No sensible person doubts that drugs can cause enormous harm. They can ruin lives. They are implicated in a wide range of crimes, and they enrich criminals. Drug trafficking fosters extraordinary brutality, endangers innocent citizens, and undercuts the development and practice of democracy by corrupting public officials in numerous countries, including the United States. That said, there remains considerable disagreement over the nature and extent of drug-related harm, the factors that contribute to its many facets, and the best ways to go about addressing the numerous issues that cluster together under the canopy of “the drug problem.”

For more than a century, beginning with the passing of the Harrison Narcotic Act in 1914, U.S. drug policy has been based on the concept of prohibition, on the desire for a “drug-free America” with “zero tolerance” for drug users, producers, and traffickers. For the last 40 years, it has been known as the War on Drugs. It is truly a war, with all the hallmarks of war: displaced populations, disrupted economies, excessive violence, terrorism, the use of military force, the curtailment of civil liberties, and the demonizing of enemies. And like other wars we have been engaged in over this same period, victory has been elusive.

In the Baker Institute’s Drug Policy Program, we are convinced that U.S. drug policy, as presently designed, is premised on incorrect assumptions, aimed at the wrong targets, and too often unresponsive to human needs and aspirations. Unfortunately, that is not a new insight. In fact, apart from the reference to the Baker Institute, that sentence is a verbatim quote from the 1973 report of the National Commission on Marihuana and Drug Abuse, appointed by President Richard Nixon, led by former Republican governor of Pennsylvania Raymond P. Shafer, and comprising a blue-ribbon panel of establishment figures chosen mostly by Nixon himself.

On June 17, 1971, Nixon announced that his administration was about to launch a “total war against Public Enemy Number One in the United States—the problem of dangerous drugs.” He did not use the words “War on Drugs,” but he characterized the effort as “a new, all-out offensive.” In a taped conversation with his chief of staff H.R. Haldeman in May, he had said, “I want a goddamn strong statement on marijuana ... I mean one on marijuana that just tears the ass out of them. By God, we are going to hit the marijuana thing, and I want to hit it right square in the puss ... against legalizing and all that sort of thing.”

Nixon’s plan was foiled by facts. In March 1972, the commission issued a preliminary report, Marihuana, A Signal of Misunderstanding, which declared that “neither the marihuana user nor the drug itself can be said to constitute a danger to public safety” and recommended that Congress and state legislatures decriminalize the use and casual distribution of marijuana and seek means other than prohibition to discourage use. Endorsers of these recommendations included the American Medical Association, the American Bar Association, the American Association for Public Health, the National Education Association, and the National Council of Churches.

Nixon angrily rejected the report and Congress declined to consider its recommendations, but the Shafer Commission pressed on and a year later...
issued a second, more comprehensive report, *Drug Use in America: Problem in Perspective.* Nixon also ignored that one, declaring his intention to ratchet up his “attack on all fronts” in an “all-out war,” and “just kick the hell out of it.”² He proposed and Congress approved the creation of the Drug Enforcement Administration (DEA), which merged existing anti-drug agencies into a single federal agency charged with coordinating government drug control actions. Forty years later, the DEA is one of the largest and most powerful agencies in the government, with a worldwide reach.

Since 1973, federal, state, and local governments have spent an estimated $1 trillion on eradication, interdiction, and incarceration. They have destroyed thousands of acres of crops, seized countless tons of contraband, and imprisoned more people than any other country in the world, a disproportionate number of them poor and black. Despite these efforts, illicit drugs continue to be available to meet a remarkably stable demand. As the Shafer Commission observed, “Drug policy can be thus summed up: increased use of disapproved drugs precipitates more spending, more programs, more arrests, and more penalties, all with little positive effect in reducing use of these drugs.”³

Because that same statement holds true 40 years later, the NAACP, the US Conference of Mayors, the Latin American and Global Commissions on Drugs and Democracy, the Organization of American States, a growing number of influential think tanks and advocacy groups, and more than 80 percent of Americans regard the War on Drugs as a failure.⁴ Still, a century of anti-drug propaganda has shaped a set of convictions that serve as formidable barriers to sensible, humane drug policy, despite clear evidence that the propaganda is fraudulent. Current U.S. drug policy can never succeed. We need a new paradigm. Fortunately, we have the material to construct one.

After its surveys revealed a marked disjunction between public perception and empirical reality, the Shafer Commission urged federal and other levels of government to “maintain and monitor an ongoing collection of data necessary for present and prospective policy planning, including data on incidence, nature, and consequences of drug use.” That recommendation has been well satisfied. Monitoring the Future (MTF),⁵ begun in 1975, questions approximately 50,000 teens annually, with follow-ups in later years. The National Survey on Drug Use and Health (NSDUH)⁶ interviews approximately 70,000 people 12 years and older annually. These surveys, which qualify as big data, provide a rich and revealing picture of drug use in America and are consistently confirmed by other surveys. Still, although the information is available to anyone with a computer, few people appear to know the size or actual contours of drug use in this country, and the data play only a small role in public policy, mass media presentations, and popular perception.

**Substance Use Disorder and the Role of Alcohol**

Given periodic warnings that abuse of one or another drug is spiraling out of control, it is surprising to note just how stable the level of problematic drug use in the United States remains over time.

