WELCOME TO THE CANNABIS INSURANCE (C) WORKING GROUP

VIRTUAL ATTENDEES

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Date: 7/11/23

Virtual Interim Meeting

CANNABIS INSURANCE (C) WORKING GROUP
Tuesday, July 18, 2023
12:00 – 2:00 p.m. ET / 11:00 a.m. – 1:00 p.m. CT / 10:00 am – 12:00 p.m. MT / 9:00 – 11:00 a.m. PT

ROLL CALL

Ricardo Lara, Chair
Michael Conway, Vice Chair
Nathan Hall
Jimmy Harris
Christina Miller
Angela King
C.J. Metcalf
Ryan Blakeney
Gennady Stolyarov
Justin Zimmerman
California
Colorado
Alaska
Arkansas
Delaware
District of Columbia
Illinois
Mississippi
Nevada
New Jersey
Victoria Baca/
Melissa Robertson
Glen Mulready
Andrew R. Stolfi
Michael Humphreys/
Sebastian Conforto
Carlos Vallés
Beth Vollucci
Karla Nuissl
Michael Walker
California
New Mexico
Oklahoma
Oregon
Pennsylvania
Puerto Rico
Rhode Island
Vermont
Washington

NAIC Support Staff: Anne Obersteadt/Aaron Brandenburg

1. Consider Adoption of its June 20, 2023, Meeting Minutes
   — Peg Brown (CO)  
   Attachment A

2. Discuss Comments Received on the Final Draft of the Understanding the Market for Cannabis Insurance 2.0 White Paper — Peg Brown (CO)  
   Attachment B

3. Consider Adoption of the Understanding the Market for Cannabis Insurance 2.0 White Paper — Peg Brown (CO)  
   Attachment C

4. Hear a Panel Discussion on the Uncertainties in the Treatment of Hemp and Cannabis — Courtney Moran, LL.M. (Earth Law, LLC); Morgan Fox (NORML); Gillian Schauer (CANNRA), Michael Correia (Cannabis Consultant), and Beau Whitney (Whitney Economics)

SharePoint/NAIC Support Staff Hub/Member Meetings/C CMTE/2023 Summer/Cannabis/7-18-23/Cannabis Agenda
Consider Adoption of its June 20, 2023 Meeting Minutes

—Peg Brown (CO)
Cannabis Insurance (C) Working Group
Virtual Meeting
June 20, 2023

The Cannabis Insurance (C) Working Group of the Property and Casualty Insurance (C) Committee met June 20, 2023. The following Working Group members participated: Ricardo Lara, Chair, represented by Ken Allen (CA); Michael Conway, Vice Chair, represented by Peg Brown (CO); Jimmy Harris (AR); Austin Childs (AK); Jeff Shot (DE); Angela King (DC); C.J. Metcalf (IL); Randall Currier (NJ); Melissa Robertson (NM); Gennady Stolyarov (NV); Michael Drummonds and Jan Vitus (OR); Sebastian Conforto (PA); Beth Vollucci (RI); Mary Block (VT); and Michael Walker (WA). Also participating were: Erick Wright (AL); Andy Case and Khapre Hollins (MI); and Lela Ladd (WY).

1. Adopted its April 11 Minutes

The Working Group met April 11. During this meeting, the Working Group took the following action: 1) adopted its Nov. 29, 2022, minutes; 2) discussed the final draft of the Understanding the Market for Cannabis Insurance 2.0 white paper; 3) exposed the Understanding the Market for Cannabis Insurance 2.0 white paper for a 45-day public comment period ending May 26; and discussed its work plan.

Currier made a motion, seconded by Robertson, to adopt the Working Group’s April 11 minutes (Attachment TBD). The motion passed unanimously.

2. Received an Update on the Exposed Understanding the Market for Cannabis Insurance 2.0 White Paper

Brown stated that during its April 11 meeting, the Working Group exposed the Understanding the Market for Cannabis Insurance 2.0 white paper for a 45-day public comment period ending May 26. Notification of the exposure was redistributed on June 6 to include the Working Group’s interested regulators and the Property and Casualty Insurance (C) Committee’s distribution list, and the comment period was extended to July 7.

The drafting group will meet July 11 to review comments and discuss how they should potentially be incorporated in the white paper draft. The Working Group will review the comments received and consider adoption of the white paper during its next meeting on July 18.

3. Heard a Presentation from NAMIC on the Impact of Cannabis in the Personal Lines

Tony Cotto (National Association of Mutual Insurance Companies—NAMIC) stated more research is needed across all personal and commercial lines. Cannabis-related issues in the private passenger auto insurance line include driving under the influence, challenges in measuring toxicology, and assessing driver risk analysis. Self-grow implications, goods/dwelling coverage, and risk of fire and theft are issues in the homeowner’s line. Life and health insurance issues include prescription coverages and treatment of smoking.

Almost half of the U.S. lives in a state where recreational use of marijuana is legal under state law. As of June 2023, 23 states and the District of Columbia have laws legalizing recreational marijuana, 15 states have laws legalizing medical marijuana, 10 states have laws legalizing “limited” medical marijuana for specific designated medical conditions, and two states have no marijuana law. Driving while impaired is illegal in every state. However, marijuana-impaired driving laws vary widely in terms of the level of detail and sophistication. They range from...
zero tolerance of any sort of impairment to specific quantity limits where they actually test for tetrahydrocannabinol (THC) and have different levels that are deemed acceptable. Specifically, 12 states have “zero tolerance” laws for THC driving: Arizona; Delaware; Georgia; Indiana; Iowa; Michigan; Oklahoma; Pennsylvania; Rhode Island; South Dakota (for drivers under the age of 21); Utah; and Wisconsin. Additionally, five states have specific per se limits for THC to establish “impairment” while driving: Illinois; Montana; Nevada (only for felony violations); Ohio; and Washington. Colorado has a unique “permissible inference law” that applies if THC is identified in the driver’s blood in quantities of 5 ng/ml or higher. The remaining 37 states and territories include marijuana under “driving under the influence of drug” (DUID) laws. As most of the applicable laws are found in traffic and criminal codes—not insurance codes—partnering beyond insurance is important.

The National Highway Traffic Safety Administration (NHTSA) traffic arrest and fatality data indicate cannabis is the illicit drug most frequently found in the blood of drivers involved in motor vehicle crashes. A 2017 National Academies of Science, Engineering, and Medicine (NASEM) study found marijuana combined with alcohol is the most frequent combination of drugs by drivers. Per the Centers for Disease Control and Prevention (CDC), marijuana slows reaction time and reduces the ability to make decisions, which is vital to driving. Crash risk associated with drug use in two European studies from 2012 and 2014 found an extremely increased crash risk for marijuana used in conjunction with alcohol. Surprisingly, when only marijuana is used, there is only a 6% increase in fatal crashes and a 1-3 relative risk increase.

A 2018 study by the Insurance Institute for Highway Safety (IIHS) compared claim frequencies in Colorado, Oregon, and Washington after recreational cannabis was legalized to four non-recreational use neighboring states. The IIHS found meaningful spikes in claim frequency after legalization of recreational marijuana. However, in Oregon, there appeared to be almost no effect on collision claims after legalization. An Insurance Information Institute (III) study in 2019 found crash risk increased 22% while under the influence of marijuana. However, the presence of THC does not necessarily equal impairment. Medical cannabis may contain either or both cannabidiol (CBD) and THC, and the cognition effects need much further study.

Enforcement and testing difficulties make research in this area challenging. There is a lot of effort going into developing roadside testing capacities, but it is still in its infancy. Unlike alcohol, there is no “breathalyzer” for THC. THC stays in the body for varying lengths of time depending on metabolism, product type, potency, quantity, and frequency of use. Biological screenings and field sobriety tests (saliva, urine, and blood testing) are time-consuming. If impairment beyond alcohol is suspected by a police officer, a drug recognition expert (DRE) is called to the scene. DREs go through Advanced Roadside Impaired Driving Enforcement (ARIDE) training to learn how to observe, identify, and articulate the signs of impairment related to drugs.

Funding for marijuana and road safety research has grown from $30 million in 2000 to $143 million in 2018. The federal Infrastructure Investment and Jobs Act directs the U.S. Department of Transportation (DOT) to produce a report about scientific research and associated research barriers on marijuana impairment while operating a vehicle. The federal Medical Marijuana and Cannabidiol Research Expansion Act removes some restrictions on research and allows for Food and Drug Administration (FDA) development and approval of CBD/THC. Emerging technology includes improved and faster oral fluid tests, ocular data systems to test eye movements, mobile fingerprinting devices for officers to use during stops, DRE tablet application to assist with drug influence evaluation, and computerized assessment and referral systems to reduce recidivism.

Public awareness surveys reveal a low level of perceived risks related to marijuana impairment. The American Auto Association (AAA) Traffic Culture Safety Index (2021) found 94% of drivers believe driving after drinking alcohol is dangerous, but only 65% believe driving within an hour of using marijuana is dangerous. Additionally,
only 31% of drivers believe police will apprehend a driver for marijuana use. However, 79% support making it illegal to drive with more than a certain amount of marijuana in your system. In 2022, the Virginia Cannabis Control Authority (CCA) found that 33% believe marijuana makes them a safer driver.

More research is needed on the specific influence of cannabis on frequency/severity of crashes, injuries versus fatalities, and the impact of different kinds of cars and roads. Road safety affects private passenger auto (PPA), commercial trucking, and workers’ compensation. Additionally, the need for new contract language and claims, fraud, and litigation-related issues need to be evaluated.

Allen asked what four states the IIHS study compared California, Colorado, and Oregon against for auto claim frequencies related to impairment. Ladd stated she would also like the study. Brown stated the presentation materials and requested studies will be available on the Working Group’s committee page. Cotto stated he would make the study available to NAIC staff for distribution. He provided the link to the NHTSA study (https://www.nhtsa.gov/campaign/if-you-feel-different-you-drive-different). He later provided additional links to studies done by the IIHS (https://www.ihs.org/news/detail/crash-rates-jump-in-wake-of-marijuana-legalization-new-studies-show) and other research studies (https://www.ihs.org/topics/alcohol-and-drugs#marijuana).

Erick Wright (AL) stated recent research findings in 2022 state users are three times less likely to drive at all within three hours of using cannabis. He asked why these more recent findings contradict those presented from 2017 research. He also asked if there was any concern about artificial intelligence (AI), police, and testing bias since policing can be biased by race, with African Americans being stopped and arrested three times more than any other race. Cotto stated the insurance industry is aware of the potential bias and is always looking for additional sources of unbiased data.

4. Heard a Presentation from Wilson Elser on the Unique Risks of Social Consumption Lounges

Ian Stewart (Wilson Elser) stated on-site social consumption facilities allow people to consume cannabis openly as opposed to the current model of consuming only in private homes. On-site consumption lounges (also called pot cafes or lounges) are licensed in 10 states: Alaska, California, Colorado, Illinois, Massachusetts, Michigan, New Jersey, New Mexico, Nevada, and New York. Illinois is unusual in that it is a bring-your-own cannabis model. Cannabis event licensing is much more robust in terms of what states are allowing in comparison to on-site consumption facilities. There are good insurance options for cannabis events, with a number of carriers offering coverages.

On-site licensing and permitting is highly varied by state and locality. However, there are certain license restrictions in all states. No one under the age of 21 is allowed in consumption lounges. Consumption areas must be properly ventilated. Cannabis consumption cannot be visible from the street. Alcohol and tobacco cannot be sold. Games that encourage consumption are prohibited. Facilities are subject to approval at the municipal level, which opt-in. Factors in assessing risk include: 1) if it is attached to the cannabis sales facility or a stand-alone facility; 2) if cannabis can be sold in the facility; 3) if there are serving limits; 4) if there is packaging; 5) if there are label and warning requirements; 6) if customers can leave with unused cannabis; 7) if customers can bring in their own cannabis; 8) if food is sold at the facility and if it is prepackaged; 9) if there are warnings or instructions given to patrons; and 10) if there are occupancy limits. Many jurisdictions are looking for ways to cap risk. This includes limiting sales, having customer identification cards that inform on impairment effects and require oral affirmation of understanding, preventing outside marijuana, and helping impaired consumers find transportation. Assisting impaired consumers find transportation through ride-sharing partnerships or no-tow policies can present a moral hazard issue if patrons abuse it.
Considerations around patrons taking unused cannabis off-site include ensuring possession limits and compliant packaging. Although it raises the question of potentially encouraging public intoxication, it also potentially discourages over-consumption before leaving the facility. Considerations around how the facility is procuring cannabis include: 1) if the lounge is attached to a retail facility or stand-alone; 2) if the lounge can procure multi-serving items and resell individual pieces; 3) if Metrc modification is needed to allow the selling of fractional units; 4) if there are serving limitations; 5) if only prepackaged items are sold or if cannabis-infused food is allowed; 6) if there are good storage and disposal practices for cannabis waste; and 7) if there are constraints on last sales before the close of the business day. Nevada prohibits the sale of products two hours before the close of business. There is no uniform standard for service training related specifically to cannabis products. Cannabis needs a higher level of training due to the clinical effects on the body and difficulty identifying impairment compared to alcohol.

