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Effects of Marijuana Legalization on Law Enforcement and Crime:

Executive Summary

June 30, 2020

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Effects of Marijuana Legalization on Law Enforcement and Crime

EXECUTIVE SUMMARY¹

Introduction

In November 2012 Washington and Colorado citizens, state and local policymakers and practitioners, in multiple social service and law enforcement agencies, embarked on a grand social experiment to manage outcomes arising from the legalization of cannabis. While other countries had previously explored various approaches to marijuana decriminalization, the states of Washington and Colorado were largely left to develop and implement their own paths toward the legalization of possession, use, production and retail sale of cannabis. Such an effort at creating a state-regulated industry based on the sale of a federally prohibited controlled substance had not previously occurred in the United States. The effects of this decision to legalize cannabis were both immediate in some cases and took a while to materialize in others; when considered in tandem, these impacts (positive and negative) have had wide-ranging implications for the future of both states and those to follow on as the course of legalization. How Washington’s decisionmakers have proceeded in the formulation of statutory and administrative processes pertaining to marijuana could serve as a as template (or more properly a cautionary tale) for other states and countries interested in taking the same step toward the commercialization of cannabis. Indeed, the legalization of recreational cannabis in Washington and Colorado would serve as a watershed moment, with 11 (to date) additional states and the District of Columbia enacting their own laws regarding the legalization of marijuana in the years to follow. Each of these political jurisdictions has looked to Washington and Colorado for guidance on what does and does not work

¹ The full report for this research project is available at https://www.ncjrs.gov/pdffiles1/nij/grants/255060.pdf.
regarding legalization, and what are the subsequent effects of state regulation of a newly formed cannabis industry upon commerce, state revenues, and public health and public safety.

Methods

The research findings reported here resulted from a three-year study of the effects of this watershed decision by the people of Washington on law enforcement and crime. This research, supported by a grant from the National Institute of Justice, included municipal, county, state and tribal law enforcement partners representing 14 state, urban, suburban, rural, and tribal agencies in Washington state and the neighboring state of Idaho, as well as law enforcement professionals from 25 additional agencies and organizations in Washington (e.g. Vancouver, the Tri-Cities area, etc.). We tried several times to involve an Oregon northern border police department but were unsuccessful in gaining their involvement. Focus groups and a combination of joint and individual interviews involved 153 justice system officials that included sworn officers from three multi-agency regional drug task forces and one gang task force. In addition, interviews included prosecutors, officers from the Washington State Department of Fish and Wildlife, regulatory personnel from the Washington State Liquor and Cannabis Board, and instructors from the National Association of State Boating Law Administrators.

We constructed case study profiles and assessed qualitative (focus groups, interviews) and quantitative (Uniform Crime Reporting Program or UCR, calls for service records, body worn and dash mounted camera footage) data regarding how police practices and strategies, and crime itself, have been affected by legalization in Washington. We also explored the question of how that watershed decision in Washington has changed policing in adjacent border areas where marijuana remains prohibited.
Our research plan allowed for the cross-validation of findings at the individual, organizational and jurisdictional levels, providing the opportunity for consistent themes to emerge. Our qualitative approach to evidence collection was grounded in the process of interpretative phenomenological analysis of individual-level data, while our quantitative analyses made use of a number of different techniques, including descriptive analysis, data visualizations, interrupted time-series modeling, multi-level models, and the application of systematic social event modeling (SSEM) to the study of body worn camera footage for select incidents. Our study design allowed us to tease out key lessons for U.S. states and other countries interested in the legalization of recreational marijuana and subsequent successful governmental regulation of that newly formed industry.

