INTRODUCTION

Marijuana, a product of the cannabis plant, has long been recognized for its medicinal uses and psychoactive effects produced by its chemical compounds cannabidiols (CBD) and tetrahydrocannabinol (THC). It is a Schedule I drug under the Controlled Substance Act of 1970. Despite its tangled legal status, it is also a product at the heart of a growing and increasingly legitimized industry and a topic on which property/casualty insurers increasingly need to be informed. In 2017 alone, the legal cannabis industry generated $9 billion in sales in the U.S. and is expected to grow to $21 billion by 2021. (1) Cannabis may serve as an alternative to highly addictive opioids and is also used by some doctors to treat symptoms of anxiety, depression, Parkinson's disease, post-traumatic stress disorders, AIDS, cancer, and a host of other medical conditions.

As of October 2018 marijuana is legal for medical use in 30 states and the District of Columbia, decriminalized in 22 states and the D.C., and available for recreational use in nine states and D.C. (2) The legal landscape shifted dramatically in recent years, and public opinion on the legalization of marijuana has transformed significantly with no sign of relenting anytime soon. If current trends continue, it will be critical for property/casualty insurance companies to have at least a basic understanding of cannabis and the cannabis industry and how they both intersect with insurance industry products and services.

This paper explores the issues and complexities at the intersection of the insurance industry and the burgeoning cannabis industry, including a review of the legal landscape surrounding it. While the legalization of marijuana can be a politically divisive subject, there is value in insurers developing an understanding of how the issues at play will affect their companies. Given recent trends, it is increasingly impractical for insurers to ignore the rapidly transforming cannabis landscape.

SURVEYING THE CANNABIS LEGAL LANDSCAPE

The modern story of cannabis begins in the 1830s with an Irish physician by the name of William O'Shaughnessy. O'Shaughnessy was working in India when he discovered that extracts from the cannabis plant could reduce vomiting and stomach pain in cholera patients. (3) From this limited medicinal use, it did not take long before the psychoactive effects produced by the THC in cannabis were discovered and the plant's cultivation and distribution began to spread across the globe. Recreational use of cannabis emerged in the U.S. in the early 20th century.

Cannabis's place in society – and the question of its legality – was debated during the Prohibition era and throughout the ensuing decades, culminating in 1970 when President Richard Nixon signed into law the Controlled Substances Act designating cannabis as a Schedule I drug and making its possession, distribution, and sale a punishable offense under federal law. (4)
A drug’s federal scheduling is based on a consideration of three criteria:

1) Medical use  
2) Potential for abuse  
3) Safety or dependence liability (3)

Schedule I drugs are those with “no currently accepted medical use and a high potential for abuse” compared to Schedule V drugs that are “drugs with lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics.” (7) Examples of other Schedule I drugs include heroin, lysergic acid diethylamide (LSD), and methylenedioxymethamphetamine (ecstasy). Examples of Schedule V drugs (the most innocuous classification) include Robitussin, Lyrica, and Lomotil.

<table>
<thead>
<tr>
<th>Schedule I</th>
<th>Schedule II</th>
<th>Schedule III</th>
<th>Schedule IV</th>
<th>Schedule V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential for abuse</td>
<td>The drug or other substance has a high potential for abuse</td>
<td>The drug or other substance has a high potential for abuse</td>
<td>The drug or other substance has a low potential for abuse relative to the drug or other substances in schedules I and II</td>
<td>The drug or other substance has a low potential for abuse relative to the drug or other substances in schedule IV</td>
</tr>
<tr>
<td>Medical use</td>
<td>The drug or other substance has no currently accepted medical use in treatment in the United States</td>
<td>The drug or other substance has no currently accepted medical use in treatment in the United States</td>
<td>The drug or other substance has a currently accepted medical use in treatment in the United States</td>
<td>The drug or other substance has a currently accepted medical use in treatment in the United States</td>
</tr>
<tr>
<td>Consequences of abuse</td>
<td>There is a lack of accepted safety for use of the drug or other substance under medical supervision</td>
<td>Abuse of the drug or other substance may lead to severe psychological or physical dependence</td>
<td>Abuse of the drug or other substance may lead to moderate or low physical dependence or high psychological dependence</td>
<td>Abuse of the drug or other substance may lead to limited physical dependence or psychological dependence relative to the drug or other substances in schedule IV</td>
</tr>
<tr>
<td>Marijuana, Heroin, LSD, Ecstasy, Peyote</td>
<td>Cocaine, Methadone, Fentanyl, Vicodin, Adderall, Ritalin</td>
<td>Codeine, Xanax, Metadone, Steroids</td>
<td>Xanax, Soma, Tramadol</td>
<td>Robitussin, Lyrica, Lomotil</td>
</tr>
</tbody>
</table>

Neither state prohibitions nor the federal prohibition stopped cannabis from being a popular recreational drug over the subsequent decades, (8) likewise for the “Just Say No” campaign and the so-called “War on Drugs” championed to various degrees by governments at the federal, state, and local levels. To the contrary, marijuana use persisted and held a place in popular culture. At the same time, there was growing belief regarding its efficacy as a remedy for the side effects of chemotherapy treatments.

California became the first state to take action in what would become a significant trend to legalize the use of marijuana when it passed the Compassionate Use Act of 1996. This law permitted the treatment of severe and chronically ill patients with marijuana and set in motion a wave of initiatives across the country to introduce legislation legalizing first the medical, and later the recreational use, possession, distribution, and sale of marijuana under state law. (9)
As of October 2018, 30 states and the District of Columbia have legalized marijuana for medical use, nine states and the D.C. have legalized it for recreational use, and 22 states and the District of Columbia have decriminalized it.

Typically, legalization of marijuana means individuals cannot be arrested, ticketed, or convicted for using marijuana if they follow the state laws as to age, place, reason, and amount for consumption. In addition, legalization is accompanied by state and local governments involvement in regulating and taxing the production, distribution, and sale of cannabis products. In states that have legalized the recreational or medical use of marijuana, all individuals and businesses following the state or locality-specified marijuana requirements will not have criminal liability under state or local law.

Legalization is different from a state decriminalizing marijuana possession, which typically means "certain small, personal-consumption amounts are a civil or local infraction, not a state crime (or are a lowest misdemeanor with no possibility of jail time)," according to the National Conference of State Legislatures. It is important to note that the definition of "small amounts" of marijuana possession varies from state to state. For example, in New Hampshire, possession of three-quarters of an ounce or about 21 grams or less of marijuana is classified as a civil violation and results in a $100 fine for the first offense. In Illinois, possession of 10 grams or about a third of an ounce or less constitutes a civil offense and $200 maximum fine. Further, decriminalization usually refers only to possession and does not typically mitigate the legal penalties associated with the distribution and sale of marijuana.

