

THE MARIJUANA GATEWAY FALLACY

Eve Waltermaurer
Gerald Benjamin
Leah Mancini



FOR PUBLIC POLICY INITIATIVES

COVER IMAGE (detail)

Cannabis sativa, Family *Cannabaceae*.
Original book source: *Prof. Dr. Otto Wilhelm
Thomé Flora von Deutschland, Österreich
und der Schweiz* 1885, Gera, Germany

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It is that myth, not marijuana itself, that has the greatest harmful effects.

”

After a year of field visits and 1,193 interviews, mostly with health care providers, the 3,000 page Indian Hemp Drug Commission Report concluded in 1894 that even moderate use of cannabis caused no significant physical, mental, or moral damage to the user. For the ensuing 120 years, this has remained the generally accepted medical knowledge about marijuana use. There are some potentially significant negative short term effects. There are also increasingly understood positive therapeutic effects of marijuana use. There is no proven gateway effect; marijuana use does not systematically lead to the use of other, more harmful drugs. But the myth that it does persists.

Short Term Effects: The Science

The National Institute of Drug Abuse (NIDA) states that recreational marijuana users risk short term effects including altered senses, altered sense of time, changes in mood, impaired body movement, impaired memory, and difficulty with thinking and problem solving. Marijuana users may also be at risk for breathing problems, increased heart rate, temporary hallucinations, and temporary paranoia (NIDA, 2016).

There are additional effects on specific sub-populations. Individuals who possess one of the three AKT1 gene variations are seven times more likely to develop schizophrenia-like disorders with daily marijuana use. Also, adolescents with one or two copies of the Val variant in the COMT gene are more likely to develop

schizophrenia-like disorders with any marijuana use (NIDA, 2015).

Other short term effects of marijuana potentially include impacts on peripheral vision, awareness of the passage of time, motor control, balance, and executive functioning, all needed for driving. Since the legalization of marijuana in the states of Colorado and Washington, there has been a 47 percent increase of drivers in the U.S. National Roadside Survey who have tested positive for THC (Davis et al., 2016), a marker for marijuana use. Interestingly however, a case controlled study from Virginia found no statistical association between THC in the blood and motor vehicle accidents; the value of this work is limited because the drug is less widely available in that state since it is not legal for recreational use.

More generally, assessing the relationship between car accidents and driving under the influence of marijuana has been challenging because of various factors that contribute to THC levels in blood. THC is fat soluble. Its levels in a person's body depend on how often and how recently he or she has smoked. Thus, an individual may be driving sober and yet be convicted for driving under the influence because of THC remnants in his or her system (Rumball, 2016). People driving under the influence of marijuana are aware of their impairment, unlike with alcohol or cocaine (Rumball, 2016). Also, because of the tolerance that builds up to marijuana, frequent smokers are less likely to experience its adverse effects (Davis et al., 2016). In assessing its impacts, it is also important to remember that as the proportion of people using marijuana increases, the proportion of people in fatal accidents that test positive for THC will also necessarily increase; this is the same as for any new medicine available.

Finally, there is some evidence that public policy may mitigate the negative effects of marijuana on driving risks. A survey conducted in Washington and Colorado found that the prevalence of driving under the influence decreased with knowledge of DUI laws and the perception that it is dangerous. As marijuana becomes legal, education about how to remain a responsible driver is an effective solution to combating drugged driving (Davis et al., 2016).

Positive health effects on individuals who use marijuana for medical purposes, which utilizes Tetrahydrocannabinol (THC) and Cannabidiol (CBD), are increased appetite, decreased nausea, and decreased pain, inflammation, and muscle control problems (effect of THC). CBD has been found to reduce pain and inflammation and help in the control of seizures. Furthermore, there may also be some value in the use of CBD in treating mental illness (NIDA 2015).

Sources and Persistence of the Gateway Myth

At an 1925 Geneva Conference on “Opium as an International Problem,” the Egyptian delegate argued for greater control over the trafficking of hemp products; The delegate suggested that, while light use does not pose a danger, the behavior is habit forming and addictive, leading to greater use:

“Hashish absorbed in large doses produces a furious delirium and strong physical agitation; it predisposes to acts of violence and produces a characteristic strident laugh. This condition is followed by a veritable stupor, which cannot be called sleep. Great fatigue is felt on awakening, and the feeling of depression may last for several days.”

In addition to the lack of empirical evidence supporting these claims, many at the 1925 conference questioned why hemp/cannabis use would be addressed at an opium conference. And while the results were an agreement to “exercise such effective control” to prevent the illegal trade of hemp and hemp resin, this coupling of marijuana and opioids has not been undone to this day, medical

evidence notwithstanding. Policy choices have consistently categorized marijuana with more dangerous drugs, in particular heroin, rather than with less implicated (but known to be harmful) substances such as cigarettes.

