

DRIVING WHILE STONED IN VIRGINIA

Paul J. Larkin*

INTRODUCTION

In 2021, Virginia became the first state in the Old South to pass legislation beginning a multi-year process of legalizing the commercial sale of cannabis for recreational use.¹ By so doing, the Old Dominion joined numerous other states that permit cannabis to be sold for medical or recreational use under state law,² even though its distribution for either purpose remains a federal crime.³ Provisions legalizing the simple

* John, Barbara & Victoria Rumpel Senior Legal Research Fellow, The Heritage Foundation; M.P.P. George Washington University, 2010; J.D. Stanford Law School, 1980; B.A. Washington & Lee University, 1977. I want to thank GianCarlo Canaparo, Robert L. DuPont, Bertha K. Madras, John G. Malcolm, and Ed Wood for invaluable comments on an earlier version of this Article. The views expressed in this Article are my own and should not be construed as representing any official position of The Heritage Foundation. Any mistakes are mine.

1. H.B. 2078, 2021 Gen. Assemb., 1st Sp. Sess. (Va. 2022) (codified at various provisions of the Virginia Code Annotated (West 2022)). The cannabis industry is likely to attempt to capitalize on its success in Virginia elsewhere in the southern states. See Will Yakowicz, *Why the Legal Cannabis Industry Is High on the American South*, FORBES (Nov. 18, 2021, 8:14 AM), <https://www.forbes.com/sites/willyakowicz/2021/11/18/why-the-legal-cannabis-industry-is-high-on-the-american-south/?sh=3cdb9da7eb6b> (“‘The South is the biggest frontier in cannabis,’ says Jim Cacioppo, the CEO of Jushi, a marijuana company that has 26 dispensaries across Virginia, Pennsylvania, California, Illinois and Massachusetts. ‘It’s just a matter of time.’”).

2. As of February 3, 2022, thirty-seven states, four territories, and the District of Columbia permit the use of cannabis products for medical purposes, while eighteen states, two territories, and the District of Columbia permit recreational-use cannabis. *State Medical Cannabis Laws*, NAT’L CONF. OF STATE LEG. (Feb. 3, 2022), <https://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx> [<https://perma.cc/8FTQ-THGR>]. State laws permitting cannabis to be distributed for either purpose differ widely. See DRUG POLICY AND THE PUBLIC GOOD 245-54 (Thomas Babor et al., eds., 2d ed. 2018); Rosalie Liccardo Pacula, Priscillia Hunt & Anne Boustead, *Words Can Be Deceiving: A Review of Variation among Legally Effective Medical Marijuana Laws in the United States*, 7 J. DRUG POL’Y ANALYSIS 1 (2014).

3. Federal law flatly prohibits its distribution for any purpose. 21 U.S.C. § 812 (2018). See generally Paul J. Larkin, Jr., *Reflexive Federalism*, 44 HARV. J.L. & PUB. POL’Y

possession and home cultivation of a limited amount of cannabis by adults went into effect on July 1 of that year, but the General Assembly must re-pass the provisions creating a cannabis regulatory agency before commercial sale of cannabis can begin.⁴

Unfortunately, when passing the 2021 legislation the Virginia General Assembly did not adequately consider one of the most serious adverse effects that legalization will have on the public health and safety. The principal psychoactive ingredient in cannabis—delta⁹-tetrahydrocannabinol (THC)⁵—impairs the mental functioning necessary to drive safely by (among other things) slowing reaction time, weakening attention, distorting time and space, creating short-term memory deficits, and hampering eye-hand-foot coordination.⁶ Prior to 2021, there was evidence that Virginians have increasingly chosen to use cannabis and drive shortly thereafter.⁷ Legalization is likely to increase further the number of Virginians who do so, as well as the amount they consume,⁸ and experience shows that some of them will drive under its

523, 527-43 (2021) (discussing the confusion created by the conflicting state and federal schemes) [hereafter Larkin, *Reflexive Federalism*].

4. See VA. CODE ANN. § 4.1-604 (West 2022); *Cannabis in Virginia, Frequently Asked Questions (FAQ)*, CANNABIS.VIRGINIA.GOV, <https://www.cannabis.virginia.gov> (last visited Apr. 8, 2022).

5. LESLIE L. IVERSEN, *THE SCIENCE OF MARIJUANA* 100–04 (2018).

6. Robert L. DuPont, Erin A. Holmes, Stephen K. Talpins & J. Michael Walsh, *Marijuana-Impaired Driving: A Path Through the Controversies*, in *CONTEMPORARY HEALTH ISSUES ON MARIJUANA* 183, 186 (Kevin A. Sabet & Ken. C. Winters eds., 2018) (“Today there is a wealth of evidence that marijuana is an impairing substance that affects skills necessary for safe driving.”); see *infra* note 24 (collecting authorities).