Summary of Findings

Our findings indicate that some of the predictions made by opponents and proponents of legalization were validated, while others were not supported by our study findings. Put briefly: marijuana legalization has not had overall consistently positive or negative effects. Given the magnitude of the shift that legalization/commercialization represented, it is perhaps unsurprising that legalization has resulted in a varied set of positive and negative outcomes, some of which were not anticipated by either proponents or opponents to marijuana law reform. Several of the “negative” outcomes do reflect concerns predicted by opponents to legalization: our qualitative data suggested the advent of increased concern with traffic safety issues, greater youth access to marijuana, and the persistence of the black market. It turns out that all of these concerns were justified, and all are worthy of continued attention. On the “positive” front, legalization appears to have coincided with an increase in crime clearance rates in several areas of offending, suggesting that legalization may result in a net positive redistribution in police human resource allocation in
some police departments and strengthen the perception that police interactions with citizens have improved. It is also the case that far fewer persons are being brought into the criminal justice system as a result of arrest for non-violent marijuana possession offenses, with all of the benefits for law enforcement, prosecutorial teams and corrections that accompany that reduction. It is important to note, however, that our research suggests that there are potential differential effects of legalization by race and age. Though these areas were not the primary focus of our research, they are of the utmost importance to understanding the full consequences of legalization and should be explored in more depth in future research.

That said, the implementation of marijuana legalization at the local law enforcement agency level yielded some unexpected outcomes. These include growing concern about the lack of training and funding for cannabis-related law enforcement activities such as cannabis-impaired driving and boating, the sunk cost of previously invested resources (e.g., the effects on the use of drug detection dogs), an overall null effect on serious crime rates, and a broad and rising set of concerns about how to best handle the detection of marijuana-related impairment in commercial vehicle operations and traffic incidents.

Study Limitations

Our research methodology necessarily included a number of limitations that would prevent the wholesale generalization of the results. For instance, most of the data was collected from one state (Washington) and which was one of the two “pioneer” states involved in legalization in this country. For example, the calls for service data were obtained from a limited number of agencies and are likely not generalizable to the entire state, much less the country. The crime data is extracted from the UCR database (as not all of Washington was National Incident-Based Reporting System [NIBRS] compliant for all years under study) which is known to suffer from a number of
limitations, including: undercounting of some crimes, a lack of contextual information about criminal activity, and missing incidents not reported to the police. While the calls for service data address some limitations of the UCR (for instance, calls for service data are better suited for the analysis of minor crimes), these data still do not address the limitation that only incidents reported to the police are analyzed. Put simply, if legalization resulted in a shift in criminal behavior that was not reported to the police, our quantitative analyses would be incapable of detecting it. Similarly, the body-worn camera (BWC) analysis was exploratory in nature and the data represent two agencies that are geographically and organizationally disparate. As an exploratory component, these results are not generalizable.

The qualitative findings of this study offer insight into the lived experiences of officers, deputies, troopers, trainers, supervisors, administrators, and prosecutors, and are not without their limitations. Our qualitative data are limited by issues of generalizability (they may not represent the opinions of law enforcement professionals more broadly) and potentially be issues of selection bias (it is possible that those with the strongest opinions were perhaps most likely to volunteer to participate in focus groups and interviews). As with any research design employing purposive sampling, these results are not generalizable. They do not represent the lived experiences of all law enforcement officers or justice system representatives, nor adequately capture the totality of the lived experiences of this study’s participants. While we were able to obtain a large, and diverse sample of participants, we unfortunately were unable to engage officers from all municipalities in Washington, and across all law enforcement domains. These results emphasized and sought to document experiences pre- and post-legalization. While we made every effort to restrain our analysis to issues involving cannabis legalization effects on law enforcement and crime, our participants, as reflected in our findings, often gravitated towards broader frustrations involving
Police resourcing, training, and prosecutorial practices. Lastly, while our qualitative data is well-suited for capturing the perceptions of police officers, they are also limited in this regard. Police perceptions of legalization may be skewed and not reflective of the broader process of legalization.

**Key Findings and Policy Recommendations**

After over three years of field research and writing up results on the effects of cannabis legalization on law enforcement and crime in Washington State, we are now able to identify a number of noteworthy principal findings. We hope that our work will help policymakers, law enforcement and social services practitioners and stakeholder groups involved with marijuana legalization in their state, or considering such an effort, anticipate both the predictable and unanticipated outcomes for public health and public safety that the commercialization of cannabis brings in its wake.