There are 35 states that currently have dram shop laws for alcohol that limit liability for those establishments that are serving alcohol to minors or visibly intoxicated adult patrons. (Some states only limit the liability for serving minors.) Some states, such as California, have their own standard for the obviously intoxicated minor. There are seven states that have no dram shop law. Nevada is one of the few states that have modified their dram shop laws to accommodate cannabis. In contrast, Michigan expressly allows for suits to be brought against establishments that service visibly intoxicated persons. Michigan also requires a minimum insurance coverage amount of $50,000 through an admitted carrier.

The liability landscape is a critical consideration when determining the risk profile for any particular on-site cannabis consumption facility. The hypothetical scenario of a person killing someone while driving home intoxicated from a nightclub, after having also earlier consumed alcohol at a restaurant and bar and cannabis at an on-site consumption lounge, illustrates the difference between the treatment of alcohol and cannabis. In California, every establishment but the on-site consumption lounge is immune from prosecution or a civil suit. In most states, an establishment only needs to be a substantial cause of an occurrence, not the only or most significant cause. Complicating this issue is that data on the extent to which THC concentration is correlated to subjective impairment is lacking. Additionally, ventilation and filtration must meet standards. Underwriting risks for on-site social consumption lounges needs to account for the different liability laws. Policy exclusions and endorsements need to change and be adaptable to the risks specific to each state.

Currier asked how cannabis lounges make money and turn over tables if they cannot sell food or alcohol. Stewart said this issue is a big dispute driver in terms of some of the restrictions that drag on profits, such as stopping sales of cannabis products two hours before closing time. The consumer experience for consumption is different from a bar or restaurant because only prepackaged food products can be consumed versus a meal. Consumers tend not to stay for hours and spend a lot of money. The most profitable on-site consumption facilities are attached to a retail facility.

Brown stated she noted both presenters indicated more research was needed in this space. She stated the Working Group’s drafting group noted the same need while working on the white paper. It is difficult to assess risk without the necessary data. She stated the Working Group would meet again July 18 to review exposure comments received and consider adoption of the white paper.

Having no further business, the Cannabis Insurance (C) Working Group adjourned.
Discuss Exposure Comments Received on the
*Understanding the Market for Cannabis Insurance 2.0* White Paper

—*Peg Brown (CO)*
Good Morning Anne:

Several individuals in the Insurance Division read the whitepaper and the only comment I received was in regard to the Cannabis Education Landscape on page 21. The suggestion is that claims adjusters be included as they will also need to understand the cannabis industry and may need specialized training on cannabis related claims.

Thanks,

Karla Nuissl
Director of Market Regulation and Producer Licensing
Vermont Department of Financial Regulation

D.  **Cannabis Education Landscape**

Education could help address complications and gaps experienced in the cannabis and insurance industries caused by the recent and rapid rate of state regulation. Those needing to maintain currency include cannabis business owners, employees and licensees, regulators, and the insurance industry, such as insurers, claims adjusters, agents and producers. Many involved in the cannabis industry and businesses would be better able to mitigate their risks with insurance through keeping current on applicable authorities and their requirements.

Regulators and other interested parties should enhance their knowledge through understanding industry trends, such as current and future state cannabis or insurance market conditions. For example, pre-license training for insurance producers does not touch on the topic of cannabis, but the insurance producers may be engaged in providing coverage to the cannabis industry. A producer of insurance should be well educated on the industry they provide coverage for, in order to ensure the procured policy is appropriate, adequate, and lawful. Additionally, claims adjusters may need specialized training on cannabis-related claims.
Re: Understanding the Market for Cannabis Insurance 2.0 white paper

Dear Members of the Cannabis Insurance (C) Working Group:

Insurance Services Office, Inc. (ISO) thanks the NAIC Cannabis Insurance (C) Working Group for the opportunity to provide comments on the exposure draft of the Understanding the Market for Cannabis Insurance 2.0 white paper. ISO appreciates the NAIC’s effort in addressing cannabis insurance. Furthermore, we have changes to the sections of the white paper reference ISO.

By way of background, ISO is licensed in all 50 states as an advisory, rating, or rate service organization under the relevant section of each state’s insurance code, and as such is regulated by state insurance commissioners and insurance departments. For you to best understand our perspective, please note that ISO provides information, including statistics, underwriting and claims information, actuarial analyses, policy language, and consulting and technical services in connection with multiple lines of property/casualty insurance, as well as information about specific properties. Our customers include insurers and reinsurers, as well as agents, brokers, self-insureds, risk managers, financial services firms, regulators, and various government agencies.

As a rate service organization (advisory organization), ISO’s primary role is to provide our insurer customers with advisory insurance policy forms and endorsements, policy writing and rating manuals, and advisory prospective loss costs. Our advisory programs cover roughly 30 insurance lines of business in the property/casualty market.

ISO would like to suggest the following changes to the sections of the white paper referencing our organization and its products:

Changes to pages # 36-37

ISO is an insurance advisory organization that shares actuarial information with its customers, including insurance companies, actuaries, agents and brokers, and government entities. ISO gathers large amount of loss data from various insurance companies to develop advisory prospective loss costs. Licensing carriers may use these loss costs to develop their ultimate insurance rates. Insurers obtain data about past losses to help develop rates based on projections of future losses, so when insurers have more loss data, they can predict future losses more accurately. ISO also creates general insurance policy forms and endorsements that become often viewed by many as an industry standard. The ISO-created policy forms and endorsements often created by ISO will incorporate includes policy language that have been analyzed by tested in the courts thereby having fewer risks providing licensing carriers with potentially less volatility in interpretation than if an insurer were to create their own form.

ISO insurance programs are available that provide options to provide insurance coverage to or exclude coverage with respect to cannabis-related businesses and exposures through an insurance policy endorsements. An insurance endorsement can be used at policy inception or after a policy is issued to add, delete, exclude, or otherwise alter coverage.
Typically, standardized forms will exclude cannabis from being covered due standard "illegality" and "contraband" exclusions. Previously, neither the ISO Commercial General Liability (CGL), Commercial Property (Property) nor Commercial Auto (CA) forms expressly addressed cannabis. However, ISO has created a series of developed several endorsements with "exceptions" to permit coverage within the terms of the endorsement to specifically address the cannabis exposure in these and other insurance programs. The related endorsements can enhance an insurer's flexibility to tailor their product by expressly addressing coverage with respect to cannabis-related exposures.

Currently, the standard ISO General Liability, Commercial Property and Commercial Auto forms do not address cannabis specifically. If an insurance carrier prefers to avoid providing coverage with respect to cannabis-related exposures in any of the related insurance programs, ISO makes available several exclusionary endorsements to exclude coverage. However, if there is interest in obtaining providing coverage for a cannabis-related exposure, ISO has made available several endorsements for that purpose. These endorsements permit insurers the flexibility to tailor their product by expressly addressing coverage for a cannabis-related exposure.

ISO offers endorsements for commercial general liability, commercial property, and commercial auto to specifically exclude coverage for cannabis, or to limit the exclusion by adding an exception for hemp, or hemp with lessor risk. ISO’s CGL and Property programs include options for the carrier to extend certain coverage with respect to the cannabis exposure. Carriers also have the option to extend limited coverage with respect to only the hemp exposure using a cannabis exclusion with an exception applying to hemp. Additionally, the CGL program includes options for insurance carriers to exclude liability for specifically listed products.

Within the commercial general liability program, ISO also has developed liability coverage endorsements with an aggregate limit for cannabis, a cannabis exclusion with hemp exception aggregate limit, and a cannabis liability exclusion with designated product or work exception subject to an aggregate limit.

Lastly, ISO developed the defense within limits endorsement specific to products liability coverage that would allow the carrier to limit the type cost of defense that is provided under related to products covered by the coverage form.

Similar options are available for ISO’s Businessowners, Commercial Flood, and Commercial Inland Marine programs.

Changes to pages # 38-39

3. Filing Process and Adoption of ISO and AAIS Forms

AAIS and ISO are advisory organizations which submit advisory loss costs, rules and forms to the respective regulating agency for review and approval. These advisory organizations have member or subscriber requirements to use their approved forms, rules, rates, or loss costs. Loss costs are the data on claims that have been paid out.

In some states, advisory organization file on behalf of insurers that have given them authorization, and other states may have varying filing requirements as in the case of California. In the absence of a filing made on behalf of an insurer, the insurance company submits a separate filing to adopt the product or endorsement before it can use what has been created by the advisory organization. For example, in California, insurer XYZ wanted to start writing a Cannabis Business Owners policy. As a member of an advisory organization, XYZ could use the advisory organizations forms and data for what coverages to offer, forms to use, rules to apply, and rates (loss costs multiplied by a loss cost multiplier to account for the insurer expenses) to use. Insurer XYZ would submit a prior approval new program filing with the California Department of Insurance to adopt the portions of the advisory organization material they wanted to use. The filing would then be reviewed and approved before insurer XYZ could start writing cannabis business owners risks using the advisory organizations filing as a foundation. So, two separate filing approvals are needed: first, the approval of the filing containing the advisory organization product; and then after the advisory organization’s product is approved, the insurance company(s) filings requesting adoption of the already approved advisory organization’s product.
ISO’s Cannabis Endorsements were approved for use in a majority of the states in Sept 2019. According to AAIS, CannaBOP was first filed and approved in California in 2018. Since then, CannaBOP has been approved in Colorado, and Nevada, Illinois, Michigan and Washington. In March 2021, CannaBOP was adopted by Golden Bear in Arizona.

[Please note, we have removed the sentence pertaining to footnote 157, therefore, the NAIC will have to adjust footnotes accordingly. We have also attached a clean version of the changes for convenience. Thank you for the opportunity to provide suggestions.]

Respectfully submitted,

Stephen C. Clarke
Vote to Adopt the *Understanding the Market for Cannabis Insurance 2.0* White Paper

—Peg Brown (CO)
REGULATORY GUIDE
UNDERSTANDING THE MARKET FOR CANNABIS INSURANCE: 2023 UPDATE

NAIC White Paper

TBD

Drafted by the
Cannabis Insurance (C) Working Group
of the
Property and Casualty Insurance (C) Committee
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I. INTRODUCTION

The cannabis industry continues to evolve and expand both in structure and in the number of states with legalized cannabis. The National Association of Insurance Commissioners (NAIC) Cannabis Insurance (C) Working Group’s original white paper adopted in 2019, *Regulatory Guide Understanding the Market for Cannabis Insurance*, found there are substantial gaps in insurance coverage for the cannabis industry. While gaps remain, much has transpired since the writing of the original white paper. This white paper seeks to provide an update on activities and trends since the adoption of the previous white paper.

The original white paper focused on the cannabis industry’s architecture, insurance needs and gaps, and insurance regulator best practices to encourage insurers to enter the market. The cannabis industry has become more sophisticated since the original white paper was published in 2019. It has also continued to rapidly expand. The maturation and expansion of the cannabis market is driving new product development, infrastructure changes and the need for businesses providing ancillary services. It is in these areas where insurance gaps most persist. As such, this white paper will include discussion on emerging insurance issues in these areas of the cannabis industry.

Additionally, the current state of cannabis regulation in the United States (U.S.) will be explored. States and U.S. jurisdictions continue to legalize cannabis, but it remains federally illegal under the Controlled Substances Act (CSA). This tension between federal and state law creates uncertainty with the insurability of cannabis and how policy language will be applied to coverages. Municipal bans on cannabis in states where cannabis has been legalized further complicate this issue. For these reasons, insurers remain reluctant to enter the cannabis space. Although capacity has improved since the first white paper’s publishing, most of the commercial insurance for cannabis-related businesses is still found in the excess and surplus lines (also known as the non-admitted) market. Potential paths forward to these issues, including best regulatory practices and addressing the needs of states regulating insurance and cannabis operators under state law.

This white paper will outline the complexities of the cannabis industry explaining the different designs of cannabis businesses, jurisdictional variations, current insurance types and offerings, potential future insurance products, differences presented by insuring hemp versus cannabis, and the importance of developing consistent regulatory practices for state cannabis insurance regulators. It will also cover cannabis history and terminology, cannabis policy trends at the state and national levels, current landscapes of cannabis regulation, licensing and education, cannabis business operating structures, and cannabis industry insurance market considerations. It will
conclude with a brief discussion on the future state of cannabis insurance, including possible next steps for all affected parties.

The need for accessible, affordable and adequate insurance for the cannabis industry will only continue to increase. Therefore, it will be vitally important for state insurance regulators to fully comprehend and carefully consider the needs and risks for this industry. Regulators can play an important role in encouraging insurance participation in the new cannabis-related industry, which can help all affected parties achieve risk mitigation with proper financial management. This will lead to increases in consumer protections, as well as better functioning cannabis and insurance markets.