7. See JOINT LEGIS. AUDIT & REV. COMM’N, REPORT TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA: KEY CONSIDERATIONS FOR MARIJUANA LEGALIZATION, COMMISSION DRAFT 19 (2020) [hereafter 2020 VIRGINIA MARIJUANA COMM’N] (“evidence shows more Virginians are using marijuana and driving”). See generally CNTRS FOR DISEASE CONTROL & PREV., MORBIDITY AND MORTALITY WEEKLY REPORT, DRIVING UNDER THE INFLUENCE OF MARIJUANA AND ILLICIT DRUGS (Dec. 20, 2019) (“During 2018, 12 million (4.7%) U.S. residents reported driving under the influence of marijuana in the past 12 months; 2.3 million (0.9%) reported driving under the influence of illicit drugs other than marijuana”). That practice might be due to the mistaken belief that cannabis does not impair one’s driving ability and might even enhance it. See *infra* note 26 and accompanying text.

8. 2020 VIRGINIA MARIJUANA COMM’N, *supra* note 7, at 101–02.

influence.⁹ Accordingly, unless the 2021 law is revised before large-scale commercial cannabis distribution takes effect, one inevitable result of that legislation will be an increase in roadway crashes causing grave injuries and fatalities by drivers who are “one token over the line.”¹⁰

The 2021 Virginia legislation signified that Virginia wishes to join the number of states with approved cannabis régimes. The intervening November 2021 state election, however, saw the electorate choose a new, Republican governor, as well as shift control of the House of Delegates from the Democratic to Republican Party.¹¹ Those developments spiced up the question whether the General Assembly would re-pass the 2021 legislation in 2022, because every Republican delegate voted against it in 2021. In fact, the Virginia General Assembly declined to reenact the 2021 law in its 2022 session, deferring it until the session beginning in 2023.¹²

Virginia’s legislators have an opportunity to correct this grievous flaw in the 2021 law by taking a variety of reasonable steps to prevent needless, serious bodily injury and deaths before the commercial sale of cannabis becomes a reality. This Article explains why and how the General Assembly should address that deficiency in its 2023 session.¹³

9. The data from other states supports that inference. *Infra* notes 27–33 and accompanying text.

10. MIKE BREWER & TOM SHIPLEY, ONE TOKE OVER THE LINE (Kama Sutra Records 1971).

11. *Virginia Election Results*, N.Y. TIMES, (Dec. 12, 2021), <https://www.nytimes.com/interactive/2021/11/02/us/elections/results-virginia.html>.

12. *2022 Session, S.B. 391 Cannabis control; retail market*, VIRGINIA’S LEGIS. INFO. SYS. (Mar. 1, 2022), <https://lis.virginia.gov/cgi-bin/legp604.exe?221+vot+H11V0234+SB0391> (continuing the bill to the 2023 Session).

13. Two additional points are worth noting. The 2022 General Assembly or one that follows can always revise or repeal the 2021 statute because no legislature can bind its successors. *Cf. Dorsey v. United States*, 567 U.S. 260, 274 (2012) (“[S]tatutes enacted by one Congress cannot bind a later Congress, which remains free to repeal the earlier statute, to exempt the current statute from the earlier statute, to modify the earlier statute, or to apply the earlier statute but as modified.”). Second, by criticizing the General Assembly’s failure to address drug-impaired driving I do not mean to say that the 2021 Virginia law is otherwise free from defects. For example, the 2021 law envisions the distribution of cannabis by private parties licensed by the Virginia Cannabis Control Authority Board of Directors. *See infra* text accompanying note 47. Several

This Article proceeds as follows: Part I addresses the problem of drug-impaired driving that cannabis legalization poses. Part II discusses the 2021 Virginia legislation and its shortcomings on that subject. Part III suggests several steps that the General Assembly should take to remedy the problems that would inevitably occur if the 2021 legislation were to go into effect as it now stands.

I. THE PROBLEM OF DRUG-IMPAIRED DRIVING

Driving a motor vehicle is a complicated task requiring attention, memory, eye-hand- foot coordination, quick-response ability, and judgment.¹⁴ Society has known the fatal consequences of drunk driving

commentators, however, have argued that states should at least consider allowing retail sales only by state-owned facilities in a manner similar to the decision by some states to permit only Alcoholic Beverage Control stores to sell distilled spirits. The reason is (at least) three-fold: to prevent advertising, to address cannabis dependency, and to give the state an off-ramp to end legalization if the new project does not work well. *See, e.g.*, JONATHAN P. CAULKINS, BEAU KILMER, MARK A. R. KLEIMAN, ROBERT J. MACCOUN, GREGORY MIDGETTE, PATRICIA OGLESBY, ROSALIE LICCARDO PACULA, & PETER H. REUTER., *CONSIDERING MARIJUANA LEGALIZATION: INSIGHTS FOR VERMONT AND OTHER JURISDICTIONS* 60–64 (2015); Richard J. Bonnie, *The Surprising Collapse of Marijuana Prohibition: What Now?*, 50 U.C. DAVIS L. REV. 573, 591–92 (2016); Paul J. Larkin, Jr., *Cannabis Capitalism*, 69 BUFF. L. REV. 215, 221, 269–79 (2021) [hereafter Larkin, *Cannabis Capitalism*]; Benjamin M. Leff, *Tax Benefits of Government-Owned Marijuana Stores*, 50 U.C. DAVIS L. REV. 659, 683 (2016). Moreover, rough agricultural cannabis cannot satisfy the requirements necessary to ensure that a food is safe, and that a drug is safe and effective for its intended use. Cannabis might contain microbials (*e.g.*, *E. coli*), toxins, (*e.g.*, aflatoxins), hazardous chemical solvents (*e.g.*, butane), heavy metals (*e.g.*, arsenic, lead, mercury), and the like—all of which are hazardous to a user’s health—along with other, unsavory contents (*e.g.*, insects). *See, e.g.*, PATRICIA C. FRYE & DAVE SMITHERMAN, *THE MEDICAL MARIJUANA GUIDE: CANNABIS AND YOUR HEALTH* 51-53, 55 (2018); BRIAN F. THOMAS & MAHMOUD A. EL-SOHLI, *THE ANALYTICAL CHEMISTRY OF CANNABIS: QUALITY ASSESSMENT, ASSURANCE, AND REGULATION OF MEDICINAL MARIJUANA AND CANNABINOID PREPARATIONS* 44–46 (2016); Franziska Busse, Leyla Omid, Katharina Timper, Alexander Leichtle, Michael Windgassen, Eyleen Kluge & Michael Stumvoll, *Lead Poisoning Due to Adulterated Marijuana*, 358 NEW ENG. J. MED. 1641 (2008). The 2021 legislation does not explain why food, alcohol, and tobacco cannot contain such contaminants, but cannabis may. H.B. 2078, *supra* note 1.