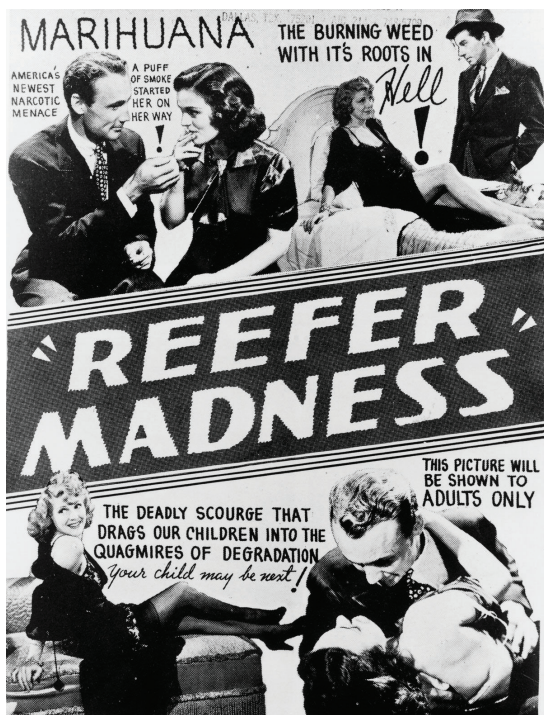
The United States Federal Bureau of Narcotics was created in 1930. Its first Director was Harry Anslinger, who made his reputation enforcing the national prohibition of alcohol. With prohibition failing, Anslinger and his agency colleagues needed a new focus. In 1937, he spearheaded the Marihuana Tax Act.

On its surface, this Act appears to be a simple tariff placed on the buying and selling of marijuana at reasonable variable rates: \$24 per year for manufacturers, \$1 per year for physicians, dentists, surgeons, and other practitioners, and \$3 per year for others. This approach appears to lend no support to marijuana being seen as a dangerous drug. In fact, with a lower tariff for health care providers its therapeutic nature may be implied. Moreover, fees at these levels, even in that era, were unlikely to be deterrents or considerable sources of revenue for the government.

But a deeper reading of the Act reveals that there were extraordinarily restrictive provisions accompanying this tax, e.g., providers were required to release to the government personal details of patients receiving marijuana. Also, failure to comply resulted in severe penalties of five years imprisonment, a \$2,000 fine, or both.

This Act was in fact a first step toward Anslinger’s efforts to prohibit marijuana, despite existing evidence of its relative harmlessness. When arguing for the 1937 act, he said:

But here we have drug that is not like opium. Opium has all of the good of Dr. Jekyll and all the evil of Mr. Hyde. [Marijuana] is entirely the monster Hyde, the harmful effect of which cannot be measured... Some people will fly into a delirious rage, and they are temporarily irresponsible and may commit violent crimes.



A poster advertising *Reefer Madness*, 1936.

Shortly after, the film *Reefer Madness* hit the airwaves to spread Anslinger's claims.

Dating to 1914, New York State had on its books the Boylan Bill, which listed marijuana as a regulated "habit forming" drug and required a prescription to obtain it. At the time of the national Marihuana Tax Act, the then mayor of New York City Fiorello LaGuardia created a committee to examine marijuana use in his city. This committee concluded that the gateway theory was incorrect, a finding Anslinger was quick to publicly renounce as unscientific.

In 1951, the Bogs Act amended the 1922 Narcotic Drugs Import and Export Act, adding marijuana to opioids and cocaine as a barred drug under U.S. penal law for the first time. (A first offense for possession carried a sentence of two to ten years.) Once again, marijuana found itself grouped with these notably severe drugs.

The negative associations about marijuana were being perpetuated by the "War on Drugs" declared in 1970. Following the Controlled Substance Act of 1970, President Richard Nixon's own drug commission unanimously recommended decriminalizing marijuana for recreational use. But, in 1971, Nixon placed

marijuana on the list of the most restrictive drugs, criminalizing it while simultaneously increasing the strength of federal drug control agencies. Years later, Nixon's domestic policy chief John Ehrlichman told *Harper's* magazine that this was a conscious reaction to anti-government/anti-war organizing. By criminalizing heroin it was easier to arrest and vilify blacks and, by criminalizing marijuana, it was easier to arrest and vilify hippies. Ehrlichman added: "Did we know we were lying about drugs? Of course we did." (Baum, 1998)

Following failed efforts by the Carter administration to decriminalize marijuana, the Reagan administration advanced the "harmful effect" narrative with the First Lady Nancy Reagan's "Say No to Drugs" campaign. This effort garnered support among parents, who were increasingly worried about the availability and effect of drugs on their children. During this time, the US saw an upsurge of D.A.R.E. programs (Drug Abuse Resistance Education) which sent police officers into schools to warn youth of the dangers of drugs.

"Proving" Marijuana to be a Gateway Drug: A Last Ditch Effort

From the 1970s onward, national anti-drug programs and like efforts implicating marijuana proliferated, all unsupported by research. As no seriously harmful effects could be cited to justify these efforts, it became necessary to present marijuana as a gateway drug that ultimately lead to the use of harsher substances.