II. UNDERSTANDING CANNABIS CONCEPTS AND TERMS

Cannabis, also known as marijuana, is an annual herbaceous plant in the Cannabis genus, under the Cannabaceae family.\(^1\) Cannabis has been referred to as consisting of three species of plants, cannabis ruderalis, cannabis sativa, and cannabis indica. The properties of the plant depend on and are determined by the type of cannabis being produced. Each plant type differs in size, shape, and production yield. Many plants utilized in modern day cannabis industries are hybrid species, which have been selected for certain plant traits.\(^2\)

Cannabis ruderalis has a naturally high composition of Cannabidiol (CBD), an anti-inflammatory non-psychoactive component, and low concentrations of delta-9 Tetrahydrocannabinol (THC) (the psychoactive substance associated with cannabis).\(^3\) This type of plant tends to be short and stalky and has the ability to begin the flowering cycle automatically at a certain point in the plant’s lifespan, regardless of lighting.\(^4\) Cannabis ruderalis has low levels of THC and produces smaller yields when comparing it to the indica or sativa variants.\(^5\)

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1 John M. McPartland, National Library of Medicine: National Center for Biotechnology Information – Cannabis Systematics at the Levels of Family, Genus, and Species (October 1, 2018) – [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6225593/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6225593/)
3 Id.
4 Id.
5 Id.
Cannabis sativa grows taller and more highly branched than the other two species.\(^6\) Cannabis sativa also grows narrow leaves and tends to produce higher yields than cannabis ruderalis.\(^7\) Additionally, it can produce high levels of THC composition.

Cannabis indica grows with short and dense branch structures.\(^8\) Cannabis indica generally has the shortest flowering period of the species.\(^9\) Cannabis indica also produces higher yields than cannabis ruderalis and can produce high levels of THC.\(^10\)

Historically the terms indica and sativa were introduced in the 18th Century to define different species of cannabis.\(^11\) Sativa was used to describe cannabis hemp plants, which were cultivated for plant fibers and seeds.\(^12\) Indica was used to describe intoxicating cannabis, which was harvested for seeds and hashish.\(^13\) The terms have been adapted to modern day usage, by allowing sativa to refer to cannabis with energizing properties, and indica to be synonymous with cannabis that relaxes the consumer.

Recently science has discovered that the effects of a cannabis plant to a consumer result from cannabinoids and terpenes. Cannabinoids are various naturally occurring, biologically active, chemical constituents of cannabis, including some that possess psychoactive properties.\(^14\) Examples of cannabinoids include delta-9 THC, a chemical psychoactive component of cannabis, and CBD a non-psychoactive and anti-inflammatory chemical component. THC is one of many chemical compounds found in the resin secreted by glands of the cannabis plant. THC can stimulate cells in the brain to release dopamine, creating euphoria.\(^15\) CBD is non-impairing and non-euphoric, where it does not cause impairment or intoxication to the consumer.\(^16\)

\(^6\) Id.
\(^7\) Id.
\(^8\) Id.
\(^9\) Id.
\(^10\) Id.
\(^12\) Id.
\(^13\) Id.
Cannabis also contains terpenes, which are aromatic chemical compounds produced and commonly found in plants. Each cannabis plant has a different terpene profile, and the profile of each plant can cause varied effects in the consumer.17

Usable cannabis and hemp are derived from the same species of plant. However, hemp is defined as cannabis that has a THC concentration of no greater than .3% total, as measured in dry weight.18 Hemp is cultivated for use in the production of a various assortment of products, including foods and beverages, personal care products, nutritional supplements, fabrics and textiles, paper, construction materials, and other manufactured and industrial goods.19

Cannabis is produced in several different forms: seeds, clones, plant tissue, plants, harvested materials (i.e., leaves, flowers, stalks, stems, pollen, and concentrates), and consumer products (consumable flowers, concentrates (i.e., hash, keif, waxes, oils, and vapor), topical goods, and infused consumables). The main categories of consumer cannabis products include Flower; Concentrates; and Infused Goods.20

- **Cannabis Flower** – THC in cannabis plants is produced by resinous glands that tend to concentrate in the plant’s flowers or buds.21 Cannabis farmers harvest the flower from the plant (removing bulky leaves and stems with less THC concentration) and dry the plant material of any moisture so it is prepared for consumption. Generally, cannabis flower is often smoked in pipes or hand-rolled cigarettes called joints, pre-rolled joints, or pre-rolls. Cannabis flower can also be smoked in a cigar or combined with tobacco and smoked as a cigarette.22

- **Cannabis Concentrates** – Cannabis can be harvested and processed through methods that produce cannabis concentrates. These products have been grown, harvested, and processed in a way to maximize cannabinoid, THC, and terpene content. Cannabis concentrates can take the form of hash, keif, waxes, or oils. The cannabis in these products has been concentrated through different scientific extraction and processing methods, including but not limited to: screens, sifts, bags, mechanical separation,

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21 Id.
22 Id.
chemical extractions, distillation, and pressurized heat applications. These methods employ different scientific strategies to extract, at highly concentrated ratios, THC from the cannabis plant. The final product of these extraction processes can result in a range of forms, from a dry and granular pollen powder similar to hash or keif, to a sticky resinous wax material, which can resemble plant sap, and is known as cannabis wax (i.e., budders, shatters, crumbles, sugars, distillates, or oils). These forms vary in properties such as viscosity and density and are named accordingly. For example, a cannabis concentrate wax marketed as a budder, is likely to have the same consistency as household butter, being pliable and not too rigid. However, a cannabis concentrate wax marketed as shatter would have extremely rigid properties, and the wax could break into pieces or shatter, if pulled or bent.23

- **Infused Goods** – Cannabis can also be processed into topical products and infused consumables. Topical products are those that are placed directly on the consumer’s skin. Infused consumables include beverages, edibles, and suppository products that have been infused with cannabis, including cannabinoids such as THC or CBD. Topical products are not associated with impairment or intoxication to the consumer. However, infused consumable products will lead to intoxication or impairment of the consumer, as these products contain cannabis concentrates, including THC and CBD. Examples of infused consumable products include cannabis beverages and edibles.24

### III. THE EXPANSION OF STATES LEGALIZING CANNABIS

#### A. Medical-Use and Recreational-Use Legalization in States

California was the first state in the United States (U.S.) to legalize cannabis for medical use.25 In 1996, California passed Proposition 215 allowing for the sale and medical use of cannabis for patients with AIDS, cancer, and other serious painful diseases. Currently, as of February 3, 2022, 37 states, the District of Columbia, and three territories allow for the medical use of cannabis.26

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In 2021, twenty-five years after California first authorized medical cannabis, the majority of states in the U.S. now allow the use of cannabis for medical purposes.

Colorado was the first state in the U.S. to legalize cannabis for recreational purposes in 2012. Washington also passed marijuana reform legislation shortly after Colorado in 2012 legalizing recreational use of cannabis. As of November 9, 2022, 21 states, two territories, and the District of Columbia have enacted legislation to regulate cannabis for nonmedical or recreational use. According to 2020 U.S. Census Bureau apportionment numbers, more than 145 million Americans now live in a state that has legalized cannabis.

The path towards legalization is not necessarily straight nor is it quick. The following are examples of this experience.

Today, cannabis laws in Alaska allow adult-use. The state first legalized medical marijuana in 1998, though for many years there was no way for patients to legally purchase it. Alaska was second in the U.S. to decriminalize possession of up to one ounce, and the third to legalize recreational marijuana. Residents over 21 years old with a valid state ID can legally grow up to six plants at home, and purchase up to one ounce of marijuana or 7 grams of concentrates from regulated dispensaries. Only cash is accepted.

Some states did not see cannabis legalized overnight. For example, Oregon’s Measure 80 (Oregon Cannabis Tax Act Initiative) in 2012 did not receive enough “yes” votes. The Measure would

[References]
28 University of Washington: School of Law – Cannabis Law (Recreational) – Legalization in Marijuana (December 2, 2021) – https://guides.lib.uw.edu/law/cannabis/wa
have permitted cannabis to be sold at state-licensed stores and would have permitted adults to purchase cannabis at such stores without a license. Oregon did not legalize such recreational cannabis use until July of 2016. This is a consistent experience among the states where there is a majority support for legalization, but it may take multiple attempts.

The nature of cannabis being regulated on a state-by-state basis permits state systems on cannabis regulation to differ quite drastically. The below map outlines the different states and their varied approaches to cannabis regulation:

![State Regulated Cannabis Programs](image)


B. Public Opinion Supports Legality Expansion

As discussed in the previous white paper, the majority of Americans now support legalized cannabis. In fact, public support of legalizing cannabis is increasingly favorable. Over 90% of U.S. adults in 2021 believe cannabis should be legal for either medical or recreational purposes.

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38 Ted Van Green, PEW Research Center: Americans overwhelmingly say marijuana should be legal for recreational or medical use (November 15, 2021) – [https://www.pewresearch.org/fact-tank/2022/11/22/americans-overwhelmingly-say-marijuana-should-be-legal-for-medical-or-recreational-use/](https://www.pewresearch.org/fact-tank/2022/11/22/americans-overwhelmingly-say-marijuana-should-be-legal-for-medical-or-recreational-use/)
Here, 60% support legalization of cannabis for medical and recreational use, and 31% support legalization of cannabis for medical use only. Public opinion on cannabis, and cannabis legalization, have changed significantly since President Richard Nixon signed the Controlled Substances Act (CSA) of 1970 into law. Once associated with the war on drugs, cannabis now presents business opportunities, with the state-legal cannabis markets expected to reach over $40 billion in the U.S. by 2026.

Public opinions and perspectives on cannabis are shifting to a level of lower scrutiny than experienced under the previous zero tolerance approach adopted by the federal government and individual states. For example, U.S. Congress has considered replacing the statutory term of reference from marijuana or marihuana to cannabis. The changing of terms from marijuana to cannabis is being pursued in part because there are potentially negative connotations associated with the history and origin of the term marihuana. States have also sought similar legislation for the switching of statutory references from marijuana to cannabis. The increasing legislative reformation of cannabis at the federal and state levels, as well as less scrutiny from the public, combine to show that cannabis is likely trending towards regulation versus outright prohibition.

IV. FEDERAL LEGISLATION ACTIVITY INTENSIFIES

Conflicting individual state and federal laws on cannabis have largely discouraged insurers from participating in coverage of the market. To illustrate this conundrum, cannabis is an illegal substance under the CSA. The CSA classifies cannabis as a Schedule I drug that has no currently accepted medical use in the U.S. A 2018 Farm Bill provision removed hemp from the list of Schedule I controlled substances. Therefore, the U.S. Drug Enforcement Administration (DEA) will not consider hemp-derived cannabinoids as a controlled substance that is subject to the CSA. However, cannabis and CBDs (irrespective of being sourced from cannabis or hemp) are subject to Federal Drug Administration (FDA) approval under the Federal Food, Drug, and Cosmetic Act.

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39 Id.
45 Id.
46 U.S. Department of Agriculture Website, Farm Bill – https://www.usda.gov/farmbill
(FD&C Act). The FDA has not yet approved a cannabis drug for medical use or treatment. The FDA has approved CBD medicines for the treatment of epilepsy. Federal law currently prohibits CBD from being added to any food or drink product. On July 22, 2019, the FDA issued formal letters making the determination that certain CBD products were sold in violation of the FD&C Act. Despite this prohibition, products containing CBD are generally widely available in the retail marketplace in formulations ranging from nutritional supplements to cosmetics and for both human and veterinary use.

Companies functioning within state-legal cannabis industries generally experience banking restrictions due to federal regulations. This causes many cannabis businesses and cannabis-related businesses (CRBs) to function on a cash-only basis. Current estimates show that approximately 70% of CRBs operate solely as a cash-only business and have no formal relationship with a bank. This causes CRBs to possess and process large amounts of money in cash form, which can create a higher risk of theft and additional liabilities. More on this and the federal authorities limiting the abilities of cannabis businesses to engage in financial transactions can be found in the NAIC’s White Paper on Understanding the Market for Cannabis Insurance (2019).

There is an ongoing concern about entities supporting cannabis businesses as being charged with violation of the Racketeer Influenced and Corrupt Organizations (RICO) Act. In addition, the federal Internal Revenue Code 280E, prevents cannabis businesses from taking advantage of tax deductions for actual economic expenses incurred in the ordinary course of business. This can prevent cannabis businesses from taking deductions related to insurance and premiums or costs, such as for workers' compensation and health insurance.

Recently, the federal government has been considering cannabis reform legislation at a record setting pace. During the 117th Congress (in 2021 – 2022), at least five different pieces of national cannabis reform legislation were introduced. Each bill took a different approach to altering the

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50 NAIC – CIPR Topics: Cannabis and Insurance (August 18, 2021) – https://content.naic.org/cipr_topics/topic_cannabis_and_insurance.htm
51 Id.
federal government’s position on cannabis. The bills include the SAFE Banking Act, the CLAIM Act, the Marijuana Opportunity Reinvestment and Expungement Act of 2021 (MORE), the Cannabis Administration and Opportunity Act (CAOA), and the States Reform Act of 2021.

The CLAIM Act would provide a safe harbor from penalties or other adverse agency action for insurance companies that provide services to cannabis-related legitimate businesses in jurisdictions where such activity is legal. The Government Accountability Office (GAO) must report on barriers to marketplace entry for minority-owned and women-owned cannabis-related businesses.53

The NAIC submitted a letter in support of the CLAIM Act on June 17, 2021. The letter acknowledged the bill would provide a safe harbor from violations of federal law for those engaged in the business of insurance participating in cannabis industry activity that is permissible under state law. By removing barriers, the CLAIM Act would permit insurers to provide insurance coverage options for these commercial policyholders.54

The SAFE Banking Act would remove constraints on depository institutions to provide banking services to a legitimate cannabis-related business. Under the SAFE Banking Act, proceeds would not be considered unlawful activity and not run afoul of anti-money laundering laws. Under this Act, depository institutions would not be at risk of forfeiting financial assets for providing a loan or other financial services to a legitimate cannabis-related business. The NAIC also submitted a letter in support of the SAFE Banking Act on June 17, 2021.