**Findings**

1. **Crime.** Neither cannabis-related crime nor more serious offenses seemed to be affected by legalization. This finding was derived from a rigorous examination of the quantitative UCR data (see above discussion and Lu et al., 2019) and was confirmed in the qualitative (focus groups and interviews) analyses for a variety of agencies in Washington, including tribal (see above discussion). Certainly, the sharp decrease in cannabis-related crimes is to be expected from the legalization of its possession of small amounts; however, de-prioritization by the police likely explains some of this decrease as well (see Figure 1 which shows decreased arrest rates since 2008, regardless of agency UCR reporting limits).
2. De-prioritization of Cannabis Crimes. Before, but especially since legalization, there has been a de-prioritization of cannabis crime by both police and prosecutors. Though this approach was not universally accepted in all jurisdictions across Washington, most of the police and prosecutors made this point in the focus groups and interviews conducted across the state.

3. Traffic. In virtually all focus groups and interviews with law enforcement there was widespread concern expressed about increased drugged driving since legalization, and much discussion about the difficulty in detecting it and documenting impairment for successful prosecution. Law enforcement patrol officers and their supervisors tend to believe, based on their own experience and those of their colleagues, that there are many more drivers who are impaired by cannabis consumption on the road than there were before legalization. Research compiled by the Washington Traffic Safety Commission (e.g., see Grondel, Hoff, & Doane, 2018) indicates that there is good reason to be concerned, though whether there are more drugged drivers since legalization is not yet clear as there is also more testing for it than there was previously. Grondel and his colleagues (2018) found, through the administration of self-reported surveys, that there are...
a significant proportion of drivers who drive shortly after consuming THC,\(^2\) and even some chronic users of marijuana who believe, whether true or not, that its consumption improves their driving. In some jurisdictions drug recognition experts (DREs) were widely used in cannabis-related cases, but in others, due to the need to be timely in extracting blood for laboratory testing, DREs have been rarely if ever used post legalization. Many officers who have the Advanced Roadside Impaired Driving Enforcement (ARIDE) training performed by DREs have proceeded to secure search warrants for blood based on their knowledge that THC metabolizes quickly post-consumption and the likelihood of capturing 5 ng/ml (the per se standard for presumption of impairment in Washington) is greatly reduced if blood is not taken early in a suspected case of impaired driving.

4. Transnational Criminal Organizations. In the interviews there were a few police managers and officers who indicated that they suspected there were transnational criminal organizations involved in the growing, production and sale of marijuana in the state. Most of the municipal and county police officers indicated that they were not involved in the investigations done of these areas, and that this was the purview of the Washington State Liquor and Cannabis Board and the Washington State Patrol.

5. Illegal Grow Operations. In the interviews a significant number of law enforcement officers expressed the belief that illegal grow operations were somewhat common, and that even some legal operations were selling some of their product illegally “out the back door” for transport outside the state. Having said this, few police managers or officers opined that there was crime associated with retail sales outlets, especially once they became settled in their respective

\(^2\) THC stands for tetrahydrocannabinol, and is the active ingredient of cannabis.
6. **K-9 Dogs.** More than a few officers lamented the declining need for K-9s in cannabis detection post legalization. As a result of legalization, the dogs trained for the detection of marijuana could no longer be used for normal duty. Some have been retained for use in school detection applications, but in general new K-9 dogs not trained to detect cannabis must be secured or abandonment of the popular K-9 program has to be considered.

7. **Loss of a Search Tool.** Several officers in the interviews remarked on how the legalization of marijuana had hampered their ability to search a vehicle. Previously, the smell of cannabis had been used as a justification for a search in many cases; however, under conditions of legalization that practice is no longer allowed. As a direct result, several of the police officers interviewed expressed concern that other illegal activity might be occurring and they could no longer use the smell of marijuana to detect it.

8. **Clearance Rates.** Our research on clearance rates in both Washington and Colorado indicates that after legalization occurred the clearance rate for several crimes improved. Legalization did not appear to have a negative impact on the ability of the police to clear cases. Our results provide an initial indication that legalization, in some part, contributed to improvements and did not have an adverse effect on police performance – as measured by clearance rates (see Table 1, which shows crime clearance rates and Figures 2 and 3, which depict violent and property crime clearance rates).
Table 1. Interrupted Time-Series Analysis Results on Crime Clearance Rates per Month for Washington

