more than 1,500 articles, and findings for 116 articles were reviewed for this report.

JLARC staff began the literature search by reviewing the National Academies of Sciences, Engineering, and Math comprehensive review of major research conducted on the effects of marijuana use on individuals. It is a review of systematic reviews and select research articles on the effects of marijuana use on specific health conditions and symptoms. The National Academies of Sciences did not examine all health conditions associated with or potentially affected by marijuana use. Instead, popular medical conditions showing promise for therapeutic relief from use and specific negative health points were chosen as focus areas. Over 100 health outcomes were examined in the review.

For conditions that were negatively impacted by marijuana use, the National Academies focused on specific health endpoints including Prenatal, Perinatal, and Postnatal health; Mental Health; Psychosocial Effects (Cognition); Injury and Mortality; Immunity; Cardiometabolic risks; Respiratory Symptoms; Problem Cannabis Use; Use of other Substances; and Cancer. These focus areas guided JLARC's selection of health issues and additional research to examine.

The National Academies review includes research up to 2016. Consequently, JLARC selected 2016 as the starting point to review additional literature on the health endpoints identified by the National Academies and examined research that filled the gap from the National Academies review to present. Other subject areas including the use of vaping products or edibles were not the focus of this literature review for several reasons. Research on these products are fairly new, creating a lack of substantial findings to review. Additionally, almost no studies on vaping or edibles were found in the librarian's search results.

After receiving the search results from the research librarian, JLARC staff used similar criteria used by the National Academies to evaluate and identify true systematic reviews. The criteria allowed

JLARC staff to understand the difference between a simple review of the literature and a more structured, rigorous analysis of past research projects. Criteria such as bias risk, use of multiple databases, and conflicts of interest were included in JLARC's evaluation of reviews. Similarly, a selected articles were also evaluated based on methods used by the National Academies. These criteria include sample size, sampling source, funding source, and effect size. Any outcomes where research studies showed mixed results were stated as such. The results of the research findings on the therapeutic effects of marijuana use can be found in Appendix L and research on the negative effects of marijuana use can be found in Appendix M.

Data collection and analysis

Several types of data analyses were performed for this study.

Historical arrests and projections (Chapter 2)

JLARC staff analyzed historical marijuana arrests in Virginia and projected potential changes in arrests caused by the decriminalization and legalization of marijuana possession. The team reviewed all marijuana arrests in Virginia between 2009 and 2019 and estimated potential changes in criminal marijuana arrest rates based on changes observed in other states. Both custodial arrests and arrests that result in a criminal court summons are counted in this analysis.

First, JLARC staff reviewed historical marijuana arrest rates in Virginia for the past decade. The Virginia State Police (VSP) provided incident-based reporting (IBR) data that enabled staff to count the number of arrests in which marijuana was the most serious offense for all law enforcement agencies across the state. Staff converted arrests to a rate per 100,000 Virginians. Arrests grouped as "possession" arrests are incidents where an offender was arrested for possessing, using, or buying marijuana, while "distribution" arrests are incidents where an offender was arrested for distributing, selling, transporting, or cultivating.

Second, JLARC calculated changes in arrest rates in states that recently decriminalized or legalized marijuana. Staff accessed uniform crime reporting (UCR) data collected by the FBI for each year between 2010 and 2018 and converted arrests to rates. For states that had adequate data quality and decriminalized or legalized marijuana possession between 2010 and 2017, staff calculated a percentage change in arrest rate in the year following the marijuana policy change for each state.

Finally, staff used average changes in arrest rates in other states to project the potential effect of decriminalization and legalization in Virginia. Average percentage change in arrest rates were calculated across (1) states that decriminalized marijuana in the period and (2) states that legalized marijuana in the period. These two average changes were then applied to Virginia's 2019 marijuana arrest rate to project potential changes caused by first decriminalization and second, legalization. The calculation does not include changes in fines/tickets for minor marijuana offenses in states that have decriminalized or legalized marijuana, which do not typically result in criminal arrest.

Racial disproportionality in marijuana arrests and cases that proceeded in court by locality (Chapter 2 and Appendix D)

JLARC staff received arrest data from the Virginia Incident Based Reporting Database from the Virginia State Police. The arrest dataset included data on arresting locality, arrest activity type (e.g. possessing/concealing, distributing/selling, etc.), arrest date, age at the date of offense, gender, race, ethnicity, and arrestee resident status (i.e. whether the individual was arrested in the same locality in which he or she lives). The dataset included arrests for all marijuana-related incidents from 2009 through 2019. For this analysis, only data from 2015–2019 was used.

JLARC staff received data on cases that proceeded in court from the Office of the Executive Secretary of the Virginia Supreme Court’s general district court case management system. The general district court dataset included data on the court in which charges were filed, case/charge type (i.e. misdemeanor or felony), amended case type, Code section, Virginia Crime Code, disposition (i.e. dismissed, guilty, nolle prosequi, etc.), arrest date, age at the date of offense, gender, race, and zip code of offender address. The dataset included all marijuana-related charges filed in general district court, from the oldest retained through 2019 (approximately 10 years). For this analysis, only data from 2015–2019 was used.

To conduct this analysis, JLARC staff first removed any localities that had less than 30 percent resident arrests/cases and/or fewer than 10 Black arrests/cases per year, to control for localities that may be arresting a high proportion of non-residents and ensure there were a sufficient number of arrests/cases upon which to draw meaningful conclusions about the disproportionality within each locality.

JLARC staff then used both the arrest and court case data—along with U.S. Census Bureau county and state population data—to calculate the average rate of marijuana possession arrests and cases that proceeded in court per 1,000 residents for both Black and white populations by locality. Once the arrest rates and rates of cases that proceeded in court were calculated for each locality, JLARC staff were able to assess disproportionality in a given locality by dividing the Black rates by the white rates. The resulting rates of disproportionality reflect how many times more likely a Black individual was to be arrested for marijuana possession or to have his or her case proceed in court than a white individual within the same locality during this time period. For additional information on the disproportionality across localities, see Appendix D.

Court filings, fees, fines, and costs (Chapters 2 and 3)

JLARC staff analyzed marijuana charges, dispositions, sentencing, and assessed costs, fines, and fees from general district and circuit court case management systems. Staff counted charges filed as (or amended to) marijuana offenses across general district and circuit courts and sorted filings based on disposition. Staff then sorted convictions based on the “most serious” result of the conviction. For example, the result of the conviction was counted as “probation” if an individual was required to both pay a fine and serve a probation sentence.

JLARC staff estimated how much time clerks and judges in Virginia’s courts spend on marijuana charges and calculated the amount of fees, fines, and costs assessed for marijuana convictions. For

both court time and revenue collected through the court system, staff also projected changes that could be caused by decriminalization and legalization.

To estimate how much time judges and clerks spent on marijuana charges prior to decriminalization, staff multiplied an estimate of minutes spent on each charge by marijuana charges filed. Staff used case weights (minutes spent on each case) from previous studies of judicial and clerical time and the number of charges filed in general district and circuit courts from case management systems.

JLARC staff also calculated the sum of fines, costs, and fees courts assessed for marijuana convictions. Courts do not receive fines, fees, and costs revenues because state revenues are deposited into the General Fund and special funds. Staff summed fines, fees, and costs assessed on individuals for marijuana convictions annually in 2016, 2017, and 2018 in circuit courts (excluding Fairfax and Alexandria) and general district courts. Not all fines and costs can be considered net revenue, and not all fines, fees, and costs will be collected.

Staff then estimated how much time judges and clerks might save and how much assessed fines and costs might decline as a result of decriminalization and legalization. For decriminalization, staff assumed that the total charges filed do not decline and the impact on court workload is minimal. This is because multiple states that decriminalized marijuana possession saw criminal arrests decline but did not see a decline in overall marijuana court filings. Estimates of declines in fines, fees, and costs assessed assume each possession conviction results in a \$25 penalty under decriminalization rather than the average of over \$300 in fines and costs imposed previously. Staff then assumed charges filed and fines and costs imposed would decline in proportion to projected changes in arrests after legalization.

Incarceration and supervision (Chapters 2 and 3)

JLARC staff reviewed several data sources to illustrate recent supervision and incarceration populations and costs associated with marijuana offenses and estimate potential changes caused by decriminalization and legalization. For marijuana offenses in recent years, the team (1) counted the number of individuals who spent time in jail or prison, (2) estimated the approximate number of incarceration days and supervision cases (and costs) directly attributable marijuana, and (3) estimated potential changes in direct costs that could result because of decriminalization and legalization.

Staff first estimated the number of individuals who spent time in jail or prison for marijuana offenses in recent years. The Compensation Board provided data on local and regional jail confinements where the offender was charged or convicted of a marijuana offense. Staff counted the number of unique individuals confined in jails at any point in 2019 with any marijuana offense, either before or after trial. For prisons, the Department of Corrections (DOC) provided counts of state-responsible individuals confined at the end of FY19.

Second, staff estimated the number and jail and prison days attributable to marijuana convictions for charges filed in courts in 2018. J&DR convictions were excluded because only three adults received a jail sentence in J&DR courts for marijuana charges filed in 2018. For each conviction, staff calculated an effective sentence by subtracting any suspended sentences from the total time an offender was sentenced to imprisonment. “Good time” assumptions were then applied to these effective sentences to calculate the share of the sentence that would likely be served. For misdemeanors, staff assumed inmates would serve 50 percent of the effective sentence; for felonies, 85 percent. Data from the

Compensation Board was used to calculate pretrial jail days associated with marijuana charges and for a “robustness” check to confirm calculations made with court sentencing data.

JLARC staff combined these jail and prison day baseline estimates with arrest projections and direct cost assumptions to estimate the cost savings jails and prisons might see as a result of legalization. A key assumption in these calculations is that because jail and prison days associated with marijuana represent a very small share of overall workload for jails and prisons, staffing levels would not be changed because of legalization. Under this assumption, JLARC staff used direct, marginal costs per inmate per day in cost calculations for both jails and prisons. These direct inmate costs represent what jails and prisons spend on average on meals and medical care for each inmate, each day the inmate is confined. Inmate costs were sourced from recent Department of Planning and Budget and DOC estimates for jails and prisons, respectively.

JLARC staff also counted state and local supervision cases attributable to marijuana and estimated potential changes in costs caused by legalization. JLARC staff used data from the Department of Criminal Justice Services on local probation placements for marijuana offenses to estimate the number of offenders on local probation for marijuana in recent years. For state-responsible offenders under supervision, DOC provided state populations as of June 30 of the last three fiscal years. Potential cost savings as a result of legalization were estimated by assuming state supervision caseloads would decline in proportion to projected declines in arrests. These potential declines in caseloads were multiplied by average operational costs per state probation case obtained from DOC annual reports.

Marijuana arrests and police time (Chapter 3)

JLARC staff estimated the amount of time law enforcement officers in Virginia spent specifically making marijuana arrests in 2019. Aggregate time spent on arrests was calculated in two steps (1) estimating the typical amount of time officers spend on each arrest and (2) multiplying those estimates by the number of marijuana arrests police made in Virginia in 2019.

Staff estimated the amount of time police spend on each marijuana arrest by two methods. First, staff spoke with a sample of local police agencies and sheriff’s offices across the state and the Virginia State Police and asked how much time officers typically spend on each marijuana arrest. Second, staff combined incident-based arrest data from VSP with dispatch data from a large local police department in Virginia to calculate a median time spent on service calls that resulted in a marijuana arrest in 2019. Marijuana arrests through summons were estimated to take between 15 and 40 minutes, and custodial arrests were estimated to take one to three hours.

Next, staff multiplied time per arrest estimates by the number of marijuana arrests in each category. There were 27,487 arrests where marijuana was the most serious offense in 2019, and 33,300 arrests that occurred in an incident when marijuana was seized by police. Sixty-nine percent of marijuana arrests in 2019 were through summons rather than custodial. In total, staff estimated that officers spent between 12,000 and 43,000 hours on marijuana arrests in 2019, or the equivalent of six to 21 full-time officers who only made marijuana arrests for a year. Twenty-one officers is 0.1 percent of roughly 22,000 law enforcement officers in Virginia.

JLARC staff also estimated the share of police calls for service that end in a marijuana arrest for several large departments in the state. Staff calculated the ratio of marijuana arrests to police calls for

service in the nine law enforcement agencies that accounted for 47 percent of marijuana arrests in the state in 2019. For every one marijuana arrest made by those departments, there were 189 service calls, indicating that roughly 0.5 percent of service calls were related to a marijuana arrest (assuming one officer was involved in each arrest).

Appendix C: Agency responses

As part of an extensive validation process, the state agencies and other entities that are subject to a JLARC assessment are given the opportunity to comment on an exposure draft of the report. JLARC staff sent an exposure draft of relevant sections of the report to staff from the following 16 organizations:

- Department of Behavioral Health and Development Services
- Department of Criminal Justice Services
- Department of Juvenile Justice
- Department of General Services
- Department of Health Professions
- Department of Motor Vehicles
- Department of Taxation
- Division of Legislative Services
- Office of the Executive Secretary, Supreme Court of Virginia
- Office of the Attorney General
- Secretary of Finance
- Virginia Alcoholic Beverage Control Authority
- Virginia Association of Counties
- Virginia Foundation for Healthy Youth
- Virginia Municipal League
- Virginia State Police

Appropriate corrections resulting from technical and substantive comments are incorporated in this version of the report. This appendix includes a response letter from the Virginia Alcoholic Beverage Control Authority and the Department of Taxation.



November 5, 2020

Mr. Hal Greer, Director
Joint Legislative Audit and Review Commission
919 E Main St #2101
Richmond, VA 23219

Dear Hal:

I thank you and your staff for the many courtesies extended to the Virginia ABC Authority during the course of your work in researching and reporting to the Commission on the legalization of marijuana. Virginia ABC was pleased to respond to particular inquiries by Mark Gribbin and his team regarding how our experiences in the regulation of alcohol may translate to the regulation of marijuana in the Commonwealth.

In particular, we were pleased to review applicable chapters of the Exposure Draft that related to our experiences and management of the sale and consumption of alcohol. We found the draft report to be accurate and comprehensive as to the ABC role in regulating a controlled substance. The opportunity to discuss our thoughts and comments was welcomed. In our review we were able to provide a bit more insight in to how ABC operates in our role in enforcement and regulation of alcohol. Specifically we discussed the significant regulatory role that the ABC Bureau of Law Enforcement plays in addition to that Division's role as law enforcement officials. Similarly we discussed personnel levels and current ratios of law enforcement officers to licensed establishments in the Commonwealth. Finally, we discussed ABC revenues and the process for profit transfers to the General Assembly based on projections from year to year. Mark and his team listened intently and the final report reflects the incorporation of our comments. We hope that our comments and participation helped to produce a thorough and comprehensive study that will provide benefit to the Commission in their deliberations and ultimately to the citizens of the Commonwealth.

Again, thanks very much for the opportunity to participate and for the insights of your staff in seeking to find answers and present viable options to the Commission. ABC is certainly interested in the results and in future opportunities to respond to questions from you and your Commission.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Travis G. Hill", is written over a horizontal line.

Travis G. Hill
Chief Executive Officer



COMMONWEALTH of VIRGINIA

Department of Taxation

November 6, 2020

Mr. Hal E. Greer, Director
Joint Legislative Audit and Review Commission
919 East Main Street, Suite 2101
Richmond, Virginia 23219

Dear  ~~Mr. Greer~~:

Thank you for the opportunity to review and comment on the exposure draft report: *Key Considerations for Marijuana Legalization*. We believe the report is very well done and will be useful to the members of the General Assembly going forward. We also appreciate you incorporating our technical suggestions into the final report draft. We have a few comments on the report:

- If the Department of Taxation were required to administer an excise tax on marijuana, additional resources would be required for our agency. This would include programming costs associated with implementing the new tax and hiring additional full-time employees to administer the tax and enforce compliance.
- The report cautions that the tax administration agency would need to accept large cash tax payments until credit unions within Virginia allow the marijuana industry to deposit their cash with them. The Department of Taxation is not equipped to accept large cash tax payments and would require additional security measures if such large cash payments were necessary. In addition, most business taxpayers are currently required to file their tax returns and make tax payments to the Department electronically, so allowing large cash payments would be inconsistent with the requirements imposed on other industries.
- The Department's sales tax auditors are trained to review business records to find untaxed purchases. They are not equipped to investigate criminal tax evasion by cash based businesses. Such investigations require auditors to make purchases to see if they are subsequently reported, conduct surveillance of retail outlets, and investigate business owners' personal finances to determine whether they are supported by reported income. These are activities for trained law enforcement.

Mr. Hal E. Greer, Director
November 6, 2020
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Thank you again for the opportunity to review the draft report. Should you have any additional questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Craig M. Burns', written over a horizontal line.

Craig M. Burns
Tax Commissioner

c: The Honorable Aubrey L. Layne, Jr., Secretary of Finance

Appendix D: Disproportionality of marijuana law enforcement in Virginia by locality (2015–2019)

JLARC staff assessed disproportionality of marijuana law enforcement at the locality level from 2015–2019. A five-year period was chosen instead of a 10-year period because this timeframe had the heaviest enforcement of marijuana possession laws. From 2010–2014, there were 20,700 marijuana possession arrests statewide, on average, but from 2015–2019 there were 23,300 average annual arrests.

Disproportionality was evaluated by comparing the Black arrest rate/rate of cases that were prosecuted or otherwise proceeded in court to the white arrest rate/rate of cases that were prosecuted or otherwise proceeded in court for marijuana possession from 2015–2019. The resulting rates of disproportionality reflect how many times more likely a Black individual was to be arrested for marijuana possession or have his or her case proceed in court than a white individual within the same locality during this time period.

Rates of cases that were prosecuted or otherwise proceeded in court were used instead of conviction rates because they are a better indicator of how strictly a locality is enforcing the law. Cases that proceeded in court included all cases with a final disposition on the merits, including dismissed cases, but excluded “nolle prossed” cases. (Nolle prossed cases are those in which prosecutors requested that the charges be dropped.) Some commonwealth’s attorneys have implemented policies not to prosecute possession cases, and these decisions would not be adequately captured in conviction rates. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but an insufficient number of nolle prossed cases made it difficult to draw any reliable conclusions at the locality level.

Racial disparities in marijuana law enforcement were found in every Virginia locality where there was sufficient data to make an assessment. Localities were determined to have insufficient data if they had fewer than 10 Black arrests/cases and/or less than 30 percent resident arrests/cases per year. Requiring a locality to have a minimum average of 10 Black arrests/cases per year ensures there is sufficient data upon which to draw meaningful conclusions about the disproportionality within that locality. Establishing a threshold of 30 percent resident arrests controls for localities that may be arresting a high proportion of non-residents, such as those traveling through on the interstate. Some of the disproportionality in these localities is likely overstated because many of the people arrested for marijuana possession were not residents of that locality. The 30 percent resident arrest threshold partially controls for this effect but does eliminate it. However, even if arrest rates are overstated in some localities, these localities still appear to be disproportional to some extent.

A locality could have a high rate of disproportionality without having a high number of arrests or cases that proceed in court, and vice versa. For example, in Prince George County, Black individuals were nearly six times more likely to be arrested for marijuana possession, but only 56 Black individuals were arrested per year, on average. In contrast, in Prince William County, Black individuals were three times more likely to be arrested, with an average of over 700 Black arrests for marijuana possession each year.