Figure 1, drawn from NSDUH findings over the years 2002–2013, depicts the number of people in this country aged 12 and older estimated to have a diagnosable⁷ Substance Use Disorder (SUD), an umbrella term for repeated patterns of harmful drug use that differentiates it from normal use, indicating abuse and/or dependence, in the past 12 months. The substances monitored include alcohol, illicit drugs, and nonmedical use of prescription drugs. Note the similarity in the height of the 12 columns. Although NSDUH surveys indicate that some 30 million people first used illicit drugs and 50 million first used alcohol over this 12-year period,⁸ the number of SUDs in each year was remarkably stable, averaging a bit fewer than 22.1 million despite a large annual influx of new users. The numbers of people who develop problems with various substances are
roughly matched by the numbers of those who recover from them, usually on their own and without treatment, participation in AA or another 12-step program, or relapse. These stable numbers also indicate a slight decline in SUDs as a percentage of our growing population.

Secondly, notice the predominance of alcohol abuse in each of these years. On average, 68 percent of SUDs involve alcohol only. These are known as Alcohol Use Disorders, or AUDs, a subset of SUDs. Another 14 percent involve both alcohol and illicit drugs (including nonmedical use of prescription drugs). Only 18 percent of SUDs—3.9 million, less than 1.5 percent of the population 12 and older—involve illicit drugs only, and even these are likely to have abused alcohol at some earlier time in their lives.

The largest major study of overlapping drug disorders, the 2001–2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), revealed that 81–91 percent of people with a significant marijuana, cocaine, heroin, or methamphetamine disorder had either a current or earlier alcohol disorder (Figure 2).

In short, few people who have no problem with alcohol will have a problem with any drug. It happens, but it is relatively rare. As Figure 2 also illustrates, however, about 30 percent of the general population have had an alcohol disorder at some point in their lives. The authors of this paper neither advocate nor practice abstinence from alcohol, but its contribution to the “drug problem” in this country cannot be denied.

Alcohol’s dominant role in substance use disorders is not a new phenomenon. To illustrate the “incorrect assumptions [and] wrong targets” undermining effective drug policy, the Shafer Commission’s report flatly stated, “Alcohol dependence is without question the most serious drug problem in this country today”10 and identified the enormous gap between science and public perceptions of
alcohol as the single greatest impediment to rational analysis:

The imprecision of the term “drug” has had serious social consequences. Because alcohol is excluded, the public is conditioned to regard a martini as something fundamentally different from a marijuana cigarette, a barbiturate capsule, or a bag of heroin ... [and] to believe that “street” drugs act according to entirely different principles than “medical” drugs. The result is that the risks of the former are exaggerated and the risks of the latter are overlooked.

This confusion must be dispelled. Alcohol is a drug (italics added). All [psychoactive] drugs act according to the same general principles. Their effects vary with dose. For each drug there is an effective dose (in terms of the desired effect), a toxic dose, and a lethal dose. All drugs have multiple effects. The lower the dose, the more important non-drug factors become in determining drug effect. At high dose levels, and for some individuals at much lower dose levels, all drugs may be dangerous. The individual and social consequences of drug use escalate with frequency and duration of use. American drug policy will never be coherent until it is founded on uniform principles such as these, which apply to all drugs.11

By far the most widely used of these, marijuana accounts for a much larger share of illicit-only SUDs than any of the far more dangerous drugs.12 Most scientists and other professionals who study drug abuse are familiar with these data. In fact, for decades, experts in the National Institutes of Health (NIH) have contemplated combining the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA). A significant 2010 NIH report explained:

[S]imilar risk factors are associated with use and abuse of drugs and alcohol, and similar behavioral therapies and prevention strategies can be employed regardless of substance ... [Separation of the institutes] perpetuates the misconception, especially among youth, that alcohol is not really a drug. Therefore, one benefit of merger is to develop a clear public health message that alcohol has similar detrimental effects on the brain and body as illicit drugs.13

An appended statement by the NIAAA went even further: “Alcohol differs from other drugs of abuse in the degree to which heavy use damages the brain and other organs. Alcohol is particularly toxic to the brain and myriad organ systems, as well as to the developing fetus.”14 The statement also charged alcohol with being the drug most likely to provoke violent behavior and the greatest loss of mental and physical control: “On college campuses alone, alcohol use results annually in

**Figure 2: Prevalence of Lifetime Alcohol Use Disorder among Individuals with Selected Lifetime Drug Use Disorder**15

<table>
<thead>
<tr>
<th>Drug</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Pop.</td>
<td>30.3</td>
</tr>
<tr>
<td>Nicotine</td>
<td>61.4</td>
</tr>
<tr>
<td>Cannabis</td>
<td>81.5</td>
</tr>
<tr>
<td>Inhalants</td>
<td>89.9</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>89.4</td>
</tr>
<tr>
<td>Cocaine</td>
<td>90.9</td>
</tr>
<tr>
<td>Amphetamines</td>
<td>88.8</td>
</tr>
<tr>
<td>Sedatives</td>
<td>87.8</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>88.4</td>
</tr>
<tr>
<td>Opioids</td>
<td>85.5</td>
</tr>
</tbody>
</table>

Prevalence of Lifetime Alcohol Use Disorder

Source: 2001-2002 National Epidemiological Survey on Alcohol and Related Conditions (NESARC)
almost 2,000 deaths, 100,000 sexual assaults, 600,000 injuries, and 700,000 assaults.”

The projected merger of NIDA and NIAAA fell through in 2012, though with announced intentions to pursue greater “functional integration.” The lengthy report from the highest levels of U.S. health policy—containing information that challenges the most fundamental flaw in U.S. drug policy, the double standard for alcohol—received virtually no media attention.