14. *See, e.g.*, Paul J. Larkin, Jr., *Medical or Recreational Marijuana and Drugged Driving*, 52 AM. CRIM. L. REV. 453, 454 (2015) [hereinafter Larkin, *Drugged Driving*]; Gary M. Reisfield, Bruce A. Goldberger, Mark S. Gold & Robert L. DuPont, *The Mirage of Impairing Drug Concentration Thresholds: A Rationale for Zero Tolerance*

since automobiles were invented.¹⁵ Beginning in the 1980s, however, society resolutely chose to reduce what had previously become an “increasing slaughter on our highways” that had “reach[ed] the astounding figures only heard of on the battlefield.”¹⁶ The federal and state governments aggressively implemented multi-step programs to reduce that bloodshed. Among them were the following: legislation fixing the maximum blood-alcohol content (BAC) at 0.08 grams per deciliter (g/dL), mandatory license suspension penalties for conviction, more aggressive prosecution of drunk drivers, and public education and advocacy by organizations such as Mothers Against Drunk Driving (MADD) and Remove Intoxicated Drivers (RID).¹⁷ The result has been a tremendous success. Fatalities have decreased by nearly 50 percent, from more than 20,000 persons in 1982 to just above 10,000 in 2018.¹⁸ Scores of thousands of people are alive today because of our efforts to persuade individuals to follow the admonition “Don’t Drink and Drive.” There is interest and hope in seeing that number diminish even further.¹⁹ Only time will tell.

Per Se *Driving Under the Influence of Drugs Laws*, 36 J. ANALYTICAL TOXICOLOGY 353, 353 (2012).

15. See Eric J. Gouvin, *Drunk Driving and the Alcoholic Offender: A New Approach to an Old Problem*, 12 AM. J.L. & MED. 99, 100 (1986) (“Inebriates and moderate drinkers are the most incapable of all persons to drive motor wagons. The general palsy and diminished power of both the reason and senses are certain to invite disaster in every attempt to guide such wagons.”) (quoting a 1904 editorial from the *Quarterly Journal of Inebriety*).

16. *Breithaupt v. Abram*, 352 U.S. 432, 439 (1957).

17. Federal law conditions a portion of federal highway funds on a state’s adoption of a 0.08 BAC standard. See, e.g., 23 U.S.C. § 163(a); 23 C.F.R. § 1225.1 (2022); *Missouri v. McNeely*, 569 U.S. 141, 160 n.8 (2013). For a history and discussion of the problem, see JAMES B. JACOBS, *DRUNK DRIVING: AN AMERICAN DILEMMA* (2013); SOCIAL CONTROL OF THE DRINKING DRIVER (2d ed. Michael D. Laurence, John R. Snortum & Franklin E. Zimring eds., 1989); BARRON H. LERNER, *ONE FOR THE ROAD: DRUNK DRIVING SINCE 1900* (2011); DuPont, *supra* note 6, at 194 (“MADD humanized the problem by identifying real-life victims and revealing the devastating impact that the decisions to drive drunk can impose on others. This served as a catalyst for a social and political movement whose moral authority continues to grow.”).

18. VINDHYA VENKATRAMAN, CHRISTIAN M. RICHARD, KELLY MAGEE & KRISTIE JOHNSON, *NAT’L HIGHWAY TRAFFIC SAFETY ADM’N, COUNTERMEASURES THAT WORK—A HIGHWAY SAFETY COUNTERMEASURES GUIDE FOR STATE HIGHWAY SAFETY OFFICES 1-1* (10th ed. 2020).

19. See NAT’L ACAD. SCIS, ENG’G & MED., *GETTING TO ZERO ALCOHOL-IMPAIRED DRIVING FATALITIES: A COMPREHENSIVE APPROACH TO A PERSISTENT PROBLEM* 32

Beginning in the mid-1990s, however, states began the process of authorizing under state law the cultivation, distribution, possession, and use of cannabis.²⁰ The first state laws were limited to medical uses, but in 2012 Colorado and Washington State changed the game by enacting recreational-use marijuana régimes.²¹ There are now more than thirty states with one program or the other.²² Because none of those laws prohibited the use of alcohol, the new cannabis schemes have legalized the use of an additional impairing substance. One effect is to risk offsetting the benefits that we have seen from our decades-long efforts to combat drunk driving.²³

(Steven M. Teutsch, Amy Geller & Yamrot Negussie eds., 2018) (“[Alcohol-impaired driving fatalities] justify interventions to protect the public.”).