TABLE D-1

Eighty-eight localities had disproportionate arrest rate ratios of Black to white individuals for marijuana possession from 2015–2019

Locality	Percent resident arrests	Percent Black population	Average Black arrests	Black rate per 1,000	Percent white population	Average white arrests	White rate per 1,000	Rate of disproportionality
Accomack County	69%	28%	28	3.07	60%	29	1.48	2.07
Albemarle County	68	9	56	5.50	77	56	0.68	8.11
Alexandria	49	22	200	5.77	52	63	0.76	7.57
Alleghany County	67	5	10	14.66	92	27	1.94	7.55
Amelia County	62	21	8	-	74	12	-	-
Amherst County	64	19	21	3.42	75	32	1.32	2.58
Appomattox County	81	19	10	3.24	77	13	1.09	2.96
Arlington County	36	9	219	10.52	62	108	0.75	14.01
Augusta County	82	4	12	3.65	91	40	0.59	6.23
Bath County	51	4	1	-	92	6	-	-
Bedford County	55	7	48	8.71	88	113	1.64	5.30
Bland County	30	4	4	-	94	12	-	-
Botetourt County	50	3	35	33.14	93	110	3.54	9.36
Bristol	38	6	4	-	89	37	-	-
Brunswick County	24	55	28	-	41	6	-	-
Buchanan County	88	3	0	-	95	17	-	-
Buckingham County	85	34	8	-	61	11	-	-
Buena Vista County	45	5	4	-	88	23	-	-
Campbell County	85	14	12	1.48	80	32	0.73	2.04
Caroline County	42	27	77	9.36	64	65	3.36	2.78
Carroll County	35	1	25	108.87	95	76	2.70	40.37
Charles City County	63	46	3	-	42	3	-	-
Charlotte County	49	28	5	-	68	7	-	-
Charlottesville	84	19	7	-	66	5	-	-
Chesapeake	53	29	632	8.93	58	233	1.69	5.29
Chesterfield County	67	23	798	10.09	62	532	2.50	4.03

Appendixes

Clarke County	60	5	5	-	86	24	-	-
Colonial Heights	24	15	151	-	72	90	-	-
Covington	44	13	1	-	81	4	-	-
Craig County	46	0	0	-	97	4	-	-
Culpeper County	70	14	71	9.75	71	92	2.54	3.84
Cumberland County	69	31	5	-	63	9	-	-
Danville	67	50	196	9.46	42	60	3.43	2.76
Dickenson County	76	0	0	-	98	8	-	-
Dinwiddie County	36	32	22	2.37	62	10	0.57	4.19
Emporia	41	63	59	17.29	28	13	8.63	2.00
Essex County	51	38	12	2.81	55	8	1.29	2.17
Fairfax City	23	6	12	-	56	31	-	-
Fairfax County	68	10	1,230	11.05	51	1224	2.09	5.28
Falls Church	9	4	6	-	72	5	-	-
Fauquier County	48	7	46	8.79	80	90	1.61	5.46
Floyd County	85	2	0	-	93	15	-	-
Fluvanna County	71	15	11	2.85	78	23	1.10	2.58
Franklin City	56	57	13	2.69	37	3	0.93	2.88
Franklin County	66	8	65	14.69	87	173	3.52	4.17
Frederick County	58	4	20	5.65	83	68	0.94	6.03
Fredericksburg	39	23	89	13.49	60	73	4.29	3.14
Galax	51	6	3	-	75	29	-	-
Giles County	47	1	3	-	95	22	-	-
Gloucester County	66	8	28	9.42	85	71	2.23	4.22
Goochland County	59	16	4	-	78	6	-	-
Grayson County	66	5	3	-	90	24	-	-
Greene County	70	7	8	-	83	30	-	-
Greensville County	29	59	24	-	36	15	-	-
Halifax County	58	36	68	5.43	60	32	1.56	3.48
Hampton	64	49	366	5.50	38	77	1.47	3.73
Hanover County	30	9	377	39.08	84	235	2.65	14.75
Harrisonburg	65	7	51	13.33	66	141	4.01	3.33
Henrico County	64	30	675	6.92	53	232	1.33	5.21
Henry County	88	22	21	1.84	70	37	1.03	1.78
Highland County	47	1	0	-	97	1	-	-
Hopewell	75	41	29	3.17	46	7	0.65	4.87
Isle Of Wight County	41	23	40	4.79	71	28	1.08	4.43
James City County	60	13	74	7.57	76	83	1.45	5.21

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King and Queen County	54	26	17	9.11	66	21	4.42	2.06
King George County	46	16	24	5.80	74	26	1.35	4.30
King William County	59	16	5	-	77	9	-	-
Lancaster County	79	28	9	-	67	5	-	-
Lee County	72	4	0	-	93	12	-	-
Lexington	41	9	2	-	82	10	-	-
Loudoun County	74	7	151	5.23	56	252	1.13	4.62
Louisa County	78	16	21	3.62	78	35	1.26	2.88
Lunenburg County	70	33	17	4.26	59	12	1.67	2.55
Lynchburg	73	28	159	7.06	63	60	1.20	5.90
Madison County	47	9	10	8.58	85	23	2.06	4.16
Manassas	49	13	44	7.95	41	36	2.11	3.77
Manassas Park	49	13	31	13.92	33	36	6.34	2.20
Martinsville	58	46	43	7.21	44	23	4.02	1.79
Mathews County	75	9	2	-	86	7	-	-
Mecklenburg County	48	34	45	4.25	60	23	1.24	3.41
Middlesex County	41	17	2	-	78	3	-	-
Montgomery County	63	4	39	9.78	84	154	1.87	5.24
Nelson County	66	11	4	-	82	11	-	-
New Kent County	41	13	32	11.09	79	38	2.22	5.00
Newport News	84	41	400	5.49	43	72	0.93	5.90
Norfolk	80	41	482	4.81	44	91	0.86	5.61
Northampton County	51	34	9	-	54	7	-	-
Northumberland County	74	24	13	4.37	70	11	1.34	3.26
Norton	22	6	1	-	86	11	-	-
Nottoway County	61	39	19	3.10	54	9	1.05	2.95
Orange County	50	13	28	5.97	78	45	1.60	3.72
Page County	83	2	7	-	94	64	-	-
Patrick County	55	5	2	-	90	15	-	-
Petersburg	69	76	142	5.93	15	12	2.54	2.33
Pittsylvania County	76	21	13	1.02	74	20	0.45	2.30
Poquoson	62	1	4	-	91	17	-	-
Portsmouth	75	53	86	1.70	38	17	0.46	3.69

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Powhatan County	59	10	15	5.27	86	48	1.96	2.69
Prince Edward County	44	32	23	3.07	62	15	1.04	2.96
Prince George County	30	31	56	4.68	55	16	0.78	5.98
Prince William County	81	21	723	7.64	43	490	2.46	3.10
Pulaski County	56	5	14	8.10	91	51	1.64	4.96
Radford	47	9	50	31.35	83	100	6.76	4.64
Rappahannock County	35	4	4	-	89	24	-	-
Richmond City	73	48	272	2.51	41	37	0.40	6.35
Richmond County	59	29	14	5.38	61	8	1.41	3.81
Roanoke City	88	29	188	6.60	59	106	1.81	3.64
Roanoke County	40	6	82	15.01	86	186	2.30	6.52
Rockbridge County	42	3	38	55.97	92	111	5.33	10.49
Rockingham County	62	2	23	14.25	89	94	1.32	10.78
Russell County	75	1	2	-	97	31	-	-
Salem	40	7	34	18.47	86	92	4.25	4.35
Scott County	36	1	3	-	97	65	-	-
Shenandoah County	52	2	31	30.90	88	118	3.11	9.93
Smyth County	51	2	28	40.45	94	126	4.34	9.31
Southampton County	39	35	27	4.36	61	13	1.15	3.78
Spotsylvania County	66	16	159	7.53	68	182	2.00	3.77
Stafford County	65	18	181	6.87	62	165	1.82	3.78
Staunton	63	11	29	10.68	81	85	4.29	2.49
Suffolk	67	42	89	2.36	49	29	0.65	3.65
Surry County	31	42	3	-	53	4	-	-
Sussex County	33	57	20	3.10	38	7	1.65	1.88
Tazewell County	63	3	21	16.10	94	98	2.50	6.45
Virginia Beach	67	19	373	4.36	62	199	0.71	6.10
Warren County	60	5	26	14.03	87	95	2.75	5.09
Washington County	48	1	13	16.84	95	116	2.26	7.47
Waynesboro	70	12	8	-	75	20	-	-
Westmoreland County	63	26	30	6.55	64	25	2.17	3.02
Williamsburg	33	15	35	15.33	68	30	2.95	5.19
Winchester	41	11	35	11.74	66	87	4.73	2.48
Wise County	65	6	4	-	91	49	-	-

Wythe County	33	3	37	46.84	94	106	3.90	12.00
York County	54	13	37	4.11	71	52	1.07	3.85

SOURCE: JLARC staff analysis using arrest data from the Virginia State Police.

NOTE: The rate of disproportionality was calculated by dividing the locality arrest rate of Black individuals per 1,000 residents by the locality arrest rate of white individuals per 1,000 residents. Localities were categorized as having insufficient data if they had less than 30 percent resident arrests and/or fewer than 10 Black arrests per year. Many localities with disproportionate arrest rates are along the I-81 corridor, which make it appear as though most arrests are of travelers along the interstate. However, the localities that include portions of I-81 had an average of 55 percent resident arrests from 2015–2019.

TABLE D-2

In 83 localities, cases of Black individuals proceeded in court at a higher rate than cases of white individuals, likely stemming from disproportionate arrest rates

Locality	Percent resident cases	Percent Black population	Average Black cases	Black rate per 1,000	Percent white population	Average white cases	White rate per 1,000	Rate of disproportionality
Accomack County	62%	28%	31	3.42	60%	31	1.58	2.17
Albemarle County	38	9	67	6.59	77	104	1.25	5.27
Alexandria	37	22	160	4.63	52	99	1.21	3.83
Alleghany County ^a	33	7	18	12.35	89	55	2.97	4.15
Amelia County	41	21	9	-	74	15	-	-
Amherst County	47	19	29	4.81	75	51	2.12	2.27
Appomattox County	51	19	14	4.66	77	24	2.02	2.30
Arlington County	27	9	139	-	62	79	-	-
Augusta County	34	4	13	4.09	91	43	0.63	6.46
Bath County	40	4	2	-	92	11	-	-
Bedford County	47	7	26	4.76	88	54	0.79	6.03
Bland County	22	4	2	-	94	9	-	-
Botetourt County	23	3	29	-	93	81	-	-
Bristol	34	6	4	-	89	33	-	-
Brunswick County	22	55	33	-	41	5	-	-
Buchanan County	60	3	1	-	95	11	-	-
Buckingham County	54	34	7	-	61	11	-	-
Buena Vista County	35	5	6	-	88	46	-	-
Campbell County	38	14	22	2.76	80	43	0.98	2.81
Caroline County	32	27	47	5.77	64	34	1.75	3.30
Carroll County	21	1	31	-	95	96	-	-

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Charles City County	43	46	5	-	42	4	-	-
Charlotte County	47	28	10	2.91	68	10	1.25	2.33
Charlottesville	44	19	29	3.34	66	29	0.94	3.55
Chesapeake	49	29	653	9.24	58	245	1.77	5.21
Chesterfield County	54	23	489	6.19	62	260	1.22	5.06
Clarke County	14	5	4	-	86	18	-	-
Colonial Heights	25	15	126	-	72	64	-	-
Craig County	49	0	0	-	97	9	-	-
Culpeper County	67	14	80	10.96	71	111	3.09	3.55
Cumberland County	26	31	5	-	63	10	-	-
Danville	72	50	237	11.45	42	84	4.81	2.38
Dickenson County	80	0	0	-	98	6	-	-
Dinwiddie County	16	32	22	-	62	10	-	-
Emporia	46	63	51	14.96	28	9	6.14	2.44
Essex County	41	38	15	3.68	55	9	1.56	2.36
Fairfax City	26	6	7	-	56	12	-	-
Fairfax County	51	10	840	7.54	51	953	1.63	4.62
Falls Church	11	4	7	-	72	10	-	-
Fauquier County	46	7	44	8.52	80	95	1.71	4.98
Floyd County	61	2	0	-	93	9	-	-
Fluvanna County	43	15	10	2.49	78	22	1.08	2.32
Franklin City	58	57	17	3.54	37	2	0.80	4.43
Franklin County	59	8	36	8.28	87	90	1.83	4.51
Frederick County	49	4	34	9.63	83	134	1.86	5.18
Fredericksburg	36	23	96	14.68	60	96	5.65	2.60
Galax	64	6	2	-	75	26	-	-
Giles County	49	1	4	-	95	30	-	-
Gloucester County	56	8	29	9.89	85	72	2.28	4.34
Goochland County	34	16	19	5.22	78	27	1.54	3.39
Grayson County	36	5	1	-	90	24	-	-
Greene County	55	7	6	-	83	23	-	-
Greensville County	1	59	25	-	36	15	-	-
Halifax County	67	36	77	6.17	60	36	1.73	3.57
Hampton	63	49	55	0.83	38	15	0.29	2.83
Hanover County	23	9%	321	-	84	184	-	-
Harrisonburg/ Rockingham County	61	4	43	7.88	80	192	1.80	4.37
Henrico County	44	30	464	4.76	53	147	0.84	5.65

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Henry County	51	22	13	1.13	70	21	0.58	1.95
Highland County	67	1	0	-	97	3	-	-
Hopewell	54	41	54	5.93	46	20	1.92	3.09
Isle Of Wight County	38	23	49	5.82	71	33	1.27	4.59
James City County/ Williamsburg	56	13	88	7.29	75	88	1.32	5.52
King and Queen County	33	26	14	7.48	66	13	2.75	2.72
King George County	43	16	14	3.31	74	13	0.68	4.83
King William County	45	16	3	-	77	5	-	-
Lancaster County	79	28	6	-	67	5	-	-
Lee County	64	4	0	-	93	26	-	-
Lexington/ Rockbridge County	31	4	46	35.10	90	158	5.90	5.95
Loudoun County	64	7	134	4.64	56	262	1.17	3.95
Louisa County	53	16	23	4.05	78	46	1.64	2.46
Lunenburg County	48	33	17	4.26	59	13	1.84	2.32
Lynchburg	74	28	97	4.32	63	61	1.21	3.57
Madison County	36	9	7	-	85	18	-	-
Martinsville	66	46	22	3.69	44	13	2.20	1.67
Mathews County	75	9	1	-	86	4	-	-
Mecklenburg County	33	34	61	5.77	60	33	1.80	3.21
Middlesex County	47	17	3	-	78	4	-	-
Montgomery County	56	4	25	6.34	84	93	1.13	5.58
Nelson County	38	11	9	-	82	25	-	-
New Kent County	25	13	16	-	79	16	-	-
Newport News	71	41	536	7.36	43	120	1.54	4.78
Norfolk	70	41	508	5.07	44	106	1.00	5.08
Northampton County	17	34	31	-	54	20	-	-
Northumberland County	60	24	10	3.43	70	8	0.99	3.47
Nottoway County	68	39	14	2.37	54	11	1.26	1.87
Orange County	50	13	20	4.28	78	41	1.45	2.96
Page County	73	2	5	-	94	69	-	-

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Patrick County	53	5	1	-	90	14	-	-
Petersburg	73	76	182	7.60	15	13	2.75	2.76
Pittsylvania County	47	21	27	2.05	74	34	0.74	2.77
Portsmouth	72	53	77	1.52	38	18	0.50	3.07
Powhatan County	42	10	11	3.84	86	30	1.21	3.16
Prince Edward County	33	32	26	3.53	62	26	1.87	1.88
Prince George County	21	31	67	-	55	24	-	-
Prince William County ^b	76	20	522	5.10	43	547	2.47	2.07
Pulaski County	55	5	15	8.81	91	61	1.98	4.46
Radford	41	9	35	21.61	83	53	3.59	6.02
Rappahannock County	23	4	4	-	89	22	-	-
Richmond City	53	48	443	4.10	41	93	1.00	4.09
Richmond County	25	29	13	-	61	6	-	-
Roanoke City	77	29	78	2.74	59	41	0.71	3.86
Roanoke County	35	6	58	10.66	86	127	1.57	6.78
Russell County	62	1	1	-	97	27	-	-
Salem	48	7	25	13.74	86	63	2.89	4.75
Scott County	32	1	4	-	97	60	-	-
Shenandoah County	50	2	25	25.65	88	101	2.66	9.65
Smyth County	43	2	14	19.51	94	56	1.93	10.13
Southampton County	17	35	11	-	61	7	-	-
Spotsylvania County	53	16	140	6.65	68	155	1.71	3.89
Stafford County	56	18	208	7.90	62	220	2.43	3.25
Staunton	61	11	32	11.62	81	96	4.86	2.39
Suffolk	63	42	185	4.94	49	58	1.31	3.76
Surry County	60	42	3	-	53	2	-	-
Sussex County	19	57	21	-	38	10	-	-
Tazewell County	60	3	15	11.35	94	62	1.60	7.11
Virginia Beach	63	19	324	3.79	62	235	0.84	4.49
Warren County	56	5	21	11.51	87	72	2.09	5.51
Washington County	40	1	11	14.51	95	87	1.68	8.63
Waynesboro	63	12	9	-	75	28	-	-
Westmoreland County	53	26	29	6.29	64	23	2.06	3.05
Winchester	45	11	37	12.42	66	99	5.39	2.30
Wise County ^c	60	6	3	-	91	44	-	-

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Wythe County	32	3	34	42.31	94	97	3.59	11.80
York County ^d	40	11	41	4.56	74	74	1.24	3.67

SOURCE: JLARC staff analysis using general district court data from the Office of the Executive Secretary of the Virginia Supreme Court.
 NOTE: ^a Includes Covington. ^b Includes Manassas and Manassas Park. ^c Includes Norton. ^d Includes Poquoson. The rate of disproportionality for cases that proceeded in court was calculated by dividing each locality's rate of cases for Black individuals per 1,000 by the locality's rate of cases for white individuals per 1,000. Localities were categorized as having insufficient data if they had less than 30 percent resident cases and/or fewer than 10 Black cases per year. This analysis includes dismissed cases but excludes "nolle prossed" cases (in which charges were dropped by prosecutors) to determine how strictly any given locality is enforcing the law. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but was not possible given an insufficient number of nolle prossed cases to draw any reliable conclusions at the locality level.

Appendix D: Disproportionality of marijuana law enforcement in Virginia by locality (2015–2019)

JLARC staff assessed disproportionality of marijuana law enforcement at the locality level from 2015–2019. A five-year period was chosen instead of a 10-year period because this timeframe had the heaviest enforcement of marijuana possession laws. From 2010–2014, there were 20,700 marijuana possession arrests statewide, on average, but from 2015–2019 there were 23,300 average annual arrests.

Disproportionality was evaluated by comparing the Black arrest rate/rate of cases that were prosecuted or otherwise proceeded in court to the white arrest rate/rate of cases that were prosecuted or otherwise proceeded in court for marijuana possession from 2015–2019. The resulting rates of disproportionality reflect how many times more likely a Black individual was to be arrested for marijuana possession or have his or her case proceed in court than a white individual within the same locality during this time period.

Rates of cases that were prosecuted or otherwise proceeded in court were used instead of conviction rates because they are a better indicator of how strictly a locality is enforcing the law. Cases that proceeded in court included all cases with a final disposition on the merits, including dismissed cases, but excluded “nolle prossed” cases. (Nolle prossed cases are those in which prosecutors requested that the charges be dropped.) Some commonwealth’s attorneys have implemented policies not to prosecute possession cases, and these decisions would not be adequately captured in conviction rates. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but an insufficient number of nolle prossed cases made it difficult to draw any reliable conclusions at the locality level.

Racial disparities in marijuana law enforcement were found in every Virginia locality where there was sufficient data to make an assessment. Localities were determined to have insufficient data if they had fewer than 10 Black arrests/cases and/or less than 30 percent resident arrests/cases per year. Requiring a locality to have a minimum average of 10 Black arrests/cases per year ensures there is sufficient data upon which to draw meaningful conclusions about the disproportionality within that locality. Establishing a threshold of 30 percent resident arrests controls for localities that may be arresting a high proportion of non-residents, such as those traveling through on the interstate. Some of the disproportionality in these localities is likely overstated because many of the people arrested for marijuana possession were not residents of that locality. The 30 percent resident arrest threshold partially controls for this effect but does eliminate it. However, even if arrest rates are overstated in some localities, these localities still appear to be disproportional to some extent.

A locality could have a high rate of disproportionality without having a high number of arrests or cases that proceed in court, and vice versa. For example, in Prince George County, Black individuals were nearly six times more likely to be arrested for marijuana possession, but only 56 Black individuals were arrested per year, on average. In contrast, in Prince William County, Black individuals were three times more likely to be arrested, with an average of over 700 Black arrests for marijuana possession each year.