The MORE Act would decriminalize cannabis. Specifically, it removes cannabis from the list of scheduled substances under the Controlled Substances Act (CSA) and eliminates criminal penalties for an individual who manufactures, distributes, or possesses cannabis. The States Reform Act of 2021 would remove the legal obstacles preventing U.S. cannabis companies from accessing the financial system and allow for interstate commerce of cannabis. The bill also requests the release and expungement of people convicted of nonviolent cannabis-only crimes.55

On July 21, 2022, Senate Majority Leader Chuck Schumer introduced the Cannabis Administration and Opportunity Act (CAOA).56 The CAOA attempts to accomplish significant reformation of

federal cannabis policy allowing states to lead on cannabis regulation and establishing a federal regulatory paradigm similar to that of alcohol and tobacco. The CAOA would expunge federal cannabis-related records and create funding for law enforcement departments to fight illegal cannabis cultivation.

On October 6, 2022, President Biden asked the Secretary of Health and Human Services and the Attorney General to review how marijuana is categorized under federal law. President Biden also signed the Medical Marijuana and Cannabidiol Research Expansion Act (Statute at Large 136 Stat. 4178 - Public Law No. 117-215), in December 2022. This new law is anticipated to increase access to the scientific study of cannabis by streamlining the government issuance of permits to scientists who want to study the substance and expediting applications for cannabis producers (including universities) that grow the substance for research purposes. None of these laws passed in the previous Congress, but it is anticipated that discussion will continue on these issues.

V. CANNABIS BUSINESS REGULATORY, LICENSING, AND EDUCATION LANDSCAPE

A. States Legalize Cannabis Around the Cole Memorandum

Colorado and Washington were the first states to legalize cannabis for recreational use in 2012. At that time, nineteen states had already legalized cannabis for medical use. To address the growing legalization of cannabis use by the states, the federal Department of Justice (DOJ) issued the Cole Memorandum in 2013. The Cole Memorandum provided states with the federal position on enforcement of marijuana under the CSA. Specifically, it provided that the federal government would not prioritize enforcement or interference with state implementation of regulated cannabis programs if states upheld the Department of Justice’s and federal government’s priorities. These priorities included:

- Preventing the distribution of marijuana to minors;

59 The White House: Briefing Room Website – Statement from President Biden on Marijuana Reform, (October 6, 2022) – https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/06/statement-from-president-biden-on-marijuana-reform/
61 Id.
• Preventing revenue from the sale of marijuana from going to criminal enterprises, gangs, and cartels;
• Preventing the diversion of marijuana from states where it is legal under state law in some form to other states;
• Preventing state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity;
• Preventing violence and the use of firearms in the cultivation and distribution of marijuana;
• Preventing drugged driving and the exacerbation of other adverse public health consequences associated with marijuana use;
• Preventing the growing of marijuana on public lands and the attendant public safety and environmental dangers posed by marijuana production on public lands; and
• Preventing marijuana possession or use on federal property.

Many states that voted to legalize the sale and use of cannabis designed their regulated cannabis systems to carefully consider the DOJ and federal government priorities outlined in the Cole Memorandum. Each state took an individualized approach in implementing cannabis regulation. This has led to individual cannabis industries across the country that operate under separate and distinct authorities for their jurisdictions. The differences in state cannabis regulations are evident in the varied cannabis business licensing programs, regulation authorities, consumer experiences, and associated practices for CRBs. For example, Colorado has implemented a regulatory system, where cannabis businesses can vertically integrate their businesses, including agriculture, retail sales, and manufacturing. Washington has implemented a prohibition on vertical integration, requiring licensed cannabis businesses to operate in their licensed business classification, such as a cannabis retailer, cannabis producer, or cannabis processor.

The Cole Memorandum was rescinded by the federal government in 2018. This created a gray area for states with legal cannabis operations. The United States Attorney General issued new guidance in 2018, under Attorney General Jefferson B. Sessions. The new guidance directed U.S. state attorneys to use their discretion, as well as well-established principles that govern all federal prosecutions, in cannabis enforcement. The current administration has expressed views to return to a Cole-like environment but has not taken an official position.

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63 Id.
B. The Role of CANNRA

States have been striving to work towards best policies and practices in the cannabis and insurance industries by working through the Cannabis Regulators Association (CANNRA). CANNRA is a national not-for-profit organization of cannabis regulators that provides policymakers and regulatory agencies with the resources to make informed decisions when considering whether and how to legalize and regulate cannabis. CANNRA is a support association for regulatory agencies, not a cannabis advocacy group. As such, it takes no formal position for or against cannabis legalization, but rather seeks to provide government jurisdictions with unbiased information to help make informed decisions when considering whether or how to legalize or expand regulated cannabis. Membership in CANNRA is limited to regulators and representatives from relevant government offices. CANNRA is funded by member agencies and does not receive funding from industry or advocacy groups.

CANNRA strives to create and promote harmony and, where possible, standardization across jurisdictions that legalize and regulate cannabis. CANNRA helps interested parties find objective data and evidence-based approaches to policy making and implementation. CANNRA also works to ensure federal officials benefit from the vast experiences of states across the nation to ensure any changes to federal law adequately address states’ needs and priorities.

C. Cannabis Impairment and Insurance Considerations

Insurers rely on data to help them understand the risks they indemnify. However, there is still much to know about impairment and cannabis use. Cannabis shares the Schedule I classification along with some of the most serious drugs including heroin, LSD, and meth. As such, cannabis used for studies must come from federally approved facilities. Historically, the University of Mississippi was recognized as the only institution federally approved to cultivate cannabis for research, with the license awarded in 1968. The cannabis that is produced in this facility does

65 Id.
68 Id.
69 Id.
70 Id.
71 Omar Sacirbey, MJ Biz Daily: DEA close to allowing companies to grow cannabis for scientific research (December 17, 2021) – https://mjbizdaily.com/dea-preparing-to-ok-companies-to-grow-cannabis-for-scientific-research/#:~:text=Currently%2C%20the%20University%20of%20Mississippi%20awarded%20its%20license%20in%201968.
not resemble the cannabis in modern day retailers. In fact, the cannabis produced in the federally approved facilities does not mimic the appearance nor potency of state regulated cannabis.72

Recently the federal government, through the DEA, approved registrations for two other companies to produce cannabis for research purposes.73 This is a historic development for the research of cannabis and allows the DEA to oversee the production of research-grade cannabis at a level not previously achieved with the University of Mississippi.74 The two companies include Groff North America Hemplex and the Biopharmaceutical Research Company, who began harvesting their first crops by January of 2022.75

The limitations on human studies, with limited accessibility to cannabis that resembles that same substance in state legal medical and retail markets, creates substantial complications to the scientific research of cannabis, including long-term studies on effects or dangers of impairment and usage. Thus, they provide limited information from which to develop policy or make informed decisions.

Testing for cannabis impairment is difficult due to the limits of drug testing technology, as well as the lack of a recognized limit to determine impairment. For example, the nationally recognized level of impairment for alcohol is set at .08 g/mL of blood alcohol concentration, which is well founded with scientific research. However, there is no similar national standard set for driving under the influence of cannabis. Cannabis may not affect all people consistently. Cannabis may remain in a person’s body for weeks after consumption, and may still appear in drug tests, even though it may no longer be causing impairment to the consumer. As a practical matter, because of these problems, drivers may be tested for high blood alcohol concentrations but may not be tested for other impairing substances.

The states of Illinois, Montana, Nevada, Ohio, and Washington have all adopted specific per se limits for THC present in a driver’s body, with ranges between 2 nanograms and 5 nanograms per milliliter of blood.76 These authorities provide that when a person has reached or exceeded the legal threshold, that person is considered impaired under law. The state of Colorado has a

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74 Id.
75 Id.
reasonable inference law that outlines in instances where THC is identified in a driver’s blood, at quantities of 5ng/ml or more, it is assumed that the driver was under the influence.\textsuperscript{77} The reasonable inference laws are different from the per se laws, as they allow drivers who are charged to raise an affirmative defense showing despite having tested at or above the legal limit, they were not actually impaired. There are also twelve states that have zero-tolerance laws for THC, including: Arizona, Delaware, Georgia, Indiana, Iowa, Michigan, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Utah, and Wisconsin.\textsuperscript{78}

Complicating this issue is the lack of technologies, scientific methodologies, or accepted best practices in discovering or determining cannabis impairment. New technologies are being developed and generally involve biological screening or field sobriety tests. Here, examples of technologies used to detect cannabis impairment include saliva, urine, and blood testing machines. A few states, including Alabama and Michigan, have adopted active oral fluid roadside tests for drivers suspected to be impaired by cannabis use, among other drugs, which could negatively impact their driving.\textsuperscript{79} Law enforcement officers in most states also generally possess discretion to determine whether an individual is impaired and presents a risk to themselves or others, whether using cannabis or other impairing substances in public, the workplace, or in driving situations. Many law enforcement agencies employ Drug Recognition Experts who rely on professional experience and training to discover and determine whether an individual is impaired by cannabis usage. The use of new technology, scientific methodology, and best practices among law enforcement agencies will be critical in mitigating the risks of cannabis impairment in our workplaces and on our roadways.

1. Cannabis Driving Impairment – Cannabis DUI

Preventing cannabis users from driving while impaired was a top priority enumerated in the Cole Memorandum and an issue that each state with a regulated cannabis industry has considered. Cannabis is the second leading substance present in cases of driving under the influence, only trailing to alcohol.\textsuperscript{80} Scientists and law enforcement are still seeking a reliable DUI test to identify impairment from cannabis use. While there are blood tests that can detect some of cannabis’s components, such as THC, there is no scientifically accepted standardized method of testing or determining the level of impairment from a cannabis user’s blood or breath. Law enforcement

\textsuperscript{77} Colorado Department of Transportation: FAQs on Impaired Driving (September 13, 2022) – https://www.codot.gov/safety/impaired-driving/druggeddriving/faqs
\textsuperscript{78} National Conference of State Legislatures (NCSL): Drugged Driving | Marijuana Impaired Driving (September 23, 2021) – https://www.ncsl.org/research/transportation/drugged-driving-overview.aspx
\textsuperscript{79} Id.
\textsuperscript{80} National Institute on Drug Abuse: Drugged Driving DrugFacts (September 13, 2022) – https://nida.nih.gov/publications/drugfacts/drugged-driving
Some insurance backgrounds

The suspect to cannabis with cannabis.86,87 NAMIC’s research revealed that the states that have legalized cannabis for medical and recreational use will only continue to grow as ballot initiatives and legislation are codified. This places a focus on the scientific research, funding, and technology development that will assist all parties in better understanding and ability to mitigate risks that cannabis-impaired driving may present. Educational campaigns to educate drivers of all ages and backgrounds on the potential risks associated with cannabis consumption will be needed.

Some studies, including studies associated with NAMIC and the American Property Casualty Insurance Association (APCIA), show a direct relation between cannabis regulation and increased auto accidents, as well as an associated increase for auto insurance premiums.82,83 Other studies focus on data that shows an increase in cannabis DUI and related car accidents, whether related to recreational or medical cannabis legalization.84,85 Multiple insurance periodicals have recorded similar increases in car insurance claims and accident rates after states have regulated cannabis.86,87 Obviously increased accident rates and claims have an effect on premium, however, at this point, research is inconclusive on whether the relationship is a correlation or a direct causation.

Education for those outside of the cannabis industry can be conducted through public service announcements, government sponsored education efforts, informative websites, and news media. For example, the US Department of Transportation, the National Highway Traffic Safety Administration, and the Ad Council have recently started a campaign communicating the dangers

of driving while under the influence of cannabis, called Drug Impaired Driving, if you feel different, you drive different.88

2. Cannabis Workplace Impairment

Currently two out of three Americans live in a state that has approved the sale and use of recreational cannabis.89 Cannabis can appear in drug tests and remain in a consumer for 30 days or longer.90 Therefore, cannabis users could lawfully consume the substance during their off-work hours, but still be affected by cannabis or THC in their systems during work. Employers must assess if their staff present a risk of liability to themselves or others. Problems include issues with pre-employment drug testing, determining employee impairment, establishing reasonable accommodations, and maintaining medical privacy.