**Vulnerability and Age**

Obviously, not everyone who enjoys a glass of wine, a beer, or a Manhattan is destined to become an alcoholic. Less well understood is that not everyone who uses any illegal drug, not just marijuana, becomes a drug addict. Not all use is abuse, and not all people are equally vulnerable to the development of problem use. In fact, most people who use any illicit psychoactive drug never develop a problem with it, even with drugs touted to bring “Instant Addiction!” The National Institute on Drug Abuse estimates that only 23 percent of people who ever try heroin develop dependence. According to 2013 NSDUH data, about 14 percent (37.6 million) of Americans have tried cocaine, but only 0.6 percent (1.55 million) had used it in the past month. More than 75 percent of crack users give it up within a year. Nearly 44 percent of Americans—more than half of those younger than 50—have used marijuana at some point in their lives, but only 7.5 percent have used in the past month. For most people, marijuana use doesn’t typically lead even to more marijuana use, much less to harder drugs.

The key to this surprising finding is that most people who try heroin or cocaine or other potentially addictive drugs use them only once or a few times, or so infrequently that they do not become addicted, although the risk is decidedly higher for heroin and certain smoked drugs like crack and crystal meth. Figure 3, based on data from 2004–2006, graphically illustrates how quickly most people cease experimentation with most addictive substances. The orange bars represent the percentage of people who first used the drugs in question “year before last” but had not used them in the year of the survey.

**Figure 3: Percentages of Year-before-Last Initiates Not Using the Initiated Substance in the Past Year, by Substance (2004–2006)**

![Graph showing percentages of year-before-last initiates not using the initiated substance in the past year by substance, with 2004–2006 data](image-url)

Source: Substance Abuse and Mental Health Services Administration

**Age**

It should come as no surprise that, as Figure 4 shows, illicit drug use is closely correlated with age. It begins as early as age 12 and accelerates rather sharply, reaching a peak between 18 and 20, prime years for risky behavior, particularly by young men. It then drops rapidly over the next two decades, influenced by such factors...
as academic demands, family and career responsibilities, hangovers, and awareness that addiction is not a desirable state. (Although high percentages of people continue to use alcohol in a non-problematic way throughout their lives, the patterns for binge drinking and heavy alcohol use follow a similar age-related decline.)

Predictably, SUDs follow a similar pattern. As indicated in Figure 5, 5.2 percent of U.S. adolescents aged 12–17 had a substance use disorder in 2013. That proportion more than tripled to 17.3 percent for people aged 18–25. The peak of SUDs occurs around age 22, shortly after alcohol becomes legal. From age 26 to 65+, only 7 percent had an SUD. This similarity between the numbers for adolescents and adults over 25 is not a coincidence. For the most part these are, in essence, the same people. A few adolescents have broken free of their dependence. A few of those who developed problems in the 18–25 range have taken their place, but most in that middle cohort have managed to overcome their problem, starting at about age 22.

After age 35, about 93 percent of us are home free. We do not have a drug disorder and are not likely to develop one. That does not mean we could down a liter of vodka every night or start mainlining heroin and not run into trouble. It means we have made our choices and will usually stick with them. No change in the law, either stricter or more lenient, is likely to alter our commitment to personally responsible behavior. After Portugal decriminalized all drugs in 2000, a slight rise in use by middle-aged people followed but soon returned to earlier levels, apparently after curiosity and, perhaps, nostalgia were satisfied, suggesting that any lasting increase in adult SUDs will be rare under any system. That said, severe and persistent trauma such as that experienced by victims of rape or by veterans suffering from physical wounds or PTSD can lead to a search for relief in addictive drugs.

As these data make clear, drug use, like much of human behavior, occurs along a spectrum from mild to intense. Sensible policy will not apply measures appropriate for major pathology to the majority who function reasonably well and recover rather quickly from whatever problematic behavior they exhibit. If tragedy can be avoided, SUD will usually come and go during the 18–25
period. This is highly relevant for criminal justice. Most arrests for illicit drugs occur prior to the age of 30, when most offenders are in the midst of a natural process of recovery. Those arrests might never have occurred if the drug in question had been alcohol, and most of the convictions and sentences would not have been levied if the defendants had been white. In 2013, the rate of SUD was 7.4 percent among blacks, 8.4 percent among whites, and 8.6 percent among Hispanics, but blacks are arrested more than three times as often as whites and make up 45 percent of inmates in state prisons for drug offenses. This latter circumstance has increased the cynicism of minorities, who know they are the victims of discrimination. That cynicism easily extends to other laws and to law in general, loosening the psychic bond to society and its norms, and that harms democracy and the rule of law.

While it is comforting to note the decline in the use of potentially harmful drugs as people age, adolescent use of psychoactive drugs is cause for great concern. According to 2013 NSDUH data, closely mirrored in MTF surveys, approximately 9.5 percent of adolescents aged 12–17 used illicit drugs at least once in the month prior to the survey. Predictably, alcohol and tobacco played leading roles; 62.3 percent of heavy drinkers (NSDUH definition: “consumed five or more drinks on the same occasion on each of five or more days in the past 30 days”) were also current illicit drug users, compared to only 4.9 percent of nondrinkers. The rate of illicit drug use among youthful cigarette smokers was nearly nine times higher than that of nonsmokers. Of the 4.6 million people who used alcohol for the first time in that year, 83 percent were younger than age 21 and 59 percent were 17 or younger.

High numbers of these youngsters are in for a lifetime of trouble. A 2011 study by the National Center on Addiction and Substance Abuse (CASA) at Columbia University reported that nine out of 10 people who develop a longtime substance disorder start using before age 18, and that “one in four Americans who began using any addictive substance before age 18 are addicted, compared to one in 25 Americans who started using at age 21 or older.”