TABLE D-1

Eighty-eight localities had disproportionate arrest rate ratios of Black to white individuals for marijuana possession from 2015–2019

Locality	Percent resident arrests	Percent Black population	Average Black arrests	Black rate per 1,000	Percent white population	Average white arrests	White rate per 1,000	Rate of disproportionality
Accomack County	69%	28%	28	3.07	60%	29	1.48	2.07
Albemarle County	68	9	56	5.50	77	56	0.68	8.11
Alexandria	49	22	200	5.77	52	63	0.76	7.57
Alleghany County	67	5	10	14.66	92	27	1.94	7.55
Amelia County	62	21	8	-	74	12	-	-
Amherst County	64	19	21	3.42	75	32	1.32	2.58
Appomattox County	81	19	10	3.24	77	13	1.09	2.96
Arlington County	36	9	219	10.52	62	108	0.75	14.01
Augusta County	82	4	12	3.65	91	40	0.59	6.23
Bath County	51	4	1	-	92	6	-	-
Bedford County	55	7	48	8.71	88	113	1.64	5.30
Bland County	30	4	4	-	94	12	-	-
Botetourt County	50	3	35	33.14	93	110	3.54	9.36
Bristol	38	6	4	-	89	37	-	-
Brunswick County	24	55	28	-	41	6	-	-
Buchanan County	88	3	0	-	95	17	-	-
Buckingham County	85	34	8	-	61	11	-	-
Buena Vista County	45	5	4	-	88	23	-	-
Campbell County	85	14	12	1.48	80	32	0.73	2.04
Caroline County	42	27	77	9.36	64	65	3.36	2.78
Carroll County	35	1	25	108.87	95	76	2.70	40.37
Charles City County	63	46	3	-	42	3	-	-
Charlotte County	49	28	5	-	68	7	-	-
Charlottesville	84	19	7	-	66	5	-	-
Chesapeake	53	29	632	8.93	58	233	1.69	5.29
Chesterfield County	67	23	798	10.09	62	532	2.50	4.03

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Clarke County	60	5	5	-	86	24	-	-
Colonial Heights	24	15	151	-	72	90	-	-
Covington	44	13	1	-	81	4	-	-
Craig County	46	0	0	-	97	4	-	-
Culpeper County	70	14	71	9.75	71	92	2.54	3.84
Cumberland County	69	31	5	-	63	9	-	-
Danville	67	50	196	9.46	42	60	3.43	2.76
Dickenson County	76	0	0	-	98	8	-	-
Dinwiddie County	36	32	22	2.37	62	10	0.57	4.19
Emporia	41	63	59	17.29	28	13	8.63	2.00
Essex County	51	38	12	2.81	55	8	1.29	2.17
Fairfax City	23	6	12	-	56	31	-	-
Fairfax County	68	10	1,230	11.05	51	1224	2.09	5.28
Falls Church	9	4	6	-	72	5	-	-
Fauquier County	48	7	46	8.79	80	90	1.61	5.46
Floyd County	85	2	0	-	93	15	-	-
Fluvanna County	71	15	11	2.85	78	23	1.10	2.58
Franklin City	56	57	13	2.69	37	3	0.93	2.88
Franklin County	66	8	65	14.69	87	173	3.52	4.17
Frederick County	58	4	20	5.65	83	68	0.94	6.03
Fredericksburg	39	23	89	13.49	60	73	4.29	3.14
Galax	51	6	3	-	75	29	-	-
Giles County	47	1	3	-	95	22	-	-
Gloucester County	66	8	28	9.42	85	71	2.23	4.22
Goochland County	59	16	4	-	78	6	-	-
Grayson County	66	5	3	-	90	24	-	-
Greene County	70	7	8	-	83	30	-	-
Greensville County	29	59	24	-	36	15	-	-
Halifax County	58	36	68	5.43	60	32	1.56	3.48
Hampton	64	49	366	5.50	38	77	1.47	3.73
Hanover County	30	9	377	39.08	84	235	2.65	14.75
Harrisonburg	65	7	51	13.33	66	141	4.01	3.33
Henrico County	64	30	675	6.92	53	232	1.33	5.21
Henry County	88	22	21	1.84	70	37	1.03	1.78
Highland County	47	1	0	-	97	1	-	-
Hopewell	75	41	29	3.17	46	7	0.65	4.87
Isle Of Wight County	41	23	40	4.79	71	28	1.08	4.43
James City County	60	13	74	7.57	76	83	1.45	5.21

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King and Queen County	54	26	17	9.11	66	21	4.42	2.06
King George County	46	16	24	5.80	74	26	1.35	4.30
King William County	59	16	5	-	77	9	-	-
Lancaster County	79	28	9	-	67	5	-	-
Lee County	72	4	0	-	93	12	-	-
Lexington	41	9	2	-	82	10	-	-
Loudoun County	74	7	151	5.23	56	252	1.13	4.62
Louisa County	78	16	21	3.62	78	35	1.26	2.88
Lunenburg County	70	33	17	4.26	59	12	1.67	2.55
Lynchburg	73	28	159	7.06	63	60	1.20	5.90
Madison County	47	9	10	8.58	85	23	2.06	4.16
Manassas	49	13	44	7.95	41	36	2.11	3.77
Manassas Park	49	13	31	13.92	33	36	6.34	2.20
Martinsville	58	46	43	7.21	44	23	4.02	1.79
Mathews County	75	9	2	-	86	7	-	-
Mecklenburg County	48	34	45	4.25	60	23	1.24	3.41
Middlesex County	41	17	2	-	78	3	-	-
Montgomery County	63	4	39	9.78	84	154	1.87	5.24
Nelson County	66	11	4	-	82	11	-	-
New Kent County	41	13	32	11.09	79	38	2.22	5.00
Newport News	84	41	400	5.49	43	72	0.93	5.90
Norfolk	80	41	482	4.81	44	91	0.86	5.61
Northampton County	51	34	9	-	54	7	-	-
Northumberland County	74	24	13	4.37	70	11	1.34	3.26
Norton	22	6	1	-	86	11	-	-
Nottoway County	61	39	19	3.10	54	9	1.05	2.95
Orange County	50	13	28	5.97	78	45	1.60	3.72
Page County	83	2	7	-	94	64	-	-
Patrick County	55	5	2	-	90	15	-	-
Petersburg	69	76	142	5.93	15	12	2.54	2.33
Pittsylvania County	76	21	13	1.02	74	20	0.45	2.30
Poquoson	62	1	4	-	91	17	-	-
Portsmouth	75	53	86	1.70	38	17	0.46	3.69

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Powhatan County	59	10	15	5.27	86	48	1.96	2.69
Prince Edward County	44	32	23	3.07	62	15	1.04	2.96
Prince George County	30	31	56	4.68	55	16	0.78	5.98
Prince William County	81	21	723	7.64	43	490	2.46	3.10
Pulaski County	56	5	14	8.10	91	51	1.64	4.96
Radford	47	9	50	31.35	83	100	6.76	4.64
Rappahannock County	35	4	4	-	89	24	-	-
Richmond City	73	48	272	2.51	41	37	0.40	6.35
Richmond County	59	29	14	5.38	61	8	1.41	3.81
Roanoke City	88	29	188	6.60	59	106	1.81	3.64
Roanoke County	40	6	82	15.01	86	186	2.30	6.52
Rockbridge County	42	3	38	55.97	92	111	5.33	10.49
Rockingham County	62	2	23	14.25	89	94	1.32	10.78
Russell County	75	1	2	-	97	31	-	-
Salem	40	7	34	18.47	86	92	4.25	4.35
Scott County	36	1	3	-	97	65	-	-
Shenandoah County	52	2	31	30.90	88	118	3.11	9.93
Smyth County	51	2	28	40.45	94	126	4.34	9.31
Southampton County	39	35	27	4.36	61	13	1.15	3.78
Spotsylvania County	66	16	159	7.53	68	182	2.00	3.77
Stafford County	65	18	181	6.87	62	165	1.82	3.78
Staunton	63	11	29	10.68	81	85	4.29	2.49
Suffolk	67	42	89	2.36	49	29	0.65	3.65
Surry County	31	42	3	-	53	4	-	-
Sussex County	33	57	20	3.10	38	7	1.65	1.88
Tazewell County	63	3	21	16.10	94	98	2.50	6.45
Virginia Beach	67	19	373	4.36	62	199	0.71	6.10
Warren County	60	5	26	14.03	87	95	2.75	5.09
Washington County	48	1	13	16.84	95	116	2.26	7.47
Waynesboro	70	12	8	-	75	20	-	-
Westmoreland County	63	26	30	6.55	64	25	2.17	3.02
Williamsburg	33	15	35	15.33	68	30	2.95	5.19
Winchester	41	11	35	11.74	66	87	4.73	2.48
Wise County	65	6	4	-	91	49	-	-

Wythe County	33	3	37	46.84	94	106	3.90	12.00
York County	54	13	37	4.11	71	52	1.07	3.85

SOURCE: JLARC staff analysis using arrest data from the Virginia State Police.

NOTE: The rate of disproportionality was calculated by dividing the locality arrest rate of Black individuals per 1,000 residents by the locality arrest rate of white individuals per 1,000 residents. Localities were categorized as having insufficient data if they had less than 30 percent resident arrests and/or fewer than 10 Black arrests per year. Many localities with disproportionate arrest rates are along the I-81 corridor, which make it appear as though most arrests are of travelers along the interstate. However, the localities that include portions of I-81 had an average of 55 percent resident arrests from 2015–2019.

TABLE D-2

In 83 localities, cases of Black individuals proceeded in court at a higher rate than cases of white individuals, likely stemming from disproportionate arrest rates

Locality	Percent resident cases	Percent Black population	Average Black cases	Black rate per 1,000	Percent white population	Average white cases	White rate per 1,000	Rate of disproportionality
Accomack County	62%	28%	31	3.42	60%	31	1.58	2.17
Albemarle County	38	9	67	6.59	77	104	1.25	5.27
Alexandria	37	22	160	4.63	52	99	1.21	3.83
Alleghany County ^a	33	7	18	12.35	89	55	2.97	4.15
Amelia County	41	21	9	-	74	15	-	-
Amherst County	47	19	29	4.81	75	51	2.12	2.27
Appomattox County	51	19	14	4.66	77	24	2.02	2.30
Arlington County	27	9	139	-	62	79	-	-
Augusta County	34	4	13	4.09	91	43	0.63	6.46
Bath County	40	4	2	-	92	11	-	-
Bedford County	47	7	26	4.76	88	54	0.79	6.03
Bland County	22	4	2	-	94	9	-	-
Botetourt County	23	3	29	-	93	81	-	-
Bristol	34	6	4	-	89	33	-	-
Brunswick County	22	55	33	-	41	5	-	-
Buchanan County	60	3	1	-	95	11	-	-
Buckingham County	54	34	7	-	61	11	-	-
Buena Vista County	35	5	6	-	88	46	-	-
Campbell County	38	14	22	2.76	80	43	0.98	2.81
Caroline County	32	27	47	5.77	64	34	1.75	3.30
Carroll County	21	1	31	-	95	96	-	-

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Charles City County	43	46	5	-	42	4	-	-
Charlotte County	47	28	10	2.91	68	10	1.25	2.33
Charlottesville	44	19	29	3.34	66	29	0.94	3.55
Chesapeake	49	29	653	9.24	58	245	1.77	5.21
Chesterfield County	54	23	489	6.19	62	260	1.22	5.06
Clarke County	14	5	4	-	86	18	-	-
Colonial Heights	25	15	126	-	72	64	-	-
Craig County	49	0	0	-	97	9	-	-
Culpeper County	67	14	80	10.96	71	111	3.09	3.55
Cumberland County	26	31	5	-	63	10	-	-
Danville	72	50	237	11.45	42	84	4.81	2.38
Dickenson County	80	0	0	-	98	6	-	-
Dinwiddie County	16	32	22	-	62	10	-	-
Emporia	46	63	51	14.96	28	9	6.14	2.44
Essex County	41	38	15	3.68	55	9	1.56	2.36
Fairfax City	26	6	7	-	56	12	-	-
Fairfax County	51	10	840	7.54	51	953	1.63	4.62
Falls Church	11	4	7	-	72	10	-	-
Fauquier County	46	7	44	8.52	80	95	1.71	4.98
Floyd County	61	2	0	-	93	9	-	-
Fluvanna County	43	15	10	2.49	78	22	1.08	2.32
Franklin City	58	57	17	3.54	37	2	0.80	4.43
Franklin County	59	8	36	8.28	87	90	1.83	4.51
Frederick County	49	4	34	9.63	83	134	1.86	5.18
Fredericksburg	36	23	96	14.68	60	96	5.65	2.60
Galax	64	6	2	-	75	26	-	-
Giles County	49	1	4	-	95	30	-	-
Gloucester County	56	8	29	9.89	85	72	2.28	4.34
Goochland County	34	16	19	5.22	78	27	1.54	3.39
Grayson County	36	5	1	-	90	24	-	-
Greene County	55	7	6	-	83	23	-	-
Greensville County	1	59	25	-	36	15	-	-
Halifax County	67	36	77	6.17	60	36	1.73	3.57
Hampton	63	49	55	0.83	38	15	0.29	2.83
Hanover County	23	9%	321	-	84	184	-	-
Harrisonburg/ Rockingham County	61	4	43	7.88	80	192	1.80	4.37
Henrico County	44	30	464	4.76	53	147	0.84	5.65

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Henry County	51	22	13	1.13	70	21	0.58	1.95
Highland County	67	1	0	-	97	3	-	-
Hopewell	54	41	54	5.93	46	20	1.92	3.09
Isle Of Wight County	38	23	49	5.82	71	33	1.27	4.59
James City County/ Williamsburg	56	13	88	7.29	75	88	1.32	5.52
King and Queen County	33	26	14	7.48	66	13	2.75	2.72
King George County	43	16	14	3.31	74	13	0.68	4.83
King William County	45	16	3	-	77	5	-	-
Lancaster County	79	28	6	-	67	5	-	-
Lee County	64	4	0	-	93	26	-	-
Lexington/ Rockbridge County	31	4	46	35.10	90	158	5.90	5.95
Loudoun County	64	7	134	4.64	56	262	1.17	3.95
Louisa County	53	16	23	4.05	78	46	1.64	2.46
Lunenburg County	48	33	17	4.26	59	13	1.84	2.32
Lynchburg	74	28	97	4.32	63	61	1.21	3.57
Madison County	36	9	7	-	85	18	-	-
Martinsville	66	46	22	3.69	44	13	2.20	1.67
Mathews County	75	9	1	-	86	4	-	-
Mecklenburg County	33	34	61	5.77	60	33	1.80	3.21
Middlesex County	47	17	3	-	78	4	-	-
Montgomery County	56	4	25	6.34	84	93	1.13	5.58
Nelson County	38	11	9	-	82	25	-	-
New Kent County	25	13	16	-	79	16	-	-
Newport News	71	41	536	7.36	43	120	1.54	4.78
Norfolk	70	41	508	5.07	44	106	1.00	5.08
Northampton County	17	34	31	-	54	20	-	-
Northumberland County	60	24	10	3.43	70	8	0.99	3.47
Nottoway County	68	39	14	2.37	54	11	1.26	1.87
Orange County	50	13	20	4.28	78	41	1.45	2.96
Page County	73	2	5	-	94	69	-	-

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Patrick County	53	5	1	-	90	14	-	-
Petersburg	73	76	182	7.60	15	13	2.75	2.76
Pittsylvania County	47	21	27	2.05	74	34	0.74	2.77
Portsmouth	72	53	77	1.52	38	18	0.50	3.07
Powhatan County	42	10	11	3.84	86	30	1.21	3.16
Prince Edward County	33	32	26	3.53	62	26	1.87	1.88
Prince George County	21	31	67	-	55	24	-	-
Prince William County ^b	76	20	522	5.10	43	547	2.47	2.07
Pulaski County	55	5	15	8.81	91	61	1.98	4.46
Radford	41	9	35	21.61	83	53	3.59	6.02
Rappahannock County	23	4	4	-	89	22	-	-
Richmond City	53	48	443	4.10	41	93	1.00	4.09
Richmond County	25	29	13	-	61	6	-	-
Roanoke City	77	29	78	2.74	59	41	0.71	3.86
Roanoke County	35	6	58	10.66	86	127	1.57	6.78
Russell County	62	1	1	-	97	27	-	-
Salem	48	7	25	13.74	86	63	2.89	4.75
Scott County	32	1	4	-	97	60	-	-
Shenandoah County	50	2	25	25.65	88	101	2.66	9.65
Smyth County	43	2	14	19.51	94	56	1.93	10.13
Southampton County	17	35	11	-	61	7	-	-
Spotsylvania County	53	16	140	6.65	68	155	1.71	3.89
Stafford County	56	18	208	7.90	62	220	2.43	3.25
Staunton	61	11	32	11.62	81	96	4.86	2.39
Suffolk	63	42	185	4.94	49	58	1.31	3.76
Surry County	60	42	3	-	53	2	-	-
Sussex County	19	57	21	-	38	10	-	-
Tazewell County	60	3	15	11.35	94	62	1.60	7.11
Virginia Beach	63	19	324	3.79	62	235	0.84	4.49
Warren County	56	5	21	11.51	87	72	2.09	5.51
Washington County	40	1	11	14.51	95	87	1.68	8.63
Waynesboro	63	12	9	-	75	28	-	-
Westmoreland County	53	26	29	6.29	64	23	2.06	3.05
Winchester	45	11	37	12.42	66	99	5.39	2.30
Wise County ^c	60	6	3	-	91	44	-	-

Appendixes

Wythe County	32	3	34	42.31	94	97	3.59	11.80
York County ^d	40	11	41	4.56	74	74	1.24	3.67

SOURCE: JLARC staff analysis using general district court data from the Office of the Executive Secretary of the Virginia Supreme Court. NOTE: ^a Includes Covington. ^b Includes Manassas and Manassas Park. ^c Includes Norton. ^d Includes Poquoson. The rate of disproportionality for cases that proceeded in court was calculated by dividing each locality's rate of cases for Black individuals per 1,000 by the locality's rate of cases for white individuals per 1,000. Localities were categorized as having insufficient data if they had less than 30 percent resident cases and/or fewer than 10 Black cases per year. This analysis includes dismissed cases but excludes "nolle prossed" cases (in which charges were dropped by prosecutors) to determine how strictly any given locality is enforcing the law. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but was not possible given an insufficient number of nolle prossed cases to draw any reliable conclusions at the locality level.

Appendix E: Marijuana policy changes and crime

Virginia law enforcement officers have expressed concern about potential impacts of marijuana legalization. In interviews with Virginia law enforcement agencies and associations, police expressed varying levels of concern about several issues related to legalization, from continued or exacerbated illegal market activity, to robberies of new marijuana dispensaries, to other issues such as substance abuse and homelessness that could have broader consequences for crime and society.

Police in other states that have legalized marijuana have varied perceptions about marijuana legalization's impact on overall crime. In a Police Foundation report, Colorado officers perceived an increase in crime immediately following legalization. In contrast, focus groups with police in Washington revealed that officers generally did not believe marijuana legalization was directly related to any changes in crimes such as property crime. Anecdotal evidence from other states suggests some localized marijuana-related crime could differ under legalization. For example, Denver police reported that in 2012–2013, burglaries took place at 13 percent of the city's licensed marijuana facilities (which tend to be cash-based) compared to 2 percent at liquor stores. Sheriffs in jurisdictions with many unlicensed marijuana growers in California report that marijuana operations continue to attract organized crime.

Academic research on the relationship between marijuana policy and overall crime rates is inconclusive. A recent study from Washington State found little overall impact of legalization on serious crime rates. Some studies find that legalization is related to large decreases in property crime rates. Others associate legalization with small increases in violent and nonviolent crime in the short term that do not persist. One study indicated that crime *clearance* rates did not change or improve after legalization, indicating that legalization did not harm officers' abilities to solve crimes. Still some studies find that the presence of recreational or medical dispensaries increases local crime rates, while others find that dispensaries have no impact on local crime. Long-term impacts are largely unknown because marijuana legalization is relatively recent.

Recent studies examine the impact on crime rates from medical marijuana legalization, decriminalization, and adult use marijuana legalization. The following table summarizes a sample of recent academic studies on the relationship between marijuana policy changes and crime rates. Studies of the impacts of decriminalization and medical marijuana legalization are included because of the limited available research on adult use legalization. This sample of studies suggests a lack of consensus on the impact of marijuana policy changes on crime rates.

TABLE E-1
Sample of recent academic studies shows mixed impacts of marijuana policy change on crime

Study topic	Impact on crime	Primary findings
Medical marijuana	Little impact	<ul style="list-style-type: none"> Medical marijuana has little overall effect on crime rates in most states. (Chu, 2019) Medical marijuana dispensary density has no association with violent or property crime. (Kepple, 2012)
	Increase	<ul style="list-style-type: none"> The density of medical marijuana dispensaries is associated with slightly higher property and violent crimes but not directly adjacent to dispensaries. (Freisthler, 2016) Medicalization/legalization shows some association with increased petty crimes such as shoplifting. (Dills, 2017)
	Decrease	<ul style="list-style-type: none"> Medical marijuana may have significantly reduced violent and property crime in California. (Chu, 2019) There is evidence of 4–12% reductions in robberies, larcenies, and burglaries due to the legalization of medical marijuana. (Huber, 2016) Medical dispensaries are associated with a significant decline in property crime. (Chang, 2017) Legalization of medical marijuana decreases violent crime in states bordering Mexico; impact on crime in states not bordering Mexico is negligible. (Gavrilova, 2017)
Decriminalization	Little impact	<ul style="list-style-type: none"> Decriminalization had little impact on self-reported criminal or healthy behaviors. (Dills, 2017)
	Increase	<ul style="list-style-type: none"> Decriminalization is associated with an increase in burglaries (6.6%) and robberies (11.6%). (Huber, 2016)
	Decrease	<ul style="list-style-type: none"> Offense rates for non-drug crime fell significantly (9.4%) following decriminalization. (Adda, 2014)
Adult use marijuana	Little impact	<ul style="list-style-type: none"> Recreational dispensaries have no effect on overall crime rates. (Brinkman, 2019) Marijuana legalization and sales have had minimal to no effect on violent or property crimes in Colorado or Washington in the medium-term. (Lu, 2019)
	Increase	<ul style="list-style-type: none"> Slight increases in larceny, burglary, and assault immediately after legalization that do not persist. (Lu, 2019) Medicalization/legalization shows some association with increased petty crimes such as shoplifting. (Dills, 2017) Recreational/medical marijuana dispensaries in Denver are associated with large increases in drug and alcohol offenses, robberies, burglaries, and assault. (Hughes, 2020)
	Decrease	<ul style="list-style-type: none"> Legalization reduced rapes by between 15% and 30%. (Dragone, 2019) Violent and property crime <i>clearance</i> rates improved slightly after legalization, especially for burglary and motor vehicle theft. (Makin, 2019) Recreational dispensaries are associated with large decreases in nonviolent crime. (Brinkman, 2019)

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Appendix F: Virginia's current marijuana laws

The General Assembly decriminalized simple marijuana possession for adults in the regular 2020 legislative session through HB 972 and SB 2, making simple marijuana possession punishable by a maximum \$25 civil penalty. However, Virginia law maintains criminal penalties for other marijuana violations. For example, convictions for possession with intent to distribute and sell marijuana are still penalized as criminal misdemeanors and felonies.

Table F-1 below outlines the primary changes made in the 2020 regular session. Notably, the bills also changed Virginia's marijuana law by removing hash oil (concentrated marijuana) from the list of Schedule I substances, which means hash oil is now treated in the same manner as marijuana flower. Additionally, there is now a presumption that possessing an amount of marijuana equal to or less than one ounce is for personal use. The felony threshold for marijuana distribution or possession with intent to distribute is now one ounce. These two changes makes it less likely individuals will be prosecuted for more serious marijuana offenses when an offender possesses an ounce or less of marijuana or hash oil.