It should be noted there is little data on the impact of legal market cannabis consumption on everyday life. There is a huge range of products available on the legal market that have never touched a research lab. Cannabis consists of a few primary cannabinoids and hundreds of minor cannabinoids and terpenes, many still being discovered. There is also a huge variation in potency across strains. Different products have different levels of the major and minor cannabinoids, and each looks distinct. For these reasons, the study of cannabis is unlike the study of other drugs where one is pretty much focused on a dose dependent effect of a single pharmacological agent.91

Overlapping authorities and developments in case law on the topic have revealed that employers lack consistent and developed guidelines for cannabis drug testing in the workplace. Case law in several states including California, Oregon, and Washington has established that a private employer can terminate an employee for failing a company’s drug test, even if that employee is authorized under state law to use cannabis as a medicine.92 Multiple states, including Arizona, Arkansas, Connecticut, Delaware, Maine, Minnesota, Oklahoma, Pennsylvania, Rhode Island, and

88 U.S. Department of Transportation (NHTSA) (April 3, 2023) – https://www.nhtsa.gov/campaign/if-you-feel-different-you-drive-different#ecture=Several%20studies%20show%20that%20smoke%20be%20arrested%20for%20DUI.
90 Zawn Villines, Medical News Today: How long can you detect marijuana (cannabis) in the body (February 21, 2022) – https://www.medicalnewstoday.com/articles/324315
91 Cinnamon Bidwell, Presentation from the University of Colorado on Emerging Scientific Issues in the Cannabis Space (December 1, 2021)
West Virginia prohibit employers from refusing to employ an applicant or terminate an existing employee based only on a positive drug test for cannabis.93

Recently some employers in the private sector have been reducing the scrutiny placed on cannabis use and impairment in the workplace. In September 2021, Amazon made the corporate decision to no longer deny employment, or terminate employees, due to failed drug tests due to cannabis use.94 Amazon even emphasized the company would reinstate employment eligibility for previous applicants and staff who were terminated or deferred during random or pre-employment cannabis screenings.95 However, this policy has exceptions, where employees involved in transportation may be required to prove they have not used and will not be impaired by cannabis.96 The shift from a zero-tolerance policy on drug testing for cannabis use, to one of acceptance, is further evidenced by the developments in professional sports industries. Four of the biggest professional sports in America, including NBA, NHL, MLB, and NFL, have all relaxed their drug testing policies as it pertains to cannabis.97

3. Other Cannabis Impairment Considerations

Cannabis businesses are attempting to capitalize on the trend of increased usage by bringing ingenuity to their products and services.98 While many consumers historically smoked the substance in private settings, there are now other innovative forms of cannabis in the regulated markets, which allow consumers to eat or vaporize the substance discreetly in public environments.99 These trends of increased exposure, additional usage, as well as ingenuity in the cannabis industry, combine to create complications with regulating and insuring the risks of cannabis impairment.

Prior to legalization, cannabis users would need to consume their cannabis products in private locations, out of view from the public and law enforcement. Cannabis users employed these strategies to secretly consume the illegal cannabis products for effect, while also avoiding risk of penalties from law enforcement. However, with legalization of cannabis came the ability for consumers to use cannabis in different forms and settings. For example, a current medical

93 Id.
95 Id.
96 Id.
99 Id.
cannabis patient in Las Vegas can lawfully use a cannabis vaporizer at a cannabis consumption lounge to administer their prescribed medications.\textsuperscript{100}

Cannabis legalization and ingenuity possess potential to increase the frequency, exposure, and risks of cannabis impairment. Cannabis is now offered in newer and varied mediums, such as beverages and edibles, and can be created with concentrated forms of cannabis that are much more potent. Cannabis consumers run the risk of being uninformed on if the product has been scientifically researched or studied for long-term side effects, and what level of impairment it is likely to produce.

The risks posed by cannabis impairment must be carefully considered in the underwriting process to ensure adequate coverage and appropriate premiums. Risk selection and risk classification play important roles in insurance underwriting systems. The current state of cannabis research may not provide the insurance industry with a sufficient understanding of cannabis impairment and how it can impact underwriting. An incomplete understanding of the increased risks associated with cannabis impairment could lead to circumstances of underinsured policyholders or a lack of sustainable insurer solvency.

\textbf{D. Cannabis Education Landscape}

Education could help address complications and gaps experienced in the cannabis and insurance industries caused by the recent and rapid rate of state regulation. Those needing to maintain currency include cannabis business owners, employees and licensees, regulators, and the insurance industry, such as insurers, claims adjusters, agents and producers. Many involved in the cannabis industry and businesses would be better able to mitigate their risks with insurance through keeping current on applicable authorities and their requirements.

Regulators and other interested parties should enhance their knowledge through understanding industry trends, such as current and future state cannabis or insurance market conditions. For example, pre-license training for insurance producers does not touch on the topic of cannabis, but the insurance producers may be engaged in providing coverage to the cannabis industry. A producer of insurance should be well educated on the industry they provide coverage for, in order to ensure the procured policy is appropriate, adequate, and lawful. Additionally, claims adjusters may need specialized training on cannabis-related claims.

E. Vaping Regulations and Their Impact on Cannabis

As cannabis is legalized and regulated in different states across the country, ingenuity in cannabis products and technologies continues to create complications for regulators, insurers, businesses, and consumer populations alike. An example of this is the increased use of and access to cannabis vaping or vaporization products.

Vaping technology was developed to provide a noncombustible nicotine delivery system to help cigarette and tobacco smokers. Vaping devices heat liquid into an aerosol that can be inhaled. This method of vaporization has now been adapted for cannabis use and is the method often used to consume cannabis products. Studies have shown that cannabis users believe vaping the substance is less harmful to their health than the consumption alternative of combustible smoking methods.101 This theory is based on the reduction of ingesting harmful contaminants present in cannabis smoke, which are less present in cannabis vapors.102 The significant increase in vaping has raised concern about the health and safety of this practice. Of particular concern is the increase in vaping among teenagers.

A large illicit cannabis market continues to exist without concern for product safety and exacerbates issues of product liability coverage. Illicit products containing substances not allowed in a regulated market are part of the challenge. Current scientific research provides inadequate information to understand the effects of acute and long-term inhalation of aerosols emitted by vaping devices. A lack of studies on the substance itself or the consumption methodologies means the consequences of vaping cannabis are largely unknown. While many choose to vape believing it is a safer method of consumption, studies are needed to determine whether vaporizing cannabis truly offers a safer experience for the consumer.

Millions of Americans have consumed cannabis from vaporization devices over the past decade and the possibly dangerous effects are now being observed.103 In 2019, America experienced an outbreak of e-cigarette, or vaping, product use-associated lung injuries (EVALI).104 The Centers for Disease Control and Prevention (CDC) established a link between EVALI and cannabis users, where a substance called Vitamin E Acetate was added to cannabis vaporization products, which

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102 Id.
103 Centers for Disease Control and Prevention: Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products (December 6, 2021) – https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html#what-we-know
104 Id.
can interfere with normal lung functioning.\footnote{Centers for Disease Control and Prevention: Severe Lung Disease FAQ (December 6, 2021) – https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease/faq/index.html} Since this outbreak was the result of an additive, it does not speak to the impact of vaping itself, but does speak to the need for regulation.

Governments in jurisdictions with regulated cannabis industries took alternative approaches to respond to the outbreak of EVALI cases in cannabis consumers. Washington and Oregon enacted emergency bans on cannabis vaping product additives, whereas Massachusetts temporarily stopped the sale of all vaping products.\footnote{Will Stone, NPR: Some States with Legal Weed Embrace Vaping Bans, Warn of Black Market Risks (October 26, 2019) – https://www.npr.org/sections/health-shots/2019/10/26/770377080/some-states-with-legal-weed-embrace-vaping-bans-warn-of-black-market-risks} While many jurisdictions were concerned about EVALI’s association with consumers who vaporized cannabis, some states were confident in the safety of products being produced within their regulated systems. For example, Pennsylvania released a position in response to the EVALI outbreak, explaining that none of the EVALI cases experienced in the state were connected to the state’s medical cannabis program.\footnote{Tony Rhodin, Lehigh Valley Live The Express-Times: With 149 Illnesses in U.S. Linked to Vaping Pennsylvania Says its Medical Marijuana Vape Products are Safe (August 23, 2019) – https://www.lehighvalleylive.com/news/2019/08/with-153-illnesses-in-us-linked-to-vaping-pennsylvania-says-its-medical-marijuana-vape-products-are-safe.html}

### F. Licensing Takes a Focus on Social and Economic Equality

The prohibition of cannabis in America has disproportionately and adversely impacted people of color.\footnote{Robert Hoban, Forbes: The Critical Importance of Social Equity in the Cannabis Industry (August 31, 2020) – https://www.forbes.com/sites/roberthoban/2020/08/31/the-critical-importance-of-social-equity-in-the-cannabis-industry/?sh=41a7ba0d1a6d} Studies have shown that “… on average Black people are almost 4 times more likely to be arrested for pot than white people.”\footnote{Sagiv Galai, ACLU: Equity Must Be at the Heart of Marijuana Legalization (June 26, 2019) – https://www.aclu.org/blog/criminal-law-reform/drug-law-reform/equity-must-be-heart-marijuana-legalization} This racial disparity in law enforcement is present in all areas of the country, regardless of the demographics of the jurisdiction.\footnote{ACLU: Report: The War on Marijuana in Black and White (published June 2013) – https://www.aclu.org/report/report-war-marijuana-black-and-white?redirect=criminal-law-reform/war-marijuana-black-and-white}

State-legal cannabis industries are now estimated to be worth over 18 billion dollars and provide for hundreds of thousands of full-time jobs.\footnote{Alex Malyshev and Sarah Ganley, Reuters: The Challenges of Getting Social Equity Right in the State-Legal Cannabis Industry (July 22, 2021) – https://www.reuters.com/legal/litigation/challenges-getting-social-equity-right-state-legal-cannabis-industry-2021-07-22/} However, minority populations that were most adversely impacted by the war on drugs and prohibition of cannabis are being excluded from the
States legalizing cannabis have recently taken efforts to resolve the racial disparity in cannabis business ownership by employing social and economic equity provisions into their laws. Social and economic equity in cannabis licensing can vary by jurisdiction, but includes reducing barriers, improving access, and assisting cannabis business license applicants who are from certain communities who have been adversely and disproportionately impacted by cannabis prohibition. These groups can include but are not limited to women-owned businesses, minority-owned businesses, distressed farmers, and service-disabled veterans. The intended goal of social and economic equity provisions in cannabis business authorities is to achieve participation in the legalized industry for those who were most negatively affected by the war on drugs.

States that have experienced cannabis reform legislation, either recreationally or medically, have taken different approaches to implementing social and economic equity provisions in their regulated cannabis markets. For example, Michigan in processing recreational cannabis business licenses will reduce licensing fees for prospective business owners living in cities where residents were disproportionately impacted by the war on drugs. California offers a statewide program for recreational cannabis to assist local governments with equity provisions in providing loans, grants, and technical assistance to cannabis entrepreneurs and employers. It is too early to know the effect on the insurance market for cannabis businesses of these regulatory policies. However, there are efforts to address social and economic equity concerns in insurance generally.

VI. CANNABIS OPERATING AND ORGANIZATIONAL STRUCTURES EVOLVE

The industry’s growing legitimization has intensified merger and acquisition activity for gain of market share. The year 2021 is generally acknowledged in both the financial and cannabis

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112 Id.
113 MJBizDaily: MI Marijuana rules changes include new licenses, lower fees, social equity (September 1, 2021) – https://mjbizdaily.com/michigan-marijuana-rules-changes-include-new-licenses-lower-fees-social-equity/
industry press as one of overall sales growth marked by rising incidence of consolidation.\textsuperscript{115} The significant amount of consolidation in the industry continues to produce frequent ownership changes and business structure modifications.\textsuperscript{116} There are varying aspects through which this cannabis market evolution can be viewed, and each has implications for insurance coverage availability. As noted in his article “The Year of Cannabis Industry Consolidation”,\textsuperscript{117} Robert Hoban writes: “There are loosely four common phases of an industry’s life cycle – introduction, growth, maturity, and decline. The cannabis industry is not yet mature across the board, but largely stuck in the growth phase. The step between the later stages of the growth phase and the beginning of maturity comes down to one word: consolidation. That is the mantra for 2021.”

There are some indications that more vertically integrated– or common ownership along the supply chain– is occurring. It is viewed that larger scale cultivation operations permit greater consistency in raw material availability. Some of this can be demonstrated by the increasing prevalence of indoor or greenhouse cultivation, which permits a more controlled growing environment and avoids some of the risks associated with traditional outdoor grow operations (e.g., use of clones rather than seed; environmental controls for light, heat, water, pest control; multiple harvests per year in a smaller footprint; more accessible warehousing/storage for processing, etc.). Such physical consolidation is much more friendly to vertical integration of ownership. This integration also permits more risk management along with scale to support acquisition of insurance coverage. Greater scale and integration of cannabis businesses also allow purchase of more comprehensive coverage through the excess and surplus lines market. The downside is that there are indications that the reinsurance market to cover such risks continues to be constrained resulting in policy limits which may not reflect the scale or potential risk of the business.

Larger, and more vertically integrated, cannabis businesses are able to seek out and negotiate more comprehensive insurance packages and can pay the higher premiums for tailored coverage. In contrast, cottage industry players (e.g., independent retailers) tend to look for more “off-the-


\textsuperscript{116} Oregon Liquor Control Commission (OLCC): Update on Marijuana Licensing (August 30, 2018) – \url{www.oregon.gov/olcc/marijuana/Documents/Bulletins/Licensing_Delay_DirectorsMessage.pdf}

shelf” insurance solutions as would typically be available in the admitted market (but appears to be not widely available). Some admitted insurance coverage is available for discrete types of insurance. A good example is workers compensation insurance, which is widely available for employers in the cannabis industry – but such niches are limited.

Another aspect of this consolidation is change in the ownership and sophistication of the industry. In 2019 in Colorado, the Colorado legislature changed state law to allow people who live outside Colorado to own cannabis businesses in the state, and it permitted publicly traded companies and private capital funds to invest in Colorado cannabis businesses. This “opening” of the market for cannabis businesses was ostensibly premised on increased access to capital for cannabis businesses, but it also fueled M&A activity with concomitant insurance aspects. In particular, availability of directors’ and officers’ liability coverage is often cited as a challenge for cannabis businesses.