The first approach to connecting marijuana with subsequent use of more harmful drugs (initially called the "stepping stone" theory) assumed a susceptibility trait in individuals. The origin of the association of marijuana as a stepping stone drug was posited in the late 1960s by the Federal Bureau of Narcotics (Anthony, 2012). In short, it was argued that dealers allegedly sought to hook individuals on marijuana in order to switch them to heavier, more expensive drugs. This was argued despite the fact that research noted that the sources of marijuana (typically acquaintances) were vastly different from the typical dealers of other drugs (Mandel, 1968).

The stepping stone argument was particularly well received by the Federal Bureau of Narcotics which used it to support greater enforcement against marijuana trafficking. The gateway or stepping stone theory gained academic attention in 1982 when John O'Donnell and Richard Clayton published an article arguing that marijuana use is a *cause* of heroin use. This research was relied upon by the director of the National Institute on Drug Abuse and then brought to the U.S. Senate Subcommittee on Alcoholism and Drug Abuse (Baumrind, 2016). As a result, the notion of marijuana as a gateway drug became further entrenched in United States drug—and drug treatment—policy.

These findings were subsequently critiqued for a methodological fallacy—the confusion of correlation with causation—and for being potentially driven by the political climate which sought to implicate marijuana as a gateway drug. Countless researchers have indeed identified a relationship between prior use of marijuana and subsequent use of hard drugs (and a link between prior use of cigarettes and alcohol use typically preceding marijuana) but these works do not establish the causality of this pattern (Anthony, 2012).

The first and only absolutely necessary criterion for establishing causality is a temporal relationship; in order to establish a factor as a cause of an outcome it must always precede the outcome. This necessary requirement for causality poses a problem for research on the gateway hypothesis for several reasons including identifying a sample that does not bias the results, properly measuring the timing of use, and properly measuring use as compared with experimentation.

Kandel and Kandel (2016) maintain that a demonstration of causality requires not only proof that the use of one drug leads to the use of a second drug but also an identification of the mechanisms underlying the progression of drug use. Because testing the causality of recreational drug use in humans is unethical, any evidence of drug progression comes primarily from

observational epidemiology which seeks to establish sequence and association (Kandel & Kandel, 2016).

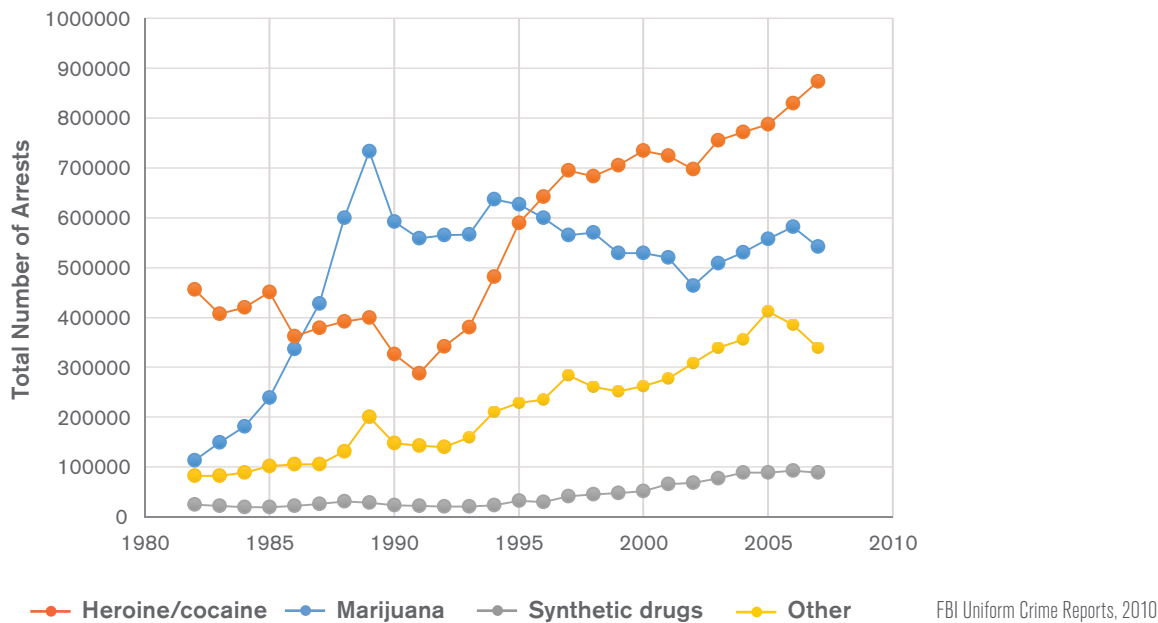
A large source of drug progression data comes from high school surveys. This methodology often leaves out heavier drug users who are more likely to drop out of school or be absent, thereby limiting our understanding of the trajectory for this subgroup. An Australian study, which sampled households rather than schools, showed that 29% of adolescents had tried hard drugs without beginning with marijuana. A sample of serious drug users showed that 15% of respondents tried hard drugs without first using marijuana (Mackesy-Amiti, Fendrich, & Goldstein, 2016). In sum, this research suggests that serious drug users do not follow the typical gateway hypothesis pattern and are more likely to follow an atypical progression.

Another problem is that this research relies on self-reporting in which youth are asked to give the age of first use of each substance. This calls into question the capacity to recall initiation coupled with a lack of definition of “use.” Specifically, youth are asked when they first tried a substance. “Trying” ranges from a singular “taste” followed by no further use through to full engagement with a substance.