Just as with decriminalization, the specifics of the legal use of marijuana vary greatly from state to state. The legal specifications are typically broken down into the following categories:
• Possession limit
• Form of consumption (smoked, edible, or liquid forms)
• Whether it can be purchased at a dispensary and whether those dispensaries can operate as for-profits or non-profits
• Whether it can be cultivated at home
• Purchasing reciprocity with other legal-status states

A comparison of medical marijuana laws in New York and Nevada helps to highlight the complexity of the patchwork of state laws. In New York, patients must have one of several specified debilitating or life-threatening conditions such as cancer, HIV, or multiple sclerosis; be at least 21 years old; and may only possess a 30-day supply with the actual quantity to be determined by a physician and “no individual dose may contain more than 10 milligrams of THC.” Additionally, medical marijuana may only be administered as a liquid, oil, or capsule, rather than smoking or as an edible (infused in food). Additionally, New York does not permit home cultivation.

Across the country in Nevada, marijuana may be used to treat “chronic or debilitating medical conditions,” such as AIDS, cancer, or glaucoma for those 18 years and older. In addition, home cultivation is allowed but only if the patient lives more than 25 miles from a dispensary or cannot find a dispensary with the needed strain. The possession limit for medical use is “two and one-half ounces of usable marijuana in any 14-day period and up to 12 plants, irrespective of whether they are mature or immature” or “for purposes of edible and marijuana-infused products, the total amount of THC in any one 14-day period cannot exceed 10,000 milligrams.”

A CANNABIS PATCHWORK

The significant variations in marijuana laws extend into the realm of taxation, state and local application processes and fees, capital requirements for dispensaries, and cost of licenses for businesses for cultivation, dispensaries, manufacturing, testing, and more. These differing specifications among states create a patchwork that can be confusing for anyone attempting to understand marijuana laws across the country.

WOULD RESCHEDULING CANNABIS MAKE IT LEGAL?

Rescheduling cannabis would not necessarily result in full-blown legalization. For example, if the DEA were to relegate cannabis to a Schedule II classification, it would still be considered “highly addictive with a dangerous potential for abuse.” However, if designated as a Schedule II drug, cannabis would be considered “medically acceptable in particular cases, like for treating chronic pain or addiction.” Rescheduling in this way would have virtually no effect on the recreational status of cannabis because recreational possession and use would still be “illegal” and subject to prosecution under the Controlled Substances Act.
WHAT IT WOULD DO

The Brookings Institute notes, “There are fewer obstacles to conducting research on drugs in Schedule II for research than Schedule I” and that rescheduling cannabis as Schedule II would “slightly relax the bureaucratic hurdles to research on the medical benefits or impacts of cannabis.” Additionally, rescheduling would permit FDA-approved derivatives of cannabis to be available for “prescription with the highest level of restrictions.” Beyond opening opportunities for medical research, reclassifying cannabis would send a message to the medical research community, state policymakers, and constituents that the federal government supports further research for legitimate medical marijuana use, which cannot be said of its current Schedule I designation.

THE POT PARADOX

One might imagine that pro-cannabis groups would advocate for the rescheduling or even de-scheduling entirely of cannabis. However, some states that have already developed robust cannabis industries now have market incumbents that fear moving cannabis to Schedule II would open the market to large tobacco and/or pharmaceutical companies that would be eager to pursue the now more-legitimized medical research angle. And while de-scheduling cannabis would effectively legalize it across the country, it would make it even more likely that an influx of tobacco and pharmaceutical companies would flood the market. If federal lawmakers did push for rescheduling or de-scheduling cannabis, they may very well receive push-back from progressive cannabis states with well-established cannabis industries. Because there is disagreement about the best path forward among the cannabis-legalization community, a change in the scheduling of marijuana under the Controlled Substances Act is unlikely in the near-term.

FEDS STILL SAY ‘CAN’T’ ON CANNABIS

Simply understanding the state and local legal landscapes for marijuana cultivation, use, and sale across the country is a challenge. Further complicating matters is that even in a state that has legalized or decriminalized the possession and distribution of marijuana, it remains illegal under federal law. This fact has caused many to eye the proliferation of a legalized marijuana industry with caution, hesitation, confusion, and skepticism.

Recent developments at the federal level have only added to the confusion. After several states passed legalization bills, Deputy Attorney General James Cole released in August 2013 a Department of Justice memorandum issuing guidance to federal prosecutors concerning marijuana enforcement under the CSA. The guidance suggested that federal prosecutors and law enforcement officials prosecute based on the state’s specific medical and recreational marijuana laws with the expectation that “states and local governments that have enacted laws authorizing marijuana-related conduct will implement

Visit SOFE at: www.sofe.org
strong and effective regulatory and enforcement systems that will address the threat those state laws could pose to public safety, public health, and other law enforcement interests." (28)

The Cole memo offered some reassurance to those individuals and businesses involved with the marijuana supply chain that they would not be prosecuted under federal law for activities in states that allow the production, and distribution, and use of marijuana. However, this reassurance came only in the form of a guidance memorandum, which can be retracted at any moment.

The outcome of the 2016 presidential election eradicated any perceived stability in the "legality" of the cannabis industry. With a new administration at the helm, those involved in the marijuana business expressed concerns about the status of the DOJ's prosecutorial discretion under the Cole memo. Their fears were realized when, in January 2018, Attorney General Jeff Sessions released a memo directing U.S. attorneys to "enforce the laws enacted by Congress and to follow well-established principles when pursuing prosecutions related to marijuana activities." (29) The Sessions memo heightened the confusion about the legal status of the cannabis industry, even in those states that had legalized it under their own laws. The DOJ's reversal has come close to bringing the conflict between state and federal marijuana laws to a head.

THE BANK SECRECY ACT

Passed by Congress in 1970, The Currency and Foreign Transactions Reporting Act of 1970, commonly referred to as the Bank Secrecy Act or "BSA," requires U.S. financial institutions to assist U.S. government agencies in detecting and preventing money laundering. Specifically, the act requires financial institutions to keep records of cash purchases of negotiable instruments, file reports of cash transactions exceeding $10,000 (daily aggregate amount), and report suspicious activity that might signify money laundering, tax evasion, or other criminal activities." (30) Several other anti-money laundering laws, including provisions in Title III of the USA PATRIOT Act of 2001, have been enacted to amend the BSA.