TABLE F-1
Virginia made several changes to primary marijuana laws in 2020 regular session

Marijuana offense	Previous penalties	Primary changes
Possess (marijuana)	First offense: Court can defer and dismiss case if probation terms are satisfied (or a misdemeanor).	Simple possession is now a \$25 civil penalty. Simple possession remains a delinquent act for those under 18 years of age.
	Subsequent offense: Misdemeanor	
Possess (hash oil)	First offense: Court can defer and dismiss case if probation terms are satisfied.	Simple possession of hash oil is now a \$25 civil penalty. Simple possession remains a delinquent act for those under 18 years of age.
	Subsequent offense: Class 5 felony.	
Distribute or possess with intent to distribute (PWID)	½ ounce or less: Class 1 misdemeanor	Now a rebuttable presumption that 1 ounce or less is for personal use.
	>½ ounce to 5 pounds: Class 5 felony	1 ounce or less is now a misdemeanor, while over 1 ounce to 5 pounds is now a Class 5 felony. Penalties for offenses over 5 pounds did not change.
	Over 5 pounds: Felony, 5–30 years	
		Distribution of hash oil is now aligned with distribution of marijuana.

SOURCE: Code of Virginia § 18.2-248.1, 18.2-250.1, 18.2-251, and 54.1-3446.

Marijuana offenses are included in several sections of the Code of Virginia beyond the most frequently charged marijuana statutes, § 18.2-250.1 and § 18.2-248.1. For example, § 18.2-248 includes penalties for manufacturing or distributing very large amounts of marijuana or engaging in criminal marijuana enterprises. Table F-2 below outlines additional key code sections that establish marijuana offenses.

TABLE F-2
Additional marijuana offenses and penalties under Virginia law

Code section	Description	Classification, imprisonment, fines
§ 18.2-248	Manufacture, sell, give, distribute or possess with intent to sell, give, or distribute large amounts (more than 100 kg) of marijuana or mixture. Act as a principal in continuing criminal enterprise involving large amounts of marijuana and revenue.	Felony, 20 years–life, up to \$1 million fine. Different mandatory minimum sentences apply for different amounts of marijuana and when an ongoing criminal enterprise is involved.
§ 18.2-248.1(d)	After a third or subsequent felony distribution of offense under 18.2-248.1, offender must be sentenced to five years and up to life in prison.	Felony, 5 years–life, up to \$500,000 fine. ^a
§ 18.2-248.01	Transport 5 pounds or more of marijuana into Virginia.	Felony, 5–40 years, fine up to \$1 million. ^a
§ 18.2-474.1, 53.1-203	Deliver or attempt to deliver marijuana to a prisoner or possess or sell marijuana as a prisoner.	Felony, 0-10 years, fine up to \$2,500.
§ 18.2-255	Distribute marijuana to person under 18 or enlist person under 18 to distribute marijuana when juvenile is at least three years younger.	Felony, 2-50 years, up to \$100,000 fine. Penalties differ depending on amount of marijuana. ^a
§ 18.2-255.1, 18.2-265.3, 54.1-3466	Sell, distribute, possess, or intent to sell or distribute controlled drug paraphernalia, or advertise paraphernalia to minors.	Misdemeanor, 0–12 months, fine up to \$2,500. Selling to a juvenile: Felony, 0–5 years, fine up to \$2,500.
§ 18.2-255.2	Sell, manufacture, distribute or possess with intent to distribute marijuana while on school property or within 1,000 feet of a school.	Felony, 1–5 years, fine up to \$100,000. ^a
§ 18.2-258	It is a “common nuisance” if a location is frequented by marijuana users or sellers. Owners and tenants are criminally liable for permitting or maintaining such a nuisance.	Misdemeanor, 0–12 months, fine up to \$2,500 (first offense) Felony, 0–5 years, fine up to \$2,500. (subsequent offense)
§ 18.2-258.02	Maintain a fortified drug house used to manufacture or distribute marijuana.	Felony, 0–10 years, fine up to \$2,500.
§ 18.2-308.4	Use of a firearm while manufacturing, selling, distributing, or possessing more than 1lb of marijuana with intent to manufacture, sell, or distribute.	Felony, 5 years, fine up to \$2,500. ^a
§ 22.1-277.08	Schools may expel students who bring marijuana to school or school-sponsored activities. ^b	

SOURCE: Code of Virginia.

NOTE: This table is not intended to be a comprehensive list of all penalties and repercussions associated with marijuana in the Code of Virginia. Language is adapted from language used in Code for readability. Excludes Code sections related to medical marijuana or hemp.

^a Low number of years shown is the mandatory minimum sentence. ^b Note that marijuana possession by juveniles is a delinquent act.

Appendix G: Other states' marijuana laws

As discussed in Chapter 4, Virginia will need to make decisions about which marijuana laws to enact, remove, keep, or alter if it legalizes recreational marijuana for adults. The state could reference laws in other states to guide decisions, though it is important to consider that criminal legal structures and sentencing practices differ across states.

States that have legalized marijuana have not removed all penalties related to marijuana. The 11 states (and Washington, D.C.) that legalized marijuana before 2020 maintain legal limits on marijuana. These states also assess criminal and civil penalties for violating legal limits. The four states that legalized marijuana in November 2020—Arizona, Montana, New Jersey, and South Dakota—are not considered in this appendix.

Adult use marijuana laws in legal states address a few main elements: (1) the amount of marijuana adults are allowed to possess, grow, or share, (2) where and when marijuana can and cannot be used, and (3) penalties for illegal activities, such as unlicensed distribution and exceeding possession limits. Additionally, states impose consequences for underage adults and juveniles who possess marijuana because marijuana remains illegal for individuals under 21. States with medical marijuana programs also have some special exceptions for registered patients, such as higher marijuana possession limits.

There are three main marijuana product types that states treat distinctly in statute (shown below). States set separate limits for products in part because the same weight or volume of two marijuana products can represent significantly different serving sizes or dosages. For example, concentrates are generally more restricted because they are more potent products. One study estimated that one gram of marijuana flower at 17 percent THC is roughly equivalent to .28 grams of marijuana concentrate at 62 percent THC and .03 grams of THC in marijuana-infused products.

- **Marijuana flower**, or usable marijuana, is the dried flowers or buds of the cannabis plant that contain THC and other compounds. Marijuana flower is typically smoked.
- **Marijuana concentrates** are concentrated marijuana products with higher percentages of THC. These products are made by removing THC from cannabis plants either mechanically or through the use of solvents, high heat, and/or pressure. Marijuana extracts are concentrates made by non-mechanical processes. Concentrates can take many forms such as butane hash oil or kief. Concentrates are often consumed using a vaping or “dabbing” device but can also be smoked in some forms.
- **Marijuana-infused products** are food or potable liquids into which marijuana concentrates or marijuana flower are incorporated. These products are frequently ingested in the form of marijuana “edibles,” such as brownies and gummies.

All states limit the amount of marijuana adults can possess, grow, or share

All states that have legalized marijuana restrict marijuana possession and use to adults 21 years of age and older to prevent youth access. In addition, states set limits for the amounts of marijuana adults can possess, grow, and share to deter illicit market activity.

States typically allow adults to possess up to one ounce of marijuana flower and up to five grams of marijuana concentrates (Table G-1). Almost all states set separate possession limits for marijuana flower versus marijuana concentrates. Some states also set limits on infused products. For example, Illinois permits adults to possess 500 milligrams of THC in infused products, while Oregon and Washington allow adults to possess up to 16 ounces of solid, infused products such as edibles and 72 ounces of liquid, infused products such as beverages.

TABLE G-1

States typically limit adults to 1 oz. of marijuana, 5g of concentrates, and 2-6 plants

State	Marijuana flower	Concentrates	Infused products	Home cultivation
Alaska	1 ounce	n/a ^a	n/a	6 plants per adult (3 can be mature) 12 plants per dwelling
California	1 ounce	8 grams	n/a	6 plants per private residence
Colorado	1 ounce	1 ounce	n/a	6 plants per adult (3 can be mature) 12 plants per residence
D.C.	2 ounces	n/a ^a	n/a	6 plants per adult (3 can be mature) 12 plants per residence (6 mature)
Illinois	1 ounce ^b	5 grams ^b	500 mg THC	Not permitted
Maine	2.5 ounces	5 grams	n/a	3 mature plants, 12 immature plants, and unlimited seedlings per adult
Massachusetts	1 ounce	5 grams	n/a	6 plants per adult 12 plants per property
Michigan	2.5 ounces	15 grams	n/a	12 plants per adult 12 plants per property
Nevada	1 ounce	3.5 grams	n/a	6 plants per adult ^c 12 plants per household
Oregon	1 ounce	1 ounce	16 ounces solid, 72 ounces liquid ^d	4 plants per residence
Vermont	1 ounce	5 grams	n/a	2 mature plants and 4 immature plants per household
Washington	1 ounce	7 grams	16 ounces solid, 72 ounces liquid ^d	Not permitted.

SOURCE: JLARC analysis of other states' laws; NORML; NCSL; NAMSDL.

NOTE: Some amounts are converted from other units of measure to ease comparisons among states. ^a Alaska and D.C. laws do not appear to distinguish between concentrates and marijuana flower, though possession of hashish (a concentrate) appears to remain a crime. ^b Illinois permits non-residents to possess half as much marijuana as residents; possession limit is 30 grams, or just over one ounce. ^c Nevada permits adults to grow marijuana at home only if they live 25 miles or more away from a marijuana retailer. ^d Purchase limits that function as possession limits.

Some states allow adults to possess more marijuana at home than in public. These laws might encourage marijuana to be kept at home rather than in public places and are practical if states permit adults to grow marijuana plants that can produce more marijuana than public possession limits allow. States that allow home cultivation typically allow adults to possess any marijuana they grow at home. Other states set additional limits for private possession. For example, Massachusetts permits adults to possess one ounce of marijuana in public, but up to 10 ounces at home as long as it is stored in a locked area, as well as any marijuana harvested from legally cultivated plants.

States also have alternative possession limits for registered medical marijuana patients and caregivers. For example, Illinois permits possession of 2.5 ounces of marijuana for medical use (relative to one ounce for adult recreational use). Oregon allows registered medical patients or caregivers to purchase eight ounces at one time and up to 32 ounces in one month.

Laws that allow adults to grow marijuana at home aim to balance a desire to provide adults with lower-cost access to marijuana while keeping individuals from growing marijuana for the purpose of selling it on the illegal market. As Table G-1 shows, most states permit adults to grow two to six marijuana plants at home. States often set specific limits for the number of “mature” or flowering plants that differ than limits for “immature” plants, because plants do not produce significant amounts of THC until they mature and produce flowers. To deter large home cultivation sites that can resemble commercial operations, all states that permit home cultivation also cap the number of plants that can be grown in a single dwelling, property, or household at six to 12 plants.

Home cultivation laws in other states often constrain how adults can grow marijuana to limit access by the public and youth. All states require that plants are (1) out of view of the public without the use of optical aids, (2) locked or reasonably secured, and (3) inaccessible to minors. Violations of these requirements typically result in fines. States also require that renters receive explicit permission from property owners or landlords before growing marijuana. Some other states’ home cultivation laws are even more restrictive. For example, Maine requires that home cultivators tag each plant with the grower’s and property owner’s identification information to facilitate enforcement of illicit home cultivation sites. Nevada only permits home cultivation if residents live more than 25 miles from a marijuana retailer to limit cultivation to those who do not have access to retail marijuana.

Most states also allow unlicensed adults to give to other adults (without payment) similar amounts of marijuana that they allow adults to possess, grow, or buy at one time. These laws allow individuals to share smaller amounts of marijuana without being subject to criminal penalties for marijuana distribution. Laws are typically carefully worded to prevent unlicensed adults from selling marijuana on the illicit market, for example:

- Michigan prohibits unlicensed individuals from advertising or promoting the transfer of marijuana to the public;

- Massachusetts prohibits individuals from “gifting” marijuana in conjunction of the sale of another item to evade laws governing the legal sale of marijuana; and
- Washington requires that transfers of marijuana without payment occur out of view of the public and that the marijuana must be in the retailer’s original packaging.

Most states that have legalized marijuana also permit adults to possess or purchase marijuana paraphernalia, while some still prohibit the sale of paraphernalia—especially to minors. These laws permit adults to possess, purchase, and use products that are complementary to legal marijuana while aiming to restrict youth access. For example, Massachusetts permits adults 21 and over to possess, purchase, obtain, manufacture, and transfer to other adults marijuana “accessories” used to plant, grow, manufacture, ingest, or inhale marijuana, among other activities.

Other states assess fines for consuming marijuana in public places

All states that have legalized marijuana prohibit marijuana consumption in public. These laws are different than possession laws because they apply to the act of using or consuming marijuana rather than possessing it. However, public use laws vary somewhat among states. For example, California prohibits smoking or ingesting marijuana in public places, while Washington State prohibits opening a package containing marijuana in view of the public. Some states also prohibit marijuana use in specific locations and contexts in addition to public places generally. These include locations such as marijuana businesses, childcare facilities and schools, and facilities for the disabled. Using marijuana on federal land remains illegal, and all states prohibit marijuana use on federally owned property.

Most public use penalties are fines. Most states that have legalized marijuana penalize a first-offense public use of marijuana violation with a maximum fine of \$100. Penalties for public marijuana consumption range from a \$25 ticket in Washington, D.C., to a misdemeanor and maximum fine of \$600 in Nevada. Nevada is the only legalized state to maintain a criminal penalty for adult public consumption.

Public use laws can interact with existing smoking laws. Virginia’s current smoking law (Code of Virginia § 15.2-2824) assesses up to a \$25 fine for smoking in certain locations after being asked to stop smoking. Retail establishments in Virginia can also create no-smoking or smoking zones. Laws meant to curtail tobacco smoking in public places have since been applied to marijuana in states that have legalized marijuana. For example, Illinois prohibits marijuana consumers from smoking in any place prohibited by the Smoke Free Illinois Act, which initially applied to tobacco smokers. Oregon’s Indoor Clean Air Act prevents consumers from smoking or vaping marijuana inside most businesses.

All states maintain criminal penalties or fines for illegally distributing, possessing, and growing more marijuana than is allowed

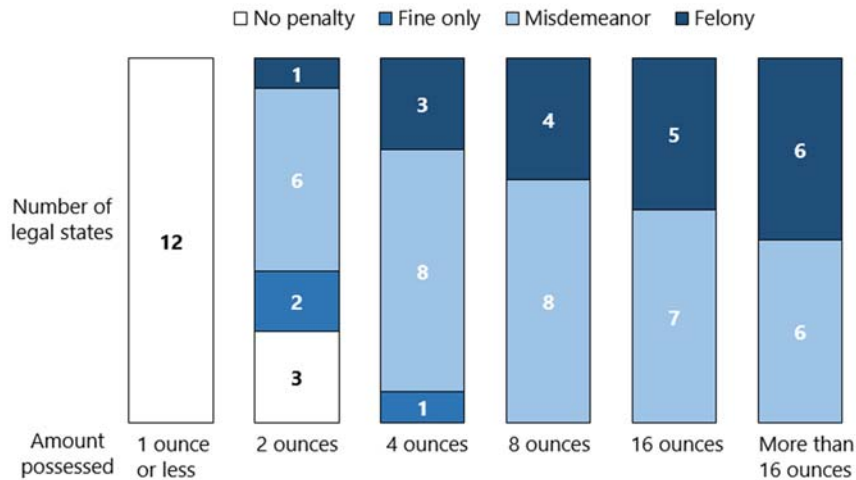
To deter activities that can contribute to an illicit market and criminal or unlicensed enterprises, states that have legalized marijuana possession and/or home cultivation for adults continue to penalize adults who possess, grow, or share marijuana over legal limits or sell marijuana without a license.

Possession over the legal limit

All legal states have criminal penalties for some amount of marijuana possession, though the penalties differ across states. Figure G-1 indicates that about half of states consider any amount of simple marijuana possession over the legal limit to be a misdemeanor, while some consider possession of as little as two ounces of marijuana a felony.

FIGURE G-1

All legalized states maintain penalties for adult marijuana possession over the legal limit



SOURCE: JLARC analysis of other states' laws; NORML.

NOTE: Indicates the penalty an adult could face if he or she possessed the weight of marijuana listed in each state reviewed.

Some limits were converted from other units to ounces and rounded for ease of comparison.

Specific penalty structures for violating marijuana possession limits differ significantly across states. For example, any amount of simple possession over the one ounce legal limit in California is a misdemeanor punishable by 10 days to six months in jail and/or a fine of \$250–\$500. In contrast, Colorado has a series of escalating penalties for different weights of marijuana possession, shown in Table G-2 below.

TABLE G-2

Legal states penalize possession over the legal limit with fines and/or jail time

Amount Possessed	Colorado	California
1 ounce or less	No penalty	No penalty
1–2 ounces	Petty offense, \$100	Misdemeanor, 10 days, \$500
2–6 ounces	Misdemeanor, 0–12 months, \$700	Misdemeanor, 10 days, \$500
6–12 ounces marijuana	Misdemeanor, 6–18 months, \$5,000	Misdemeanor, 10 days, \$500
More than 12 ounces	Felony, 1–2 years, \$100,000	Misdemeanor, 10 days, \$500

SOURCE: Colorado Revised Statutes Title 18. Criminal Code § 18-18-406; California Health & Safety Code § 11357.

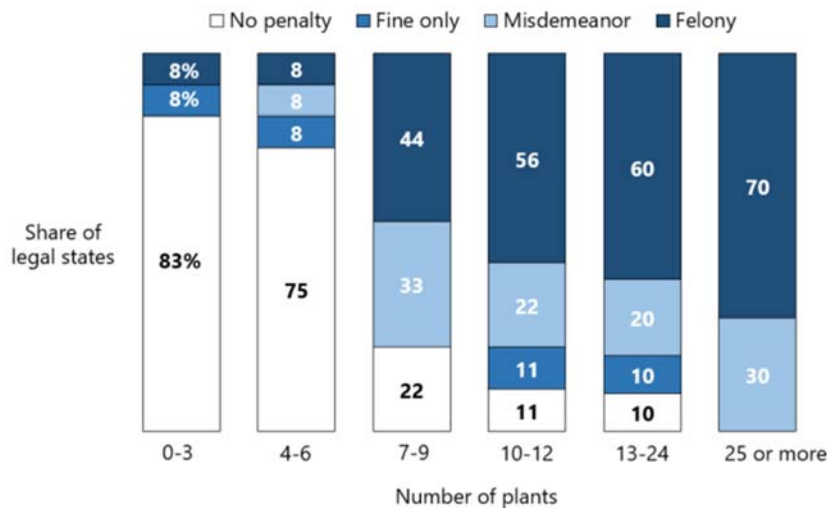
NOTE: In Colorado, possession of one to three ounces of marijuana concentrate is a misdemeanor; possession of more than three ounces is a felony. In California, possession of more than eight grams of concentrate is a misdemeanor. Note that possession of eight ounces or more is presumed to be possession with intent to distribute.

Violations of home cultivation limits

While most states permit home cultivation of a small number of marijuana plants, states maintain criminal penalties for exceeding plant limits. These penalties are meant to discourage growing more plants than are needed for personal use. For example, adults can grow up to four plants in Oregon without penalty, while growing five to eight plants is a misdemeanor and more than eight plants is a felony. In Illinois (which does not permit recreational home cultivation) growing one to five plants is a fine of \$200, and six or more plants is a felony. As Figure G-2 illustrates, most states allow adults to grow four to six plants without penalty, but most continue to penalize growing more than a dozen plants as a felony offense.

FIGURE G-2

States have different civil and criminal penalties for growing more marijuana than is allowed



SOURCE: JLARC analysis of states law in states that have legalized marijuana for adult use; NORML.

NOTE: Some states' laws do not specify penalties for some ranges of plants and are excluded from calculations for those ranges. Two states do not permit any recreational home cultivation.

Illegal distribution, sale, possession with intent, and manufacture

All states that have legalized marijuana maintain criminal penalties for unlicensed marijuana sales to deter criminal activity involving marijuana and to promote a legal market. Virginia's current penalties for illicit marijuana sale, distribution, or possession with intent to distribute appear to be within range of penalties in other states that have legalized marijuana. Similar to Virginia's current law, all states that have legalized marijuana treat the unlicensed sale, delivery, or distribution of marijuana as a misdemeanor or felony, with convictions having the potential for significant fines and/or jail time. Table G-3 shows the amount of marijuana that must be sold, distributed, delivered, or possessed with intent to distribute to be considered a felony offense in states that have legalized marijuana. Virginia is between California and Nevada because marijuana distribution of one ounce or less is a misdemeanor offense, while distribution over one ounce is a felony offense.

TABLE G-3

Virginia's criminal penalties for illegal marijuana distribution are similar to other states' penalties

Felony distribution amount	States
None (least severe)	California, Oregon, Massachusetts ^a
Between 4 and 16 ounces	Colorado, D.C., Maine
Between ½ and 3 ounces	Alaska, Illinois, Virginia , Vermont
Any amount (most severe)	Michigan, Nevada, Washington

SOURCE: JLARC analysis of state laws; NORML.

NOTE: Unclassified violations are considered felonies if they can result in over one year of incarceration. California and Oregon consider any amount of unlicensed distribution without aggravating factors a misdemeanor. ^a Massachusetts considers distribution over 50 pounds a felony offense.

Distribution laws in some states, like California, are less severe. California considers unlicensed distribution of any amount of marijuana a misdemeanor with up to six months in jail and a \$500 fine. Other states, like Nevada, maintain more severe penalties. In Nevada, unlicensed sale of any amount of marijuana is punishable by a felony, one to four years in prison, and up to a \$5,000 fine.