Another approach, biological feasibility, relies on the idea that there is some physiological pathway through which marijuana use will create a craving for other, more dangerous, drugs. Animal studies have found THC did indeed prime rats' brains to encourage enhanced behavioral responses to future THC dosages and to harder drugs, such as morphine. However, this “cross-sensitization” is also evident in animal research on the effects of nicotine and alcohol. Evidence to date suggests that animal drug reaction models “fall short” of predicting outcomes in humans (Shanks, Greek & Greek, 2009).

There are alternative explanations to the gateway hypothesis for why most users of dangerous drugs report

Figure 1. DRUG ARRESTS IN THE U.S. 1980–2010



the use of marijuana. (Morral, Caffrey, and Paddock, 2002). The Common Liability Model posits that the use of multiple drugs reflects a common risk for drug use, rather than the use of one drug increasing the risk of using other. This may arise from common genetic predispositions, psychosocial factors, drug availability, and opportunity to use (Kandel & Kandel, 2016). Availability is linked to the age of an individual. Because of the relative ease of obtaining alcohol and marijuana in the home (compared with cocaine and heroin), youth interested in drug experimentation are likely to try these first.

In 2016, the National Institute on Drug Addiction (NIDA)—while not fully rejecting the idea that marijuana is a gateway drug—concluded that, given the evidence to date, “further research is needed to explore this question.” Shortly after NIDA released this determination, D.A.R.E. quietly removed marijuana from its publicized list of gateway drugs.

Yet, non-evidence-based political factors on both the left and the right remain the reason for the persistence of the gateway myth. In 2015, Chris Christie, New Jersey Governor and former Republican presidential candidate

is quoted as saying, “Marijuana is a gateway drug. We have an enormous addiction problem in this country, and we need to send very clear leadership from the White House on down through the federal law enforcement.” (Wolf, 2015)

In Massachusetts, Boston Mayor Martin J. Walsh and House Speaker Robert DeLeo, both Democrats, and Republican Governor Charlie Baker formed a coalition opposing legalization of recreational marijuana. Mayor Walsh said “You’ll hear the other side say that marijuana is not a gateway drug. If you know anyone in the recovery community, talk to them... You’ll hear that most of them, many of them started with marijuana.” Speaker DeLeo added that it would be hypocritical to support legalization of marijuana while fighting the opioid abuse epidemic (Miller, 2016). When talking about legalization of the medical use of marijuana in Florida, her state, Congresswoman Debbie Wasserman Schultz, former chair of the Democratic National Committee, said about marijuana policy: “I just don’t think we should legalize more mind altering substances if we want to make it less likely that people travel down the path toward using drugs (Sainato, 2016).”

IMPLICATIONS OF THE GATEWAY DESIGNATION

Negative Effects of Treating Marijuana as a Gateway Drug

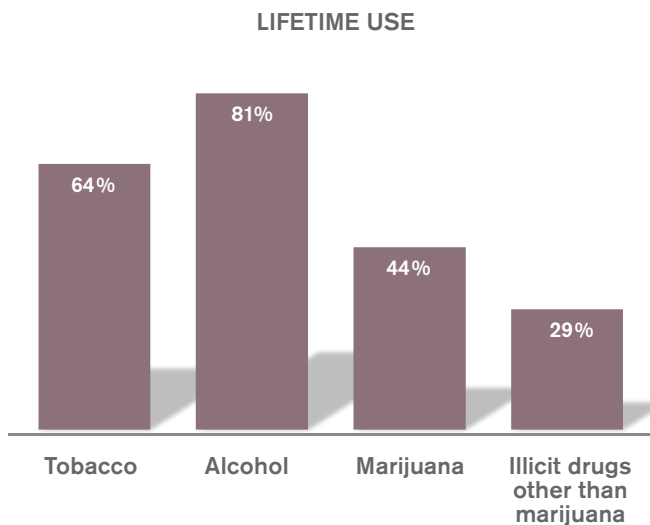
States and localities have spent billions aggressively enforcing marijuana possession laws without (apparently) diminishing its availability or use. Marijuana possession arrests have increased since the 1990s to a total of 46% of all drug arrests by 2010; exceeding the combined arrests for heroin and cocaine by the mid 1990s (*Figure 1*). Despite these increases in arrests, a 2013 Gallup poll found that self-reported marijuana use has held steady: approximately 35% in 1985 and 38% in 2013 (Saad, 2013).

People of color are disproportionately arrested for marijuana. Blacks and whites use marijuana at similar rates across small and large counties, rural and urban localities, poor and rich areas, and areas with small and large proportions of blacks (ACLU, 2017). The ACLU reports that, despite the similarity in drug use, blacks are 3.7 times more likely than a white person to be arrested for marijuana possession. The consequences of a marijuana arrest can result in a lifetime of difficulty—finding public housing, student aid eligibility, employment opportunities,

child custody, and immigration status—potentially a worse societal impact than the original issue: use of a non-fatal drug.