20. California, the first state to outlaw cannabis, started the trend by enacting, via a citizen’s initiative, the Compassionate Use Act of 1996. *See* CAL. HEALTH & SAFETY CODE § 11362.5 (2020); Claire Frezza, *Medical Marijuana: A Drug Without a Medical Model*, 101 GEO. L.J. 1117, 1120 (2013).

21. *See* COLO. CONST. art. XVIII, § 16; WASH. REV. CODE § 69.50.4013 (2020); TODD GARVEY & BRIAN T. YEH, CONG. RESEARCH SERV., R43034, STATE LEGALIZATION OF RECREATIONAL MARIJUANA: SELECTED LEGAL ISSUES 1-5 (2014) (summarizing the Colorado and Washington Initiatives).

22. *See supra* note 2.

23. *See, e.g.*, PAM SHADEL FISCHER & PAM FISCHER CONSULTING, GOVERNORS HIGHWAY SAFETY ASS’N, HIGH-RISK IMPAIRED DRIVERS: COMBATTING A CRITICAL THREAT 4 (2019) (“Between 2006 and 2016, the rate of fatally injured drivers (with known test results) that tested positive for drugs increased from 28 percent to 44 percent”); Jonathan Caulkins, *Against a Weed Industry*, NAT’L REV., Apr. 2, 2018, at 28 (“As policy liberalized, cannabis transformed from a weekend party drug to a daily habit, becoming more like tobacco smoking and less like drinking. The number of Americans who self-report using cannabis daily or near-daily grew from 0.9 million in 1992 to 7.9 million in 2016.”); Russell S. Kamer, Stephen Warshafsky & Gordon C. Kamer, *Change in Traffic Fatality Rates in the First 4 States to Legalize Recreational Marijuana*, 180 JAMA INTERNAL MED. 1119, 1120 (2020), <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767643>

(“[L]egalization of recreational marijuana is associated with increased traffic fatality rates. Applying these results to national driving statistics, nationwide legalization would be associated with 6800 (95% CI, 4200-9700) excess roadway deaths each year.”); Mark A.R. Kleiman, *The Public-Health Case for Legalizing Marijuana*, 51 NAT’L AFFS. 68, 76–77 (2019) (“Over the past quarter-century, the population of ‘current’ (past-month) users has more than doubled (to 22 million) and the fraction of those users who report daily or near-daily use has more than tripled (to about 35%).”); Mark R. Rosekind, Johnathon P. Ehsani & Jeffrey P. Michael, *Reducing Impaired Driving Fatalities: Data Need to Drive Testing, Enforcement and Policy*, 180 JAMA INTERNAL MED. 1068, 1068 (2020) (“[E]very year more than 10 000 individuals die on US

Like alcohol, THC impairs a driver's ability to handle a vehicle safely.²⁴ That effect does not automatically or rapidly dissipate. It can last for hours; in long-term heavy users, it can last for up to several weeks.²⁵ Unfortunately, a goodly number of users reported driving

roads as a result of crashes in which a driver had a blood alcohol concentration of greater than 0.08 g/dL, accounting for about one-third of motor vehicle crash deaths annually. As this significant alcohol-impaired driving problem continues, public health and safety professionals are justifiably concerned by the introduction of an additional legal intoxicant into our communities and onto our roads.” (footnote omitted)). Cannabis is not the only drug that can impair driving. *See, e.g.*, MARCELLINE BURNS, *MEDICAL-LEGAL ASPECTS OF DRUGS* 153 (2003) (“Without exception, all illicit drugs have the potential to impair the cognitive and behavioral skills that allow a person to engage in normal daily activities, such as driving and working.”); Ronald H. Farkas, Ellis F. Unger & Robert Temple, *Zolpidem and Driving Impairment—Identifying Persons at Risk*, 369 *NEW ENG. J. MED.* 689, 689–91 (2013) (describing the impact of Zolpidem on driving).