A broad and growing consensus among specialists holds that a sizable proportion of SUDs—estimates tend to range between 40 and 60 percent—can be traced to genetically related vulnerability, including some forms of mental illness. As Michigan State psychologist Hiram Fitzgerald observed,

> The most damaged children (and those at highest risk) are those who temperamentally have the following vulnerability characteristics (behavioral indicators of undercontrol, roughness, irritability, early mood dysregulation, sadness, depression, sleep problems, and antisocial behavior). They also are growing up in high adversity, very difficult environments.

These difficult environments—including peer pressure, physical and sexual abuse, poor parenting, low academic competence, poverty, an unhappy home, alcohol or drug abusers in the family, stress, social isolation, loss of hope, and traumatic events of various sorts—can
push people toward substances that bring temporary relief and make it easier to relapse when they are trying to quit. In short, drug use is typically a response to and symptom of social and psychological maladjustment rather than its cause. As the Shafer Commission declared in 1973, “[Addiction] seems to rest more in the nature of the soil than in the characteristics of the seed. The individual user, rather than the drug, is the core of the problem.”

This pattern of lifelong problems rooted in adolescence has a direct physiological basis: Teen drug use can affect sensitive brains in a way that makes them vulnerable to addiction over their lifetimes. The earlier the age of developing SUDs, the longer they tend to last, the more severe they tend to be, and the more likely relapses will occur.

Susan Foster, director of policy research and analysis at the National Center on Addiction and Substance Abuse (CASA) at Columbia University, said, “Teen substance use is the origin of the largest preventable and most costly public health problem in America today. It is time to ... respond to it as fiercely as we would to any other public health epidemic threatening the safety of our children.”

Responding fiercely means responding early to prevent further substance abuse and its consequences. It means paying attention to who is smoking, drinking, or perhaps groggy from prescription drugs. These are far more likely to cause or deepen addiction than marijuana, though marijuana can be quite harmful to adolescents, and no responsible reform advocate argues it should be made legal for minors. It also means counseling kids who are obviously troubled in other ways about the dangers of these drugs and providing them with accurate information rather than trying to scare them with claims they know to be inaccurate. It is also unnecessary and unwise to do invasive drug testing, which is expensive, has a low rate of discovery, creates a hostile environment, and may result in getting kids kicked off an athletic team, out of the band, out of school, or put into a school filled with other substance abusers—all of which are likely to make things worse.

Fortunately, most kids have been paying attention. In 1981, 41 percent of seniors in the MTF survey said they had engaged in binge drinking at least once in the previous two weeks, despite its being against the law. By 2013, that had fallen to 22 percent, a decline of nearly half. Smoking has seen a similar decline, from 28 percent among adolescents in 1996 to 8 percent today.

Use of marijuana, however, is up, with 22.7 percent of seniors acknowledging use in the previous 30 days. While this doubtless reflects a growing acceptance of marijuana, prohibition may again play a role. Liquor and tobacco stores can face fines or lose their license if they sell to underage kids. Regulation works better. In the Netherlands, the drug is quasi-legal for adults, and “coffee shops” that sell it can be shut down if they sell to adolescents or deal in harder drugs. A 2007 World Health Organization study of lifetime drug use in 17 countries found that cannabis use was less than half that in the United States. Even more striking, lifetime cocaine use in the Netherlands was only 2 percent, compared with 16 percent in the U.S.—by far the highest rate of the countries studied.

Young people who have substance use problems, whatever the substance, should be provided with appropriate treatment. We recognize that this can sound like “Every child should spend a semester abroad,” and treatment programs vary widely in quality and cost and are neither available nor affordable to many who need them. But in our collective zeal to fight an unwinnable war, we have managed over the past four decades to create and pay for measures far more expensive and far less effective.

For more than a century, the main weapons of fierce response have been prohibition and punishment, which are unable to impact the three main drivers of problem drug use. They cannot alter the conditions of birth and childhood, relieve the inherent stresses of becoming a teenager, or end the existence of alcohol. Prohibition is also remarkably ineffective at reducing the availability
of the drugs it aims to control. News media periodically issue dramatic reports of record drug seizures, but supply on the street seldom seems affected for long, and knowledgeable observers estimate that at least 90 percent of all illicit drugs eventually reach the retail market. With a little effort, anyone who wants any drug can find it.

Monitoring the Future has repeatedly asked teens why they chose either not to use marijuana at all or, if they did use it, why they stopped. In a summary of 29 years of surveys, MTF reported that the reason cited by the fewest high school seniors over that period was availability. A core tenet of U.S. drug policy—making drugs unavailable—was not considered worth a mention by more than 93 percent of the people it was designed to protect. The surveys found a similar lack of correlation between patterns of use and availability of cocaine.38

To repeat: “The individual user, rather than the drug, is the core of the problem.” Precisely as the Shafer Commission complained, we have lost sight of this by orienting policy toward specific drugs, most of comparatively minimal importance. Some drugs are far more dangerous than others, but the drug itself is not the key. Legislators who rush to outlaw the latest fad drug—salvia, K2, “spice,” “bath salts,” etc.—may believe they are striking a blow against drug abuse. They are not. They may alert some kids to the quite real dangers of specific substances and force merchants to stop selling them. Both are commendable results, but anyone determined to get a buzz on can always find another drug from a friend, a family member, a dealer, a liquor cabinet, a medicine chest, or a garage. The important factor is not availability, but the individual choices being made.

There is broad consensus in the medical and scientific communities that substance abuse should be viewed and treated as a medical and public health problem, not a crime. We already do that with the two-thirds of substance abuse involving alcohol alone. It is time to widen that scope to include the less destructive drugs. Instead, despite knowing that some youthful experimentation is inevitable, our policies have made drugs far more dangerous by depriving users of any certainty about purity or potency and have involved more than 1 million teens in their sale. Ill-considered laws and harsh punishments have destroyed the lives of people who needed only to get a bit older to become responsible citizens for life. And we have spent $1 trillion in the process.