VII. CANNABIS INSURANCE NEEDS AND COVERAGE AVAILABILITY

A. Admitted vs. Excess and Surplus Lines Market

While there are a few states with admitted carriers, most of the cannabis industry is purchasing insurance through the excess and surplus lines market. Some admitted carriers, mostly in specific lines such as required workers’ compensation, will write coverage for cannabis businesses. However, for more comprehensive or package coverage, the substantial majority is written through excess and surplus carriers, which are generally exempt from state regulation, and in many to most cases, state laws. One result of this is that it is challenging, if not virtually impossible, for state regulators to assess the size and extent of insurance coverage, in both availability and affordability along with coverage for cannabis businesses. Some admitted carriers do write coverage primarily in their domiciliary state or immediate region, or for a specific component of the marketplace, e.g., retail dispensaries, for general liability.

What state regulators do know is there is a burgeoning market for cannabis coverage in the excess and surplus lines and managing general agent/underwriter program arena. There are also a few other structures to provide coverages, such as captives and risk retention groups (RRGs)

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being explored.119 Estimates range from a handful to in excess of 30 insurers and managing general agents/underwriters are providing services in this area.120 Nonetheless, a Google search of commercial insurance for cannabis business will yield several references to entities, primarily surplus lines brokers or managing general agents/underwriters, which “specialize” in writing coverage for cannabis businesses or have an insurance “program” for cannabis businesses. Review of some of these indicates the majority are surplus lines brokers who are providing excess and surplus lines coverage.

As more insurance companies feel comfortable writing insurance in this industry, it is anticipated the market will move from excess and surplus lines to the admitted market, similar to other products in the past.121 At one point, there were insurance companies that didn’t want anyone to know they were providing coverage for these exposures and now they are openly providing this coverage.122 However, there is a chance that not all segments of the cannabis industry will move from the excess and surplus lines to the admitted market. We may see certain segments, like retail or dispensary, moving to the admitted market because the risks associated with those are less than with other segment areas.123

B. Insurance Needs and Considerations from Seed-To-Market

Though most coverage is in the excess and surplus lines market, access to commercial insurance for cannabis businesses varies significantly by the market segment of the seed to sale continuum. For some market segments, there are an increasing number of options in areas such as general commercial liability or basic property coverage. In many cases, businesses in the cannabis space

119 According to IRMI.com an MGA is Managing General Agent (MGA) — a specialized type of insurance agent/broker that, unlike traditional agents/brokers, is vested with underwriting authority from an insurer. Accordingly, MGAs perform certain functions ordinarily handled only by insurers, such as binding coverage, underwriting and pricing, appointing retail agents within a particular area, and settling claims. Typically, MGAs are involved with unusual lines of coverage, such as professional liability and surplus lines of insurance, in which specialized expertise is required to underwrite the policies. However, MGAs also write some personal lines business, especially in geographically isolated Areas (e.g., western Oklahoma, North Dakota) where there are accessibility concerns. MGAs benefit insurers because the expertise they possess is not always available within the insurer’s home or regional offices and would be more expensive to develop on an in-house basis. – https://www.irmi.com/term/insurance-definitions/managing-general-agent


123 Id.
are facing more expensive coverage than other similar businesses. While they can get some insurance, a common complaint is that the limits available are constrained, e.g., $1M per occurrence, $2M aggregate capped. A further challenge is the anticipated explosive business growth for established cannabis businesses year over year.\textsuperscript{124}

What follows is some discussion about the various cannabis business market segments, particular insurance needs and availability, and some of the particular risk considerations which make availability and affordability challenging.

1. Cultivation

Coverage for cannabis has several aspects. First, hemp was included as a “legal” crop in the 2018 Farm Bill.\textsuperscript{125} As it currently stands, federal multi-peril crop insurance is available in certain states and communities with conditions. The cultivator must: 1) be licensed and meet all requirements of state, tribal and federal authorities, 2) have at least one year of history producing the crop, and 3) have a contract for the purchase of the hemp crop at the policy inception.\textsuperscript{126} Hemp has the additional risk of becoming “hot hemp” due to environmental causes (THC above the 0.3 compliance level). Additionally, hemp does not qualify for replant payments or prevented plant payments.\textsuperscript{127}

Second, for hemp that does not qualify and cannabis cultivation, the insurance coverage availability is much less clear. There appears to be a small market for private crop insurance, though reports are that it is prohibitively expensive until more data and experience is available to support underwriting. An option that is emerging is parametric coverage for outdoor cannabis crops with triggers including: recorded rainfall over specified time, wind, early freeze, hail, and drought.\textsuperscript{128}

\textsuperscript{127} USDA Farmers: Hemp and Farm Programs (accessed February 21, 2023) – \url{https://www.farmers.gov/your-business/row-crops/hemp}
More broadly, a primary differentiator amongst cannabis cultivators is whether the grow is outdoor or indoor (greenhouse). The two methods have significantly different risk profiles leading to differing accessibility and affordability. Outdoor cultivation brings not only the traditional multi-peril concerns of crop insurance for destructive weather (hail, frost, damaging wind), disease, drought, fire, flooding, and insect damage. The more controlled environment of an indoor grow protects from some of the environmental risks, but presents its own array of challenges including electrical, plumbing, security, and contaminants, including but not limited to mold, mildew, and pesticides. Anecdotally, coverage is more available for indoor cannabis cultivation though it is undeterminable whether this is because the grow environment can be more easily managed, or whether the scale of a greenhouse grow permits several “crops” per year with increased proceeds.

2. Processing and Manufacturing

Cannabis products are available in a rising number of derivations. Cannabis is commercially available in flower (similar to lose tobacco), pre-rolled joints, vapes, dabable concentrates (highly concentrated extracts aka wax, shatter, or other appellations), edibles (including gummies, chocolates, taffy, beverages and more), tinctures, topical applications and more. Usage and the reasons for usage likewise can vary greatly by product format. According to IRI, a data analytics firm focused on consumer-packaged goods (CPG), forty-three percent of adults in fully legal states are cannabis consumers. Of those, 72% consume inhalable products, and 62% of those inhalable users are consuming cannabis at least once daily. Topical cannabis is more associated with pain relief, as the top reported relief communicated by consumers of those products. Better sleep is the top reported relief communicated for consumers of edibles. Users of CBD cite a myriad of health-related reasons for their use, the top four being pain relief, better sleep, and management of anxiety and stress.

As the number and variety of products/uses grows, so do the processing and manufacturing systems to produce a retail product. Traditional cannabis consumption relies on “flower” or “bud” which is ground and then packed into a pipe or rolled. To achieve this basic formulation, the cannabis plant must be harvested, dried, sorted, trimmed to remove the flower from leaves and stalks, and then cured. Obviously, premises for drying, sorting, and trimming, and curing is required, and some portions of these processes may be supported by mechanization. Under the Colorado cannabis regulatory structure, the premises used must be licensed as a “Regulated


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Marijuana Business Operation” which carries extensive rules about possession and access to the premises, security and lock standards, signage, floor plans, shared facilities (medical and adult use), waste disposal, inventory tracking, health and safety measures and audits, and prohibited chemicals and practices.\textsuperscript{131}

Insurance for cannabis manufacturing premises is reportedly becoming more widely available, but pricing can be more expensive than for other sectors. The extensive regulation of the premises must be balanced against the enhanced risks including: potentially high-value raw materials, inventory in-process, risks of fire, theft, contamination, etc., and the potential of mishandling waste in violation of state law. Against this higher base level of premises coverage can be increased risks from processing to make cannabis derivative products such as edibles, topicals and dabs. For many of these derivative products, the raw material (including cannabis or the <.3% THC hemp) must be processed using solvents, pressure, heat, or distillation/crystallization or combinations thereof. Each adds an aspect of risk which should be considered and accounted for in the underwriting process.

3. Testing

State mandated testing schemes are substantial and detailed to ascertain if the regulated cannabis (as either raw material or finished product) is: 1) contaminated or mislabeled, 2) is in violation of any product safety, health or sanitary statute, rule, or regulation, or 3) whether the results of a test raise questions requiring further investigation. The most significant area of liability will be professional liability if someone suffers legal injury due to a negligently erroneous test result. As an erroneous test could require the destruction of an entire crop or product run, the economic injury is obvious. From a consumer perspective, a test result indicating safety when a product is contaminated or varies from potency standards could lead to substantial recovery for personal injury. Consequently, professional liability or errors and omissions coverage is an important part of a testing facility’s portfolio.\textsuperscript{132}

4. Distribution

There are effectively two levels of distribution concern. One is raw material transport between cultivator and manufacturer/processor (and testing labs), and the other is consumer delivery. However, at the base, in Colorado, both levels rely on a comprehensive seed-to-sale tracking

\textsuperscript{131} Code of Colorado Regulations, Department of Revenue, Marijuana Enforcement Division, 1 CCR 212-3, Part 3 - Regulated Marijuana Business Operations
\textsuperscript{132} See subsequent section under Products Liability for further discussion of aspects of liability for a defective product.
system which can be used to provide manifests documenting the transport of cannabis products throughout the state. In Colorado, this requirement is stated in statute as:

“To ensure that no marijuana grown or processed by a retail marijuana establishment is sold or otherwise transferred except by a retail marijuana store or as authorized by law, the state licensing authority shall develop and maintain a seed-to-sale tracking system that tracks retail marijuana from either seed or immature plant stage until the marijuana or retail marijuana product is sold to a customer at a retail marijuana store[.] . . .” 133

The seed to sale tracking system in Colorado is based on a Radio Frequency Identification (RFID) tag which is affixed to a plant and, with aggregation of the information on it, follows the plant through cultivation, harvest, manufacturing, and distribution. For licensed operators who are transporting legal product, this permits explicit manifests which can be reconciled with the cargo between cultivator and manufacturer/processor. Both medical and retail cannabis in Colorado require a transporters license which is obtained from the state’s regulatory authority, the Marijuana Enforcement Division of the Colorado Department of Revenue.

Insurance concerns of transporters include cargo coverage for an often high-value commodity which can be subject to theft/hijacking and spoilage. As described in a Reuters article, “Low coverage limits on cargo insurance, for example, can force companies to split shipments up, said Gene Brown, an insurance agent in Carmel, California, who specializes in cannabis coverage.” 134 Similarly, the cash-based current consumer economics of the industry has substantial security needs and a high risk of theft.

Recently, delivery to consumers through purchase on an app has been authorized in Colorado and has generated significant interest. (Interest was likely accelerated by expansion of other delivery services such as Uber Eats, and similar services during COVID). This direct-to-consumer delivery has similar liability concerns as other delivery services, e.g., damage to third party vehicles and parties, and the potential for theft, misdirection, or deception.

5. Retailers

When someone says “legal cannabis” the mental picture most people have is of a local dispensary in a state where it is legalized. Certainly, for most people a dispensary or store is how they experience the industry. As storefronts, retailers have many of the same business insurance

133 §44-12-202(1), Colo. Rev. Stat. - Powers and duties of state licensing authority - rules. § (1). Note: an almost identical provision is located in Colorado’s medical marijuana code.
needs as other commercial establishments — e.g., premises/property and general liability coverage, inventory, employee benefits and employment practices liability insurance, business income/interruption, umbrella, commercial auto, and cyber. Generally, insurance coverage is increasingly becoming available for these risks, albeit often at higher rates than for other types of retailers.

Primary among the risks is those of theft — both cash and product. In 2020, one of Colorado’s largest cannabis retailers with 21 locations, reported 15 burglary attempts in 90 days. Because of the situation that most cannabis outlets deal almost exclusively in cash, there is ample opportunity for burglaries and robberies. And because the product for sale is high value itself, criminals don’t go for just the cash. It is common for retailers to have substantially increased security, including round-the-clock guards, video screening, and extensive training and monitoring of their staff, to mitigate their enhanced risk.

In addition to the risk of damage to premises from break-ins for theft, personal injury to employees, customers, and bystanders is also a concern. As noted previously, workers compensation coverage is more available for cannabis retailers since it is a state-mandated coverage. However, questions of consistent occupational subclassification and experience rating may develop and have premium impacts. In Colorado, complaints or concerns are not generally received about employee benefit coverages (primarily health). This is likely due to the Affordable Care Act and expansion of guaranteed availability to the individual health insurance market. On the employment practices liability aspect, there are anecdotal reports of challenges in finding coverage. At this time, additional information is needed to ascertain whether there is out-of-the-ordinary employment practices liability that is not mitigated by state regulatory schemes. This includes requiring criminal background checks and licensure of all persons employed in a business that possesses, cultivates, dispenses, transfers, transports, offers to sell, manufactures, or test regulated cannabis.

6. Products Liability

One of the thorniest insurance issues for cannabis businesses is that of products liability coverage. As products liability claims may be made against any, and potentially all, entities in the supply chain from retailer or distributor, manufacturer, testing, or cultivator. The costs of defense in a products liability action alone make this coverage “in demand.” Moreover, the breadth of

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136 Id.
circumstances which can lead to a products liability claim raise legitimate concerns for all parts of the industry. By way of refresher, there are three basic theories of product liability: 1) design defect, which could include pesticide, mold or biological contamination; 2) manufacturing defect, which can include contamination introduced during processing, or by faulty testing and results; and 3) warning/instruction defect, including product labeling violations or omissions, advertising misrepresentation, and packaging defects, i.e., child-resistant packages. It is easy to imagine the potential liability concerns of an industry involving an intoxicant that until relatively recently was comprehensively banned throughout the United States.