These laws apply to marijuana due to its inclusion as a Schedule I controlled substance, with the highest severity for violations. When banks or other financial institutions engage in such commerce, they must report suspicious activity to FinCEN, the Financial Crimes Enforcement Network. Following guidance issued by FinCEN, financial services firms are permitted to submit special marijuana-related suspicious activity reports, or SARs. However, such firms are required to review more than 50 items of guidance for each transaction to ascertain if a potential violation of federal law beyond violating the CSA has occurred. The cost of compliance and the time it takes to analyze each transaction to avoid penalty tends to keep most banks out of even attempting compliance in this regard. (31) According to the Brookings Institute, only around 350 banks and credit unions do business with marijuana-related
operations. Together, they file more than 2,000 SARs each month in order to comply with FinCEN’s guidance.

THE RACKETEER INFLUENCED AND CORRUPT ORGANIZATIONS ACT

The Racketeer Influenced and Corrupt Organizations Act broadly defines activities that would be considered “racketeering” to include dealing in controlled substances found in 18 U.S.C. §1961. It also makes it unlawful “for any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise’s affairs through a pattern of racketeering activity or collection of unlawful debt.” Additionally, there are not only criminal penalties (18 U.S.C. §1963) but civil penalties that can be prosecuted by the U.S. (18 U.S.C. §1964) and private citizens for any person injured in his business or property by reason of a violation.

The act was originally utilized for organized crime syndicates that crossed state lines and engaged in a number of illegal activities. However, RICO has been used to target a broad spectrum of industries and activities. For example, RICO has been discussed to combat alleged collusive pricing among health care networks. Other lawsuits have been brought founded upon nuisance or reputational or property value loss simply for being associated with various entities.

In the cannabis context, in a recent case a federal judge held that private landowners could bring civil claims under RICO against marijuana growers and their associates alleging an injury to their land. The plaintiffs claimed the racketeering activity the defendants engaged in (although legal by Colorado state law) was the “dealing in marijuana,” and the marijuana growing operation injured their property by “emitting pungent, foul odors, attracting undesirable visitors, increasing criminal activity, increasing traffic, and driving down property values.”

A GROWING INDUSTRY, DESPITE DIFFICULTIES

The confusion and potential criminal exposure resulting from marijuana’s legal status under federal law extends well beyond those individuals or businesses directly involved in the supply chain. In particular, companies providing ancillary services, such as banking or insurance services, to a state-legalized marijuana industry can be exposed to legal issues. In addition to violating the Controlled Substances Act, doing business with any part of the marijuana industry can run afoul of several federal laws, including the Banking Secrecy Act/Anti-Money Laundering Law and the Racketeer Influenced and Corrupt Organizations Act. Banks and insurers providing services to enterprises involved in the cannabis industry could find themselves held criminally or civilly liable for allegedly causing harm to others by aiding the operation of the business.
For these reasons, many industries have avoided doing business with anyone involved in the cannabis supply chain. This has created difficulties for marijuana-related businesses in obtaining basic services such as banking and insurance. Despite this, those states that have legalized marijuana to some degree have seen an entire industry spring up with the cultivation and sale of marijuana becoming a booming business. In 2017, the legal medical and adult-use market reached $8.5 billion, according to the “State of Legal Marijuana Markets” executive report. The same report projects that the U.S. cannabis market will reach $23.4 billion by 2022. Another report even likened the industry’s 25 percent compound growth rate through 2021 to cable television at 19 percent in the 1990s and broadband internet at 29 percent in the 2000s. Other reports project the industry would reach as much as $50 billion by 2026 if marijuana were legalized at the federal level. In addition, medical and adult use retail cannabis tax revenues topped $745 million in 2017 and are expected to hit $2.3 billion in 2020.

### Annual U.S. Cannabis Sales vs. Other Industries & Goods

<table>
<thead>
<tr>
<th>Industry</th>
<th>2017 Sales</th>
<th>2022 Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer</td>
<td>$106.6B</td>
<td></td>
</tr>
<tr>
<td>Cigarettes</td>
<td>$67.0B</td>
<td></td>
</tr>
<tr>
<td>Nutraceuticals</td>
<td>$1.1B</td>
<td>$10.3B</td>
</tr>
<tr>
<td>Estimated Total Demand for Recreational Cannabis in the U.S.</td>
<td>$45.6B</td>
<td></td>
</tr>
<tr>
<td>Movie Tickets</td>
<td>$1.6B</td>
<td></td>
</tr>
<tr>
<td>Ice Cream (Retail)</td>
<td>$5.1B</td>
<td></td>
</tr>
<tr>
<td>Donuts, Croissants, &amp; Pastries</td>
<td>$4.9B</td>
<td></td>
</tr>
<tr>
<td>Frozen Pies</td>
<td>$2.1B</td>
<td></td>
</tr>
<tr>
<td>Legal Recreational &amp; Medical Cannabis in 2016</td>
<td>$40.6B</td>
<td>$65.5B</td>
</tr>
<tr>
<td>Wines &amp; Craft Beers</td>
<td>$2.7B</td>
<td></td>
</tr>
<tr>
<td>Paid Music Streaming Services</td>
<td>$2.0B</td>
<td></td>
</tr>
<tr>
<td>Teabas</td>
<td>$2.3B</td>
<td></td>
</tr>
<tr>
<td>Girl Scout Cookies</td>
<td>$7.6B</td>
<td></td>
</tr>
</tbody>
</table>

1 Includes U.S. and Canada


Rate: All data is for 2015 or 2016. Most recent figures are reported in the chart.

Copyright 2017 Marijuana Business Daily, a division of Anne Handel Ventures Inc. All rights reserved.
Public support for the legalization of marijuana has been steadily growing. When Gallup first surveyed Americans about marijuana use in 1969, only 12 percent of those surveyed supported legalization. In an October 2017 Gallup Poll, 64 percent of participants indicated they believe that the use of marijuana should be made legal. In a study conducted by New Frontier Data in 2017, 63 percent of participants agreed that “The federal government should legalize cannabis.” Fifty-five percent of participants indicated that “cannabis should be legalized, regulated, and taxed like cigarettes and alcohol” while only 9 percent suggested that “cannabis should be illegal.” According to a January 2018 Pew Research study, six in 10 Americans say that the use of marijuana should be legalized. Pew’s study also underlines the generational disparities on the issue of marijuana legalization: 70 percent of millennials, 66 percent of Gen Xers, and 56 percent of baby boomers say the use of marijuana should be legal. In a poll conducted by Quinnipiac University in 2018, 63 percent of Americans supported legalizing marijuana, the highest number ever measured in a series of successive polls. In the same poll, 93 percent of participants supported the use of medical marijuana.
INTERSECTION OF CANNABIS AND PROPERTY/CASUALTY INSURANCE

Even if no other states passed legalization laws and the industry stopped growing – a dubious proposition indeed – insurance companies have been, and will continue to be, affected by the presence of marijuana for sale and for medical and recreational use across the states where it has been legalized. The industry and its regulators are increasingly recognizing this fact. For example, the National Association of Insurance Commissioners in August 2018 created the Cannabis Working Group to study cannabis issues affecting the insurance industry. (48) A brief consideration of just a few sample lines of business will serve to illustrate some of the interconnections.