A NEW PARADIGM

The situation calls for a thorough overhaul, a new paradigm to replace prohibition as the default response to psychoactive drugs other than alcohol and tobacco, with punishment as its most widely wielded weapon. This is no longer unthinkable.

In contrast to the cultural situation of the early 1970s, we are in a period of transition to a time when marijuana will be legal in some form in most jurisdictions, and non-problematic use of other now-illicit drugs will be widely tolerated or decriminalized, if not officially legal. The Justice Department’s easing up on marijuana users when they abide by their state’s regulations opens the door for states to serve as laboratories for large-scale social experiments that could provide valuable information and limit risk—as recommended by the National Academy of Sciences in 1982.39

Extensive lists and descriptions of plausible reforms are readily available from a number of organizations and individual experts and need not be repeated here.40 For descriptions of major experiments currently underway or under consideration, see Appendix A. We will not attempt in this paper to lay out a detailed scheme of reform. Instead, we will suggest key principles and recommend a means to end the futile century-long war on drugs.

Key Principles

- A precondition for any successful widespread approach to reducing the harms of substance abuse is to abandon calls for a “Drug-Free America” and insistence on “Zero Tolerance” for
the use of any psychoactive drug other than alcohol and tobacco. Prohibition has not and will not work. People who are determined to get illicit drugs will manage to do so, despite the threat and reality of harsh punishment. For a list of “Principles of Harm Reduction,” formulated by the Harm Reduction Coalition, see Appendix B.41

- Drug abuse should be treated as a public health issue rather than a crime. Since not all drug use is abuse, non-problematic use need be neither an issue nor a crime.
- A major objective of sound drug policy should be the elimination of nearly all the illegal market over time. By having access to a closely regulated legal market, with reasonable access and fair prices, users would have a strong incentive not to risk prosecution by going outside that market.
- As the control of supply and distribution shifts, the power of the license will replace the power of the gun. The guaranteed knowledge of purity and strength of the product will replace the adulteration and deliberate substitution of other drugs. With control taken from criminals and transferred to appropriate public health entities, the wave of benefits will become enormous.
- All aspects of drug policy should have a strong research component. Reliable information from users is hard to come by under prohibition, but it is an essential element of progress.
- Policy can be tailored to the characteristics specific to different drugs, with sufficient flexibility to allow for adjustments dictated by research and experience.
- The federal government should establish a more cooperative relationship with states, permitting them to serve as laboratories for testing policies other than prohibition and punishment. This is already happening with the growing number of systems for regulating medicinal and recreational use of marijuana and could be expanded to deal with other drugs. In some situations, local public health authorities with strong proposals might qualify for waivers from both federal and state law.

A New Commission

Considered piecemeal in a continued climate of misinformation, misconception, and vested interest, even the most promising reforms face a hard slog in this country. To facilitate open examination and honest consideration of alternatives to current failed or flawed policies, we urge the formation of a politically independent national scientific commission on drug policy, its members chosen by the National Academy of Sciences, in consultation with the NIH and the Department of Health and Human Services. Such commissions can be a means to avoid or delay change or, as in the case of the Shafer Commission, their recommendations can be shelved. Still, sound scientific investigation and scrutiny will be essential to any substantial change in U.S. drug policy. Experiment is the essence of science but anathema to the prevailing drug war paradigm. A primary function of the commission would be to alter that culture.

A vital early step would be to remove cannabis from Schedule I of the Controlled Substances Act, which deems it to have “a high potential for abuse” and “no currently accepted medical use in treatment in the United States.” The first of these assertions is highly misleading. Marijuana can have significant negative effects, particularly when used heavily, but the minority of users who get into trouble with it belies the claim of “high potential for abuse.” The second assertion is not only false but also dishonest. A rapidly growing body of scientific research and extensive practical experience with the drug by people dealing with myriad afflictions make clear that its medical use is quite widely accepted, even if federal authorities insist on denying that fact. The dishonesty is definitively documented in the text of US 6630507, a 2003 patent granted for a class of cannabinoids—chemicals in the cannabis, or marijuana, plant—deemed to be useful “in limiting neurological damage following ischemic insults, such as stroke or trauma, or in the treatment of neurodegenerative disease, such as Alzheimer’s disease, Parkinson’s disease, and HIV dementia.” The grantee for this patent is “The United States
of America As Represented by the Department of Health and Human Services.”

Scientific research on the potential benefits of marijuana is extremely difficult to conduct, especially since the only legal source of the plant that can be used in studies that can clear most Institutional Review Boards and be published in mainstream professional journals is a government marijuana farm on the campus of the University of Mississippi and under tight control of the National Institute on Drug Abuse (NIDA). The American Medical Association, the American College of Physicians, the Institute of Medicine, and a host of other medical and scientific groups in this country and internationally have called for more research on the therapeutic benefits of cannabis. NIDA has consistently declined to participate. As one spokesperson put it, “[O]ur focus is primarily on the negative consequences of marijuana use. We generally do not fund research focused on the potential beneficial medical effects of marijuana.”

We are confident that many experts employed or funded by the government would welcome the opportunity to design and test alternatives that could lead to major benefits, but they are precluded from challenging prohibition as a matter of policy. What frustrated researchers have decried as “The NIDA Monopoly” should be ended.

A new commission could establish research protocols, vet proposals, and analyze outcomes. Equally important, a major function could be to transmit accurate scientific information to the media and the public. Placing its imprimatur on responsible research and carefully explaining proposed changes to the public could provide political cover to legislators and encourage bipartisan solutions.