Reliance on a standard policy for products liability coverage for CRBs may not provide the full protection a business would anticipate. Most standard policies contain broad exclusions for Schedule 1 federally prohibited substances or criminal/fraudulent or dishonest acts or claims arising from violation of statute, code, rule, regulation, procedure, or guidance. Most standard policies do not include products completed, operations and health hazard exclusions for cannabis businesses. Coverage for defense costs in a products liability action against a cannabis business is particularly key. The experience in the vaping crisis, aka Vape-Gate, is instructive. While it was ultimately found that most of the vaping injuries involved illicit or black market vape products, the potential for substantial and broad liability led to tighter risk management in the cannabis supply chain, including identification of unapproved or potentially dangerous additives resulting in adulterated products.\footnote{138} It is recommended cannabis businesses specifically discuss with their insurer about coverage for products liability to ensure they understand the coverage provided and any limitations on it.

\section{VIII. Market Considerations for Commercial Cannabis Insurance}

As noted above, availability of insurance coverage for cannabis businesses is overwhelmingly found in the excess and surplus lines market at present. In part, this is due to the evolving nature of the commercial cannabis industry, and the lack of generally agreed upon data, measurement, and experience to support insurance underwriting. It is anticipated that just as the cannabis commercial industry evolves, so will the associated commercial insurance options in the admitted market. This evolution is anticipated and may be driven by how the cannabis business market develops, e.g., vertical integration and consolidation vs. continuation of niche commercial entities in the cannabis supply and distribution market.

A. Cannabis as a Client (and Consumer Beliefs)

As more states legalize cannabis for either recreational use or medical use, more insurance companies may enter the market to write cannabis businesses. The cannabis industry is a new aspect for insurance companies. Thus, they will need to understand the risks and exposures, as well as the needs of cannabis businesses as clients.139

It is also important for producers to be educated on the cannabis market to serve this demographic. For example, it would be beneficial for a producer to be educated on the risks and exposures at each segment from seed-to-sale so that they can explain to their client what would be best suited for their needs. They may also help explain the differences between legal requirements and best practices. A cannabis business may not purchase a coverage because it is not legally required, however, it may be a good business practice.

The cannabis business as a client has a similar learning curve. The cannabis business owner must have done their due diligence to obtain a license, be educated on cannabis products and processes, and know the applicable laws surrounding cannabis. However, a cannabis business as an insurance client may need some help with insurance terms and coverage options as they may not know what options are suitable for their needs.140 Vocabulary from region to region or state to state also differs. This can be challenging to an insurance company when trying to explain coverage options to a cannabis business as a client.

Misconceptions also play a part when cannabis businesses seek insurance. When cannabis businesses first opened (around 1996 in California) there was fear that due to the federal illegality they could be subject to criminal charges at any moment.141 There are concerns from the cannabis industry that the information provided to insurers can be accessed by the federal government.142 Some businesses in the industry may believe that insurance is not worth the cost.

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or that coverage is not available.\textsuperscript{143} Such misconceptions fuel belief that coverage is not available but, more recently, the concerns have been about the cost and limitations of coverage. Among the inherent limitations of excess and surplus lines are the higher costs of coverage and restrictions on the coverage beyond cannabis licensure requirements.

B. The Role of Data

Cannabis businesses are just like any other business; however, they continue to pay several times more than what other industries pay for insurance.\textsuperscript{144} For example, a small mercantile general liability policy might run about $1,000, but for a cannabis business that policy could run about $10,000, without products liability.\textsuperscript{145} A directors and officers’ policy (D&O) for $1 million in coverage could cost a cannabis business well into the six-figure range.\textsuperscript{146} The difference in pricing may largely be due to the federal v. state treatment and the concomitant risks involved with cannabis businesses.\textsuperscript{147} One major issue that persists for the cannabis businesses and insurance is the lack of consistent and verifiable market data across market segments to inform of potential risks.\textsuperscript{148} Insurers know very little about the losses and expenses associated with this industry and therefore it is difficult to price. An insurer can acquire information from their potential customer but there is not a public source of comparative data that insurers can use to evaluate risks.\textsuperscript{149}

The lack of data relating to losses and expenses is a major issue but data from similar situated businesses can be used to assist in the underwriting process. When looking at dispensaries, an insurer can look at either a pharmacy for medical use cannabis, and liquor stores or vape shops for recreational use of cannabis to learn about underwriting a cannabis business. Similarly, cannabis processors and growers can look to processors from other similarly situated industries. Cannabis businesses need insurance at every point from seed-to-sell. Although data is lacking, there is information available to begin the underwriting process and to get a sense of what is needed by a cannabis-related business.

\textsuperscript{143} Brenda Wells, Ph.D., Presentation on Balancing Actual and Perceived Risks (East Carolina University). (July 27, 2021) – Webex Enterprise Site - Replay Recorded Meeting – https://naic.webex.com/webappng/sites/naic/recording/fe42d865d13210398fd70050568f0567/playback
\textsuperscript{146} Id.
\textsuperscript{147} Id.
\textsuperscript{148} Id.
\textsuperscript{149} Id.
Insurers can also consider various factors during underwriting depending on the type of cannabis business. For processors, the results from a third-party inspection, the type of security system, and whether they are wired to outside monitoring stations, fire suppression systems, and the sufficiency of the electrical system with proper wattage and circuits, all could be factors in the underwriting process. For retailers, the type of safe storing cash or product can also be considered when in the underwriting process; there may be a regulatory requirement that a safe has to be so heavy as to not be easily moved or the insurer may impose one. Overall, the insurer may want to know more about the owner/operator of the cannabis-related business. For instance, it may want to know if they are a member of a trade association or what education and training they have and what they require of their staff. All this information can play a role in the risk involved with the cannabis-related business. What insurers would like to see is the risk be reduced. For example, the risk to insure someone who just decided to open a shop would be much higher than a person who took the time to get trained and educated in cannabis.

C. Developing Commercial Policy Forms

Most insurance policies, particularly those in the admitted market, are standardized. Advisory organizations help develop these forms that are used by property and casualty companies. The standardization of forms ensures: 1) the legal requirements from each state are taken into consideration 2) premium rates are based on actuarial studies of insurable risks; and 3) case law is taken into consideration to prevent ambiguities in contract terms. Additionally, standardized forms using familiar terms and vocabulary may reduce the potential for disparate interpretations. Prior to legalization, insurance policies would typically exclude cannabis-related activities from a policy due to the illegality of the product as a federally listed Schedule 1 substance.\textsuperscript{150} As states implement new cannabis laws, insurers will need to modify their contract forms to achieve compliance. Striving for consistent terminology and language is part of the normal work of advisory organizations.

1. Insurance Services Office (ISO)

ISO is an insurance advisory organization that shares actuarial information with its customers, including insurance companies, actuaries, agents and brokers, and government entities.\textsuperscript{151} Insurers obtain data about past losses to help develop rates based on projections of future losses.

\textsuperscript{150} Heather Howell Wright, National Underwriter Property and Casualty 360: ISO Revises Policy Forms to Address Cannabis (November 1, 2019) – ISO revises policy forms to address cannabis | PropertyCasualty360 – https://www.propertycasualty360.com/2019/11/01/insurance-services-organization-revises-policy-forms-to-address-cannabis/

so when insurers have more loss data, they can predict future losses more accurately. ISO gathers large amount of loss data from various insurance companies to develop advisory prospective loss costs. Licensing carriers may use these loss costs to develop their ultimate insurance rates. ISO also creates general insurance policy forms and endorsements often viewed by many as an that become industry standard. TheISO-created policy forms and endorsements often includes policy created by ISO will incorporate language that has been tested analyzed in by the courts, thereby having fewer risks providing licensing carriers with potentially less volatility in interpretation than if an insurer were to create its own form.

ISO’s insurance programs are available that provide options to forms provide insurance coverage to or exclude coverage with respect to cannabis-related businesses and exposures through policy an insurance endorsements. An insurance endorsement can be used at policy inception or after a policy is issued to add, delete, exclude, or otherwise alter coverage. Typically, standardized forms will exclude cannabis from being covered due standard “illegality” and “contraband” exclusions.

Previously, neither the ISO Commercial General Liability (CGL), Commercial Property (Property) nor Commercial Auto (CA) forms expressly addressed cannabis. However, ISO has created a series of developed several endorsements to specifically address the cannabis exposure in these and other insurance programs. The related endorsements can enhance an insurers flexibility to tailor their product by expressly addressing coverage with respect to cannabis-related exposures endorsements with “exceptions” to permit coverage within the terms of the endorsement. Currently, the standard ISO General Liability, Commercial Property and Commercial Auto forms do not address cannabis specifically.

If an insurance carrier prefers to avoid providing coverage with respect to cannabis-related exposures in any of the related insurance programs, ISO makes available several exclusionary endorsements to exclude coverage. However, if there is interest in obtaining providing coverage for a cannabis-related exposure, ISO has made available several endorsements for that purpose. These endorsements permit insurers the flexibility to tailor their product by expressly addressing

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152 Id.
153 Id.
154 Id.
coverage for a cannabis-related exposure.\textsuperscript{158} ISO offers endorsements for commercial general liability, commercial property, and commercial auto to specifically exclude coverage for cannabis, or to limit the exclusion by adding an exception for hemp, or hemp with lessor risk.

ISO’s CGL and Property programs include options for the carrier to extend certain coverage with respect to the cannabis exposure. Carriers also have the option to extend limited coverage with respect to only the hemp exposure using a cannabis exclusion with an exception applying to hemp. Additionally, the CGL program includes options for insurance carriers to exclude liability for specifically listed products.

Within the commercial general liability program ISO also has developed liability coverage endorsements with an aggregate limit for cannabis, a cannabis exclusion with hemp exception aggregate limit, and a cannabis liability exclusion with designated product or work exception subject to an aggregate limit.\textsuperscript{159}

Lastly, ISO developed the defense within limits endorsement specific to products liability coverage that would allow the carrier to limit the type cost of defense that is provided under related to products covered by the coverage form. Similar options are available for ISO’s Businessowners, Commercial Flood, and Commercial Inland Marine programs.

2. American Association of Insurance Services (AAIS)

AAIS, a not-for-profit advisory organization that is governed by its member insurance companies, provides insurance forms, rules and loss costs to the property casualty insurance industry.\textsuperscript{160} AAIS provides policy forms and manuals in commercial lines, inland marine, farm and ag business lines and personal lines to more than 700 insurance carriers.\textsuperscript{161} As a licensed statistical agent in 51 jurisdictions, AAIS collects data that helps members meet regulatory statistical reporting responsibilities, which also supports loss cost development and ratemaking activities.\textsuperscript{162}

AAIS’ cannabis business owners’ policy (CannaBOP) product was developed at the request of the California Department of Insurance to strengthen carrier participation for coverage of commercial cannabis operations. The CannaBOP is a package policy that provides property and

\textsuperscript{158} ISO: Overview of Select ISO Endorsement Options Addressing Cannabis Exposures (Sept. 30, 2022) (unpublished) [reprinted with permission]

\textsuperscript{159} Id.

\textsuperscript{160} AAIS: An Unwavering Commitment to our Members…to the Success of the Insurance Industry (accessed February 21, 2023) – Our Role in Insurance - AAIS Online – https://aaisonline.com/our-role-in-insurance

\textsuperscript{161} Id.

\textsuperscript{162} Id.
liability coverages for qualifying cannabis dispensaries, storage, distributors, processors, manufacturers and private cannabis testing facilities and laboratories. Rather than providing coverage to legal cannabis businesses through an endorsement, AAIS advocates for cannabis specific product development and cannabis specific programs. The CannaBOP program also includes the rules, loss costs and a suite of optional endorsements to be used by an insurance company. The program also offers technology support so that CannaBOP can be quickly distributed and AAIS dedicated personnel keeping a keen eye on the “legs & regs” to help carriers remain compliant within this space.

3. Filing Process and Adoption of ISO and AAIS Forms

AAIS and ISO are advisory organizations which submit advisory loss costs, rules and forms to the respective regulating agency for review and approval. These advisory organizations have member or subscriber requirements to use their approved forms, rules, rates, or loss costs. Loss costs are the data on claims that have been paid out.

In some states, advisory organizations file on behalf of insurers that have given them authorization, and other states may have varying filing requirements as in the case of California. In the absence of a filing made on behalf of an insurer, the insurance company submits a separate filing to adopt the product or endorsement before it can use what has been created by the advisory organization. For example, in California, insurer XYZ wanted to start writing a Cannabis Business Owners policy. As a member of an advisory organization, XYZ could use the advisory organizations forms and data for what coverages to offer, forms to use, rules to apply, and rates (loss costs multiplied by a loss cost multiplier to account for the insurer expenses) to use. Insurer XYZ would submit a prior approval new program filing with the California Department of Insurance to adopt the portions of the advisory organization material they wanted to use. The filing would then be reviewed and approved before insurer XYZ could start writing cannabis business owners risks using the advisory organizations filing as a foundation. So, two separate filing approvals are needed: first, the approval of the filing containing the advisory organization product; and then after the advisory organization’s product is approved, the insurance company(s) filings requesting adoption of the already approved advisory organization’s product.