24. *See, e.g.*, BRITISH MED. ASS'N, *THERAPEUTIC USES OF CANNABIS* 19–20, 66 (1997); EUROPEAN MONITORING CNTR. FOR DRUGS AND DRUG ADDICTION, *DRUGS USE, IMPAIRED DRIVING AND TRAFFIC ACCIDENTS* 33–41 (2d ed. 2014) [hereafter EUROPEAN DRUG MONITORING CNTR.]; NAT'L ACAD. SCIS., *ENG'G & MED., THE HEALTH EFFECTS OF CANNABIS AND CANNABINOIDS* 227–30 (2017); NAT'L INST. ON DRUG ABUSE, *CANNABIS (MARIJUANA) RESEARCH REPORT* 7–8 (2020); NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., *MARIJUANA, ALCOHOL, AND ACTUAL DRIVING PERFORMANCE* 39–40 (1999); Rebecca L. Hartman & Marilyn A. Huestis, *Cannabis Effects on Driving Skills*, 59 *CLIN. CHEMISTRY* 478, 478 (2013) (“Epidemiologic data show that risk of involvement in a motor vehicle accident (MVA) increases approximately 2-fold after cannabis smoking.”); 2020 VIRGINIA MARIJUANA COMM'N, *supra* note 7, at 29–30; *Drugged Driving*, VA. DEP'T OF MOTOR VEHICLES, <https://www.dmv.virginia.gov/safety/#programs/drinking/drugged.asp> (last visited Apr. 23, 2022) (“Driving after taking certain medications and all illegal drugs is risky and can cause traffic crashes, injuries and fatalities.”); Larkin, *Drugged Driving*, *supra* note 13, at 473–78 & nn.87–103; Ulrich W. Preuss et al., *Cannabis Use and Car Crashes: A Review*, *FRONTIERS OF PSYCHIATRY*, May 28, 2021, at 1–11.

25. *See* EUROPEAN DRUG MONITORING CNTR., *supra* note 24, at 36 (“[M]ost studies found significant negative effects of cannabis on performance up to 10 hours after use.”); DuPont et al., *supra* note 6, at 187 (“A study of chronic, daily marijuana users assessed over a three-week period of abstinence showed prolonged impairment of psychomotor function on critical tracking and divided attention tasks necessary for driving safely.”); *see also, e.g.*, M. Kathryn Dahlgren, Kelly A. Sagar, Rosemary T. Smith, Ashley M. Lambros, Madeline K. Kuppe & Staci A. Gruber, *Recreational Cannabis Use Impairs Driving Performance in the Absence of Acute Intoxication*, *DRUG & ALCOHOL DEPENDENCE*, Jan. 14, 2020, at 8, <https://pubmed.ncbi.nlm.nih.gov/31952821/> [<https://perma.cc/9538-TB2E>]. Plus, edible cannabis releases THC more slowly than smokable cannabis because the THC in edibles must traverse the gastrointestinal

under the influence of cannabis.²⁶ What is worse, a considerable number of individuals believe that cannabis use does not impair their ability to drive safely (or actually improves their driving skills), a conclusion that is demonstrably false.²⁷ Atop that, a large number of people who use

system before reaching the brain. See DuPont et al., *supra* note 6, at 185. The delayed result could impair driving long after ingestion.

26. See, e.g., Alejandro Azofeifa, Bárbara D. Rexach-Guzmán, Abby N. Hagemeyer, Rose A. Rudd & Erin K. Sauber-Schatz, *Driving Under the Influence of Marijuana and Illicit Drugs Among Persons Aged ≥ 16 Years—United States, 2018*, 68 MORBIDITY & MORTALITY WKLY. REP. 1153, 1153 (2019) (“During 2018, 12 million (4.7%) U.S. residents reported driving under the influence of marijuana in the past 12 months; 2.3 million (0.9%) reported driving under the influence of illicit drugs other than marijuana.”). Other nations have experienced the same results, suggesting that the belief is widespread. See NAT’L HIGHWAY TRAFFIC SAFETY ADM’N, RESULTS OF THE 2013-2014 NATIONAL ROADSIDE SURVEY OF ALCOHOL AND DRUG USE BY DRIVERS 2 (2015) (stating that almost 20 percent of drivers tested positive for potentially impairing legal and illegal drugs other than alcohol); NEW ZEALAND TRANSP. AGENCY, RISKS OF DRIVING WHEN AFFECTED BY CANNABIS, MDMA (ECSTASY) AND METHAMPHETAMINE AND THE DETERRENCE OF SUCH BEHAVIOUR: A LITERATURE REVIEW 10 (2020) [hereinafter NZ CANNABIS DRIVING RISKS], <https://www.nzta.govt.nz/resources/research/reports/664> [<https://perma.cc/48YL-DB7L>] (“Of the 11% who had used cannabis in the previous 12 months, 36% of those who drove during that time reported driving under the influence of cannabis.”); Scott MacDonald, R. Mann, M. Chipman, B. Pakula, P. Erickson, A. Hathaway & P. Macintyre, *Driving Behavior Under the Influence of Cannabis or Cocaine*, 9 TRAFFIC INJURY PREVENTION 190, 191 (2008) (stating that 22% of marijuana users in Ontario, Canada have driven while under its influence, and 90% of users surveyed said that they were willing to drive after consuming a typical dose); Thomas R. Arkell, Nicholas Lintzeris, Llewellyn Mills, Anastasia Suraev, Jonathon C. Arnold & Iain S. McGregor, *Driving-Related Behaviours, Attitudes and Perceptions among Australian Medical Cannabis Users: Results from the CAMS 18-19 Survey*, ACCIDENT ANALYSIS & PREVENTION, Oct. 2, 2020, at 4, <https://pubmed.ncbi.nlm.nih.gov/33017729/> [<https://perma.cc/F9N7-DCY7>] (“[A] substantial proportion of medical cannabis users are driving shortly after using cannabis, with some driving during the time of peak effects when impairment tends to be greatest. More than 19.0% of users reporting driving within one hour of consuming cannabis and 34.6% of all users within 3 hours of use.”) (citations omitted).