Most states continue to include more severe or additional charges for aggravating factors associated with marijuana sale or distribution. These penalties are similar to Virginia's current laws that penalize selling marijuana to minors or at schools. For example, while California and Oregon do not consider selling marijuana by itself a felony offense, each state considers selling marijuana to minors a felony offense.

All states also prohibit unlicensed adults from using flammable liquids, solvents, or high heat and pressure to make marijuana concentrates, such as butane hash oil. Because these methods can create significant fire and explosion hazards, penalties for unlicensed manufacturing of marijuana concentrates with gases such as butane are typically felony offenses. Some states have also established more substantial penalties for operations that result in harm. For example, Vermont penalizes home butane extraction with up to two years in prison and a \$2,000 fine, but also penalizes butane extraction operations that result in bodily injury to another person with up to five years in prison and a \$5,000 fine.

Juveniles and young adults who possess marijuana are often required to complete drug counseling or community service and/or pay fines

All states that have legalized marijuana prohibit marijuana possession by youth under age 21. Similar to alcohol and tobacco laws, these laws aim to deter youth access to and use of marijuana. Specific legal approaches vary. For example, some states have a statute for all minors under 21 who possess marijuana. Virginia's tobacco and alcohol laws are similar. Alternatively, California law imposes different consequences for juveniles under 18 than for young adults aged 18 to 20.

A sample of states that have legalized marijuana—Alaska, California, Colorado, and Washington—show that states treat youth possession of marijuana differently.

- Alaska did not change how it treated marijuana possession by minors when legalizing marijuana for adults, and marijuana possession remains a criminal offense for those under 21. In juvenile cases, police refer marijuana possession cases to juvenile intake at the Alaska Department of Juvenile Justice, while juvenile alcohol and tobacco violations go directly to courts. There is no specific penalty for juveniles who possess marijuana, and DJJ may route juveniles into diversion programs for rehabilitation or competency development, or alternatively refer cases to juvenile courts.
- California does not consider simple marijuana possession under one ounce by any individual a crime or delinquent act. Juveniles under 18 who possess marijuana are required to perform six hours of drug education or counseling and 20 hours of community service. Youth between 18 and 20 years old who possess marijuana face a maximum \$100 fine.
- Colorado treats first-offense possession by anyone under 21 as a petty offense subject to a \$100 fine and/or substance abuse counseling. Minors are eligible for court diversion programs. Subsequent offenses can result in higher fines, mandatory substance abuse treatment, and community service.
- Washington State treats possession under 21 as a misdemeanor, punishable by probation, community service, and up to 30 days detention and a \$500 fine. First-time offenders must be diverted to local programs, and prosecutors have discretion to divert subsequent offenses.

In addition to possession laws for minors, several states added laws to help prevent youth from accessing marijuana legally available to adults. For example, other states penalize retail marijuana employees who knowingly provide marijuana to underage purchasers and other adults who knowingly allow youth to consume marijuana. Further, states penalize juveniles and underage adults who attempt to access marijuana retail locations, especially with the use of fraudulent identification.

States take varied statutory approaches to marijuana-impaired driving

States that have legalized marijuana take three primary approaches to marijuana-impaired driving laws (Table G-4). Most maintain laws similar to Virginia's current law, which prevents driving under the influence of drugs to a degree that impairs the driver. Impairment is proven with a combination of blood tests, officer testimony, behavioral sobriety tests, and dash camera footage. Michigan (and some states that have not legalized marijuana) has a zero tolerance law, which means it is illegal for drivers to have any amount of THC in their blood while driving. Other states have "per se" laws that penalize drivers who have a specific amount of *active* THC in their blood, typically five nanograms per milliliter of blood. Per se and zero tolerance laws are generally easier to prosecute but can be prone to error because THC-blood content alone has not been established as a reliable indicator of impairment level.

TABLE G-4

Adult use states take three primary legal approaches to marijuana-impaired driving

Law type	States	Description of law
General driving under the influence statute	Alaska, California, D.C., Maine, Massachusetts, Oregon, Vermont, Virginia	Illegal to drive under the influence of or while affected by drugs. Impairment must be proven by law enforcement and then linked to drug use by presence of drug or metabolite in body.
Zero tolerance	Michigan	Illegal to drive with any measurable amount of drug in the body.
Per se	Colorado ^a , Illinois, Nevada, Washington	Illegal to drive with amount of drug in the body over a specified limit.

SOURCE: Governor's Highway Safety Association.

NOTE: ^a Colorado's law is a "reasonable inference" law with a statutory THC threshold.

To further deter and penalize impaired driving, states have also established "open container" laws for marijuana. States penalize violations of these laws as traffic infractions (fines) or misdemeanors. States that penalize open containers of marijuana typically prohibit in passenger areas of vehicles marijuana packages with broken seals, loose marijuana, and containers from which marijuana has been partially removed. For example, California, Colorado, Illinois, Massachusetts, Vermont, and Washington each have open container laws for marijuana.

States have also enacted laws that explicitly prohibit marijuana consumption in vehicles (in addition to impaired driving). For example, Colorado prohibits any marijuana consumption or use in the passenger area of a motor vehicle; Maine's law prohibits drivers and passengers from consuming marijuana. Washington, D.C., specifies that vehicles are considered public places and consuming marijuana in vehicles can result in a misdemeanor and jail time. Illinois, Michigan, Nevada, Oregon, Vermont, and Washington each have a similar statute.

Appendix H: Additional considerations when revising criminal marijuana laws

If Virginia allows adults to legally use and possess marijuana for recreational purposes, it will need to consider the extent to which public and private entities can place restrictions on otherwise legal marijuana use. The General Assembly will need to make several other policy decisions governing public and private entities' ability to restrict marijuana possession and use (Table H-1). These policy areas continue to evolve in states that have legalized marijuana for adult use.

TABLE H-1

Several other policy areas can be considered when legalizing marijuana for adult use

Policy area	Key policy decision	Examples in states with legal marijuana
Employment	Could employers make hiring and termination decisions based on employee marijuana use?	Most states allow employers to continue to make employment decisions based on drug testing and marijuana use. Employers can test employees and job candidates for marijuana use, and terminate or refuse to hire individuals who test positive for marijuana use. However, one state, Nevada prohibits employers from denying employment to prospective employees because of a positive marijuana drug test (with some exceptions).
Housing	To what extent could property owners restrict marijuana consumption?	Most states allow property owners to prohibit marijuana use on their properties. These include places of temporary residence, such as hotels, as well as permanent residences, such as rental housing and apartments. For example, in Maine, marijuana may be consumed in a person's private residence only if he or she is "explicitly permitted" to do so by the property owner. However, a few states only allow property owners to prohibit smoking of marijuana. For example, Massachusetts allows owners of rental properties to prohibit smoking but not other forms of marijuana consumption.
Families	To what extent could marijuana use by a parent/prospective parent affect custody, visitation, foster care, and adoption decisions?	Some states have passed laws to keep marijuana use from being used against parents or prospective parents. Massachusetts law indicates that marijuana cannot be the <i>sole</i> reason for decisions related to parental rights if there is not clear evidence that "the person's actions related to marijuana have created an unreasonable danger to the safety of a minor child."
Professional licensing	Could professional licenses or certifications be revoked or denied <i>solely</i> because of marijuana use?	Some states have passed laws to keep marijuana use from being used against people who hold a state license. Illinois law indicates that occupational and professional licensing boards cannot take disciplinary based <i>solely</i> on legal marijuana use if the adult is not impaired while practicing his or her profession.

SOURCE: JLARC review of other states' laws and state government websites; Marijuana Policy Project; NAMSDL.

NOTE: Table does not represent all policy areas that could be affected by legalizing marijuana for adult use and does not consider laws that apply to medical marijuana users. Other states examples chosen for illustrative purposes only. Does not consider ballot initiatives passed in November 2020 that legalized marijuana in Arizona, Montana, New Jersey, and South Dakota.

Because marijuana remains illegal federally, marijuana use and possession in Virginia could continue to have implications for users regardless of state policy decisions. For example, the federal government may still deny security clearances (and employment) for federal jobs based on marijuana use. Juveniles or young adults who face charges for marijuana possession may continue to lose some student financial aid opportunities. Firearms and federally subsidized housing would continue to be subject to federal law, which can have implications for marijuana users.

Appendix I: Additional laws needed for regulating the commercial market

Virginia would need to establish dozens of new laws to ensure that the commercial market is well regulated. In some cases, the law should prescribe an exact process that must be followed or a specific requirement that a licensed marijuana operation must meet. However, in most cases, the law should simply direct the regulatory body to establish processes or requirements in a specific area.

The main chapters of this report provide numerous recommendations and options for the General Assembly to consider, including the laws needed to establish commercial market operations and licenses (Chapter 5), local authorities (Chapter 6), incorporation of the medical marijuana market (Chapter 6), social equity programs (Chapters 7 and 8), restrictions on products, labeling, and advertising (Chapter 9), taxation (Chapter 10), a regulatory board and agency (Chapter 11), license fees (Chapter 11), and a start date for commercial sales (Chapter 12).

This appendix is not a comprehensive listing of all legal changes needed to establish a commercial market. However, it does identify the additional areas in which the state would need to enact laws:

- license application, award, and renewal process,
- license qualifications,
- license holder restrictions,
- facility and operations compliance,
- compliance enforcement, sanctions, and disciplinary process,
- testing and sampling for product safety and quality,
- affirmation of marijuana business legitimacy, and
- registration of marijuana business employees.

Many of these laws do not involve a policy choice and simply facilitate an efficient market and effective regulation. A few requirements would require some minor policy decisions.

A separate appendix details the additional powers and duties the state should vest with the marijuana regulatory board and agency (Appendix P: Powers and duties to be vested with the marijuana regulatory body). Some of the powers and duties listed there may partially overlap with those listed here.

License application, award, and renewal process

Virginia would need to have a clearly defined license application process. The application process should include (a) a window for applications to be submitted, (b) the forms and supporting materials that applicants need to submit, and (c) a way to make license awards *if* there is a cap or other limit on the number of licenses that can be awarded. The exact process can vary from one type of license to the next. The state would also need to establish the process for appealing license decisions and a process for license renewals. The laws the state should consider enacting in this area, and key regulations the regulator should enact, are summarized in Table I-1.

TABLE I-1
License application, award, and renewal process

Proposed law or regulation	Law	Regulation
Direct regulator to establish an application and award process for each of the license types it awards (cultivation, processing, distribution, retail, testing, etc.)	✓	
Direct regulator to establish all required forms and specify all supporting materials that applicants are required to submit for each license type	✓	
Direct regulator to establish time periods for when applications would be accepted and awards made for each license type	✓	
Application time periods established by the regulator must allow sufficient time for applicants to assemble, submit, and revise applications as needed to complete their application packages	✓	
For uncapped licenses, require license awards to all qualified parties		✓
For state or locally capped licenses, make license awards to all qualified parties using a lottery ^{a b}		✓
To ensure equity, any lottery should have limits on the number of applications that can be submitted by or awarded to any single party, business, or controlling financial interest		✓
To ensure equity, clear consequences for applicants who attempt to submit more than the allowed number of applications, including but not limited to revocation of all the applicant's submissions and revocation of any licenses that were awarded to applicants who are later found to have violated submission rules		✓
Direct regulator to establish a process that allows applicants who are denied licenses to appeal this decision, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Licenses must be renewed annually	✓	
Prohibit licenses from being revoked or not renewed based solely on a reduction in state or local caps on cultivation, retail stores, or other modifications to caps that occur after a license has already been awarded	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: ^a For cultivation, because the cap would be at the state level, the regulator should establish either a single statewide pool for the lottery drawing or a few, smaller regional pools. A regional approach would help the state ensure that winning cultivators are located in each region of the state and not concentrated in a few areas, but may not be necessary. For retail, caps would be set at the local level so the regulator should perform an individual lottery drawing for each locality where the number of applicants exceeds the local cap. Because these awards would be made gradually, the regulator should initially make fewer retail license awards than are ultimately allowed under the local cap. For example, if Richmond capped its retail at 15 licenses, then the regulator could only make five license awards in the first year, five in the second, and five in the third.

^b The report recommends a lottery selection process instead of a merit-scoring or auction selection process because a well-designed lottery system can be more fair to small businesses, and license awards under a lottery system appear more likely to reflect the diversity of license applicants. However, lottery systems need to be designed to prevent "gaming of the system" by people who submit multiple applications. Additionally, if a lottery system is used, it is especially important to place restrictions on the transferability of licenses to prevent applicants who have no intention of establishing a business from applying with the sole goal of re-selling their license. By design, merit-scoring and auction selection favor larger businesses with greater resources. Merit-scoring systems also increase the risk of lawsuits being filed against the state by applicants who were not selected. The Chapter 5 sections on cultivation and retail license structures includes additional discussion of the advantages of lottery systems compared with merit scoring systems.

License qualifications

Virginia would need to set minimum qualification requirements for license applicants. Most states require applicants to name all parties with an ownership interest in the applying business. States then require background checks of all owners to identify any potentially relevant criminal history or any

disciplinary history for violating marijuana commercial regulations in another state. The best and most reliable way to perform these checks is by using an applicant's fingerprints. States also typically require applicants to disclose their business structure, including all financial arrangements. This allows the regulator to determine if the applicant has ties to organized crime or if there are other undisclosed, hidden ownership interests. Regulators need to know about hidden ownership interests to prevent a few large ownership groups from monopolizing the state market by using subsidiary businesses.

While background checks are important, the state does not need to automatically disqualify applicants based on past crimes or violations. The state also could choose not to consider misdemeanor marijuana arrests at all. Such requirements could disproportionately affect Black individuals, many of whom have been arrested and convicted of crimes at disproportionately high rates (see Chapters 2 and 7).

There are many other qualifications the state could require, or not require, depending on how stringent it wants initial requirements to be for license applicants. The state should generally set more stringent qualifications for commercial marijuana licenses that small businesses are unlikely to seek. For example, qualifications could be more stringent for licenses for medium and large cultivators, testing labs, and processors who produce vape oils and other concentrates or use potentially hazardous THC extraction methods. The businesses competing for those licenses would mostly be larger businesses. More stringent qualifications help ensure that the businesses that are awarded these licenses have the ability to quickly and successfully establish their facilities and operating procedures, pass compliance inspections, and start operations.

The state should set less stringent qualifications for licenses where it wants to encourage small business participation, such as licenses for small cultivators, simple processors, and retailers. Less stringent qualifications widen the potential applicant pool to include more small businesses and more diverse ownership. For example, regulators in several other states reported that their application qualifications are overly stringent because applicants are required to lease or purchase real estate before they apply. They said this requirement has been a significant barrier to small businesses and diversity, because many potential applicants do not have the resources to make real estate payments while their application is pending approval (a process which can take several months). Less stringent qualifications do not present a risk to the state because the license holder's facility and operating plans would need to be inspected and approved before it was allowed to handle marijuana. The only risk to the state is that fewer license holders would be able to quickly or successfully pass inspection and start operations.

The state would also need to set a few, straightforward renewal requirements.

The laws the state should consider enacting in this area, and key regulations the regulator should enact, are summarized in Table I-2. A few of these requirements are discussed in Chapter 7, and they have been flagged accordingly.

TABLE I-2
License qualifications

Proposed law or regulation	Law	Regulation
<i>General application qualifications</i>		
Applicants must submit all forms and supporting materials required by the regulator	✓	
Applications must be complete and truthful	✓	
All parties with an ownership or financial interest must be disclosed	✓	
Business structure, contracts, and all other business arrangements must be disclosed	✓	
Applicants, including all persons with an ownership or financial interest, must be at least 21 years of age	✓	
Applicant must disclose criminal history and regulatory violations attributable to any and all parties with an ownership or financial interest	✓	
All applicants, including all persons with an ownership or financial interest, are subject to fingerprinting and criminal background checks <i>[Note: fingerprints are necessary to run a complete criminal background check]</i>	✓	
Regulator may take a person's criminal and regulatory history into consideration, but no crime or violation should automatically disqualify an applicant	✓ ^a Optional	
Misdemeanor marijuana crimes cannot be taken into consideration by the regulator	✓ ^a Optional	
Regulator should establish <u>more stringent qualification standards</u> for some license types, including medium and large cultivators, testing labs, and processors who manufacture vape oils and other concentrates or use potentially hazardous THC extraction methods		✓ Optional
Regulator should establish <u>less stringent qualification standards</u> for some license types, including small cultivators, some edible processors, and retailers		✓ Optional
<i>More stringent qualification standards for some license types</i>		
Applicant must secure real estate prior to license award		✓
Applicant must provide detailed operations and security plans for their proposed operation		✓
Applicant's current financial assets must meet certain minimum thresholds		✓
Applicant must have past experience in the commercial marijuana industry		✓
<i>Less stringent qualification standards for some license types</i>		
Applicant DOES NOT need to secure real estate prior to license award but MUST identify the locality—city, county, or town—within which they plan to locate their business; the applicant cannot change the location of their business to a different locality without approval of the board		✓ ^a
Applicant DOES NOT need to provide detailed operations and security plans for their proposed operation, but these must be provided, reviewed, and approved before the operation is allowed to begin handling marijuana		✓ ^a
Applicant's current financial assets DO NOT need to meet certain minimum thresholds		✓ ^a
Applicant DOES NOT need have past experience in the commercial marijuana industry		✓ ^a
<i>Renewal qualifications</i>		
License holders must be in good standing and be up-to-date on all fines and fees	✓	
License holders must fully disclose any new crimes or violations found to have been committed by parties with ownership or financial interests	✓	
Regulator may take a person's criminal and regulatory history into consideration when making a renewal decision, but no crime or violation should automatically disqualify an applicant	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: ^a The reasons for these laws are discussed in more detail in Chapter 7: Promoting Social Equity in Marijuana Business Ownership.

License holder restrictions

State law should clarify that receiving a license does not mean that the licensed business can immediately start operations and begin handling marijuana. The operation must be inspected and approved by the regulator before operations can begin. The state would need to put some limits on the amount of time a licensee can take to start its operation before the license becomes void. The regulator should determine what time period would be sufficient for most license holders and establish a process for allowing extensions on a case-by-case basis.

All licenses should be specific to one particular site and type of operation. For example, a retail license should only cover retail operations at a store located at a specific address. This site-specific approach makes it clear *who* is licensed, *what* operations they are allowed to perform, and *where* they are allowed to perform them. A business could be licensed to perform two operations at the same location, such as cultivation and processing, under two separate licenses. Licenses should not be transferable to a new location without board approval. This would prevent licensees from moving to new localities in ways that violate local caps or to new premises that do not meet state standards.

The state should set initial restrictions on the number of licenses a single party can hold. These restrictions should be in place *at least* until all initial licenses are issued. For example, if the state decides to stagger retail license awards over a three to five year period, then it should limit the number of licenses any single party can hold over that time period. This would prevent a few, well-funded parties from taking control of the commercial market while it is in the early stages of being established. The exact number of licenses could be determined by the regulator. These restrictions could stay in place after all of the initial licenses are awarded, but that could result in too much state interference in the market.

The state should limit the transferability of licenses by sale or change in majority ownership in a licensed operation until all initial licenses are issued (a period of three to five years after commercial sales begin, or slightly longer than it takes to gradually make all initial license awards.) Under license transfer restrictions, a company could not buy another company's license. For example, if Company X wants to buy Retail Store Z, the license would not transfer to Company X. These restrictions are necessary to keep applicants from "speculating" on licenses by submitting applications in hope of winning a license and then selling their new license to the highest bidder, without making any effort to establish a business. Some other states that capped the number of commercial or medical marijuana licenses have seen such license speculation. Speculation could be an especially big problem in Virginia's retail market, assuming the state adopts less stringent qualification standards and low application fees. Under this approach, there would be an incentive to apply for a potentially lucrative retail license and few barriers to application. Speculation could be rampant if there are no restrictions to prevent re-sale of licenses. Restrictions on license transfers would allow the state to encourage small businesses to participate while preventing speculation.

In addition to initially restricting license transferability, the state should consider some permanent restrictions as well. The state should prohibit the sale of any license if (a) the licensed operation has not yet passed compliance inspections and begun operations or (b) the licensed operation has been in operation for less than a year.

Transferability restrictions can be highly technical and may best be left to the regulator's discretion.

The state could decide whether to explicitly prohibit publicly traded companies from acquiring licenses. Two states—Colorado and Washington—prohibited publicly traded companies from acquiring licenses. Many existing, multi-state marijuana businesses are publicly traded (on Canadian stock exchanges), so these bans can theoretically reduce competition from outside businesses and promote small, Virginia-owned businesses. The effectiveness of these laws is unclear. Washington’s law remains in place, but Colorado repealed its law last year to improve industry access to investment capital. Virginia could implement a modified prohibition that allows some investment by publicly traded companies in licensed businesses but does not allow them to have a controlling interest.

Virginia could choose to have residency restrictions to further try and promote small businesses, but they are not necessary. Some states have set residency requirements for license holders to promote participation by small businesses owned by state residents. For example, Washington requires license holders, or the manager or agent of a licensed business, to have been a state resident for at least six months. Most license holders are businesses rather than individuals, so Washington also requires that a licensed business must be incorporated in the state, and all owners must have been residents for at least six months. Regulators in other states indicated that resident restrictions are difficult, if not impossible, to enforce and the benefits are limited because a business can easily meet them. Michigan’s residency restrictions have no practical effect, and Colorado recently eliminated its residency restrictions because they harmed businesses’ ability to seek investors from outside the state.

The key considerations for regulations and laws governing license restrictions are summarized in Table I-3.