In addition to facilitating, analyzing, and publicizing research regarding cannabis, this commission should also look deeply into alternatives to prohibition of other illicit drugs. Those for whom such suggestions amount to heresy need to realize a basic truth: Addicts will get their drugs regardless of drug policy. The question is whether they will obtain them in relative safety from legally authorized personnel or buy them from unscrupulous dealers connected to criminal cartels and who do not ask kids for their IDs.

It is entirely plausible—we think quite likely—that a regulated system, presumably including some variation of prescription sales to licensed adults, operating under careful oversight and with a range of appropriate restrictions, would reduce harm immediately and lessen addiction in the long run. It would also slash the income of the cartels, gangs, and terrorists who produce foreign and domestic chaos.

A new commission would also have as part of its mandate a careful examination of prescription drugs, especially painkillers, which, according to the Centers for Disease Control, lead to nearly 15,000 overdose deaths and 500,000 emergency room visits each year in the United States. Since many young people experiment with these powerful drugs, vigorous efforts should be directed at early detection and appropriate intervention and treatment.

Throughout its efforts, the commission should consistently use alcohol as the standard for comparing the risks and benefits of other drugs, licit and illicit. Omitting such comparisons deprives the public of a context for assessing the significance of anything they may hear about other drugs. The double standard exempting alcohol from discussion of drugs cannot be justified.

Resistance to any scheme of legalization of now-illicit drugs will inevitably raise the specter of rampant addiction and provoke outcries of surrender to immorality. Addiction can be a tragic condition, but given the vast disparity in lifetime usage rates among the major illicit drugs—37 million for cocaine, 9 million for crack, 4 million for heroin—and the sharp drop-off in use of all these drugs as people age, how can one argue that their legal status is the key variable?

Perhaps as valuable as its scientific function, a new commission could expose the public to the major government sources of factual information that they have paid for, but rarely hear about except in a highly filtered version. An enormous amount of data is unknown to the public and
ignored or distorted by their representatives and, to a large extent, by the media. Simply poking around in NSDUH and MTF reports can clarify many false perceptions.

Given four decades of willful inattention to the still-relevant findings and recommendations of the Shafer Commission, we are modest in our expectations for sweeping change in federal drug policy, but we are convinced of the need for such change. As that commission’s 1973 report explained, “Unless present policy is redirected, we will perpetuate the same problems, tolerate the same social costs, and find ourselves as we do now, no further along the road to a more rational legal and social approach than we were in 1914”—a century ago.

ENDNOTES


7. Substance Abuse and Mental Health Services Administration, *Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H–48, HHS Publication No. (SMA) 14–4863 (Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014), available at http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHML2013/Web/NSDUHresults2013.pdf. The graph in Figure 1 was taken from page 82 of the report. The National Survey on Drug Use and Health (NSDUH) includes a series of questions to assess the prevalence of substance use disorders (substance dependence or abuse) in the past 12 months. Substances include alcohol and illicit drugs, such as marijuana, cocaine, heroin, hallucinogens, inhalants, and the nonmedical use of prescription-type psychotherapeutic drugs. These questions are used to classify persons as dependent on or abusing specific substances based on criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM–IV). The questions related to dependence ask about health and emotional problems associated with substance use, unsuccessful attempts to cut down on use, tolerance, withdrawal, reducing other activities to use substances, spending a lot of time engaging in activities related to substance use, or using the substance in greater quantities or for a longer time than intended. The questions on abuse ask about problems at work, home, and school; problems with family or friends; physical danger; and trouble with the law due to substance use. Dependence is considered to be a more severe substance use problem than abuse because it involves the psychological and physiological effects of tolerance and withdrawal. NB: Hereinafter, unless otherwise noted, all NSDUH findings are from the 2013 edition. The 2014 edition should be available in the fall of 2015.

8. These estimates are based on the “Initiation of Substance Use” section of the NSDUH for various years. See, for example, NSDUH 2013, pp. 60, 61, 65, 67, et al. Given the similarity of rates from year to year, we are comfortable with
assigning approximate numbers to years for which data were not available.


12. Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey, Figure 2.1, p. 16.


16. Ibid., Item 4.


18. Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey, tables 1.29A and 1.34A.


22. Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey, Figure 2.5, p. 20.

23. Ibid., Figure 3.1, p. 36.

24. See Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey, text associated with Figure 7.4, under “Age,” p. 86.


27. Ibid., p. 31.

28. Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey, p. 67.


32. Ibid.


42. Aidan Hampson, Julius Axelrod, and Maurizio Grimaldi, Cannabinoids as antioxidants and neuroprotectants, US Patent 6,630,507, filed
APPENDIX A
ALTERNATIVES TO PROHIBITION: STEPS IN A NEW DIRECTION

A few significant examples illustrate the viability of policies other than those that have held sway in the United States for decades.

PORTUGAL: RADICAL DECRIMINALIZATION

In 2001, faced with a significant drug problem that included soaring rates of drug-related deaths, many from HIV/AIDS and hepatitis C among injecting drug users, Portugal removed criminal penalties for possession of up to a 10-day supply of any drug, including cocaine, heroin, and methamphetamine. At the same time, the government significantly expanded programs for prevention, treatment, and syringe exchange and increased resources to help marginalized users reintegrate into society. Problematic drug use can still be punished by fines or community service, but these sanctions are decided by Commissions for the Dissuasion of Drug Addiction, regional panels comprising legal, health, and social work professionals. These commissions can encourage those with SUDs to seek treatment, but do not force them to do so.