One obvious concern is the criminalization of a substance that a recent national survey showed almost half (44%) of US residents aged 12 and older have reported using (See *Figure 2*) (NIH, SAMSHA 2015). Another concern is that the attention to the prevention of marijuana use (because of the mistaken idea that it is a gateway drug) competes for resources needed to fight opioid use. Among the most commonly prescribed opioid pain killers are oxycodone, hydrocodone, morphine, and codeine. Heroin and opioid painkillers are extremely similar in their chemical structure, drug experience, and withdrawal symptoms. Their short term effects include vomiting, depressed breathing, slowed heart rate, electrolyte imbalance, dehydration, coma, and possibly death. Long term effects are high risk of overdose, insomnia, tolerance, abscesses, cellulitis, collapsed veins, HIV or hepatitis, and track marks. It is estimated that 15,000 people die annually from painkiller overdoses (Rudd et al., 2016.); the death rate from opioids is on the rise (*Figure 3*). In 2014, over 47,000 people died of a drug overdose, an increase of nearly 10,000 people from 2010. In that same year, 31,000 deaths were alcohol induced; not one was associated with cannabis use (CDC/NCHS, National Vital Statistics System, Mortality File, 2015).

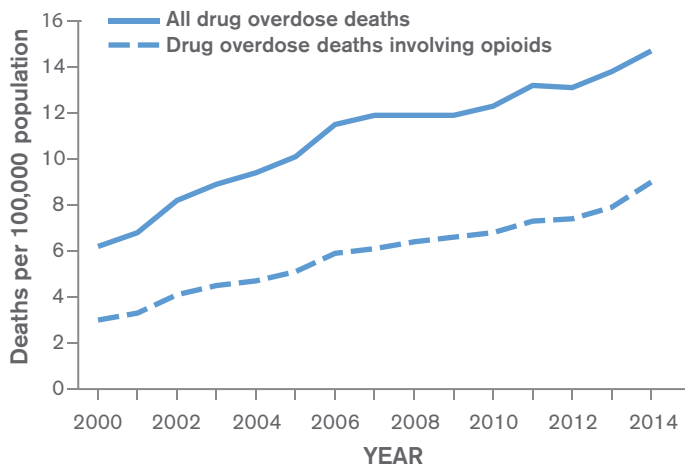
Figure 2. NATIONAL RATES OF SUBSTANCE USE AMONG US INDIVIDUALS AGED 12 AND OLDER, NIH 2014



Meanwhile, state-level death certificates from 1999 through 2010 reveal a 25 percent decrease in opioid overdose deaths in states that have passed medical marijuana laws (Bachhuber et al., 2014). Colleen Barry, a professor at the Johns Hopkins Bloomberg School of Public Health and co-director of the Center for Mental Health and Addiction Policy Research there, has established a correlation between medical marijuana legalization and the decrease of opioid overdoses (Barry, 2016). It is suggested that states legalize marijuana for medical use, it is available to patients with chronic or severe pain who then do not turn to opioids. Thus, by implication, the criminalization of marijuana may

indirectly lead to increased opioid use. Moreover, if too much of our prevention effort is focused on users of marijuana, we are likely to see little change in the more serious outcomes from the use of truly dangerous drugs, hospitalizations, and deaths.

Figure 3. AGE ADJUSTED RATE OF DRUG OVERDOSE DEATHS AND DRUG OVERDOSE DEATHS INVOLVING OPIOIDS, UNITED STATES, 2000–2014



National Vital Statistics Report, v. 65 no. 4, June 30, 2016

Projected Costs and Benefits of Marijuana Legalization

Estimates of costs and benefits of marijuana legalization are partly speculative due to varying potential state-level regulatory, licensing, and taxation practices (Ekins & Henchman, 2016) and unknown current black market supply and demand patterns. It is also hard to predict the scale of new job creation, possible tax evasion, and marijuana legalization’s impact on alcohol consumption. But, according to one projection, legalization of marijuana production, with the concomitant licensing and taxation, could produce as much as \$8.7 billion dollars in tax revenue (Evans, 2013).

Additionally, one Harvard economist predicted between \$7.7 and \$13.7 billion of savings in prosecutorial, judicial, correctional, and police resources from reduced

marijuana arrests. Moreover, productivity would rise from the recovery of lost work days for those arrested who would have spent time being processed through the criminal justice system (Evans, 2013).

Five of the nine states that have medical marijuana laws experienced lower prescription rates in fee-for-service Medicaid. (Bradford & Bradford, 2017). Reductions included: 17% for drugs used to treat nausea; 13% for drugs used to treat depression; and 12% for drugs that treat psychosis. Savings for the shift from Medicaid funded drugs to medical marijuana almost doubled from \$260.8 million in 2007 to \$475.8 million in 2014. If all states had medical marijuana laws in 2014, the authors of one study say, there could have been \$1.01 billion in savings for fee-for-service Medicaid (Bradford & Bradford, 2017).