TABLE I-3
License holder restrictions

Proposed law or regulation	Law	Regulation
A licensee may only begin operations and start handling marijuana after regulator has issued a separate approval to do so	✓	
Licenses expire if operations do not begin within set period of time from when the license is awarded; direct regulator to establish the time period and a process for granting extensions on a case-by-case basis		✓
All licenses specific to a designated site, and any transfers of a license to a new site must be approved according to transfer rules	✓	
Restrict the number of licenses, by license type, that a single party can own or have an ownership or financial interest in; restrictions should <i>at least</i> be in place until all initial licenses have been awarded (e.g. three to five years after commercial sales start)		✓
Prohibit the transferability of any license when a licensed business is sold or there is a change in the majority ownership until <i>at least</i> all initial licenses have been awarded (e.g., three to five years after commercial sales start)		✓
Prohibit the transferability of any license when (a) the licensed operation has not yet begun operations or (b) the licensed operation has been in operation for less than a year.		✓
Publicly traded companies could be prohibited from owning a majority share or having a controlling financial interest in a licensed marijuana business	✓ (Optional) ^a	

[Note: alternatively, could prohibit publicly traded companies from owning any share or having any financial interest in a licensed marijuana business.]

License holders could be required to be state residents or state-chartered businesses where the majority of owners are state residents	✓ (Optional) ^a
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SOURCE: JLARC analysis of other states' statutes.

NOTE: ^a Virginia could choose to have residency restrictions to try to promote participation by small, Virginia-owned businesses, but they are not necessary. For additional discussion, see the paragraph preceding this table.

Facility and operation compliance

Before a licensed marijuana business can begin operations and start handling marijuana, it should have to meet facility requirements set by the state. For example, the state should set key facility requirements for security and safety. Security requirements can include requirements for video monitoring of the facility, proper lighting, and restricting access to areas where marijuana plants are grown or products are stored. The state could also set requirements for setbacks, signage, store displays, and hours of operation, or it could leave this entirely at the discretion of the localities. (Setbacks are the distances that marijuana facilities must be from schools, playgrounds, daycare centers, and other places frequented by children. Most states set this distance at 1,000 feet, and Virginia has set a 1,000-foot setback for medical dispensaries.)

License holders should also have appropriate procedures and systems in place before they begin operations. This would help ensure they can operate in compliance with state requirements after they open. Several states require license holders to develop detailed operating and security plans that show how operations would comply. Some states require special employee training, such as training for cashiers on how to perform age verification checks.

After opening, license holders would need to conduct their businesses in accordance with many rules specific to their operation. For example, states generally set operating hours for retail stores. Alternatively, the state could give localities full discretion over operating hours. States also typically require their licensees to track and record the movement of all marijuana plants and products in a state-owned tracking system, among many other requirements.

The laws and regulations the state and regulator should consider governing facilities and operations compliance are summarized in Table I-4. A few of these requirements are discussed in Chapter 6 and have been flagged accordingly.

TABLE I-4
Facility and operation compliance

Proposed law or regulation	Law	Regulation
<i>Compliance requirements that must be met before operations begin</i>		
Licensed operation cannot begin handling marijuana until the license holder has met all standards, and compliance with standards is verified through inspection of the license holder's facility and review of operating and security plans and procedures	✓	
License holder must have secured a property for the operation (e.g., leased or purchased)		✓
Operation property must meet setback requirements set by the regulator and local governments	✓ ^a	
License holder must meet all local zoning requirements and obtain proper local licenses and permits, such as general business licenses and occupancy permits, that are required by the locality and allowed under state law	✓ ^a	
Operation property must meet security requirements set by the regulator (e.g., physical security requirements such as doors and locks that restrict access to areas of buildings containing marijuana plants and products, fencing or other enclosures that restrict access to outdoor areas where marijuana is grown, alarm systems, video cameras, lighting, etc.)		✓
In addition to inspection by the regulator, license holder facilities must pass all relevant state and local inspections, including any health department inspections (for food processing facilities, such as processors who manufacture edibles), agriculture inspections (for use of pesticides by cultivators), and local occupancy inspections (for building and fire code compliance)		✓
License holder must meet any insurance and financial bonding requirements set for their license type and tier		✓
Completion of training and education by at least one of the license owners or a designated responsible employee, such as an operations or compliance manager		✓
<i>Compliance requirements in general</i>		
License holders must continue to meet all facility and operating standards and requirements	✓	
Licensees must make all premises and records available to the marijuana regulator	✓	
License holders must comply with all marijuana inventory tracking, monitoring, and disposal requirements	✓	
License holders must submit any reports, documents, data, or other information required	✓	
Any changes to ownership or financial interests or business structure must be reported	✓	
License holders must comply with all operations and security plans on file and report any changes to plans		✓
License holders cannot substantially change their premises without prior approval		✓
Marijuana plants and products can only be sold (a) by a licensed marijuana business to another licensed marijuana business through a recorded sale, or (b) by a licensed marijuana retailer to an of-age consumer through a recorded and taxed retail sale	✓	
Marijuana plants or products cannot be given away for free, given away with other products or services, or sold at steep discounts by any licensed party		✓
Samples of marijuana products can be provided to licensed testing labs for testing purposes at no cost		✓
All employees must be at least 21 years of age	✓	
No alcohol or marijuana can be consumed on the premises of a licensed marijuana operation	✓	

License holders are required to provide employees with basic training on state regulations that are pertinent to their operation	✓	
Marijuana plants or products cannot be clearly visible or to the public from outside the premises	✓	
Licenses must be prominently displayed on the premises of the licensed facility	✓	
<i>Compliance requirements related to other state and local regulations</i>		
License holders must continue to meet all facility and operating standards and requirements for other state and local agencies (e.g., health sanitation requirements, fire code requirements)	✓	
Licensees must make all premises and records available to other state and local agencies, as is necessary for the performance of their duties (e.g., make financial records available to income tax auditors, make premises available to local building inspectors)	✓	
<i>Compliance requirements specifically for retail</i>		
Retailers cannot sell more than the legally allowed personal possession amount	✓	
Retailers must verify customer age	✓	
Retailers cannot sell alcohol or tobacco	✓	
Retailers cannot sell products other than marijuana and marijuana paraphernalia	✓	(Optional)
Retailers must abide by the hours of operation set by the regulator or local government	✓	
Retailers must collect marijuana sales taxes and remit taxes to the appropriate state and local agencies	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: ^a The reasons for these laws are discussed in more detail in Chapter 6: Local Authority, Medical Market, and Other Commercial Considerations.

Compliance enforcement, sanctions, and disciplinary process

The regulator would need to enforce compliance requirements by looking for potential violations. The regulator can do this through inspections, investigations into complaints, underage compliance checks, and financial audits. The regulator could also be charged with performing criminal investigations, if the state chooses to vest it with law enforcement powers and duties. The regulator would need to develop policies and procedures for carrying out these enforcement duties.

License holders who violate compliance requirements—or other state laws and regulations—should be subject to corrective action. Corrective actions can include sanctions, such as license suspensions or fines. The state should make it clear that any violation can result in a corrective action against a license holder. The state should also charge the regulator with levying sanctions, and the regulator should develop policies and guidelines for when and how sanctions would be levied.

The state should allow license holders to contest any finding of a violation or sanction. This disciplinary process should be established by the regulator, consistent with the Virginia Administrative Process Act.

The laws and regulations the state and regulator should consider for compliance enforcement are summarized in Table I-5. Many of the enforcement powers and duties the regulator would need to have, such as the power and duty to perform inspections and investigations, are recommended in Appendix P: Powers and duties to be vested with the marijuana regulatory body.

TABLE I-5
Compliance enforcement, sanctions, and disciplinary process

Proposed law or regulation	Law	Regulation
Any violation, or failure to disclose a violation, of state marijuana laws or regulations, other Virginia laws or regulations, or local government ordinances is grounds for a corrective action	✓	
Failure to disclose a criminal arrest or conviction of any party with an ownership or financial interest is grounds for a corrective action	✓	
Failure to be truthful with the regulator, including failure to provide requested information or the altering of information, is grounds for a corrective action	✓	
Failure to pay state or local taxes is grounds for a corrective action	✓	
Processes and procedures for monitoring licensed operations, including but not limited to video surveillance and financial transactions		✓
Processes and procedures for performing inspections, complaint investigations, underage compliance checks, and financial audits		✓
Process and procedures for <i>coordinating</i> with state and local law enforcement on criminal investigations and other actions necessary to stop or prevent criminal activity		✓
Processes and procedures for <i>conducting</i> criminal investigations, carrying out arrests, coordinating with other criminal justice agencies, and taking other actions necessary to stop or prevent criminal activity		✓ (Optional) ^a
Process and procedures for when marijuana can be seized from a license holder		✓ (Optional) ^a
Authority for regulator to levy sanctions for violations, including but not limited to suspending or revoking licenses, levying fines, or ordering remedial education	✓	
Process and procedures for levying sanctions for violations in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)		✓
Direct development of guidelines for making sanction decisions, such as when certain sanctions (e.g., license revocation), should be considered and what fine amounts should be levied		✓
Right of licensees to contest any finding of a violation or sanction through a disciplinary process established in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: ^a The regulator only needs to establish policies and procedures related to enforcement of criminal laws and seizure of marijuana if it is given the powers and duties to enforce criminal laws. For additional discussion of the reasons for and against giving the regulator criminal law enforcement powers and duties, see Chapter 11.

Testing and sampling for product safety and quality

Commercial marijuana products should be tested to ensure they meet minimum product safety and quality standards. The state would need to determine what contaminants marijuana products should be tested for, and what trace quantities of contaminants are unacceptable. Most other states require products to be tested for biological contaminants, such as microbes mold and fungus, as well as chemical contaminants like pesticides, herbicides, and heavy metals. State regulatory bodies are then tasked with developing regulations that more clearly outline the specific contaminants labs must test for and what trace quantities of these contaminants are acceptable.

In addition to contaminants, the state should require testing of marijuana products for THC, the intoxicating chemical found in marijuana. These tests would confirm the THC content that would be put on the label to inform consumers. The state could also require testing for the content of other cannabinoids that may be claimed on a product label, such as CBD.

The state would also need to define a process for collecting product samples. The key parts of that process would include the method for collecting product samples and the frequency of collection.

The state should direct the marijuana regulatory body to develop standards for product safety, quality, and sample testing. When developing these regulations, the regulatory body should consult with the Division of Consolidated Laboratory Services (DCLS) in the Department of General Services, the Virginia Department of Health, the Virginia Board of Pharmacy, the Department of Environmental Quality, and the Virginia Department of Agriculture and Consumer Services, and regulatory agencies in other states. The standards adopted could be Virginia-specific standards, national standards, or standards set by other states.

Considerations for laws and regulations governing testing are summarized in Table I-6. (see Chapter 5: Commercial Market Licenses and Operations).

TABLE I-6
Testing and sampling for product safety and quality

Proposed law or regulation	Law	Regulation
Direct regulator to establish product <i>safety</i> standards, including but not limited to requirements for what biological and chemical contaminants products must be tested for and the trace concentrations of these contaminants that are acceptable, if any, in different products	✓	
Direct regulator to establish product <i>quality</i> standards, including but not limited to requirements for products to be tested for THC content and other cannabinoids, as determined by the regulator	✓	
Product standards should be developed in consultation with the Division of Consolidated Laboratory Services (in the Department of General Services), the Virginia Department of Health, the Virginia Department of Agriculture and Consumer Services, and regulatory agencies in other states	✓	
Direct regulator to establish methodologically sound approach for collecting product samples to be tested	✓	
Direct regulator to establish requirements for reporting of product safety and quality test results	✓	
Require that testing labs report all test results to the regulator before or at the same time as they are reported to the product owner		✓

SOURCE: JLARC analysis of other states' statutes.

Affirmation of marijuana business legitimacy

Several states have passed laws that positively affirm the legality of their commercial markets and the activities of licensed marijuana businesses (and their employees). State laws frequently affirm that other types of businesses, such as financial institutions, are free to legally provide goods and services to licensed marijuana businesses. State laws also affirm the enforceability of contracts with licensed

marijuana businesses. These laws can help eliminate any gray areas in state criminal or commercial marijuana laws, and give non-marijuana businesses the assurances they need to do business with legitimate marijuana operations. The laws the state should consider enacting in this area are summarized in Table I-7.

TABLE I-7
Affirmation of marijuana business legitimacy

Proposed law or regulation	Law	Regulation
The goal of the state is to establish a legal, regulated commercial market for the production and sale of marijuana to most effectively restrict marijuana and protect public health and safety	✓	
Licensed marijuana businesses are not violating state criminal laws as long as they are generally in compliance with commercial laws and regulations for their licenses	✓	
Employees of licensed marijuana businesses are not violating state criminal laws as long as they are generally conducting their work in compliance with commercial laws and regulations	✓	
A violation of commercial marijuana laws or regulations by a licensed operation does not in and of itself constitute a violation of criminal law	✓	
It is legal under state law for financial institutions, including all banks, credit unions, investment companies, brokerages, mortgage lenders, and insurance companies, to conduct business in Virginia with a licensed marijuana business or its parent company	✓	
It is legal under state law for any provider of goods or services to conduct business in Virginia with a licensed marijuana business or its parent company	✓	
It is legal under state law for the owner of any real or other property to sell, lease, or rent property to a licensed marijuana business or its parent company	✓	
Contracts with licensed marijuana businesses, including contracts between license holders and contracts between a license holder and any other party, are legitimate and enforceable under state law as any other contract	✓	
Unlicensed cultivation, processing, distribution, sale, and testing of marijuana is not permitted under commercial laws and some unlicensed activity may be considered a crime under state criminal statutes	✓	

SOURCE: JLARC analysis of other states' statutes.

Registration of marijuana business employees

In addition to licensing marijuana business, Virginia could also require all employees of marijuana businesses to be registered and badged by the state. By registering employees, the regulator can hold individuals directly accountable for violation of regulations. For example, the regulator could revoke an employee's registration. If a violation is not that egregious, the regulator can take other, lesser corrective actions, such as levying fines or requiring that the employee attend a remedial education course. The regulator can also keep people who have been fired for egregious violations by one license holder from becoming re-employed at another without first having their history re-evaluated. For example, the regulator would be immediately able to see if a person who had their license revoked for repeatedly selling marijuana to minors was attempting to get a job with another retailer.

By holding individuals directly accountable, the regulator may be able to improve industry compliance and reduce the risk of illegal diversion. People are more likely to follow rules if there are personal consequences for violations. They are also more likely to encourage employees and coworkers to follow regulations. A registration program also helps reinforce that employees are monitored and face consequences if they do not comply with laws and regulations.

State employee registration programs also allow states to badge employees. Badging employees is helpful for enforcement inspectors, because it allows them to quickly determine if the facility is giving unauthorized people access to restricted areas.



Other states have taken different approaches to employee registration. Colorado has the most intensive employee registration program. All industry employees must apply for a personal license and have a criminal background check performed by the state. Licensed employees must pay annual fees to keep their licenses current. This program is labor intensive and costly; Colorado regulators said about one in 10 of its licensing and enforcement positions are dedicated to employee licensing program. Illinois, Nevada, and Oregon also register, badge, and perform background checks on all industry employees. These regulators indicated they find their programs beneficial, but some said they were administratively challenging given the large volume of licensees and high turnover, especially in lower-level and seasonal employees.

Although most states require employee registration, some do not. Washington and Michigan do not require employees to register. Michigan regulators do register employees but place responsibility for performing background checks on employers.

If Virginia decides to require employee registration, it could model its program after other states or it could implement a less intensive program. A less intensive program could focus on registering higher-level employees, such as supervisors, managers, and salaried staff. Virginia could also consider only requiring background checks for these personnel, like Illinois recently considered. Alternatively, the state could choose not require background checks for any employees (with the exception of ownership).

The six main ways the state could implement an employee registration program are summarized in Table I-8. Required background checks would likely need to be established in law so that the regulator would have the authority needed to perform background checks. Requiring employee background checks, especially for all employees, would likely increase costs for the Virginia State Police, which runs criminal background checks for state agencies.

TABLE I-8
Registration of marijuana business employees

Implementation options	Level of scrutiny	Program staffing and costs
<p>OPTION 1</p> <p>Require <i>all</i> industry employees to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks on <i>all</i> employees as part of the registration process.</p>		
<p>OPTION 2</p> <p>Require <i>all</i> industry employees to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks <i>for managers, supervisors, and salaried employees only</i>.</p>		
<p>OPTION 3</p> <p>Require <i>only managers, supervisors, and salaried employees</i> to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks for these employees.</p>		
<p>OPTION 4</p> <p>Require all industry employees to be registered and badged by the regulator. Employers are responsible for any background checks.</p>		
<p>OPTION 5</p> <p>Require <i>only managers, supervisors, and salaried employees</i> to be registered and badged by the regulator. Employers are responsible for any background checks.</p>		
<p>OPTION 6</p> <p>No employee registration program.</p>	LOW	LOW

SOURCE: JLARC analysis of other states' statutes.

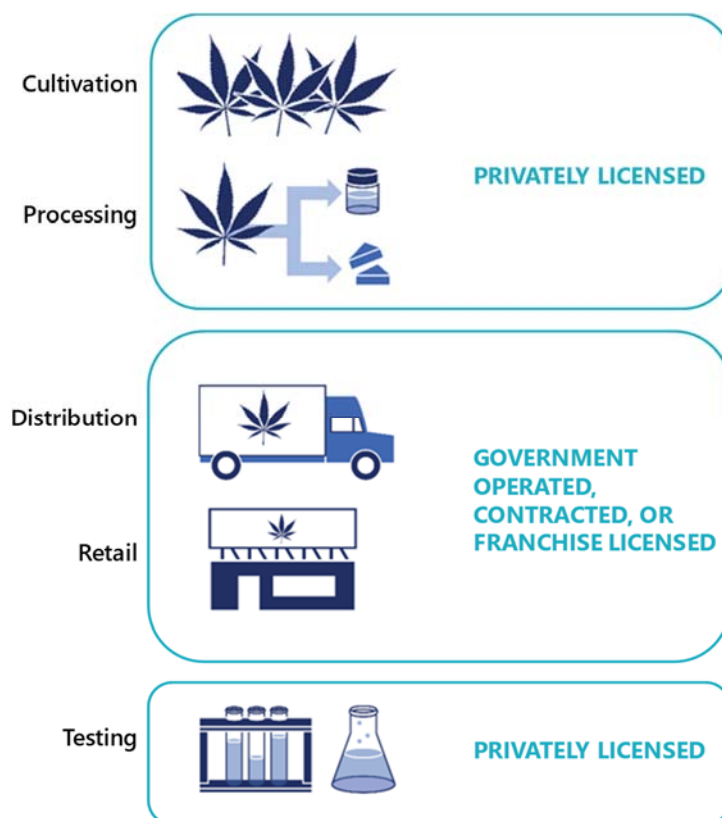
Appendix J: Government-controlled market operations and licensing

Under the government control model, the state would exercise greater control over distribution and retail (Figure J-1). The state could directly control one or both of these functions, like it does for liquor, where the Virginia Alcoholic Beverage Control Authority (VABC) distributes all liquor through its central warehouse and sells liquor at ABC-operated retail stores. Alternatively, instead of directly performing these operations, the state could contract these functions out to private parties. For retail stores, the state could issue licenses to private parties that have strict franchise-like requirements.

Regardless of the approach used, cultivation, processing, and testing operations would be performed by private, licensed businesses. These licensees would operate under rules and requirements that would be similar to those in place under fully private models. This is also similar to the state's liquor model, where all aspects of production are performed by private parties.

FIGURE J-1

In a government control model, the government has greater involvement in two of the five major commercial marijuana operations



SOURCE: JLARC analysis of other state marijuana markets, industry publications, and research literature.

Government-controlled marijuana distribution and retail has been attempted in Canada but not in the U.S. Marijuana is nationally legal in Canada, and the national government has allowed provincial governments to control these operations. In Quebec, a province-owned corporation controls both distribution and retail. In Ontario, the province controls distribution and private retailers are treated similar to franchise owners.

Government control likely best protects public health and prevents illegal diversion, but is riskier and more challenging to implement

A government control model is likely best able to achieve public health goals. Unlike private businesses, the state would not have a profit motive to advertise or otherwise promote marijuana use. Limiting advertising and promotions is important, because research studies show a link between advertising and increased marijuana use among youth, and other states have had problems with inappropriate advertising (see Chapter 9). By placing distribution and retail under government control, these problems are largely avoided. The state can directly control the visibility and promotion of commercial marijuana. State-run retail stores would also be less likely to sell to underage customers. Looking at underage alcohol sales, for example, VABC reports its stores have an underage buyer check compliance rate of 99 percent, compared to 89 percent for the private sector. (Underage buyer checks are when VABC sends an underage adult into an establishment to try and buy alcohol.)

A government control model would also reduce the risk of legally produced marijuana being diverted to the illegal market. In its role as distributor, the state would have direct control over all legal movement of commercial marijuana in the state, enhancing its ability to monitor the entire supply chain and reduce the risk of marijuana being “lost” in business transactions. It would also directly control or closely oversee retail operations, improving its ability to monitor final sales. Additionally, the more operations are under state control, the less likely it is for marijuana to be diverted. Unlike a private company, the state would not have a financial incentive or survival motive to illegally divert marijuana for profit.