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163 AAIS Solutions Kit: CANNABOP: Cannabis - Businessowners (January 2020) – 30f1bcd6-6b5d-921f-ce64-654b16f0b88 – aaisonline.com
165 Id.
ISO’s Cannabis Endorsements were approved for use in a majority of the states in Sept 2019. According to AAIS, CannaBOP was first filed and approved in California in 2018. Since then, CannaBOP has been approved in Colorado, and Nevada, Illinois, Michigan and Washington. In March 2021, CannaBOP was adopted by Golden Bear in Arizona.

IX. RESPONDING TO EMERGING TRENDS

Emerging trends in the cannabis industry provide opportunities for next steps in policy, regulation, and insurance. Cannabis product innovation is expanding past edibles to infuse cannabis into beverages, baking staples, crafts and luxury products. New formulas and strengths are also being introduced with these new products. Innovation brings both new insurance needs and risks. For instance, states issued recalls in 2022 for cannabis edibles for mislabeling and contamination, resulting in litigation.

Growing demand for ancillary services and infrastructure in the cannabis space will also likely impact cannabis-related insurance. Ancillary services include those that complement the cannabis industry and are often non-plant touching. This includes marketing, transportation and delivery, financing, breathalyzers, product packaging, accountants, landlords, staffing firms, nutrient suppliers, and equipment companies.

Insurance regulators should also be informed on the emergence of on-site social consumption lounges. A few states have started issuing licenses for these establishments. On-site social cannabis lounge sites may operate similarly to bars, where consumers would gather to socially consume cannabis at a place of business. These businesses will face liability and insurance issues that are akin to businesses serving alcohol like bars, breweries, and wineries.

X. CONCLUSIONS


169 Id.

170 Id.

A major aspect of obtaining insurance coverage for cannabis-related businesses is the complexity of limitations to interstate commerce hampering multi-state expansion. The current cannabis marketplaces are contained in individualized state jurisdictions without competition from other state marketplaces.\textsuperscript{172} There have been state legislative authorizations in California (2022) and Oregon (2019) to create legal cannabis interstate commerce through trade pacts with other states. However, these laws require Congressional authorization or a memorandum from the DOJ allowing for interstate transfers of cannabis products. Federal legislation was introduced in 2021 with the States Reform Act (SRA). The SRA would decriminalize cannabis at the federal level while deferring to state powers over prohibition and commercial regulation.

Insurers are likely to continue to be cautious about entering the cannabis space in the absence of federal safe harbor provisions, legalization, decriminalization, or rescheduling. The federal prohibition has the effect of inhibiting access to vital ancillary services, such as banking with financial institutions and mitigating risk through insurance. States may look to add safe harbor laws into their authorities to ensure vital ancillary businesses can legally service the cannabis industry within state laws. The goal of safe harbor authorities is to seek and grant protections from liabilities or penalties, so long as certain conditions are met. For example, California recently passed a bill that states an individual or firm providing insurance or related services to a state legal cannabis business does not commit a crime under California law solely for providing that insurance or related service.\textsuperscript{173} The NAIC has supported federal legislation to provide a safe harbor for financial institutions and insurers serving cannabis-related businesses operating in states that have legalized cannabis.

Currently, most commercial insurance coverage for cannabis-related businesses is in the excess and surplus market. There is, however, growing interest among admitted carriers in entering this area. Among the potential structures to facilitate cannabis-related business coverage are: use of state-based commercial insurance programs, risk retention groups (RRGs), captives, and joint underwriting associations (JUAs). States may want to look at their state laws to identify and remediate any restrictions in use of such programs for cannabis-related businesses.

Fair Access to Insurance Requirements (FAIR) plan programs afford opportunities for difficult risks to be underwritten by certain insurers when other insurance is not feasible. Sometimes known as insurers of last resort, the availability of these plans varies by jurisdiction. While commonly limited to personal lines, some states include commercial coverage. Generally, these

\textsuperscript{173} Assembly Member Cooley, AB 2568 (Chapter 393, Statutes of 2022).
programs help to provide insurance for those unable to acquire it from the admitted or excess and surplus insurance markets. FAIR plans are shared market plans, where several insurance companies provide coverage for the property, limiting the amount of risk that any one company assumes.

Risk retention groups and captive insurers also provide additional options for cannabis-related business insurance coverage. Governed by state law, there are many nuances which a state must consider. For example, Washington identified 17 businesses using captive insurance, but not paying premium taxes to the state the captive was operating in. This was due to legal framework for captive registration and taxation had not yet been established.174

Joint underwriting associations (JUAs) could be created to alleviate the lack of availability and affordability for state mandated cannabis-related commercial insurance coverage. A joint underwriting association is a nonprofit risk-pooling association established by a state legislature in response to availability crises in respect to certain kinds of insurance coverage. For example, a number of states have established JUAs to provide medical malpractice insurance for physicians who are unable to obtain affordably priced insurance coverage in the standard marketplace.

Addressing black-market cannabis operations could also help support capacity for cannabis-related commercial insurance. Black-market operations can take the form of illegal grows, unlicensed production and processing facilities, and criminal retailers. Black-market operations compete with the regulated markets and remove revenue that would be taxed and generated with the legal retailers. Black-market products are also not subject to any regulations for advertising, marketing, retail sales, or consumer safety. This creates risk than can spill over into the state legal cannabis market. For example, during Vape Gate, insurers increased pricing and added product liability exclusions for unapproved additives. Many of the vape issues were found to be due to black market products. However, insurers’ apprehension on writing vape-related risks lingered for a few years following the event.175

Some states are already taking steps to address black market operations. For example, Oregon and Washington each involve their law enforcement agencies in a collaborative effort with their cannabis regulatory bodies, to seek and enforce against illegal cannabis operations. Oregon even coordinates their enforcement efforts in collaboration with California agencies in these efforts. Colorado coordinates between law enforcement and the cannabis regulatory agencies. In

Washington, state tax revenue generated at regulated cannabis retailers is also distributed to local law enforcement agencies, which can help fund their enforcement efforts against black-market operations. The cannabis and insurance industries, as well as consumers, benefit from these enforcement activities, as well as the removal of the unregulated black-market.

As the number of states legalizing cannabis continue to grow, so will the need for cannabis-related commercial insurance. Insurance regulators must stay current with the rapidly changing landscape. There has been a rapid introduction of new cannabis products whose product liability needs and risks are still unknown. The insurance needs of ancillary businesses will also need to be understood. Finally, insurance regulators will need to access the capacity for new business models, such as on-site consumption lounges, to find insurance coverage and address associated educational needs.

XI. APPENDIX:

**ADDITIONAL CANNABIS INFORMATIONAL RESOURCES**

- **Americans for Safe Access:** [https://www.safeaccessnow.org/](https://www.safeaccessnow.org/)
- **Cannabis Business Times:** [https://www.cannabisbusinesstimes.com/](https://www.cannabisbusinesstimes.com/)
- **Cannabis Now:** [https://cannabisnow.com/](https://cannabisnow.com/)
- **Cannabis Regulators Association:** [https://www.cann-ra.org/](https://www.cann-ra.org/)
- **Drug Policy Alliance:** [http://www.drugpolicy.org/](http://www.drugpolicy.org/)
- **Law Enforcement Action Partnership:** [https://lawenforcementactionpartnership.org/](https://lawenforcementactionpartnership.org/)
- **Marijuana Policy Project (MPP):** [https://www.mpp.org/](https://www.mpp.org/)
- **MJ Business Daily:** [https://mjbizdaily.com/](https://mjbizdaily.com/)
- **NAIC - Cannabis Insurance Hearings:**
Hearing 1:
https://naic.webex.com/webappng/sites/naic/recording/225c7bfecae91039aafd0050568f5657/playback

Hearing 2:
https://naic.webex.com/webappng/sites/naic/recording/fe42d865d13210398fd700568f0567/playback

- **NAIC: Regulatory Guide – Understanding the Market for Cannabis Insurance:**
  https://content.naic.org/sites/default/files/inline-files/cmte_c_cannabis_wg_exposure_understanding_cannabis_marketplace_0.pdf

- **National Cannabis Industry Association:** https://thecannabisindustry.org/

- **National Conference of State Legislatures:** https://www.ncsl.org/research/civil-and-criminal-justice/marijuana-overview.aspx

- **National Highway Traffic Safety Administration:**
  https://www.nhtsa.gov/drug-impaired-driving/understanding-how-marijuana-affects-driving#:~:text=Though%2033%20states%20have%20changed,the%20wheel%20of%20a%20vehicle

- **National Organization for the Reform of Marijuana Laws:** https://norml.org/

- **Patients out of Time:** https://www.medicalcannabis.com/

- **Smart Approaches to Marijuana:** https://learnaboutsam.org/

- **Students for Sensible Drug Policy:** https://ssdp.org/

- **Transform Drug Policy Foundation:** https://transformdrugs.org/

- **United States Department of Agriculture – Hemp:**

- **United States Drug Enforcement Administration – Marijuana:**
  https://www.dea.gov/factsheets/marijuana

- **Veterans for Cannabis:** http://www.vfcusa.com/

- **White House, Office of National Drug Control Policy:**
  https://www.whitehouse.gov/ondcp
Hear a Panel Discussion on the Uncertainties in the Treatment of Hemp and Cannabis

— Courtney Moran, LL.M. (Earth Law, LLC); Morgan Fox (NORML); Gillian Schauer (CANNRA); Michael Correia (Cannabis Consultant), and Beau Whitney (Whitney Economics)
About Whitney Economics

NAIC Working Group

Beau R. Whitney, Chief Economist
Whitney Economics
July 18, 2023
U.S. Participation Declining

- Forecasted acres licensed is trending to be at same level as prior to 2018 Farm Bill
- U.S. hemp cultivation capacity increased nearly 575% from 2018 to 2019.
- Hemp acreage licensed declined again in 2022 down another 68%.
- Seeing a shift in percentage of fiber and grain versus CBD/Cannabinoids.

Hemp is a Multi-Faceted Industry

- Hemp is actually a larger potential market than cannabis.
- Different countries have different approaches, U.S. separates hemp, EU and other regions do not.
- Cannabis and hemp can coexist and compliment each other.
- Hemp can help address the pollution and other environmental issues such as carbon sequestration.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Global TAM (USD$ Bil)</th>
<th>Potential Hemp Share</th>
<th>Hemp Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobile parts</td>
<td>$ 380</td>
<td>20%</td>
<td>$ 76.0</td>
</tr>
<tr>
<td>Textiles</td>
<td>$ 1,005</td>
<td>5%</td>
<td>$ 50.3</td>
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<tr>
<td>Concrete Blocks</td>
<td>$ 1,700</td>
<td>10%</td>
<td>$ 170.0</td>
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<tr>
<td>Lithium Batteries</td>
<td>$ 45</td>
<td>10%</td>
<td>$ 4.5</td>
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<tr>
<td>Plastic Bags</td>
<td>$ 20</td>
<td>2%</td>
<td>$ 0.4</td>
</tr>
<tr>
<td>Plastic Cutlery</td>
<td>$ 2</td>
<td>2%</td>
<td>$ 0.03</td>
</tr>
<tr>
<td>CBD Supplements</td>
<td>$ 25</td>
<td>33%</td>
<td>$ 8.2</td>
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<tr>
<td>Skin Care</td>
<td>$ 129</td>
<td>10%</td>
<td>$ 12.9</td>
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<tr>
<td>Energy Drinks</td>
<td>$ 53</td>
<td>10%</td>
<td>$ 5.3</td>
</tr>
<tr>
<td>Animal Feed</td>
<td>$ 448</td>
<td>5%</td>
<td>$ 22.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 3,807</strong></td>
<td></td>
<td><strong>$ 350.0</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Total - USD Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>$112.75</td>
</tr>
<tr>
<td>Europe</td>
<td>$62.87</td>
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<tr>
<td>Asia</td>
<td>$31.51</td>
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<tr>
<td>Africa</td>
<td>$11.88</td>
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<tr>
<td>Central and South America</td>
<td>$8.45</td>
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<tr>
<td>Oceania</td>
<td>$4.71</td>
</tr>
<tr>
<td>Caribbean</td>
<td>$0.64</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$232.81</strong></td>
</tr>
</tbody>
</table>

Source: Whitney Economics
Regardless of Challenges – Future is Bright

- Short-run forecast is in flux due to U.S. state legislatures / bans.
- Hemp fiber and grain should surpass CBD acres licensed by 2023/24.
- Grain: Hemp for animal and human consumption.
- Fiber: Great opportunities in automotive, textiles and construction.

Source: Whitney Economics
Contact

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Beau Whitney is the founder and Chief Economist at Whitney Economics, a global leader in cannabis and hemp business consulting, data, and economic research. Whitney Economics is based in Portland, Oregon.

Serving an international clientele, Beau is considered one of the leading cannabis economists in the U.S. and globally. His applications of economic principles to create actionable operational and policy recommendations has been recognized by governments, and throughout the economic, investment, business communities.

Beau Whitney is a member of the American Economic Association, the Oregon chapter president of the National Association for Business Economics, is a member of multiple regulatory advisory committees throughout the U.S. and participates on the Oregon Governor’s Council of Economic Advisors.

Beau has provided policy recommendations at the state, national and international levels and is considered an authority on cannabis economics and the supply chain.