There could also be significant financial costs to marijuana legalization. The National Drug Intelligence Center estimates that the number of users would double, and as a result they project that approximately \$200 billion would be spent on resulting physical and mental health problems including increases in immune system damage, birth defects, infertility, cardiovascular disease, stroke, and testicular cancer. Costs could also rise to treat mental health conditions including mood disorders, latent schizophrenia, and clinical dependence as well as increased motor vehicle accidents decreased productivity due to employee turnover, absenteeism, and illness (Evans, 2013).

The cost-benefit analysis for marijuana legalization remains challenging. Several indicators, such as the impact of reduced incarceration resulting from legalization or decreased productivity due to marijuana use, are very hard to measure accurately.

Marijuana Legalization: New York as a Follower

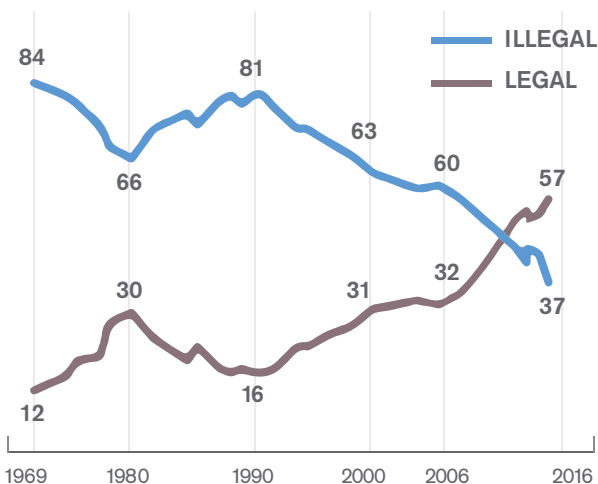
Driven by large majorities among younger voters, support for legalization of marijuana became a strong majority sentiment in the United States with the turn

of the 21st century (Figure 4). Across the nation, citizens have proven far more receptive to marijuana legalization than have been their elected representatives. States with direct democracy, in which voters may bypass legislatures and make law through an initiative and referendum process, took the lead. California was first to authorize the use of marijuana for medicinal purposes in 1996. As of November 2016, medical marijuana has become legal in twenty-eight states and Washington D.C.

Marijuana for recreational use first passed in Colorado in 2012 and is now legal in seven states and some individual cities. In 2017, Vermont almost became the first state to legalize marijuana for recreational use by legislative action; a bill doing so passed both legislative houses only to be vetoed by the governor.

While legalization for recreational use was advancing at the state level, marijuana possession and use remained a federal crime. The practice of the Obama Administration was to implement federal law with deference to states that had “strong and effective

Figure 4. OPINION ON LEGALIZING MARIJUANA, 1969–2016
Do you think the use of marijuana should be made legal, or not? (%)



Pew Research Center, October 12, 2016

regulatory and enforcement systems that will address the threat those state laws could pose to public safety, public health and other law enforcement interests,” Attorney General Holder said, however, that the national government would continue to prosecute vigorously where there was:

- the distribution of marijuana to minors;
- revenue from the sale of marijuana going to criminal enterprises, gangs and cartels;
- the diversion of marijuana from states where it is legal under state law in some form to other states;
- state-authorized marijuana activity from being used as a cover or pretext for the trafficking of other illegal drugs or other illegal activity;
- violence and the use of firearms in the cultivation and distribution of marijuana;
- drugged driving and the exacerbation of other adverse public health consequences associated with marijuana use;
- growing of marijuana on public lands and the attendant public safety and environmental dangers posed by marijuana production on public lands;
- marijuana possession or use on federal property.

Federal policy has been reversed under Trump administration’s Attorney General Jeff Sessions who has said that marijuana is “only slightly less awful than heroin.” He has indicated that the national government will depart from Obama Administration practice and return to strict enforcement of all federal drug laws (Williams, 2017). Most recently, Sessions requested that Congress restrict states from using federal funds to implementing their own laws, asking instead that his office take over these prosecutions (Ingraham, 2017). His justification: the opioid epidemic.

Policy Change in New York State

In New York State, the draconian Rockefeller Drug Laws adopted in 1973 severely penalized the possession or sale of opioids, cocaine, and marijuana. In 1977, marijuana was removed from the list. There was recognition that penalties were just too harsh for marijuana use and the burden it created on the criminal justice system were not manageable. In 2009, under governor David Paterson, New York repealed the law, eliminating mandatory minimum prison sentences for lower-level drugs and increasing judicial discretion to choose treatment over incarceration for first time users. These repeals centered cocaine and heroin but reflect a change in climate regarding lower-level drug use. Still, marijuana arrests in New York City increased from 1,000 in 1990 to 50,000 in 2000 (Johnson et. al, 2008). Although there was a decline from 2000 to 2004, the 50,000 level was reached again in 2010, dropping back in 2016 to just under 20,000. Marijuana possession arrests remain the top charge in New York City; nearly all of those arrested were black or Hispanic (*Daily Chronicle*, 2017).