Despite the potential benefits, the government control model may not be feasible. Government control of marijuana distribution and retail has not been attempted in the U.S. because marijuana remains federally illegal. If a state government became involved in marijuana distribution or retail, it would become an active participant in a federally illegal enterprise, instead of just acting as a regulator. While the U.S. Department of Justice has tolerated states that regulate commercial marijuana (and hence enforce restrictions on the substance), it is unclear how the department would respond to a state taking on an expanded role and actually distributing and selling marijuana.

Virginia could also face legal challenges from residents and neighbor states if it implements a government control model. Colorado was sued by two of its neighbor states—Oklahoma and Nebraska—shortly after it established its fully private commercial market. Oklahoma and Nebraska argued that, by legalizing marijuana, Colorado had increased marijuana trafficking in their states and strained state and local police departments. The Supreme Court declined to hear the case, and no similar lawsuits have since been filed. However, if Virginia state government becomes an *active* participant in the marijuana industry, its neighbors may be able to make a stronger case that they have been harmed by Virginia’s actions.

The government control model would also take much longer to implement than a fully private approach because the state would have to establish its own operations before the commercial market could open. State government usually moves at a slower pace than the private sector, so it would likely take longer to establish operations. The state would be further slowed by the sheer volume of additional work required. For example, the private sector could establish retail stores across the state fairly quickly, with each licensed business taking all the steps needed to establish one or a few stores. In contrast, the state would need to lease or purchase hundreds of properties across the state, renovate each property, and hire and train retail staff. This would take months if not years. In Canada, the Ontario state government attempted to establish its own retail stores but gave up after a year, largely because of logistical challenges.

The upfront costs of a government control model are also significantly higher because of the additional functions the state would perform. If the state takes on distribution, it would have to set-up its own warehouse or at least contract with one or a few private distributors. Under either approach, the state would likely have to begin making payments before the commercial market opens and tax revenues are collected. If the state attempted to directly operate retail, these costs would grow exponentially because of the cost of leasing and renovating stores and hiring and training staff.

The most practical government control model would be for the state to contract out distribution and have franchise-like private retail licenses

There are three potential ways for Virginia to implement a government control model, but only one of those options appears practical. The three options are (1) state directly operates distribution and retail, possibly under VABC (2) state contracts out distribution and retail, or (3) state contracts out distribution and franchises retail. Of the three, only the last option appears practical. Even so, as noted above, this option is still more risky and challenging than any of the fully private approaches.

Direct state control of distribution and retail, under VABC or a new agency, would be beneficial in the long term but appears impractical to implement

The state could attempt to directly operate distribution or retail, either under a new agency or at VABC. This approach could result in the most revenue for the state *in the long term*, because the state could fully capture profits from distribution and retail. However, this approach requires the most time to implement (possibly several years) and entails the highest upfront costs (tens of millions of dollars). It also has the highest risk of federal intervention and lawsuits against the state. Consequently, this approach does not appear to be practical.

The upfront time and costs of establishing directly controlled distribution and retail would be somewhat similar to establishing VABC's liquor operations from scratch. The state would need to establish warehouses, distribution networks, and retail stores throughout the state. It would need to pay for these efforts before any new revenues from marijuana sales were available. The cost of establishing all of these operations would be exponentially higher than the \$8 to \$20 million it would already cost the state to establish regulatory and other functions (see Chapter 12). By comparison, the budget for VABC's retail and distribution operations (\approx \$170 million, not including cost of inventory) is more than seven times higher than its budget for enforcement and regulation (\$22 million). If this ratio held

true for marijuana operations, it could cost the state upwards of \$100 million to establish new functions.

The state could attempt to reduce the implementation time and costs associated with the direct approach by vesting VABC with these responsibilities. However, it is not clear that tactic would have any practical advantages. VABC officials indicated that the agency's warehouse and distribution networks are designed around liquor. Marijuana distribution would likely require new, or almost entirely new, supporting infrastructure. Similarly, while some existing VABC stores could potentially be used to sell marijuana, many are likely too small to accommodate both liquor *and* marijuana. Consequently, VABC would still need to purchase or lease new retail space. Even VABC stores that are large enough to accommodate dual liquor-marijuana sales would need to be renovated, because marijuana will need to be stored and displayed differently than liquor.

On the staffing side, it's not clear that giving VABC authority for distribution and retail would reduce staffing needs. VABC would need to hire new employees to help perform many, if not all, of its new marijuana-related operations. The state may not be able to use any current VABC employees to assist with marijuana operations. The state could not ethically tell current VABC employees that, as part of their job, they are now required to commit federal crimes by aiding in the distribution and sale of a Schedule I controlled substance.

State could reduce risks and costs of government control by (1) contracting out distribution and (2) licensing retail under franchise-like agreements

The state could maintain control over distribution, but reduce costs and risks, by contracting out this function. It could then create franchise-like arrangements for retailers that would make privately-owned and operated stores resemble state-owned stores, in both appearance and operations.

Contracting out distribution would be relatively easy because the state would need only a few contracts to provide statewide coverage. This approach includes some risk, though, because it is unclear whether the state would find enough competent businesses to perform this function. Existing distributors of other products, such as beer and wine, may or may not be interested in taking on this new function. Additionally, few businesses, if any, may be interested in distributing to more remote—and less profitable—parts of the state. Additionally, the state would be relying on a small number of contractors to provide adequate distribution capacity at a statewide scale. If these contractors are not able to scale up and meet demand, the state could have regional or statewide product shortages.

The state could try to contract out retail, but this would likely be too time consuming and costly. Unlike distribution contracts, the state would probably need several dozen retail contracts. Before awarding these contracts, the state would need to hold a procurement process and solicit bids, select winners, and make contract awards. The procurement process can be time consuming, especially for a large number of bidders and contract awards. The state would also have to deal with potential challenges from parties who are not awarded contracts. Following contract awards, the state would still need to do the same sort of facility inspections and opening approvals that it would do for licensed businesses. These inspections would be needed to make sure contractors are ready to begin handling marijuana. Because contractors would be performing work on behalf of the state, rather than being licensed to operate on their own behalf, many of the costs of setting up new stores would also be

borne by the state through contractor payments. Consequently, the cost advantages of this approach are likely limited. This approach would also likely harm the ability of the state to promote small businesses, because contracts would have to be for multiple retail stores, and only larger businesses would be well positioned to compete for those contracts.

Instead of contracting out retail, the state could license retailers under franchise-like agreements. Franchise licensees would receive licenses to operate retail stores. These licensees would not have the same autonomy that a licensed retailer would have under a non-franchise regime. For example, franchise licensees would be required to locate their stores in the geographic areas identified by the state. They would have to adhere to strict requirements on store appearance, signs, and displays. They would be forbidden from any advertising or promotions. Those functions would be a state responsibility. Franchise licensees would be required to send employees to participate in standard training and buy employees a standard “uniform” (e.g., a polo shirt with standard logo). Essentially, the stores would have the appearance and function of a state-owned store, but the profits would flow to the franchise owner instead of the state.

The proposed government controlled approach—contracting distribution and franchising retail—would not generate significant profits for the state. Profits from wholesale mark-ups would pay for the cost of the distribution contracts. Consequently, distribution contractors would capture any wholesale profits. Similarly, any retail profits would flow to the retail franchise license holders.

The proposed government controlled approach is summarized in Table J-1.

TABLE J-1

Virginia could adopt a government control model that (1) contracts out distribution and (2) licenses retailers under franchise-like agreements

Operation	License structure
Cultivation ≈100–800 operations	<p>Types: Licenses divided into small, medium, and large tiers.</p> <p>Caps: License awards capped based on market demand. Awards made via lottery with stringent qualification standards for applicants.</p> <hr/> <p>Options to promote small business & industry diversity: State can exempt small cultivators from license caps and award any qualified party a small cultivation license. Qualification standards for these licenses could be less stringent, but operations would not be allowed to start until all facility and operating compliance requirements are met. Small cultivators could also have special permission to sell their products from their own premises, for off-site consumption, without a retail license.</p>
Processing ≈25–100 operations	<p>Types: Licensees can process all types of products (edibles, vape oils, concentrates) or specialize in specific products. Licenses can be divided into different types or tiers to simplify requirements for specialized operations.</p> <p>Caps: No license caps and all qualified applicants are awarded a license.</p>

Options to promote small business & industry diversity: The structure proposed above (specialized license types, no caps) would allow small businesses to enter the market and compete.	
Distribution (gov't contract) ≈5-15 operations	Contracts: Contractors are the only operations allowed to perform transport or wholesale marijuana raw materials or finished products to retailers. Some functions that could be performed by distributors in a fully private market, such as packaging, would be performed by cultivators or processors instead. Number: State would award enough contracts to provide sufficient, statewide coverage.
Options to promote small business & industry diversity: Contracted distributors could not hold retail, cultivation, or processing licenses.	
Retail (licensed state franchises, independent) ≈200-400 operations (depending on demand)	Types: Retail stores allowed, but not home delivery services or on-site consumption venues. Home delivery and on-site consumption venues could begin 3 to 5 years after store sales. Retailers would have to meet exceptionally strict standards, including standards for store design and appearance, locations, and employee training (similar to the requirements that a franchise owner would be required to meet). The state would provide license holders with guidance and programs to assist them. Caps: License awards capped by the state, which would also determine where retail stores would be located. Awards made via a lottery.
Options to promote small business & industry diversity: State can choose to set less exclusionary qualification standards for applicants to promote a larger and more diverse applicant pool. Operations would not be allowed to start until all facility and operations compliance requirements are met. Awards made gradually over period of 3 to 5 years until caps are reached.	
Testing (licensed, independent) ≈5-20 operations	Types: Testing labs must be independent. They cannot hold any other type of license. Testing labs must also be certified by the state's Division of Consolidated Laboratory Services (DCLS). Caps: None.

SOURCE: JLARC summary analysis.

NOTE: The range of potential licensees shown are estimates based on a review of mature, commercial markets in other states, Virginia's anticipated marijuana demand at market maturity, and the license structure, including caps on cultivation and retail, JLARC is recommending.

Appendix K: Defining Disproportionately Impacted Areas (DIAs) for social equity program eligibility

Virginia would need to define program eligibility for social equity initiatives. Selected criteria should (1) accurately target intended beneficiaries and (2) be unlikely to face legal challenges that could delay program implementation.

Because Black individuals have historically been arrested and convicted for marijuana offenses at higher rates than other races or ethnicities, many states' social equity programs aim to direct economic benefits to Black communities through marijuana legalization. However, as discussed in Chapter 7, race cannot explicitly be used as a criterion unless a state can withstand the two-prong test of "strict scrutiny," showing both that (1) there is a compelling government interest and (2) the remedy is sufficiently narrowly tailored (*City of Richmond v. J.A. Croson Co.*, 1989; *Pharmacann Ohio v. Ohio Dep't Commerce*, 2018). Virginia could not demonstrate a compelling government interest to use race as a criterion for its social equity programs without evidence of past discrimination that is specific to the marijuana industry. Evidence of previous disproportionality in marijuana law enforcement does not appear to be enough to justify the use of race-based benefits in the commercial marijuana industry. Therefore, implementing social equity programs with race as a criterion is unlikely to withstand legal challenges.

Because race likely cannot be used, states must develop other criteria for determining social equity program eligibility. Residency appears to be the best criterion for social equity programs. Other states have typically denoted eligible populations by designating Disproportionately Impacted Areas (DIAs). DIAs are commonly defined as cities, neighborhoods, or census tracts with a combination of high arrest/conviction rates for marijuana crimes and some measure of poverty, such as high rates of unemployment or participation in income-based state or federal programs. Virginia would similarly need to define geographic areas to determine which communities are eligible for social equity program benefits.

First, Virginia would need to determine the geographic unit to use in defining its DIAs. Based on the experiences of other states, using smaller geographic areas could better target intended beneficiaries. A few states have designated entire localities or certain zip codes as DIAs, but these designations have been too broad to effectively direct benefits to intended groups. Therefore, the best geographic unit for designating DIAs appears to be census tracts.

Virginia would also need to set criteria for how census tracts are identified as DIAs (Table K-1). Because social equity programs are intended to direct benefits to populations that have been negatively affected by prior marijuana law enforcement, Virginia could first identify areas with high rates of arrests and convictions for marijuana-related offenses. Virginia could select one of several options to determine how this criterion should be measured. For example, Virginia could select the top 25 percent of census tracts with the highest rates of arrests and convictions for marijuana possession over the past decade.

Aside from areas with highest *rates* of marijuana arrests and convictions, Virginia could also incorporate criteria that considers high *disproportionality* of marijuana arrests and convictions. JLARC staff conducted a similar analysis to determine which localities had the highest racial disproportionality in

marijuana possession arrests and cases that were prosecuted or otherwise proceeded in court. (For additional details of this analysis, see Appendix D.) Virginia could use a similar analysis, narrowed down to the census tract level, to define DIAs; however, census tracts with the greatest disproportionality may not necessarily be the communities with greatest number of marijuana-related arrests/convictions, and vice versa. Therefore, using disproportionality to define DIAs without regard to the total number of arrests or convictions may not result in the intended communities being eligible for social equity program benefits.

In addition to marijuana crime rates, the state could also incorporate a poverty measure into the DIA designation (e.g., census tracts with average poverty rates of 20 percent or greater). In defining its DIAs, Illinois outlines several criteria that measure poverty or economic disadvantage and requires that census tracts meet at least one of these criteria to be selected as a DIA (in addition to having high rates of marijuana-related arrests and convictions).

TABLE K-1
Virginia could use several criteria to designate census tracts as DIAs

Type of criteria	Criteria options	Example criteria
Rate of arrests and convictions for marijuana-related offenses	1. Possession only 2. All marijuana-related offenses (including more serious offenses, such as trafficking)	Top 25 percent of census tracts with the highest rates of arrests and convictions for marijuana possession over the past decade
Racial disproportionality of arrests and convictions for marijuana related offenses	1. Possession only 2. All marijuana-related offenses (including more serious offenses, such as trafficking)	Any census tracts with higher rates of racial disproportionality for marijuana-related convictions than the statewide average rate over the past decade
Measure of poverty or economic disadvantage	1. Poverty rate 2. Unemployment rate 3. Rate of participation in income-based state or federal programs (e.g. Supplemental Nutrition Assistance Program)	Census tracts with a poverty rate of at least 20 percent, according to latest federal decennial census

SOURCE: JLARC summary analysis.

Once DIAs have been identified, Virginia would need to decide whether to set additional parameters to determine DIA residents who are eligible for program benefits. For example, other states commonly require individuals to have lived in a DIA for a certain period of time, such as five of the past 10 years. This helps to ensure that only longstanding community residents are eligible, and that outside individuals are not able to move into DIAs to disingenuously qualify for program benefits. Virginia could also require individuals to have a prior marijuana-related arrest or conviction on their record to be eligible. As discussed in Chapter 7, this would more closely target the program to people who have been negatively affected by prior marijuana law enforcement, should the state wish to further narrow eligibility for social equity program benefits.

Virginia should periodically monitor and adjust DIA designations as needed. Based on other states' experiences, Virginia should ensure DIAs accurately target intended beneficiaries as part of its ongoing evaluations of social equity programs' effectiveness. In Michigan, for example, many DIAs initially identified were in localities that prohibited commercial marijuana activities in their jurisdictions. As a

result, the state had to adjust eligibility criteria to expand the number of DIAs. Even if initial designations effectively target intended beneficiaries, Virginia would still need to update DIAs periodically to adjust for any changes in community eligibility. For example, DIAs that currently have high rates of poverty may not be the same areas that have high rates in the future, as communities evolve and change over time.

Appendix L: Therapeutic effects of marijuana use

There is increasing support for the use of marijuana to help treat various health conditions. Currently, all but three states have approved some sort of medical marijuana program.

In the past few years, many research studies have attempted to draw conclusions on marijuana's effectiveness in treating health conditions. JLARC staff examined systematic reviews and research articles on the association between marijuana products and the alleviation of symptoms. The high volume of recent studies examining marijuana use's health effects led the National Academies of Sciences, Engineering, and Medicine to publish a comprehensive review on the effects of marijuana use. This review was published in 2017 and included research up to 2016. JLARC staff reviewed the findings from this project and examined more recent systematic reviews up to 2020 that aimed to draw further conclusions on these findings. Based on the research examined, only a few health conditions have conclusive evidence of therapeutic relief from marijuana use.

Evidence strength is based on the number and quality of studies that show an association between marijuana use and certain health incomes. High quality research uses rigorous research methods, controls for outside factors, and has enough participants that outcomes can be generalized to the larger population.

The 2017 National Academies review included mostly systematic reviews and some articles. The authors made determinations on whether there was substantial or conclusive, moderate, limited, or insufficient evidence of an association between marijuana use and improved health outcomes studied. For health conditions with substantial or conclusive evidence of an association between marijuana use and improved health outcomes, enough high quality and rigorous studies found evidence of an association. There was determined to be moderate evidence of improved health outcomes if there were a fair number of quality studies to support marijuana use and improved outcomes. For health conditions with limited or insufficient evidence, few or no quality studies demonstrated the association between marijuana use and the health outcomes measured. Limited or insufficient evidence does not mean that marijuana is ineffective in providing therapeutic relief. Rather, it means that the current evidence to support the association between marijuana use and certain health outcomes is weak.

The National Academies reviewed research for approximately 24 symptoms. For 14 symptoms, the National Academies found no evidence or insufficient evidence of ineffectiveness of marijuana use. For 10 symptoms, the National Academies found moderate or limited evidence of effectiveness of marijuana. Three conditions were found to have conclusive or substantial evidence of an association between use and relief of symptoms. These symptoms are included in table L-1, along with the strength of evidence. More recent systematic reviews have confirmed the findings for these symptoms

TABLE L-1
Research on the therapeutic effects of marijuana

	Evidence strength of effectiveness
Chronic pain	Substantial evidence
Nausea and vomiting	Conclusive evidence
Multiple Sclerosis spasticity symptoms	Substantial evidence

SOURCE: Adopted from findings included in the National Academies of Sciences, Engineering, and Medicine's comprehensive review on the effects of marijuana.

NOTE: This table does not include all health conditions reviewed in the book, only conditions for which researchers deemed evidence was sufficient to support an association.

The National Academies determined that the moderate or limited evidence available for the remaining conditions with some evidence of improved outcomes was insufficient to fully draw conclusions on the effectiveness of marijuana use. In contrast to negative health outcomes, only outcomes with substantial or conclusive evidence were considered strong enough to draw conclusions by the National Academies. Health conditions with moderate evidence include improved short-term sleep outcomes for individuals with sleep disturbances associated with: sleep apnea, fibromyalgia, pain, and multiple sclerosis. Outcomes with limited evidence include conditions such as increased appetite and decreased weight loss for HIV/AIDS patients and the improvement of Tourette syndrome symptoms. The National Academies determined there was inconclusive evidence to support symptom relief from other health conditions. Though more recent research has been conducted since the National Academies review, it has not been sufficiently rigorous or conclusive to strengthen study findings.

One exception is recent research on the impact on epilepsy. Recent systematic reviews have suggested an association between the use of marijuana and the alleviation of symptoms associated with epilepsy, particularly for children. This health condition was referenced in the National Academies review as having insufficient evidence to draw a conclusion, though the authors acknowledged that more rigorous studies were in process during the publication of their review. More recent research supports evidence of an association between the use of marijuana products and improved health outcomes for those with epilepsy.

Research is limited on differences between types of products such as edibles versus smoking, the impact of potency, and consumption trends. Research findings presented here and in the studies examined were not exclusive to a specific form of cannabis. The studies reviewed involved use of various forms of marijuana including flower, oil, extract, spray, and the pill form of cannabis. Findings discussed here should not be associated with one specific type of product unless stated.

Despite the abundance of studies, findings on the medical benefits of marijuana use are limited for several reasons. Interactions with other therapeutic treatments, biases related to reported symptom relief, and limitations on study design all influence the interpretation of study outcomes according to researchers. Research examining differences between types of products or method of use will also be critical to policymaking moving forward. Current research provides evidence that marijuana may help alleviate symptoms for a wide variety of conditions, though evidence is currently limited to adequately identify the full list of conditions.

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Appendix M: Research on the health effects of marijuana use

Marijuana has been associated with negative health outcomes. As more states implement adult use laws, understanding the current research is critical. Currently, 15 states and three territories have approved laws to legalize adult cannabis use. As the state explores general adult use legalization, understanding how marijuana use affects individuals and communities will be important. With legalization, more adults will likely use marijuana. Therefore, states are likely to see an increase in the negative health outcomes related to marijuana use. While research findings are limited, research does provide some insight into the negative health effects associated with marijuana use.

The high volume of recent studies examining the effects of marijuana use led the National Academies of Sciences, Engineering, and Medicine to publish a comprehensive review on the health effects of marijuana use. This review was published in 2017 and included research up to 2016. Because of the large volume of research studies and health conditions studied, the authors used discretion in selecting health conditions to review. JLARC staff reviewed the findings from this project and examined more recent systematic reviews up to 2020 that aimed to draw further conclusions from the 2017 findings.

The 2017 National Academies review included mostly systematic reviews and some articles. The authors made determinations on whether there was substantial or conclusive, moderate, limited, or insufficient evidence of an association between marijuana use and improved health outcomes studied. For health conditions with substantial or conclusive evidence of an association between marijuana use and improved health outcomes, enough high quality and rigorous studies found evidence of an association. There was determined to be moderate evidence of improved health outcomes if there were a fair number of quality studies to support marijuana use and improved outcomes. For health conditions with limited or insufficient evidence, few or no quality studies demonstrated the association between marijuana use and the health outcomes measured. Limited or insufficient evidence does not mean that marijuana is ineffective in providing therapeutic relief. Rather, it means that the current evidence to support the association between marijuana use and certain health outcomes is weak.