27. See, e.g., *Drug-Impaired Driving*, NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., <https://www.nhtsa.gov/risky-driving/drug-impaired-driving> (last visited Apr. 23, 2022) (“Several scientific studies indicate that [any rumor that marijuana can’t impair you or can make you a safer driver] is false.”); see also, e.g., COLO. DEP’T OF TRANSP., FY 2020 REPORT, THE CANNABIS CONVERSATION 5 (2020) (“People who consume cannabis more often consider driving under the influence of marijuana to be less dangerous.”); Arkell et al., *supra* note 26, at 5 (“The finding that 71.9% of respondents felt that their medical cannabis use does not impair their driving is consistent with

cannabis combine it with alcohol.²⁸ The psychoactive ingredient in each drug—THC and ethanol, respectively—amplifies the effect of the other,

previous reports showing that cannabis users tend to perceive DUIC [Driving Under the Influence of Cannabis] as relatively low risk, especially when compared with alcohol.”); Thomas D. Marcotte et al., *Driving Performance and Cannabis Users’ Perception of Safety: A Randomized Clinical Trial*, 79 JAMA PSYCHIATRY 201, 207 (2022), <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2788264?resultClick=24> (“A lack of insight regarding driving impairments, particularly at 90 minutes, is of concern, given that users will likely self-evaluate when they feel safe to drive. Although performance was improving at 3.5 hours, recovery was not fully seen until 4.5 hours postsmoking.”); Johannes E. Ramaekers, *Driving Under the Influence of Cannabis: An Increasing Public Health Concern*, 319 JAMA 1433, 1434 (2018) (“Regular cannabis users often admit to driving under the influence of cannabis and wrongfully believe that cannabis does not affect their driving performance or that they can compensate for cannabis-associated impairment.” (footnote omitted)).

28. See Azofeifa et al., *supra* note 26, at 1154 (“In a study of injured drivers aged 16–20 years evaluated at level 1 trauma centers in Arizona during 2008–2014, 10% of tested drivers were simultaneously positive for both alcohol and [THC.]” (footnote omitted)); *see also, e.g.*, BECKY BUI & JACK K. REED, COLO. DEP’T OF PUB. SAFETY, *DRIVING UNDER THE INFLUENCE OF DRUGS AND ALCOHOL: A REPORT PURSUANT TO HOUSE BILL 17-1315*, at 7 (2018) (noting that in 2016 alcohol and THC are the most common drug combination in cases with test results); DARRIN T. GRONDEL, STACI HOFF & DICK DOANE, WASH. TRAFFIC SAFETY COMM’N, *MARIJUANA USE, ALCOHOL USE, AND DRIVING IN WASHINGTON STATE 1* (2018) (“Poly-drug drivers (combinations of alcohol and drugs or multiple drugs) is now the most common type of impairment among drivers in fatal crashes.”); ROCKY MTN. HIGH-INTENSITY DRUG TRAFFICKING AREA STRATEGIC INTEL. UNIT, *THE LEGALIZATION OF MARIJUANA IN COLORADO: THE IMPACT 13* (2020) [hereafter *HIDTA REPORT*] (depicting that, in 2019, forty-four percent of Colorado drivers who were cited for marijuana-involved DUI also had used alcohol); EUROPEAN DRUG MONITORING CNTR., *supra* note 24, at 7 (“Studies assessing the prevalence of drugs, medicines and/or alcohol in drivers who were involved in a traffic accident (fatal or otherwise) have found that alcohol is more prevalent than any other psychoactive substance, but drugs are also frequently found, and in a higher proportion of drivers than in the general driving population. Of the drugs analysed, cannabis is the most prevalent after alcohol”); CAULKINS ET AL., *supra* note 13, at 44 (“Marijuana users are much more likely than are nonusers to drink and to abuse alcohol. For example, current marijuana users are five times as likely as nonusers to meet DSM-IV criteria for alcohol abuse or dependence (26 percent versus 5 percent); that is, one in four current marijuana users is a problem drinker Indeed, simultaneous use is common. The national household survey asks people what, if any, other substances they used the last time they drank alcohol. Among the 15.4 million people who used both alcohol and marijuana at some time in the past 30 days, 54 percent reported using marijuana along with alcohol the last time they drank, a proportion that rises to 83 percent among daily or near-daily marijuana users.” (footnote omitted)); ROBERT L. DUPONT, CORINNE SHEA & STEPHEN K. TALPINS, INST. FOR

making a cocktail of the two a particularly dangerous combination.²⁹ Given the recent increase in cannabis use by drivers,³⁰ cannabis-impaired driving threatens to undermine our successes over the last four decades in reducing alcohol-impaired driving fatalities.³¹

Consider the evidence from Colorado, which legalized recreational-use cannabis in 2012. Since 2013, all Colorado traffic deaths increased by 24 percent, but cases involving traffic deaths in which drivers tested positive for cannabis increased by 135 percent.³² The same period witnessed a doubling of traffic deaths involving drivers who tested positive for cannabis, from 55 people in 2013 to 129 in 2019.³³ The

BEHAV. & HEALTH, IMPLEMENT EFFECTIVE MARIJUANA DUID LAWS TO IMPROVE HIGHWAY SAFETY 3 (2016) (“Further adding to the complexity of the marijuana-impaired driving issue for all states across the country is the fact that drivers use marijuana in combination with other drugs, including alcohol.”); Ramaekers, *supra* note 27, at 1434 (“Consuming cannabis with or without alcohol is a common occurrence that causes substantial risk to intoxicated drivers and road users in general.”). *See generally* Larkin, *Drugged Driving*, *supra* note 14, at 478–79 & nn.104–07 (collecting studies). 29. *See, e.g.*, Larkin, *Drugged Driving*, *supra* note 14, at 478–79 & nn.105–08 (collecting studies). Poly-drug use is increasingly common. GRONDELL ET AL., *supra* note 29, at 1–2.