<table>
<thead>
<tr>
<th></th>
<th>Violent Crime</th>
<th>Property Crime</th>
<th>Rape</th>
<th>Robbery</th>
<th>Agg. Assault</th>
<th>Burglary</th>
<th>Larceny</th>
<th>Motor Vehicle Theft</th>
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<tbody>
<tr>
<td>US Trend Before I-502</td>
<td>-.005</td>
<td>.014</td>
<td>.021</td>
<td>-.019</td>
<td>.030</td>
<td>-.001</td>
<td>.018</td>
<td>-.007</td>
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<tr>
<td>(0.037)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Treatment Intercept</td>
<td>2.172</td>
<td>-3.108**</td>
<td>-1.88</td>
<td>2.605+</td>
<td>2.080</td>
<td>-2.034**</td>
<td>-2.733**</td>
<td>-8.993**</td>
</tr>
<tr>
<td>(1.554)</td>
<td>(.496)</td>
<td>(2.737)</td>
<td>(1.319)</td>
<td>(1.361)</td>
<td>(.367)</td>
<td>(.632)</td>
<td>(.702)</td>
<td></td>
</tr>
<tr>
<td>Difference between WA &amp; US</td>
<td>-.083</td>
<td>-.067**</td>
<td>-1.148</td>
<td>-.063</td>
<td>-.113+</td>
<td>-.057**</td>
<td>-.062*</td>
<td>-.032</td>
</tr>
<tr>
<td>(0.069)</td>
<td>(.022)</td>
<td>(1.121)</td>
<td>(1.069)</td>
<td>(0.065)</td>
<td>(.018)</td>
<td>(.028)</td>
<td>(.034)</td>
<td></td>
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<tr>
<td>Pre-Treatment Slope Difference</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>between WA &amp; US</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immediate Average Legalization</td>
<td>2.399*</td>
<td>1.656**</td>
<td>1.195</td>
<td>2.831**</td>
<td>3.392**</td>
<td>.96*</td>
<td>1.780**</td>
<td>2.029*</td>
</tr>
<tr>
<td>Effect</td>
<td>(1.028)</td>
<td>(1.531)</td>
<td>(1.665)</td>
<td>(1.083)</td>
<td>(1.297)</td>
<td>(.429)</td>
<td>(.587)</td>
<td>(.886)</td>
</tr>
<tr>
<td>Post-Treatment Average Slope</td>
<td>-0.045</td>
<td>-0.015</td>
<td>-0.105</td>
<td>-0.015</td>
<td>-0.129*</td>
<td>.006</td>
<td>-0.030</td>
<td>-0.013</td>
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<tr>
<td>(0.050)</td>
<td>(.027)</td>
<td>(.079)</td>
<td>(.054)</td>
<td>(.065)</td>
<td>(.022)</td>
<td>(.030)</td>
<td>(.041)</td>
<td></td>
</tr>
<tr>
<td>Immediate WA Effect</td>
<td>-1.910</td>
<td>.637</td>
<td>-1.393</td>
<td>-2.082</td>
<td>-1.342</td>
<td>.982+</td>
<td>.155</td>
<td>2.907**</td>
</tr>
<tr>
<td>(1.802)</td>
<td>(.705)</td>
<td>(3.012)</td>
<td>(1.823)</td>
<td>(2.062)</td>
<td>(.576)</td>
<td>(.869)</td>
<td>(1.154)</td>
<td></td>
</tr>
<tr>
<td>Post-Treatment WA Effect</td>
<td>.183*</td>
<td>.026</td>
<td>.280+</td>
<td>.141</td>
<td>.021</td>
<td>.064*</td>
<td>.001</td>
<td>.035</td>
</tr>
<tr>
<td>(0.091)</td>
<td>(.035)</td>
<td>(.154)</td>
<td>(.094)</td>
<td>(.109)</td>
<td>(.028)</td>
<td>(.042)</td>
<td>(.056)</td>
<td></td>
</tr>
<tr>
<td>(7.49)</td>
<td>(.396)</td>
<td>(1.148)</td>
<td>(1.783)</td>
<td>(1.019)</td>
<td>(.317)</td>
<td>(.442)</td>
<td>(.537)</td>
<td></td>
</tr>
<tr>
<td>F(7,1176)</td>
<td>1.86+</td>
<td>131.999**</td>
<td>5.09**</td>
<td>2.34*</td>
<td>7.37**</td>
<td>90.66**</td>
<td>85.08**</td>
<td>186.78**</td>
</tr>
</tbody>
</table>