For the negative health effects related to marijuana use, the National Academies used health endpoints to narrow research topics. The health effects reviewed are not all inclusive. Instead, the researchers focused on some major health effects that have seen consistent evidence of an association, or have been assumed to be connected to marijuana use. The following is a modified list of the health endpoints used by the National Academies:

- mental health;
- cognition, social, and educational outcomes;
- maternal health;
- cardiovascular symptoms;
- respiratory symptoms;
- problem cannabis use
- use of other substances;
- injury and mortality;

- immunity; and
- cancer.

The National Academies and other researchers have found evidence of an association between marijuana use and each of these categories. While some of the health endpoints presented above had several negative health outcomes with substantial or moderate evidence, not all categories had outcomes with enough evidence to provide an in-depth analysis. Below is a discussion of notable research findings.

Mental health

Research on the association between marijuana use and mental health is growing but complicated. In the National Academies research, the authors conclude that marijuana use is associated with losing touch with reality (psychotic episodes) and schizophrenia, especially for heavy users. Other outcomes such as suicidal thoughts and worsened mental health symptoms for those already experiencing mental health problems have been found as well. Recent systematic reviews have provided additional support for these outcomes. Therefore, there is evidence to support an association between the use of marijuana and negative mental health problems.

While marijuana use is one factor, researchers argue that these negative outcomes are influenced by other factors. Factors such as family history, environment, and age can also influence these outcomes. The likelihood of developing mental health problems is partially hereditary, and marijuana use could increase or worsen symptoms for marijuana users, particularly heavy users. Younger users may be more likely to experience negative mental health outcomes as well. The relationship between mental health and substance use is complex, and researchers continue to conduct studies aimed at understanding their association. Regardless, state leaders should be aware of this research and inform the public about these risks.

Cognitive, social, and educational outcomes

According to the National Academies, marijuana use is associated with cognitive impairment, including memory, learning, and attention. These outcomes can be especially detrimental for youth and supports the need to prohibit the use of marijuana for individuals under 21. Because youth's brains are still developing, any substances that can impact cognition are of concern. Overall, there is moderate evidence of an association between the use of marijuana and negative cognitive outcomes related to memory, learning, and attention.

Additionally, worsened social and educational outcomes are associated with use, particularly for younger users. Researchers found that marijuana use led to worse school and work performance. While limited evidence supports these findings, it is additional support to develop policies that restrict youth access to products and educate the community about the harms of use.

Maternal health

Maternal health research aims to examine the potential harm of marijuana use before, during, and after pregnancy (while breastfeeding). For maternal health, smoking marijuana during pregnancy has

been associated with pregnancy complications, lower birth rate, and admittance to the neonatal intensive care unit. However at this time, evidence supporting these conclusions is limited, and not all studies have reached those conclusions. For example, the National Academies found substantial evidence of lower birth weight but newer studies did not. Other factors, such as the use of other substances or a mother's medical history may also influence negative health outcomes. Some studies have begun to examine the trend of using multiple substances and recognize that this could affect outcomes. States with legalization are beginning to conduct more rigorous data collection to better understand trends in use for pregnant women, as well as how to navigate the conflicting information about the use of marijuana during pregnancy. Specifically, some pregnant women may be interested in using marijuana to relieve pregnancy symptoms, such as vomiting.

Cardiovascular and respiratory symptoms

The heart and lungs can also be affected by marijuana use. In recent years the primary mode of use has been smoking, which has led many researchers to examine the impact of smoking on the respiratory system. At this time, there is evidence to support the association between smoking marijuana and chronic cough, worse respiratory symptoms, and bronchitis. The National Academies state there is limited evidence of an association between marijuana smoke and chronic obstructive pulmonary disease. Other factors, including the use of other substances, like tobacco, can have a substantial influence on health outcomes related to the lungs. Since many people use both tobacco and marijuana, it can be difficult to distinguish health outcomes related only to marijuana use.

Major research is emerging on the effects of marijuana use on the heart, with a recent statement published by the American Heart Association's journal outlining some potential negative outcomes related to heart function (Page et al, 2020). Studies have shown an association between marijuana use, heart attack, and stroke. For heart attack, marijuana use has been associated with the triggering of heart attacks. Evidence is limited on the association between marijuana use and stroke. Reviews published since the National Academies' review have found an association between marijuana use and Tachycardia (rapid heartbeat). Tachycardia was a number one or number two complaint from individuals seeking assistance from poison control and emergency departments in several states with legalization.

Problem cannabis use and use of other substances

Broadly, problem cannabis use and cannabis use disorder (CUD, a clinically defined disorder) are related to the excessive use of marijuana. Individuals may be dependent on marijuana, and marijuana use may interfere with their day to day life. Research has demonstrated that the more a person uses marijuana, the more likely he or she is to develop problem use or CUD. More adults will likely use marijuana as more states legalize the substance, so states can expect problem marijuana use to increase as well. Research has shown mixed evidence to support increased CUD after legalization, but part of that is a result of the difficulties of measuring CUD prevalence. However, because individuals with CUD often suffer from other substance use disorders, understanding these trends will be important to designing adequate policies.

Further, researchers are looking to learn more about the relationship between substance use and mental health issues, because many people with substance use disorders also have serious mental illness. Consequently, increases in individuals experiencing substance use disorders like CUD could create an increased need for mental health services for communities. An understanding of CUD trends can help states develop better strategies that will address these interconnected issues. While research is still growing on whether CUD increases after legalization, states should begin increased data collection to help guide future policymaking. Researchers urge policymakers to consider all of these factors when developing prevention and intervention policies addressing legalization:

“Although most people will not be harmed [by legalization], those that are likely to be harmed will not be drawn equally from the population, as with problems associated with other drugs, they will be some of the most vulnerable and disadvantaged in society, problematic cannabis use like other drugs is just one disadvantage of many for these groups” (Hamilton & Tracy, 2020).

Researchers are also attempting to understand how marijuana use affects the use of other substances. If people choose to use more marijuana and use more of other substances, then additional efforts to address substance use issues as a whole rather than by substance type becomes even more important. Most research supports the likelihood that increased marijuana use could increase the use of some substances; current research is inconclusive about the use of other substances and marijuana legalization.

Cannabis Hyperemesis and Cyclical Vomiting Syndromes

The legalization of marijuana has increased awareness and prevalence of Cannabis Hyperemesis Syndrome (CHS) and Cyclical Vomiting Syndrome (CVS). These two health conditions are related to the overconsumption of marijuana products. Symptoms of these conditions typically include severe nausea and vomiting as well as abdominal pain. Symptoms are not typically life threatening. Relief from these symptoms usually occurs after discontinued marijuana use. Researchers have found increased incidences after legalization, though part of that is likely due to increased awareness of the condition. Education about how overconsumption can lead to health outcomes such as these should be a part of states’ prevention efforts.

Other health outcomes with limited and insufficient evidence of an association

For the endpoints on injury and mortality, cancer, and immunity, the only notable finding is that marijuana use has an association with increased risk of vehicle crashes. This conclusion has been supported by other research studies and systematic reviews. However, increased risk of crash does not necessarily translate into more crashes for states with legalization, as discussed in chapter 9. Regardless, states should understand these risks and develop policies or guidelines to help minimize these effects at the state level through education and law enforcement training.

Research on injuries focused primarily on negative health outcomes for youth who accidentally ingest marijuana. Though serious outcomes are rare, they can include respiratory distress and seizures, providing additional support that states should educate adults about safe storage and the dangers of

accidental consumption. Other outcomes related to injuries did not yield notable findings. Specifically, the National Academies and more recent systematic reviews determined there is not enough evidence to demonstrate an association between marijuana use and occupational injuries.

There were no major findings on the association between marijuana use and cancer, though limited evidence of an association between marijuana use and Testicular Germ Cell Tumor was found. This is a specific type of tumor found in the testicles, but evidence is limited. Further systematic reviews concluded the same findings. Last, information on the association between marijuana use and the immune system shows a limited association between marijuana use and inflammation in immune system cells.

While there are many studies attempting to review the effects of marijuana use, the current findings are limited, and more rigorous studies are necessary to form stronger conclusions. Longer studies, studies that control for the effects of other substances or behaviors on study outcomes, and experimental studies could help researchers draw stronger conclusions. There is enough evidence to demonstrate that marijuana is harmful, but the extent of that harm, including long-term effects, are still mostly unknown. Research regarding the effects of marijuana legalization on public health can be found in Chapter 9.

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Appendix N: Potential revenue from commercial marijuana market at different tax rates

Most states that have legalized commercial marijuana sales assess a total tax rate on marijuana of between 20 and 30 percent of the sales price. This total tax rate includes special state and local taxes on marijuana as well as standard state and local sales taxes. This appendix includes projected revenue over a five-year period at each percentage point rate between 20 and 30 percent, and at the low-end and high-end of expected sales volume. Low-end and high-end sales volumes are based on a variety of factors, including rate of conversion of illegal market to legal market.

TABLE N-1

Projected revenue of differing marijuana tax rates assuming *lower-end* of sales volume

Projected revenue from marijuana retail sales tax (\$M)					
Total tax rate on marijuana sales	Year 1	Year 2	Year 3	Year 4	Year 5
20%	\$25	\$50	\$78	\$101	\$122
21%	26	53	81	106	128
22%	27	55	85	111	134
23%	28	58	89	116	140
24%	30	60	93	122	146
25%	31	63	97	127	152
26%	32	66	101	132	158
27%	33	68	105	137	165
28%	35	71	109	142	171
29%	36	73	112	147	177
30%	37	76	116	152	183

SOURCE: JLARC analysis of MPG Consulting projections, 2020.

TABLE N-2

Projected revenue of differing marijuana tax rates assuming *high-end* of sales volume

Projected revenue from marijuana retail sales tax (\$M)					
Total tax rate on marijuana sales	Year 1	Year 2	Year 3	Year 4	Year 5
20%	\$41	\$84	\$129	\$169	\$203
21%	43	88	136	177	213
22%	45	92	142	186	224
23%	47	97	149	194	234
24%	49	101	155	203	244
25%	52	105	162	211	254
26%	54	109	168	219	264
27%	56	113	174	228	274
28%	58	118	181	236	284
29%	60	122	187	245	295
30%	62	126	194	253	305

SOURCE: JLARC analysis of MPG Consulting projections, 2020.

NOTE: Projections shown are only for a new marijuana retail sales tax and exclude the existing 5.3 percent sales tax to more precisely illustrate the differences in changes in the marijuana tax rate. Projections are *total* tax collected through the marijuana retail sales tax and do not distinguish between any state and local portions that the General Assembly may determine.

Appendix O: Proposed organizational structure and staffing for a new marijuana regulatory agency

A new marijuana regulatory agency should be organized into an executive office, administrative support, and three key regulatory functions: licensing, investigations, and field enforcement. The new agency would need between 110 and 140 staff. The following table provides an overview of the basic organization, duties, and staffing requirements. Position salaries are estimates based on the cost of similar positions in Virginia and other states. This structure assumes that the Office of the Attorney General will provide the new agency with all legal services, which is the standard practice for state agencies.

TABLE O-1

Potential organization structure and staffing for new marijuana regulatory agency

Section	Duties	Positions
Executive office		≈10 positions
Director's office	Responsible for leadership and management oversight of the regulatory agency.	Director (\$175,000 to \$185,000) Executive assistant (\$65,000 to \$75,000)
Policy & communications	Provide policy support to the board and director. Research emerging issues within the cannabis industry and resolve policy issues with the regulated industry and other stakeholders. Analyze data for the benefit of other groups within the regulatory agency including testing data, inventory tracking data, production data, licensing data, tax revenue data, etc. Serves as the main contact for legislators on behalf of the agency and manages all legislative affairs for the agency. Coordinates all methods of communicating public information including website, list services, etc. Handle all external requests for information including media, other regulatory agencies and stakeholders.	Analyst manager (\$100,000 to \$110,000) Analyst (\$70,000 to \$75,000) Legislative liaison (\$105,000 to \$115,000) Public information officer (\$80,000 to \$90,000) Admin/clerical (\$30,000 to \$40,000)
Administrative support		10-15 positions
Accounting, Budgeting & Human Resources	Provides administrative support functions for the agency including accounting and budgetary services. Manages the personnel process on behalf of the agency. Provides forecasting and other related services as necessary for the agency.	Controller (\$125,000 to \$135,000) Accountant (\$62,000 to \$72,000) Budget officer (\$88,000 to \$98,000) Budget analyst (\$62,000 to \$72,000) HR specialist (\$55,000 to \$65,000)
Information technology	Provide or oversee contracts for all information technology services, agency website, and systems for licensing, marijuana tracking, enforcement case management, finance, etc.	IT director (\$120,000 to \$140,000) IT specialist (\$50,000 to \$115,000)
Licensing		30-40 positions

Application intake & processing	Responsible for accepting all license applications, entering them in the licensing system, ensuring completeness of applications, conducting all cursory checks (e.g. tax checks, credit checks, fingerprints, etc.). Coordinating with investigations group for assignment of applications for further investigation.	Licensing supervisor (\$50,000 to \$60,000) Licensing specialist (\$30,000 to \$40,000) Forms design specialist (\$45,000 to \$55,000)
License issuance & renewal	Responsible for processing license approvals following the completion of all required investigations and reviews. Responsible for the issuance of business licenses and employee/owner badging (as required).	Program professional (\$75,000 to \$85,000) Admin/clerical (\$30,000 to \$40,000)
Employee registration	Responsible for processing employee registrations and issuing badges or certifications.	
Forms development	Develop and updated licensing forms as required, such as license renewal or change of ownership forms	
Compliance assistance	Develop training and education program for regulated industry and other stakeholders. Coordinate internal training program for new agency employees and other internal training areas for employees.	
Social equity	Manage and oversee the state's social equity assistance programs. Provide staff support to the Social Equity Committee, including reviewing and assessing grant applications for the community reinvestment fund. Monitor program outcomes and trends in industry diversity and social equity businesses.	Program manager (\$90,000 to \$100,000) Program professional (\$45,000 to \$75,000) Program assistant (\$30,000 to \$40,000)
Investigations		15-20 positions
General background investigations	Conduct background investigations of all businesses and owners. Investigations include review of all contracts, financing, ownership structures, etc.	Criminal invest. superv. (\$65,000 to \$75,000) Criminal investigator (\$45,000 to \$60,000)
Financial investigations	Conduct complex background investigations involving publicly traded companies and other complex business structures, including changes of ownership.	Compliance investigator (\$40,000 to \$55,000)
Regulatory & criminal investigations ^a	Perform criminal and regulatory investigations involving a wide variety of issues including licensed premises, hidden ownership, other potential regulatory violations associated with ownership and application disclosures.	Financial investigator (\$70,000 to \$80,000) Financial analyst (\$55,000 to \$70,000) Admin/clerical (\$30,000 to \$40,000)
Field Enforcement		45-55 positions
Compliance inspections	Conduct compliance inspections of licensed businesses, pre-opening inspections, underage compliance operations, other compliance issues of operating businesses.	Criminal invest. superv. (\$65,000 to \$75,000) Criminal investigator (\$45,000 to \$60,000)
Complaint investigations	Conduct investigations into complaints lodged against licensed businesses and licensed employees.	Compliance investigator & inspector (\$45,000 to \$60,000)
Regulatory and criminal investigations ^a	Conduct special investigations into potential regulatory and criminal violations at licensed businesses. Work cooperatively with other state and local law enforcement agencies on criminal investigations involving licensed businesses.	Analyst (\$40,000 to \$50,000)
Tax compliance ^b	Responsible for processing marijuana related tax returns, auditing licensed business reporting of information, and collecting marijuana sales taxes.	Audit manager (\$90,000 to \$100,000) Auditor (\$40,000 to \$65,000)
Compliance coordination	Serve as the liaison between the regulator and the third-party provider of the inventory tracking system and licensed businesses using the system. Identify and resolve issues involving compliance with the	Admin/clerical (\$30,000 to \$40,000)

requirements for inventory tracking system reporting. Review and analyze trends in data.

Serve as the liaison between the regulator, the Division of Consolidated Laboratory Services, and licensed testing facilities. Coordinate and monitor sample collection, verify lab compliance with accreditation standards, and review test result reports.

Serve as the liaison between licensed businesses and the Department of Agriculture and Consumer Services pesticide application program, and coordinate access to ensure compliance.

SOURCE: JLARC analysis of Virginia and other states and analysis performed by Kammerzell Consulting.

NOTE: ^a Criminal investigations and enforcement would be needed only if the agency is given law enforcement authority. ^b Staff position counts includes five positions for tax collection and compliance audits. However, if this function is given to the tax department, this section and these positions would no longer be needed.

Appendix P: Powers and duties to be vested with the marijuana regulatory body

Virginia will need to vest several basic powers and duties with the board and agency it designates to regulate the commercial marijuana market. These include powers and duties related to: (1) general operations, (2) licensing, (3) employee registration, (4) enforcement, (5) commercial products, and (6) transparency and accountability. The key powers and duties that could or should be vested with the regulatory board and agency are summarized in Table P-1. Marijuana regulators in other states have been vested with many of same powers and duties that are outlined here. Virginia also generally vests its regulatory agencies, especially those charged with licensing businesses or occupations, with similar powers and duties.

The state can decide whether to vest the regulatory board and agency with tax compliance and law enforcement powers and duties. Virginia and other states sometimes vest with regulators with these authorities, but sometimes do not. Tax compliance powers and duties are discussed in more detail in Chapter 10, and law enforcement powers and duties are discussed in more detail in Chapter 11.

The state can decide whether to register employees. Employee registration programs and options are discussed in more detail in Appendix I.

TABLE P-1

Virginia should grant specific powers and duties to the marijuana regulatory body, while others are optional

Power or duty to be granted in statute	Recommended	Optional
General		
Regulate the commercial, adult use marijuana market	✓	
Regulate the medical marijuana market, starting 3-5 years after commercial legalization	✓ (3-5 year delay)	
Promulgate all rules and regulations necessary to establish and regulate a commercial marijuana market	✓	
Establish and operate an agency, including hiring personnel, entering into contracts, etc.	✓	
Licensing		
Set qualifications for licenses	✓	
Approve or deny licenses	✓	
If a license is denied, preside over any appeals of license decision and make final administrative rulings	✓	
Establish process and procedures necessary for awarding and renewing licenses	✓	
Establish process and procedures for reviewing appeals of license decisions, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Investigate license applicants, including all parties with an ownership or financial interests, including the power to conduct fingerprint criminal background checks and audits or reviews of financial histories, business structures, etc.	✓	
Set, charge, and collect all <u>license</u> related fees, including application, issuance, & renewal fees	✓	

Power or duty to be granted in statute	Recommended?	Optional?
<i>Employee registration</i>		
Approve or deny employee registration applications		✓
Perform fingerprint criminal background checks of applicants		✓
Issue employee badges		✓
Set, charge, and collect all <u>employee registration</u> related fees, including application & renewal fees		✓
<i>Enforcement</i>		
Set facility and operation compliance requirements that must be met <i>before</i> a license holder can begin operations and start handling marijuana	✓	
Grant or deny permission for a license holder to begin operations	✓	
Inspect license holder premises, plans, procedures, and records before the license holder begins operations	✓	
Set facility and operation compliance requirements	✓	
Set appropriate penalties for noncompliance	✓	
Maintain & monitor a "seed-to-sale" tracking system	✓	
Monitor, inspect, investigate, audit, and otherwise check licensees for compliance	✓	
Monitor video surveillance, if necessary	✓	
Inspect licensed premises and any and all documents and records	✓	
Investigate complaints made against licensed businesses	✓	
Perform audits of financial records to affirm legitimacy of transactions	✓	
Perform underage compliance checks of licensed retailers	✓	
Perform tax compliance audits and inspections		✓
Investigate criminal activity or take direct action to stop and prevent criminal activity		✓
Employ sworn law enforcement officers and grant them limited powers to enforce criminal laws related to marijuana		✓
Seize and dispose of marijuana belonging to a license holder, in accordance with established policies and procedures		✓
Take corrective enforcement actions and levy sanctions (e.g. suspend or revoke licenses, levy fines, order remedial education, etc.)	✓	
Establish disciplinary process and procedures for contesting findings of violations or sanctions, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Preside over disciplinary process and make final rulings	✓	
<i>Commercial products</i>		
Set product standards (e.g. types of products that can be sold, potency requirements, etc.)	✓	
Set product testing requirements (e.g. who tests, what they test, frequency of testing, which tests are used, & reporting requirements)	✓	
Set packaging & labeling requirements/restrictions	✓	
Set promotion & advertising requirements/restrictions	✓	
<i>Transparency & accountability</i>		

Employees & board members cannot have ownership interests in commercial marijuana industry	✓	
Power or duty to be granted in statute	Recommended?	Optional?
Hold regular public meetings and solicit public input, in accordance with Virginia laws	✓	
Submit annual reports to legislature and governor	✓	
Make information on the commercial marijuana market widely available to the public, including the location of all licensed businesses, information on marijuana sales, and information on tax revenues generated	✓	
Protect certain licensee information from disclosure (e.g. confidential information disclosed on license applications, such as social security numbers)	✓	
Share licensee information with financial institutions, as appropriate		✓
Run a license confirmation hotline		✓

SOURCE: JLARC staff review of other states' statutes authorizing regulation of commercial, adult use marijuana and other Virginia regulatory agencies.



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919 East Main Street Suite 2101 Richmond, VA 23219