Medicinal Use in New York State

New York joined states permitting the use of marijuana for medicinal purposes in July of 2014 when the Compassionate Care Act was signed into law. This Act allows healthcare providers to prescribe medical marijuana under specific controlled circumstances and set up a framework for practitioner registration, patient certification, and patient caregiver registration. (New York State Department of Health, 2016). Twenty dispensaries were authorized. Additionally, the New York State Department of Health proposed five organizations to handle the manufacturing, transportation, and sales of medical marijuana. Locally, PharmaCann, an Illinois-based company that planned to grow and package marijuana products in Hamptonburgh in Orange County was registered in New York. Additionally, there were at least three dispensaries in the mid-Hudson region.

Almost immediately after it was passed, the Compassionate Care Act came under fire for being too

restrictive. Five licensed companies, some argued, was too few; there were already forty-three existing medical marijuana companies operating in the nation. Twenty dispensaries for the whole state, they also said, limited access too much. To receive the medicine patients had to be very seriously ill and present specified symptoms: lack of appetite, nausea, seizures, or muscle spasms. Licensed medical marijuana businesses could distribute products only from their own manufacturing facilities, could not advertise or to make claims about their products, and could only manufacture a maximum of five strains with differing ratios of active ingredients.

On November 22, 2016, the Department expanded the program to improve access to medical marijuana (especially in rural areas), authorizing nurse practitioners and physician's assistants to certify patients for medical marijuana, as long as a supervising physician has a certification. (New York Department of Health, 2016). The Health Department also announced its intention to make registration more user friendly, increase the number of laboratories certified to test marijuana products, and continue federal outreach to make it easier for patients to locate practitioners. It would, it said, consider easing regulations to allow healthcare facilities and schools to utilize medical marijuana and license twenty more dispensaries and five additional organizations to make, transport, and sell marijuana over the next two years (New York Department of Health, 2016).

There remain several barriers to the fuller implementation of medical marijuana in New York. Eighteen months after the first dispensary opened, only 5,000 patients were enrolled in the program, and only one percent of physicians in New York took the four hour course to become certified to prescribe medical marijuana (Smith, 2017). With the state considering expanding the number of licensed medical marijuana companies, those already started were concerned about the demand. For example, the CEO of Vireo Health in Westchester told Hudson Valley One that they were only using about five percent of their capacity. There was not an issue of supply, he

Table 1: NEW YORK STATE MARIJUANA BILLS INTRODUCED IN THE 2017-18 SESSION

Bill	Purpose	Status as of 5/2017
S482	Requires fifteen grams or more of marijuana to be in public view before the current misdemeanor sentencing would apply.	In Senate
A678	Eliminates the public view exception of S482.	In Assembly
S3040; A3506	Allows marijuana to be regulated and taxed; possession up to two ounces legal and cultivate up to six plants for adults 18 and older.	In Senate In Assembly
A7006; S5629	Adds PTSD to the qualifying conditions for medical marijuana	Passed Assembly, On Senate Floor Calendar

said, but one of demand for the medical products the company was producing (Riback, 2016). In May of 2017, the industry sued to block licensing of additional manufacturers (Robinson, 2017).

On December 1, 2016, the NY Department of Health added chronic pain to the list of qualifying conditions for medical marijuana. This became the eleventh condition in addition to cancer, HIV infection or AIDS, amyotrophic lateral sclerosis (ALS), Parkinson's disease, multiple sclerosis, damage to the nervous tissue of the spinal cord with objective neurological indication of intractable spasticity, epilepsy, inflammatory bowel disease, neuropathies, and Huntington's disease (New York Department of Health, 2017).

Pending New York State Marijuana Legislation

In January 2017, Governor Andrew Cuomo said in his State of the State message: “The illegal sale of marijuana cannot and will not be tolerated in New York State, but data consistently show that recreational users of marijuana pose little to no threat to public safety” (New York State, 2017). The governor expressed support for changes in the law that would lessen the prosecution of non-violent marijuana possession offenders and place penalties on those who illegally supply and sell marijuana (Blake, 2017). There has been vigorous lobbying by

advocates of legalization (Nathan, 2017). Several bills are with the legislature at this writing; however, legalization of the recreational use of marijuana has little prospect of passing this year (*Table 1*).

S482/A678 focuses on limiting the criminalization of marijuana possession. S3040/A3506 moves New York toward increased legalized sale of marijuana and A7006/S5629 adds PTSD as a qualifying condition for medical marijuana. In June 2017, Senator Liz Krueger and Assembly member Crystal Peoples-Stokes reintroduced S3040/A3506, perhaps encouraged by the \$62,000 spent on lobbying this and other bills in New York (Nathan, 2017)

In 2017, New York was among the 30 states and the District of Columbia that had some form of legalization of marijuana, mostly for medical purposes. Only seven states (not New York) and DC have legalized marijuana for recreational use. Again reflecting the use of direct democratic processes, California recently passed a proposition allowing both possession and home growing.

CONCLUSION

Currently, according to the Pew Research Center approximately 57% of US adults support the legalization of marijuana; majorities have been increasing over the past five decades (Figure 4) (Geiger, 2016). Sentiment in New York State is no exception. Public support notwithstanding, there is little desire in the Republican run state senate, which reluctantly passed the Compassionate Care Act, to move toward the legalization of recreational use. In the Democrat controlled Assembly, which is more sympathetic, some members fear potential problems with the return to strict enforcement at the national level by the Trump Administration authorities.