HOMEOWNERS INSURANCE

The interconnectedness of cannabis and insurance can be clearly seen through some of the issues that have arisen with the homeowners line of insurance. A common question growers and users are asking is whether marijuana and related products would qualify as property covered by homeowners insurance policies if they are stolen or damaged. The answer is complicated. A court case from Hawaii serves as an illustrative case. In July 2010, 12 of Barbara Tracy’s marijuana plants were stolen from her property. Tracy, a resident of Hawaii, filed a claim, and her carrier offered her a settlement of $8,800. (49) Tracy rejected the settlement and asked for more money plus bad faith damages totaling $45,000. Her carrier contested the claim, arguing there was no valid insurable interest in the plants because of a statute that says you can only have insurable interest in a lawful substance. (50) Given that marijuana
is illegal under the CSA, Tracy’s carrier argued that it would be defying public policy if the court mandated the policy cover the plants. In the end, the court sided with the carrier and rejected Tracy’s claim. However, as several other cases described below demonstrate, the results of these types of cases can depend on whether the judge rules that the CSA or state laws legalizing the substance are the controlling law.

The prior case demonstrates a key general principle when dealing with cannabis and insurance. Basic contractual law holds that parties can contract for any matter that is considered legal. An “illegal” contract can be determined to be void ab initio or “from the beginning.” Due to the various scenarios that can arise between the policyholder, the insurer, and other third parties, the need to exclude or disclaim liability after a policy is in effect is a real consideration that must be understood and defended accordingly if an insurer so chooses. This in turn creates other coverage decisions, including the duty to defend and indemnify that can result in additional declaratory rulings from courts. Further, issues concerning timely and accurate disclosures as to coverage or risk, underwriting clarity and investigation, risk management of entities, cooperation with an insurer, and lack of candor all play into coverage decisions that can result in litigation.

Another critical question is how an insurance company will know if a policyholder is growing marijuana and what that ultimately does to its risk profile, regardless of whether the company intends to cover any of the grow apparatus or the product. In other words, this could be a risk factor over-and-above what it might cost to insure the marijuana itself. Many homes’ electrical systems are not equipped to handle the kind of power required to operate an in-home grow and more inexperienced growers and manufacturers will not always take the necessary steps to create the safest possible environment for growing inside the home. Insurance companies may find that their homeowners policies in states that are decriminalizing and legalizing marijuana may need to address the risk factors of growing marijuana. Grow operations may present more risk to a home due to the nature of growing the plant, and insurers may want to attempt to ascertain if this additional risk factor is present when underwriting a homeowners insurance policy.

Another key issue for both homeowners and commercial property insurers to understand is the potential dispute over classifying property as commercial or personal. In a Colorado case, Weingarten v. Auto Owners Insurance Company, Connie and Edward Weingarten sued their insurer arguing the company had “denied their insurance claim which sought coverage for property damage due to an illegal marijuana grow operation.” Auto Owners sought summary judgment based on the fact that the property was not used “principally” as a residence but rather as an “illegal marijuana grow operation.” The Weingartens provided photos of furniture, electronics, and other amenities to argue that the house was primarily used as a residence after initially admitting they used “virtually the entire house in this operation.” The judge denied summary
judgement to Auto-Owners "to the extent it sought a determination that the house was not used principally as a private residence."

COMMERCIAL PROPERTY

A commercial property insurer may have similar considerations as a homeowners insurer when it comes to the potential risk profile of a policyholder that may be operating a marijuana grow within the property. Businesses that establish commercial-scale marijuana grow facilities represent fire risk substantially due to the complex apparatus and electric configurations required to safely grow and maintain marijuana. These businesses also have a very high-risk profile when it comes to theft. Noah Stokes, founder and CEO of OmniGuard Security, a marijuana security business, observed, "I've never met anybody who grows marijuana who's not been robbed; not just robbed once, but robbed multiple times." (54)

As in the case of homeowners insurers, in states that are decriminalizing and legalizing marijuana, companies may want to know for certain whether any part of the commercial property being insured is being used by a marijuana-related business. Similarly, landlords and insurers of landlords can become involved in cannabis issues/claims inadvertently. The increased costs involved in insuring cannabis operations put a higher burden on underwriters to understand their insureds and the potential for cannabis-related tenants/businesses to increase the risks at insureds' rental properties. In addition, the historic use and rental of an insured property can increase insurer exposure. As in environmental claims, underwriters might benefit by inquiring about the historic use of insured properties to avoid being brought into litigation along with prior carriers for an insured even if the cannabis risk is no longer at the property.

To the extent that a property is known to house such a business and coverage is offered anyway, marijuana's classification as a Schedule I drug may not be a valid reason for denying payment of a claim. The case of Green Earth Wellness Center v. Atain Specialty Insurance Company involved a claim filed by Green Earth in 2013 after "thieves entered Green Earth's grow facility through a roof vent and stole various plants." (55) Atain denied the claim on the grounds that marijuana is illegal at the federal level even though it knowingly provided Green Earth with general liability and commercial property policies for marijuana plants. (56)

Green Earth subsequently sued for breach of contract, bad faith, and unreasonable delay in payment. The district court eventually ruled that Colorado laws governed the contract, not federal laws. (57) Atain, having entered into the contract knowing that Green Earth was a marijuana business, could not invoke federal illegality of marijuana as a reason not to pay in this case. (58)
Property risks associated with cannabis can include the loss or damage of the product, fire damage, theft, and damage to the building itself. Ultimately, insurance companies, particularly those with businesses in states with medical or adult-use marijuana laws on the books, should be aware of what is and what is not potentially covered by a specific property policy with regard to marijuana.

AUTO

Some reports suggest that highway safety has already been affected by the surge of cannabis legalization across the country. A 2018 Governors Safety Highway Administration study found that marijuana is the most common drug found in fatally injured drivers and marijuana presence has increased substantially in the past decade. One recent Insurance Institute for Highway Safety (IIHS) study "examined 2012-16 police-reported crashes before and after retail sales began in Colorado, Oregon and Washington" which estimates "that the three states combined saw a 5.2 percent increase in the rate of crashes per million vehicle registrations, compared with neighboring states that didn't legalize marijuana sales." Additionally, an October 2018 Status Report produced by the IIHS and the Highway Loss Data Institute (HLDI) noted, "HLDI analysts estimate that the frequency of collision claims per insured vehicle year rose a combined 6 percent following the start of retail sales of recreational marijuana in Colorado, Nevada, Oregon and Washington, compared with the control states of Idaho, Montana, Utah and Wyoming." IIHS-HLDI President David Harkey has recently noted, "Despite the difficulty of isolating the specific effects of marijuana impairment on crash risk, the evidence is growing that legalizing its use increases crashes."