+ p < 0.1, *p< 0.05, **p<0.01

Figure 2. Violent Crime Clearance in Washington, 2010 to 2015
Previously published in Makin et al. (2020).
9. **Workload Challenges.** In both the focus groups and in the interviews police officers often noted that legalization has likely increased their workload, particularly as concerns traffic offenses. While a driving under the influence (DUI) offense involving alcohol would normally take a couple hours of processing, one involving THC or other drugs (in part because of search warrants required for blood testing) might take as long as four hours of an officer’s time. In addition, especially in the first few years of legalization before people adjusted to the reality of legalization, the police reported that they received far more calls for service involving marijuana-related nuisance complaints. These complaints typically were about people (adults and minors) smoking in public, or the smell of marijuana being smoked in apartment buildings, commercial spaces, parking facilities, and in public parks.

10. **Drug Recognition Experts.** Most departments reported that they did not have sufficient timely access to DREs. Therefore, calling them in from a distance, when their travel time and the amount of time they would have to devote to the 12-step examination of the driver, might lead to further degradation of the THC in the detainee’s bloodstream. This was one of the reasons that one
sizeable department indicated that their informal policy was to never use DREs when THC was suspected as the source of impairment of a driver. One agency has created a headquarters clinic in which blood draws are done as soon as a search warrant (24-hour electronic warrants are now available in much of the state) is obtained and six of the agency’s officers have been certified as phlebotomists so that one will be available at all times. In this agency scant use is made of DREs.

11. Cross-State Enforcement. The Idaho police in both focus groups and interviews voiced frequent complaints about the number of THC-impaired drivers crossing the state line between Washington and Idaho. When erratic drivers were stopped, the Idaho officers reported that many drivers seemed surprised that they could not drive after using cannabis or were not allowed to bring marijuana into Idaho they had purchased legally in Washington. Officers also noted that they had witnessed an uptick in the number of drivers and vehicle passengers who were quite apparently involved in the transportation of legally purchased cannabis across state lines from Washington for resale in their state or in a neighboring state where prohibition remained in force (e.g., Utah and Wyoming). Officers from one Idaho agency reported substantial asset forfeitures related to monetary seizures associated with drug trafficking that included cannabis. Agency enforcement resources were enhanced through asset forfeitures they claimed.

12. Enforcement in Washington. There was some concern expressed by several officers and police supervisors and managers that the enforcement of restrictions on cannabis use included in Initiative 502 were very difficult to execute. For example, restriction to use “in private places” for apartment renters leaves virtually precious few places to use cannabis. Likewise, widespread use out-of-doors in parks or on watercraft, though illegal, are uses which no police agency wishes to deny citizens in legal possession of state-approved marijuana products. For many of the officers, enforcement
difficulty concerns were most directly focused on youth use in public spaces and the difficulties of the detection of THC-impaired adult drivers.

13. Number of Calls for Service. Our analysis of calls for service in two relatively small college towns (one in Washington, and the other in Idaho) suggests that police calls for service did increase in the Washington town after recreational sales began, while they decreased in the Idaho town. Notably, a majority of this increase was for social welfare check calls. Our preliminary examination of calls for service data from one large municipality would indicate that neither legalization, nor the beginning of retail sales of cannabis, were associated with increases in calls for service.

Other Insights

1. Concern About Youth. There was a generalized concern, apparent from both the focus groups and the interviews, about the effect of legalization on youth use and greater exposure to cannabis as a result of legalization. Having said this, a number of officers reported that because of the difficulties inherent in documenting youth offending with cannabis (e.g., vaping and consumption of edibles), the ubiquity of cannabis in private homes post legalization, and the reticence of most prosecutors to accept youth possession cases, de-prioritization has taken place in this area as well in many jurisdictions. Public schools with School Resource Officers (SROs) and/or local police liaison officers have a decided preference for referral of cases to a school-based restorative justice, learning-focused process as opposed to referral to juvenile court in most areas of the state.

2. Youth and Family Education. Several officers complained in the interviews that not nearly enough education about the hazards of cannabis consumption for youth has taken place. Their concern was particularly focused on how cannabis affected driving, and the lack of education provided to youth and their families both before legalization and since.
3. Law Enforcement Resources and Training. Although some officers and police managers indicated that some of the funds derived from cannabis taxes had trickled down to their department for training and other initiatives, most officers and their supervisors felt that far too little new resources and/or targeted training have been made available to local law enforcement to deal with cannabis-related law enforcement issues. Many of the interviewees felt they had not been trained by their agency or provided sufficient access to relevant training outside of their agency, for them to effectively enforce the provisions of the new law.