A 2014 summary article by the Transform Drug Policy Foundation reported that the predicted massive increase in drug use did not occur in Portugal. In fact, levels of use are below the European average. Drug use has declined among those aged 15–24, the population most at risk of initiating use. Rates of continuation after initial use among the general population have also decreased. The number of newly diagnosed HIV and AIDS cases among drug users dropped dramatically from 2001 to 2012, and annual deaths directly traceable to drug use decreased from 80 to 16. Drug tourism did not become a problem.

Those who commit offenses while under the influence of drugs or to fund their drug use still go to prison, but their proportion of the incarcerated has declined from 44 percent in 1999 to 21 percent in 2012. And no one in Portugal has gone to jail or prison just for using drugs—for any drugs—for 14 years.

MARIJUANA

Non-Standard Deviations at State and Local Levels

As of May 2015, voters in four states (Colorado, Washington, Alaska, and Oregon) and the District of Columbia have opted for some form of marijuana legalization. Colorado, with a vigorous commercial market in operation since January 2014, allows adults, including tourists and other non-residents, to purchase up to 28 grams (approximately one ounce) in a day, with no weekly or monthly limit. Business has boomed, and the state took in approximately $7 million a month in sales taxes in the last half of 2014 after the market settled in. Contrary to predictions of criminal, civil, and moral chaos, marijuana use has not risen significantly, and use by adolescents has declined from levels in 2009–2011. At the other end of the spectrum, the District of Columbia voted in November 2014 to permit possession of up to two ounces of marijuana, which can be used on private (but not federal) property, and cultivation of up to six plants within a residence. Because D.C. is under direct federal control, Congress has attempted to nullify this law and has, as of March 2015, managed to restrict nearly all marijuana use to private residences.

Beginning with Seattle in 2003, a number of cities have adopted an approach in which both the public and the relevant legal authorities agree to regard enforcement of marijuana laws as the...
“Lowest Law Enforcement Priority.” A Seattle study four years after inception of this approach found no increase in use and no rise in crime or negative effects on public health. This helped ease the acceptance of statewide legalization in Washington and also spurred other cities, including the six largest in Michigan, to pass similar measures.

**Netherlands: “Coffee Houses”**

Cannabis is technically illegal in the Netherlands, but since 1976 people have been able to openly obtain and use marijuana and hashish in hundreds of “coffee shops” throughout the country, and no one is prosecuted for possessing less than five grams of the drug for personal use. The authorities have also winked as known growers operated without interference. In an arrangement known as “separation of markets,” Dutch authorities strictly forbid the coffee shops to sell harder drugs, lessening the chance that cannabis users will come into contact with dealers of more dangerous products.

Though imperfect and subject to continued adjustment, the permissive “Dutch Model” has not led to reefer madness. Lifetime use of cannabis is significantly lower in Holland (20 percent) than in the United States (42 percent). More importantly, the figures for adolescents are 14 percent compared to 38 percent in the U.S. At least partly because the coffee shops don’t sell harder drugs, lifetime cocaine use in the Netherlands is 1–2 percent, compared to 16 percent in the U.S., which has the highest rate of countries surveyed in a WHO study, despite some of the strictest laws in the world.

Drug tourism has flourished in Holland, particularly in Amsterdam, and contributes significantly to that city’s economy. In recent years, however, conservative political forces have managed to reduce the number of coffee shops in Amsterdam and elsewhere in the country and have placed restrictive limits on growers. Some cities ban foreigners from the coffee shops. As a result, criminal organizations are filling the demand formerly met by known, if not quite legal, producers and sellers. Critics of these developments complain about the decline in quality, the rise in price, the risk of prosecution, and the loss of revenue to businesses and the government. Ironically, at least some are suggesting that the Dutch should look to the United States, where a growing number of states are legalizing cannabis, with clear regulations as to who can produce, distribute, and use the drug.

**Uruguay: The First Nation to Legalize**

In December 2013, Uruguay became the first country in the world to move beyond decriminalization to actual legalization of marijuana. According to then-President José Mujica, the primary aim of “The Great Experiment” was to take a market that already existed but was run by criminals and bring it under government regulation, to the benefit of both public safety and public health.

The Uruguayan model is far more restrictive than a commercial model such as that now operating in Colorado. Marijuana production is tightly regulated, and all legal sales are made in government-run dispensaries that may not advertise their wares. Customers, who must be either Uruguayan citizens or permanent residents, must register with the Ministry of Health and cannot purchase more than 40 grams per month. They can, however, grow a limited number of plants at home and belong to cannabis growing clubs with higher limits. The government sets prices in its dispensaries, keeping them low enough to discourage people from going to the black market. In keeping with his leftist views, Mujica said, “We are not just going to say, ‘hands off and let the market take care of it,’ because if the market is in charge, it is going to seek to sell the greatest possible amount...” His isn’t a policy that seeks to expand marijuana consumption. What it aims to do is keep it all within reason, and not allow it to become an illness.”
**Heroin: Switzerland and Shreveport**

There is nothing romantic about heroin addiction, but it can be managed rather well with medically supervised methadone or other synthetic opioids. Switzerland has had notable success by providing hard-core addicts with pharmaceutical-grade heroin (diacetylmorphine) administered in supervised clinics in more than 20 cities. Patients can receive up to three doses a day by needle injection or in pill or liquid form. While many patients remain addicts, their health improves, employment increases, and involvement in felony crimes plummets—by 60 percent during the first year in the program, declining by 80 percent in subsequent years. Because health workers are available to administer Narcan (nalaxone), a highly effective opioid antagonist, no patient in the program has died of an overdose in 20 years. And because they need not buy or sell in the illicit market, the number of dealers has diminished significantly and non-users are less likely to be exposed to the drug. The total number of addicts in Switzerland, estimated to be 22,000–24,000, has been dropping by about 4 percent per year. Germany, the Netherlands, Denmark, and the United Kingdom have also made heroin-assisted treatment part of their national health services, and it is under consideration or in trials elsewhere, including Canada. At the Baker Institute’s inaugural drug policy conference in April 2002, Dr. Francois van der Linde, chairman of the Swiss Federal Drug Commission, asked the mostly American audience, “Why do you not do this? It works.”