The IIHS and HLDI also identify other potential challenges related to marijuana intoxication and sobriety testing. Their 2017 Status Report cites, "unlike alcohol, experts don't agree on how much marijuana must be consumed for a driver to be impaired. [Additionally] A positive test for THC and its active metabolite does not mean the driver was impaired at the time of the crash." In theory, a driver could be completely sober yet test positive for marijuana that was consumed weeks before the test. The lack of a reliable impairment test for marijuana could prevent law enforcement from identifying impaired drivers and prevent insurers from understanding an insured's true risk profile as they can with an alcohol-related DUI on a driving record.

Relatedly, it is not clear that users of marijuana know how much or whether certain kinds of consumption will lead to impairment. As Chris Cochran, spokesperson for California's Office of Traffic Safety asserted, "With the higher prevalence of marijuana in the world, what we're seeing is a sort of denial of the fact that marijuana can be impairing ... Marijuana is not a benign substance when it comes to driving ability. It throws off your perception of time, loosens inhibitions, and changes reaction times." If drivers do not under-
stand or have a clear way of measuring their own impairment or risk potential, driving in states with high levels of marijuana use could pose greater risk to fellow drivers and stymie efforts to combat impaired driving.

Another consideration is personal injury protection coverage, also known as “no-fault” insurance coverage. These policies pay claims for incurred medical expenses regardless of fault (as well as lost wages in some states) for injury and property damage because of an auto loss or accident. Reimbursement for injuries can arise that may include a duty to reimburse for prescribed cannabis because of a motor vehicle collision. On the other hand, some states, such as Michigan, have contained within their PIP statutes a ban on cannabis reimbursement. The statute states “[a]n insurer shall not be required to provide coverage for the medical use of marihuana or for expenses related to the medical use of marihuana.” A close review of state law and policy coverage in any given state is needed to truly understand coverage exposures.

Companies offering commercial auto may also be impacted by the marijuana industry. Transportation in the industry entails carrying large and expensive quantities of cannabis product(s), in addition to thousands of dollars in cash due to the lack of available banking services as discussed above. This situation presents an enormous amount of risk. Commercial auto insurers will want to work closely with any transportation or shipping company policyholders to understand if and how someone might ship marijuana using their service and how that will impact their risk profiles as potential distributors.

WORKERS’ COMPENSATION

Workers’ compensation insurers generally have had to deal with the complexities, confusion, and potential impact of the rise of marijuana legalization. One significant question is whether workers’ compensation should cover medical marijuana if it is prescribed to the patient by a physician. Currently five states – Connecticut, Maine, Minnesota, New Jersey, and New Mexico - have laws requiring medical treatment reimbursement for marijuana under workers’ compensation laws, according to the National Council for Compensation Insurance. Despite state law, some courts have ruled that the federal Schedule I drug classification under the Controlled Substances Act preempts state law, and Florida and North Dakota have passed laws that exclude marijuana treatment from workers’ compensation reimbursement.

A case that illustrates the complex and changing legal landscape for workers’ compensation insurance and medical marijuana is Gaetan H. Bourgoin V. Twin Rivers Paper Company, LLC. In the 1980s Bourgoin of Maine, sustained a work-related back injury while working at Twin Rivers Paper Mill. Bourgoin was initially prescribed opioids in various forms until the side effects produced adverse health effects. As a result, Bourgoin’s physician issued him a medical marijuana certification to manage his chronic back pain. The Maine’s Workers’ Compensation Board ruled that Twin Rivers’ insurer must reimburse Bourgoin for his medical marijuana. However, Twin Rivers con-
tested Bourgoin’s successful petition citing that CSA “barred” reimbursement despite Maine’s Medical Use of Marijuana Act. Following an unsuccessful appeal to the appellate division, Twin Rivers’ petition for appellate review was granted by the Maine Supreme Court.

The Maine Supreme Court later held that there was a, “positive conflict between federal and state law” and that the CSA preempts the state’s MMUMA law. Maine Supreme Court Associate Justice Jeffrey Hjelm stated, “Prosecuted or not, the fact remains that Twin Rivers would be forced to commit a federal crime if it complied with the directive of the Workers’ Compensation Board.” Hjelm contended that Twin Rivers could not simultaneously comply with both federal and state laws, but that according to the CSA, Two Rivers would be “aiding and abetting Bourgoin in his purchase, possession and use of marijuana,” and therefore breaking federal law.

The Bourgoin case demonstrates that in some instances state laws can be preempted by the CSA, but this is not always the case. In Vialpando v. Ben’s Automotive Services and Redwood Fire & Casualty, a New Mexico case from 2014, an injured worker’s employer cited the CSA and asserted that it would be illegal under federal law to reimburse the employee for medical marijuana. New Mexico’s intermediate appellate court determined that “an employer and its workers’ compensation carrier are required to reimburse an employee for costs associated with the purchase of medical marijuana.” The juxtaposition of the two cases illustrates the ambiguity that is created given conflicting state and federal marijuana laws. This state of affairs led NCCI to predict, “For the foreseeable future, the marijuana landscape will likely remain a state-by-state patchwork with courts being actively engaged in interpreting the law.”

As in the auto insurance space, marijuana use has created a perplexing landscape for employers, employees, and insurers when it comes to workers’ compensation. Since testing for accurate marijuana intoxication levels is more challenging than for alcohol, it may be difficult to determine if employees who have sustained an injury on the job were under the influence of marijuana at the time of the injury. If that is so determined (the determination likely to be challenged given the above), depending on state law and company policy, it may be the case that workers’ compensation will not be available. If the company established a “no drug-use policy,” the employee filing a claim in this case may have an issue. These are just a few of the many intricacies pertaining to workers’ compensation that insurance companies and policyholders have experienced during the trend of state-based legalization of marijuana across the U.S.

From a different perspective, there has been a growing number of people suggesting that marijuana may be a viable alternative to opioids for pain relief in certain instances. Injured workers prescribed opioids for pain relief are at risk of becoming addicted, which can be counterproductive to one of the central missions of workers’ compensation insurers: helping injured workers return to
work. In light of the opioid epidemic, if marijuana proved to be an adequate alternative without the potential for addiction, it may be a preferable option. However, the assertion that it is a preferable alternative remains highly controversial, and there has not been a substantial amount of research into the long-term effects of marijuana usage based on either quantity or form. Additionally, a workers' compensation insurer may be paying for marijuana for an extended period until a doctor says it is no longer needed. There could also be the potential treatment of any side effects or other issues that occur from long-term cannabis use, such as mental health treatment for paranoia for example, that may be compensable as well. Workers' compensation insurers will want to carefully follow the scientific research on cannabis and its derivatives like cannabidiol to better understand its medical efficacy and effects.