Policy Recommendations

After our exhaustive review of both quantitative and qualitative data, much of it spanning several years, and the focus groups and interviews involving the participation of 25 agencies and over 153 law enforcement participants from both Washington and Idaho, we were able to identify 16 distinct noteworthy findings as regards to the effect of the legalization of marijuana on crime and law enforcement. We now offer seven recommendations that are derivative from these findings, several of which were articulated by the state’s law enforcement and prosecutorial community.

1. Law Enforcement Training. In addition to the need for much more work on public education than was anticipated (see our seventh recommendation below), there is a parallel need for much more training of law enforcement officers to better prepare them to enforce marijuana laws as adjustments are made to accommodate the growth of the cannabis industry. Once a state recognizes the enormous new revenue stream it can realize from marijuana commercialization, industry lobbyists will quite predictably pressure state policymakers to reduce restrictions on the number of growing and retail sales outlets and the places where legally purchased cannabis can be used. Without ongoing updated training of the police there will be a continuation of the complaints we
documented on the part of law enforcement that too little preparation was provided to police officers to effectively enforce I-502, and too little updating of information is being provided as state legislative changes take place to facilitate the growth of the newly forming cannabis industry.

2. Traffic Safety. With respect to traffic safety and cannabis-impaired driving, the absence of tools equivalent to the accuracy, quality, and roadside collection capabilities of alcohol breath testing devices leads law enforcement officers to perceive that cannabis-impaired driving is a problem for which they are not adequately prepared and for which they are lacking proper tools. While the prevalence of alcohol impaired driving is declining in Washington and elsewhere, the incidence of cannabis impairment and co-incident alcohol and cannabis impairment appears to be rising (Berning, Compton, & Wochinger, 2015; Ramirez, et. al., 2016). Without making adequate provision for the enhancement of existing DRE programs and the expansion of ARIDE training programs, there is little chance that law enforcement can rise to the challenge of reaching the Target Zero goal of no traffic fatalities by the year 2030. Likewise, making use of dash mounted and body worn camera footage from cannabis-involved traffic stops reflecting best practices and inappropriate officer conduct alike provides another important potential tool for effective officer training.

3. Prosecutor Training. Our interviews with prosecutors revealed the need for the training of prosecutors in the area of cannabis-impaired driving cases. Reliance on the established “blood evidence paradigm” so appropriate to alcohol impairment is causing major problems when the source of impairment is cannabis. As the science of cannabis impairment is developing it is increasingly clear that THC presence in the blood is not indicative of impairment, particularly in the case of medical marijuana users and chronic users of recreational marijuana. Researchers in Colorado and Washington have shown the limitations inherent in reliance on blood THC levels for
the imputation of impairment in controlled dosage studies of occasional and chronic users. Accordingly, the AAA Foundation and the National Highway Traffic Safety Administration (NHTSA) have both concluded that per se laws are no longer advisable (Logan, Kacinko & Beirness, 2016; NHTSA, 2010). Occasional users are impaired by low levels of THC presence, but chronic users are not impaired even when higher levels of THC are found in the blood stream (Sewell, Poling, Sofuoglu, M., 2010). The inclination of ARIDE-trained officers to seek early blood draws in suspected cases of cannabis impairment has resulted in a major backlog of blood testing in the state toxicology lab, and delayed test results have become a major problem for the successful prosecution of cases where genuine impairment is indeed present but “speedy trial” standards are in force. As with law enforcement personnel, prosecutors in those states following in the path of Washington and Colorado will need access to training in the ways in which the alcohol-based Standard Field Sobriety Test, even with ARIDE training enhancement, is likely to make successful prosecution of cannabis-impaired driving cases problematic. It is recommended that some portion of any state revenues derived from marijuana sales be earmarked for the training of prosecutors tasked with assisting officers in the effective enforcement of state impaired driving statutes.