30. *See* 3 TARA KELLEY-BAKER ET AL., U.S. DEP’T OF TRANSP., NAT’L HIGHWAY SAFETY ADMIN., NATIONAL ROADSIDE STUDY OF ALCOHOL AND DRUG USE BY DRIVERS: DRUG RESULTS No. DOT HS 812 411 (May 2017); U.S. DEP’T OF TRANSP., NAT’L HIGHWAY TRAFFIC SAFETY COMM’N, FACT SHEET: NATIONAL ROADSIDE SURVEY OF ALCOHOL AND DRUG USE BY DRIVERS (2017), https://www.nhtsa.gov/sites/nhtsa.gov/files/roadsidesurvey-factsheet_020615.pdf (“Drinking and driving is falling,” but “[d]rugged driving is rising”; noting that “[a]bout 20.0 percent of drivers tested positive for at least one drug in 2014, up from 16.3 percent in 2007,” and “[s]ome 12.6 percent of drivers had evidence of marijuana use in their systems, up from 8.6 percent in 2007.”).

31. Some commentators have argued that cannabis users can compensate for THC’s impairing effects by (for example) driving less slowly and avoiding passing other vehicles. *See* Larkin, *Drugged Driving*, *supra* note 14, at 475–76 & n.97 (collecting authorities). That argument is unpersuasive. No compensatory behavior can prevent unexpected events from occurring, nor can it quicken a driver’s reaction time if he or she is under the influence of cannabis. *See* WORLD HEALTH ORG., CANNABIS: A HEALTH PERSPECTIVE AND RESEARCH AGENDA 15 (1997); Larkin *Drugged Driving*, *supra* note 14, at 476–77.

32. 7 HIDTA REPORT, *supra* note 28, at 1, 5–16; *see also, e.g.*, COLO. DEP’T OF PUBLIC SAFETY, DIV. OF CRIM. JUST., OFF. OF RES. & STAT., IMPACTS OF MARIJUANA LEGALIZATION IN COLORADO: A REPORT PURSUANT TO SENATE BILL 13-283, at 51 (Oct. 2018).

33. 7 HIDTA Report, *supra* note 26, at 1, 5–16.

percentage of all Colorado traffic deaths increased from 15 percent to 25 percent throughout that period.³⁴ Put differently, in 2013 one person died every 6.5 days in a marijuana-related traffic crash, while in 2019 that number was one person every 3.5 days.³⁵

Given those facts, it is no surprise that the federal agencies responsible for roadway safety—the National Highway Traffic Safety Administration (NHTSA)³⁶ and the National Transportation Safety Board,³⁷ along with the White House Office of National Drug Control Policy (ONDCP)³⁸—state and private organizations concerned with roadway safety—such as the Governors Traffic Safety Council,³⁹ the

34. *Id.*

35. *Id.* Colorado is not an outlier. Research has found similar evidence from cannabis legalization in Washington State. See BRIAN C. TEFFT & L.S. ARNOLD, CANNABIS USE AMONG DRIVERS IN FATAL CRASHES IN WASHINGTON STATE BEFORE AND AFTER LEGALIZATION, AM. AUTO. ASS'N FOUND. FOR TRAFFIC SAFETY, RESEARCH BRIEF (2020); DuPont, *supra* note 6, at 189-90.

36. See, e.g., NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., DRUG-IMPAIRED DRIVING (undated), <https://www.nhtsa.gov/risky-driving/drug-impaired-driving> [<https://perma.cc/83EL-TEP7>] (last accessed Jan. 6, 2021); NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., MARIJUANA, ALCOHOL AND ACTUAL DRIVING PERFORMANCE 4–15 (1999); R.K. JONES ET AL., U.S. DEP'T OF TRANSP., NAT'L HIGHWAY SAFETY ADMIN., STATE OF KNOWLEDGE OF DRUG-IMPAIRED DRIVING DOT HS 809 642 (Sept. 2003).

37. See, e.g., *Planes, Trains, and Automobiles: Operating While Stoned: Hearing Before the Subcomm. on Operations of the H. Comm. on Oversight and Government Reform*, 113th Cong. 9–23 (2014) (statement of Hon. Christopher Hart, Acting Chairman, Nat'l Transp. Safety Bd.); *id.* at 24–25 (statement of Jeffrey P. Michael, Assoc. Adm'r of Rsch. & Program Dev., Nat'l Highway Traffic Safety Admin., U.S. Dep't of Transp.); *id.* at 42 (statement of Patrice M. Kelly, Acting Dir., Off. of Drug & Alcohol Pol. and Compliance, U.S. Dep't of Transp.); *id.* at 44 (statement of Ronald Flegel, Dir., Div. of Workplace Programs, Ctr. for Substance Abuse Prevention, Substance Abuse & Mental Health Serv. Admin., U.S. Dep't of Health & Human Servs.).