It is imperative for workers' compensation insurance companies with business spanning across the 30 states that have now legalized medical and/or recreational marijuana to closely monitor the shifting legal status of medical marijuana to better understand the conditions that prompt and require reimbursement for medical marijuana, at the very least under state law. At present, even with more lenient state laws, the combination of the Schedule I classification and local courts’ interpretation, it is a difficult space to navigate. This is even more true for legalized states in which stakeholders along the cannabis supply chain cannot find coverage in the private market and resort to the state's residual market mechanism, which in many cases is an assigned risk pool. If a company is required to offer coverage to a cannabis business through a residual market mechanism, this will put the company between the proverbial rock and a hard place facing a serious and fundamental conflict between state and federal laws.

A FEDERAL SOLUTION?

There have been efforts at the federal level to eliminate or mitigate the conflict between state and federal laws as it pertains to marijuana. The Rohrabacher-Farr Amendment, signed into law in 2014 after facing six rejections, says that the Department of Justice and the Drug Enforcement Administration cannot use federal funds “to prevent states and territories from implementing their own laws on MMJ [medical marijuana].” In theory, this would protect states with medical marijuana laws on the books to prevent federal government interference. This amendment, however, does not protect recreational marijuana laws or businesses. The bill has been renewed eight times since it first passed the House in 2014. However, despite Rohrabacher-Farr, district courts have often ruled in favor of the CSA as the controlling statute in the cases before them, as several cases considered in this paper demonstrate.

On June 7, 2018, Sens. Cory Gardner, R-Colo., and Elizabeth Warren, D-Mass., introduced the Strengthening the Tenth Amendment Through Entrusting States, or STATES Act. The bill "would amend the existing Controlled Substanc-
es Act to say it no longer applies to those following state, territory or tribal laws relating to the manufacture, production, possession, distribution, dispensation, administration or delivery of marijuana." (82) In essence, the STATES Act is aimed at ensuring that states' marijuana laws are respected by the federal government and not preempted by the CSA.

CANNABUSINESS: A POTENTIAL MARKET FOR PROPERTY/CASUALTY INSURERS?

Already a $9 billion industry in 2017, it is estimated that the cannabis business will account for more than 280,000 jobs in the agriculture, manufacturing, management, administration, and retail operations industries by 2020. (83) With investors pouring $500 million into privately held cannabis companies in 2017, it is likely that investment and jobs in the cannabis supply chain will only become more common in the coming years. (84) While those dealing directly with the plant/product (see Appendix I for full description of the cannabusiness supply chain) are the primary players in the burgeoning marijuana industry, there are countless other professions associated directly or indirectly with the plant: legal counsels, compliance officers, wholesale buyers, transportation services, web developers, sales representatives, and security guards for growing facilities. As the industry continues to develop it will continue to more closely resemble traditional industries in its need for various products and services – including insurance products and services.

Due to the complicated legal landscape described above, there are very few admitted property/casualty insurers active in the marijuana space, despite the fact that virtually every leg of the cannabis supply chain has a need for insurance products and services. Many in the marijuana industry have complained about the lack of insurance products available to growers, processors, and distributors. Due to the general reluctance of insurers to write policies for cannabis suppliers and products, some larger cannabis operations have considered establishing captive insurers in order to cover their specific insurance needs while others have looked to surplus lines carriers for needed coverage. (85) Some admitted carriers have begun exploring the space: in California in 2017, Golden Bear Insurance Company became the first admitted carrier to offer insurance policies for cannabusinesses. (86)

If the legal status of marijuana is resolved to eliminate the conflict between state and federal laws, more insurers may show interest in exploring engagement with cannabusinesses in a variety of ways. A few examples include:

Both commercial property and personal homeowners insurance face many similar risks and, consequently, similar potential associated with growing, manufacturing, distribution, and possession of marijuana. As state laws increasingly sanction small, in-home growing and commercial sale for medicinal and adult-use, there is certainly
• a role for more commercial and homeowners insurers to play in ensuring that policies are offered that reflect the heightened risks associated with cultivating, processing, distributing, and consuming marijuana.

• Within the commercial auto space, armored car coverage is carving out a place for itself in the industry. According to Todd Kleperis, CEO of Hardcar Security, a recreational and medical marijuana transportation company, "You become a huge target [for criminals] and your risk profile is off the charts" when you are involved with moving marijuana products. Kleperis’s unique business "operates more like a military operation than a transport company," deploying unmarked trucks, often driven by armed military veterans. High-risk policies for marijuana transportation companies such as Hardcar could be offered to further protect the players in the marijuana supply chain.

• Given all the businesses involved in the marijuana supply chain, the growth of cannabusiness will require more workers’ compensation coverage. Cannabusinesses understand the many risks that accompany marijuana growing, manufacturing, and distribution have also created a demand for workers’ compensation policies that will cover their employees in the event of a workplace accident.

• Indoor and outdoor crop insurance represents perhaps one of the most lucrative yet risky markets for property/casualty insurers. An acre of marijuana can produce more than $1.1 million worth of revenue – to put that in perspective, an acre of corn typically yields about $645 worth of crop. Farmers are looking to marijuana to diversify their crops and ultimately make a generous profit that cannot always be made with commodity grains. Farmers who have been growing marijuana crops have also noticed a coverage gap and have voiced their interest in cannabis crop insurance.

• Another line of insurance that will be affected by the growth of the cannabis industry is product liability insurance. Cannabusinesses have expressed a need for product liability insurance in case the product is defective and causes bodily harm or injury to a customer or a client. According to the law firm Wilson Elser, “From September 08, 2015, through April 26, 2017, Colorado authorities reported 66 cannabis recalls,” which highlights an industry that is still learning how to harness and master the science behind the product. Given that the physical composition of cannabis products can vary, consisting of different ingredients, doses, and pesticides, cannabusinesses have articulated a need for product liability insurance products. In particular, edible products may be significantly more potent than other forms of cannabis and clients may not realize that several bites may cause a longer and more intense effect than a small bite. If a customer falls ill from consuming a product – even if it was consumed incorrectly – liability exposure could apply up the supply chain.
- Like most retail stores, marijuana retail dispensaries also need commercial general liability coverage for any customer-related accidents or injuries that may occur on the premises. For example, California requires distributors to “carry and maintain commercial general liability insurance in the aggregate in an amount of no less than $2,000,000 and in an amount no less than $1,000,000 for each loss.” (94) Demand for CGL policies from dispensaries and other cannabis businesses within the marijuana supply chain, especially those with frequent day-to-day interactions with customers in a retail store, may create a robust market.