In fact, similar programs existed in a number of U.S. cities in the early decades of the 20th century. One of the last and best known of these was devised and operated by Dr. Willis Butler in Shreveport, Louisiana, from 1919 to 1923. Local law enforcement and judicial officials were enthusiastic about the program, insisting that it had lessened crime in the city, but pressure from the federal government, which could not abide a local solution that defied orthodoxy, forced its closure. Later attempts to revive the model in other cities around the country were quashed before they got off the ground.

**Cocaine and Methamphetamines: Possibilities**

No programs comparable to methadone and heroin maintenance for opioid addicts currently exist for cocaine and methamphetamine dependence, but providing addicts with legal access to them in a system comparable to that used in European heroin clinics should not be dismissed out of hand. Since neither drug is as likely as alcohol to stimulate dangerous behavior, the risks of experimenting with regulated use of cocaine and some version of meth, with potency and purity known and made clear, should be far lower than popular stereotypes would imply.

As government–gathered data repeatedly make clear, the vast majority of cocaine use is experimental or sporadic. Cases of cocaine disorders (including crack) in the U.S. currently number about 1 million—0.03 percent of the population 12 and older—and most of those accompany alcohol disorders. Frequent and dependent cocaine users without an alcohol use disorder (AUD) comprise less than 0.01 percent of our population; about 70 times as many have an AUD but no problem with cocaine. The drug whose prohibition has handed power and profits to gangsters and caused misery for millions of innocent non-users in this hemisphere makes an almost trivial independent contribution to our own drug problem. Prohibition of cocaine has turned out to be like scratching a pimple until it turned into a cancer.

Methamphetamine can be a mean drug. Regular use of high doses, particularly in the impure state often sold on the streets, can take a heavy toll. But as always, the horrible anecdotes overpower statistics. According to NSDUH data, 4.7 percent have used meth at some point in their lives, but only 0.2 percent in the last month. Emerging research suggests that several medications already in use for the treatment
of other conditions could serve as potential replacement therapies for SUDs involving cocaine, methamphetamines, and other illegal stimulants. A leading candidate is dextroamphetamine, the “go pills” (trade name Dextedrine) the Defense Department has distributed to troops since at least the Korean War, and used under the trade name Adderall to treat attention deficit hyperactivity disorder (ADHD) and also as a cognitive enhancer, aphrodisiac, and euphoriant.

**ALCOHOL AND NALTREXONE**

Other promising ways to deal with SUDs in the U.S. are legal, proven to be efficacious, and rarely used. As noted in the body of this paper, alcohol is responsible for the great majority of SUDs in the United States. In 1994, the U.S. Food and Drug Administration approved the drug naltrexone for treatment of alcohol abuse. An opioid antagonist, naltrexone blocks the pleasurable effects of drinking alcohol. By taking a single pill an hour or so before planning to drink, a high proportion of people with a drinking problem are able to reduce or even stop drinking, because it no longer brings the satisfaction it once did. According to an article by Gabrielle Glaser in April 2015 issue of *The Atlantic*, naltrexone is a staple of treatment for alcohol problems in Finland, a country with a culture of heavy drinking. More than a dozen studies, including a large-scale one funded by the National Institute on Alcohol Abuse and Alcoholism and published in the *Journal of the American Medical Association* in 2006, have demonstrated that the drug can help reduce drinking. Yet according to Glaser, naltrexone is prescribed to only 1 percent of people being treated for alcohol problems in the United States.17

**ENDNOTES**


3. The number of new HIV cases over this period declined from 1,016 to 56; new AIDS cases fell from 568 to 38. Directly traceable drug deaths decreased from 80 to 16.


7. Ibid.


Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm Reduction is also a movement for social justice built on a belief in, and respect for, the rights of people who use drugs.

Harm reduction incorporates a spectrum of strategies from safer use, to managed use to abstinence in order to meet drug users “where they’re at,” addressing conditions of use along with the use itself. Because harm reduction demands that interventions and policies designed to serve drug users reflect specific individual and community needs, there is no universal definition of or formula for implementing harm reduction.

However, the Harm Reduction Coalition considers the following principles central to harm reduction practice:

1. Accepts, for better and or worse, that licit and illicit drug use is part of our world and chooses to work to minimize its harmful effects rather than simply ignore or condemn them.
2. Understands drug use as a complex, multi-faceted phenomenon that encompasses a continuum of behaviors from severe abuse to total abstinence, and acknowledges that some ways of using drugs are clearly safer than others.
3. Establishes quality of individual and community life and well-being—not necessarily cessation of all drug use—as the criteria for successful interventions and policies.
4. Calls for the non-judgmental, non-coercive provision of services and resources to people who use drugs and the communities in which they live in order to assist them in reducing attendant harm.
5. Ensures that drug users and those with a history of drug use routinely have a real voice in the creation of programs and policies designed to serve them.
6. Affirms drugs users themselves as the primary agents of reducing the harms of their drug use, and seeks to empower users to share information and support each other in strategies that meet their actual conditions of use.
• Recognizes that the realities of poverty, class, racism, social isolation, past trauma, sex-based discrimination, and other social inequalities affect both people’s vulnerability to and capacity for effectively dealing with drug-related harm.
• Does not attempt to minimize or ignore the real and tragic harm and danger associated with licit and illicit drug use.


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