4. Black Market Detection. A principal benefit of marijuana legalization was thought to be the disappearance of the black market. Our research revealed that this outcome was not realized. In fact, the advent of legalization has made it much more difficult for the police to interdict illegal marijuana and much easier for new forms of the black and gray markets to arise and to persist. The Washington legislature in 2019 allocated $3 million to the Washington State Patrol to address the problem of the persistence of a black market in marijuana in the state, and the presence of organized crime (domestic and international) in these markets. In states following along the path
of Washington and Colorado it is important that resources be allocated to assure the effective investigation and successful prosecution of black market and gray market (resale of products legally purchased to parties not permitted to make such purchases) activities. Illegal cross-state transport and penetration into markets in states where marijuana possession is prohibited is one of the primary areas of insufficient police resources for effective prevention and prosecution.

5. * Calls for Service. Our study of calls for service data revealed that a state which legalizes recreational marijuana should anticipate that local law enforcement agencies will likely experience an increase in calls for service that are not crime-related, but rather pertain to making welfare checks related to marijuana use. A proportion of these calls will entail the police making connection with social service agencies and health providers for their timely assistance, and often require follow-up checks on such cases long after the first call is received. The workload effects for police officers in such cannabis-related calls for service are likely to be substantial, particularly in smaller agencies where the supply of officers on duty at any one time is typically rather limited. We recommend that some portion of state marijuana revenue be ear-marked in an account for local law enforcement workload support to be requested by agencies where such calls for service arise with some frequency.

6. *Public Education. The state would be wise to allocate more resources to the education of its citizens about the challenges associated with medical and recreational marijuana, their responsible adult use, and their likely adverse effects for adolescent use given its present-day high potency. Such public education regarding vulnerable youth and adverse effects on the cognitive abilities of drivers deserve top-priority consideration. Provisions were indeed made for just such important work in I-502, making use of marijuana sales revenues precisely for these purposes. However, little new funding for such work already being done in this area by some school districts, some
county public health authorities, and numerous youth drug abuse nongovernmental organizations (NGOs) materialized; instead, prior funding has been supplanted (not enhanced) by I-502 revenues. This is a serious mistake which should not be made in other states.

**Dissemination of Findings**

We have published some of our findings in peer-reviewed journals—an article on crime clearances in *Police Quarterly* (Makin et al., 2019), and one on UCR crimes in *Justice Quarterly* (Lu et al., 2019). Forthcoming are an article exploring the view of the police and the implementation of legalization using focus groups in the *Justice Evaluation Journal* (Stohr et al., 2021), an article exploring the police perspective on enforcement of boating regulations post legalization in the *Journal of Qualitative Research* (Stanton et al., 2021), and an article that is focused on the effect of legalization on calls for services in *Policing and Society* (Makin et al., 2021)—with several other manuscripts submitted/under review or in preparation. We have also shared our findings with our law enforcement research partner agencies and with stakeholder groups in Washington State. Included in this group of interested parties were the U.S. Attorney’s Offices for Eastern Washington and Western Washington, Northwest High Intensity Drug Trafficking Area (NW HIDTA), the Washington State Liquor and Cannabis Board (WSLBC), the Washington Association of Prosecuting Attorneys (WAPA), the Washington Association of Sheriffs and Police Chiefs (WASPC), the Washington State Institute for Public Policy (WSIPP), the Washington State Patrol (WSP), the Washington Traffic Safety Commission (WTSC), the Washington State Parks and Recreation Commission, the Washington Department of Fish and Wildlife, the National Association of State Boating Law Administrators (NASBLA), and The Cannabis Alliance. We presented an overview of our principal findings to the Washington Liquor and Cannabis Board on January 8, 2019, the Washington State Academy of Science later that year,
to a collection of stakeholders in the state capitol, Olympia, on October 16, 2019 and at a December 3, 2019 NIJ Briefing that included federal agency experts. We had phone calls and zoom meetings with agencies and entities seeking information about the effects of legalization in both Virginia and Florida. We have also engaged the media to disseminate our results at the state and national levels. We will continue to present the results of our research at statewide, national, and international practitioner and academic conferences, including the Western Association of Criminal Justice, the Academy of Criminal Justice Sciences, and the American Society of Criminology. Our data will be archived at the Inter-university Consortium for Political and Social Research (ICPSR) so that the benefit of our work can be extended to other scholars and researchers.

References


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