- Analysts have predicted strong potential markets for other commercial lines products, including but not limited to professional liability (E&O and D&O) and intellectual property coverages. (95)

Growers, processors, landlords, distributors, and physicians in states that have decriminalized and legalized marijuana have articulated a litany of coverage gaps that could be addressed by property/casualty insurers. Admitted carrier cannabis coverage is almost nonexistent, and this lack of insurance has created a surge in the surplus lines and captive insurance markets. The emergence of admitted carriers such as Golden Bear Insurance Company in California suggests that some insurers are indeed trying to identify effective ways to collect data and write policies for personal and commercial cannabis lines.

Assuming some clarity is brought to the legal landscape surrounding cannabis and as cannabis businesses become more common, more property/casualty insurers may enter the market on an admitted basis. This process of integrating cannabis businesses with property/casualty insurance could be slow, but the cannabis industry could also offer a tremendous potential market for insurers to offer coverage to those involved throughout the supply chain.
CONCLUSION

It is understandable that the vast majority of insurance companies have hesitated to enter a market in an industry for which there is relatively little data, a patchwork regulatory environment, and plenty of legal ambiguity. Unless and until federal law is modified, it could be a very long time before major carriers move into the cannabis space. However, current public opinion combined with widespread state and local efforts to legalize cannabis signifies a shift toward broader acceptance of marijuana for medical and adult recreational use. The existing marijuana industry is robust and only expected to get bigger.

It is therefore critical for insurers to understand the industry, potential impacts, and nuanced legal developments at the local, state, and federal levels even if they do not choose to offer products in the cannabis market. As evidenced by court cases and tension between local, state, and federal laws, there are many ways in which property/casualty insurers can become involved and impacted at the various stages of the marijuana supply chain. As Sen. Cory Gardner of Colorado has put it regarding marijuana legalization, it is a “ketchup out of the bottle” issue. Therefore, it is worthwhile for companies that do business in the 30 states and growing that have legalized medical and adult-use marijuana, to at the very least, understand the multi-faceted impacts that cannabis can have on the property/casualty insurance industry.

APPENDIX I. UNDERSTANDING CANNABUSINESS & THE SUPPLY CHAIN

The cultivation and sale of marijuana today are a far cry from the one-man-show, garage-based grow operations that existed prior to formal recreational and medical legalization in numerous states. Those communities that have legalized it to some degree have seen the growth of a full-fledged industry, with a robust and multi-faceted workforce. According to the North American Marijuana Index that tracks the leading stocks operating in the legal cannabis industry in the U.S. and Canada, the cannabis industry can be segmented into three parts:

- Touching the Plant (cultivators, biotechnology, retailers)
- Direct Support (branding, lab testing, real estate, banking)
- Ancillary Services (investing & financing and technology and media)
TOUCHING THE PLANT

Cultivators, or growers, make up the first stage of the marijuana supply chain. Cultivators are generally the individuals tasked with harvesting marijuana until it is ready for distribution to a lab for testing, a manufacturing center to be packaged, or a dispensary for immediate sale. The harvesting of marijuana comes with a variety of challenges ranging from the need for sensitive climate controls and protection against pest infestations, to risk of theft and improper handling during the growing process. Of the many elements of the marijuana industry, cultivators have seen the greatest influx of competition and face the most stringent regulatory hurdles that make earning a profit difficult, especially in the early stages of business development. In California, growers who have applied for state and local licenses must cease growing and manufacturing operations until they are cleared by state and local regulators. This process can take up to one year, and for small operations with very little capital the lack of cash flow can be devastating, ultimately pushing out the smaller competitors.

Processors are tasked with trimming, cutting, extracting, infusing, packaging, and a variety of other services involving refinement of the cannabis plant. Using a range of technology to prepare the product for sale, processors create finished products ranging from cannabis oils to edibles. Processors face a number of work-related hazards depending on their specific refinement task(s) from exposure to chemicals, “compressed gases, flammable solvents, screening and pressing, and dry ice” according to the Washington State Department of Labor and Industries. Processing is no doubt a dangerous aspect of the cannabis supply chain, yet an instrumental step in transforming the marijuana plant into a consumable product that reaches the market for both recreational and medicinal consumption.

The Biotechnology sector consists of pharmaceutical companies primarily tasked with the research and development of drugs and products that contain active compounds in marijuana. The Marijuana Index notes that the biotech sector “is currently the largest sector in the U.S. and is expected to continue its growth as more companies, universities, and governments around the world expand their research of cannabinoids, the endocannabinoid system, cannabis medicinal products, and more.” Companies such as Earth Science Tech and Cannabis Science Inc. are participating in research into and the development of cannabidiol, or CBD, products for therapeutic treatment of cancer and other ailments. CBD is a compound found in the cannabis plant that is typically used as an oil, gel, or supplement to treat seizures, depression, anxiety, and a host of other conditions. Most importantly, CBD does not create the same “high” that THC does in various marijuana products. Biotech marijuana products, such as those refined by Earth Science Tech, are more widely accessible because 46 states now have CBD product laws.
While the legal status of recreational use remains uncertain and volatile in many states due to conflict with the CSA, medical marijuana prescription is more widely accepted and regulated across the country and provides a booming niche for the biotech industry. For that reason, biotech companies tend to view marijuana through a bio-pharmaceutical lens and are steering clear of the recreational space. The goal of many biotech firms is to distribute their products through major retailers and stores, effectively reaching many more patients and providing treatment options for anxiety, depression, fatty liver disease, and other ailments. Partnerships with universities, investors, and other businesses are also being pursued to contribute to the legitimacy of these marijuana-related products and services. Biotechnology, with a stated goal of improving health, will no doubt remain an influential stakeholder in the industry as the commercialization of medical marijuana continues.

A dispensary is the final destination in the supply chain for marijuana after it has been cultivated, tested, refined if desired, and packaged. Dispensaries are essentially the retail stores that sell the finished marijuana product directly to consumers. Typically, dispensaries must apply for a state license to sell marijuana (often there are separate application processes for medical and recreational licenses) and comply with other state and local regulations before officially selling it. In the case of many medical dispensaries, customers with a valid medical ID register with the dispensary and make a cash donation since many dispensaries are set up as non-profits and due to banking complications cannot accept credit and depart the store with their product in hand. That is one example of how it might work, but state law regarding dispensaries varies significantly. For example in Oregon in 2015, there were 269 medical marijuana dispensaries in operation – more than the number of McDonald’s and Starbucks franchises in the state. And that number has nearly doubled since. On the other hand, in Minnesota only permits a maximum of eight operating dispensaries at a time. In states establishing stringent dispensary regulations like Minnesota, marijuana markets may become saturated quickly and offer less competition than Oregon, a state that offers plenty of opportunity for dispensary competition.
DIRECT SUPPORT