Again, perhaps in accord with public opinion (and resource constraints), policy sometimes changes faster at the street level than in the halls of the capitol. Even without marijuana legal for recreational use, law enforcement approaches for possession and first time offenders has become far more lenient in the region. Marijuana possession ranging from 25 grams to two ounces resulted in only in 4,305 court cases outside of New York City last year. Half were dismissed, and only 2.1 percent resulted in jail time. Over the past decade, only fourteen people have experienced jail time for this level of misdemeanor.

There is compelling and enduring evidence that marijuana is not a gateway drug. Moreover, widespread public support has developed for its use for medicinal purposes and recreational use. States with direct democratic procedures for lawmaking, especially those in the west, led the way in decriminalization. New York, with no initiative and referendum process, was the twenty-first jurisdiction to allow medical marijuana. The political fight was tough, especially in the state Senate; initial authorization was limited, and the growth of the industry—with a significant Hudson Valley focus—greatly limited. In following years, amidst additional controversy in the state, regulatory changes sought to ease limits and extend accessibility to medical marijuana geographically and for use to treat a greater number of conditions.

A great deal of pushback against the decriminalizing of marijuana remains in both the public and private spheres. In New York, this is centered in the Republican State Senate. Federal policy, more accepting of state level decriminalization under the Obama Administration, returned to strict enforcement with the election of Donald Trump to the presidency. Despite extensive research identifying that any potential harms of marijuana pale in comparison to tobacco (used by 64%) and alcohol (used by 81%), both legal substances, marijuana remains as a key anti-drug focus for many, drawing away

“
Facts have their limits.
In this as in other highly
controversial areas, they can
inform policy makers, but
don't assure the adoption of
fact-based public policy.
”

resources that might be used to deal with the burgeoning heroin and opioid abuse crisis. To date, marijuana remains listed as a Schedule I drug (drugs with no currently accepted medical use and high potential for abuse) while cocaine sits under Schedule II due to lower abuse potential according to the DEA. Parents continue to decry marijuana use while many have these opioids easily accessible in their bathrooms. Even as he endorsed consideration of decriminalization, Governor Andrew Cuomo said: “The flip side argument is that [marijuana is] a gateway drug and marijuana leads to other drugs, and there is a lot of proof that that is true” (Spector, 2017).

Further extensions of medical marijuana's use in New York are near certain. Bills in the legislature, introduced by Krueger (Senate) and Peoples-Stokes (Assembly), and the work of such advocacy groups as Compassionate Care, NY, will assure that this issue remains before the public. But this is an issue on which public sentiment leads, not follows, actions of elected decision makers. A return to tough federal enforcement raises a new barrier.

Notwithstanding Governor Cuomo's oft expressed desire to have the Empire State lead in the federal system, with the gateway myth still credible for him and alive and well for many decision makers of both parties and their constituents, it will take both time and legislative adoption of recreational use in a number of sister states before New York is likely to take this next step.

Facts have their limits. In this as in other highly controversial areas, they can inform policy makers, but don't assure the adoption of fact-based public policy. As long as people and the public officials they elect have a political stake in them, myths such as the history of the marijuana gateway fallacy hang on.

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Dr. Eve Waltermaurer is the Senior Research Scientist for the Benjamin Center for Public Policy Initiatives. Dr. Waltermaurer holds a PhD in Epidemiology from the University at Albany's department of Epidemiology and Biostatistics. She has provided research, evaluation and statistical services to numerous organizations for eighteen years including serving as the statistical consult for New York State OASAS (Office for Alcoholism and Substance Abuse Services) and evaluator for several SAMSHA (Substance Abuse and Mental Health Services Administration) funded projects. Dr. Waltermaurer has been hired to conduct Youth Risk/Youth Development surveys among school age students in four New York counties. She has presented findings and led community forums on topic related to youth risk overall and opioid risk specifically.

Gerald Benjamin is Distinguished Professor of Political Science and Director of the Benjamin Center at SUNY New Paltz. Alone and with others, he has written or edited numerous books and articles and commented extensively on state, regional and local government and policy, with a special emphasis on New York.

Leah Mancini graduated from the State University of New York at New Paltz in 2017 with a Bachelor of Arts in Psychology. From 2016 to 2017 Leah was a research assistant with the Benjamin Center for Public Policy Initiatives. During her time with the Benjamin Center, Leah co-authored *The Marijuana Gateway Fallacy* discussion brief, and studied statistical methods for analyzing medical data. In addition to her work with the Benjamin Center, Leah was a lab assistant in the psychology department from 2015 to 2017, where she assisted with a professor's research, along with becoming the primary researcher on her own study. Prior to working with the Benjamin Center, Leah was a research assistant for the New Paltz Institutional Research department, where she co-authored two reports dealing with various aspects of the university's success. In the future, Leah hopes to continue her education in policy and analysis.

Editorial staff

Robin Jacobowitz

Janis Benincasa

Database queries available on request



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The Benjamin Center for Public Policy Initiatives
State University of New York at New Paltz
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