Testing labs are important components of the marijuana supply chain. Prior to the increase in legalization of marijuana for recreational and medical uses across a number of states, this leg of the supply chain really did not exist. For cultivators attempting to go unnoticed and yield the highest profit possible, sending their product to a testing lab understandably did not make much sense. Today, states that have legalized the use of marijuana typically require that product be tested by a lab before distribution to a dispensary and sale to the consumer. Labs use a variety of testing methods based on different products (oil, flour, gummis, candies, etc.) in order to determine potency — the amount of THC, CBD, and pesticide concentrations in the product. Patients with differing medical needs, often have prescriptions for specific strains and dosages of marijuana, and the labs testing the product play the role of ensuring that the product that reaches the market is the one desired by the consumer. Because of the variation in testing quality between states, customers “have a false sense that the product they are buying is actually what it says it is,” according to a Forbes article published in 2017. According to Dylan Hirsch, executive vice president of Diagnostic Lab Corporation, “There are lots of tests around, but no methodology of testing,” which speaks to the great issue of standardization in testing that ultimately creates a system in which customers are forced to rely on the credibility and reputation of the grower, processor, and dispensary rather than an FDA-style of quality and product safety regulations.

Real estate and land use play an essential yet complicated role in the cannabis industry. Cultivators, distributors, and dispensaries need space to grow, manufacture, and sell their product. Thus, homeowners and landlords can be involved in the industry without necessarily touching the plant or the finished drug. Because of the meticulous care and the potentially devastating mishaps that can occur with harvesting marijuana, landlords and sellers are charging top dollar for cannabis business tenants and buyers. In fact, some who have retrofitted their homes to accommodate growers have received offers that are more than 100 percent above asking price. While these sites that meet State requirements are more difficult to come by in states that have strict marijuana laws, in states experiencing the “green boom,” there is real opportunity to see huge valuation in the marijuana real estate market. Due to tremendous variation between state laws, what may meet property and zoning requirements for cultivating or selling marijuana in one state may be completely different in another state. And it is also worth noting that landlords, especially those in states that authorize in-home growing and use, must be proactive in working with their tenants and subsequently with insurance companies to ensure that they understand the full risk profile of their home and property.
Banking entities are unique players in the marijuana industry. One of the most overwhelming challenges faced by cultivators and dispensaries is the significant lack of access to banking services (see above for detailed summaries of CSA, BSA, and RICO laws). To avoid breaking federal law and to stay clear of incurring money laundering charges, banks often decline business with potential cannabis business clients despite state laws that have decriminalized or legalized cannabis. Even medical marijuana operations are largely unable to access banking services, requiring them to operate primarily on a cash basis.

Despite updated Financial Crimes Enforcement Network guidelines published in 2014 allowing banks to more actively engage in business with marijuana entities, most banks have decided not to pursue relationships with cannabis businesses. Until marijuana's schedule classification is addressed by the president and Congress, the marijuana and banking relationship will likely remain in gridlock. As a result of limited banking opportunities, it is not uncommon for cannabis businesses to visit the IRS with thousands of dollars in cash to pay taxes. While this micro-cash economy pervades throughout most cannabis markets, Washington state and Hawaii have been revamping their marijuana market financing schemes to include cashless payment options. In the state of Washington, legal marijuana businesses must open bank accounts, and cannabis businesses in Hawaii use a payment system similar to PayPal, called CanPay.

ANCILLARY SERVICES

Investing and Financing – According to the Marijuana Index, the investing and finance sector includes holding companies and financial service providers that manage portfolios of cannabis assets. These companies are typically venture capital and private equity firms. The average investment placed in cannabis companies by venture capital firms is approximately $450,000, according to Forbes. Firms have invested in a variety of businesses along the supply chain ranging from grow operations to companies that produce consumption devices.

Technology and Media organizations are other figures in the marijuana industry that fall under the ancillary services umbrella. The boom of the cannabis business has created opportunity for an array of technologies such as seed-to-sale tracking systems, e-commerce platforms, specialized marijuana mapping technology, and devices that are used for consuming marijuana products. In addition, a number of marijuana-related media outlets such as High Times, Freedom Leaf, and Jane Street provide extensive reporting on all things marijuana.
FOOTNOTES AND CITATIONS:


4 Ibid.


8 By 1931, consistent with the Prohibition era’s view of all intoxicants, 29 states had outlawed cannabis. "Marijuana," History.com, 2017. (https://www.history.com/topics/history-of-marijuana)


14 Ibid.


18 Ibid.

20 Ibid.

21 Ibid.


23 Ibid.


33 Ibid.


35 Safe Streets Alliance v. Hickenlooper, 859 F.3d 865 (10th Cir. 2017).


43 "Record-High Support For Legalizing Marijuana Use in the U.S.," Gallup. (http://news.gallup.com/poll/221018/record-high-support-legalizing-marijuana.aspx)


47 Ibid.

48 See https://www.naic.org/cmte_c_cannabis_wg.htm.


53 Ibid.


55 Ibid.
56 Ibid.


58 "Clearing the Air on Marijuana Legalization and Insurance," PowerPoint Presentation by Brenda Wells, Ph.D., East Carolina University. (https://register.gotowebinar.com/recording/54391-45873655509889)


68 Ibid.


72 Ibid.
73 Ibid.

74 Ibid.

75 Ibid.


77 Ibid.


93 Ibid.


97 Marijuana Index, 2017. (https://marijuanaindex.com/sectors/)


99 Ibid.

100 Ibid.

101 Ibid.


107 “Medical Cannabis,” Minnesota Department of Health. (http://www.health.state.mn.us/topics/cannabis/index.html)

108 “Inside the high-tech labs that make sure your legal marijuana is safe,” Digital Trends, May 6, 2017. (https://www.digitaltrends.com/cool-tech/how-cannabis-testing-works/)
SOFE Editor's Note: This article was originally published by the National Association of Mutual Insurance Companies (NAMIC) as an Issue Analysis. For the original version of this article, please visit www.namic.org. Reprinted with permission.

About the Authors

Jonathan Bergner is Assistant Vice President of Federal Affairs for the National Association of Mutual Insurance Companies (NAMIC) in Washington D.C. Jon is involved in the full range of NAMIC's federal government relations activities as well as the association's public policy development process. Jon graduated from the University of Virginia with a Bachelor of Arts in political theory and philosophy and has a Masters degree from Georgetown University. He has been with NAMIC for a little over 11 years.

Andrew Pauley is Government Affairs Counsel for the National Association of Mutual Insurance Companies (NAMIC).

Paul Tetrault is State & Policy Affairs Counsel for the National Association of Mutual Insurance Companies (NAMIC).

Andrew Malin is Federal Affairs Coordinator for the National Association of Mutual Insurance Companies (NAMIC).