38. See ONDCP, NATIONAL DRUG CONTROL STRATEGY 2010, at 23 (2010) [hereafter 2010 NATIONAL DRUG CONTROL STRATEGY] (concluding that drug-impaired driving poses a threat to roadway safety that is similar to the threat of alcohol-impaired driving and demands an “equivalent” response from government and society); ONDCP, WORKING TO GET DRUGGED DRIVERS OFF THE ROAD (Nov. 2010) (“Drugged driving poses threats to public safety, as evidenced by the number of fatal crashes each year on our Nation’s highways.”).

39. See, e.g., SHADEL, *supra* note 17, at 4; JIM HEDLUND, GOVERNORS HIGHWAY SAFETY ASS'N, DRUG-IMPAIRED DRIVING—MARIJUANA AND OPIOIDS RAISE CRITICAL ISSUES FOR STATES (May 2018).

AAA Foundation for Highway Safety,⁴⁰ and the Insurance Institute for Highway Safety⁴¹—numerous law enforcement associations—including the International Association of Chiefs of Police, the National Sheriffs Association, the National District Attorneys Association⁴²—as well as private researchers⁴³ are troubled by the risks posed by cannabis-impaired driving. Disregarding those concerns would be irresponsible.

II. THE 2021 VIRGINIA CANNABIS LEGALIZATION RÉGIME

Decriminalizing a controlled substance can be accomplished by treating it in the same manner as a traffic ticket. Legalizing a controlled substance can be accomplished simply by removing it from the criminal

40. See, e.g., EILEEN P. TAYLOR ET AL., AM. AUTO. ASS'N FOUND FOR TRAFFIC SAFETY, ENHANCING DRUGGED DRIVING DATA—STATE-LEVEL RECOMMENDATIONS (Dec. 2019); TEFFT & ARNOLD, *supra* note 35.

41. See, e.g., INS. INST. FOR HIGHWAY SAFETY, ALCOHOL AND DRUGS (June 2021), <https://www.iihs.org/topics/alcohol-and-drugs#marijuana> (last accessed Dec. 29, 2021).

42. See, e.g., ROBERT L. DUPONT, ET AL., NAT'L DIST. ATT'YS ASS., NAT'L TRAFFIC L. CENT., Vol. 18, No. 4 (Summer 2010); INT'L ASS'N OF CHIEFS OF POLICE (Nov. 1, 2012), <https://www.theiacp.org/resources/resolution/combating-the-dramatic-increase-in-drug-impaired-driving-offenses> (last accessed Jan 7, 2022); NAT'L SHERIFFS ASS'N, DRUG IMPAIRED DRIVING RESOURCES, <https://www.sheriffs.org/trafficsafety/impaired/drug> (last accessed Jan. 7, 2021).

43. See, e.g., Russell S. Kamer, Stephen Warshafsky & Gordon C. Kamer, *Change in Traffic Fatality Rates in the First 4 States to Legalize Recreational Marijuana*, 180 JAMA INTERNAL MED. 1119, 1119–20 (June 22, 2020), <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2767643> [<https://perma.cc/NPY5-YS9F>] (“[L]egalization of recreational marijuana is associated with increased traffic fatality rates. Applying these results to national driving statistics, nationwide legalization would be associated with 6800 (95% CI, 4200-9700) excess roadway deaths each year.”); see also Jaeyoung Lee et al., *Investigation of Associations between Marijuana Law Changes and Marijuana-Involved Fatal Traffic Crashes: A State-Level Analysis*, 10 J. TRANSP. & HEALTH 194, 201 (2018) (“We found that simply legalizing medical marijuana has no association with the number of drivers who are under the influence of marijuana in fatal crashes. On the other hand, all other types of changes in marijuana policy: decriminalization, additional medical legalization (in states that already decriminalized marijuana), and recreational legalization significantly increased the number of drivers involved in fatal crashes who were impaired by marijuana because all adults can more easily access marijuana.”). See generally Larkin, *Reflexive Federalism*, *supra* note 3, at 554–60 (collecting studies).

code.⁴⁴ Permitting large-scale commercial distribution, however, is a far more complicated matter, one that raises a host of new questions that a legislature did not need to address when cannabis was contraband.⁴⁵ Legislators could attempt to answer those questions themselves, and the public would benefit from an open, public debate regarding the problems created by the likely increased use of a psychoactive drug. The more common approach, however, is to task an agency with that burden.⁴⁶ Virginia chose that option too.

The 2021 legislation created a Virginia Cannabis Control Authority (VCCA).⁴⁷ The VCCA Board of Directors was given the power (inter alia) to “[c]ontrol the possession, sale, transportation, and delivery of marijuana and marijuana products”; “[g]rant, suspend, and revoke licenses for the cultivation, manufacture, distribution, sale, and testing of marijuana and marijuana products”; regulate the conditions under which it may be sold; and “[d]o all acts necessary or advisable” to perform its functions.⁴⁸ The law also created a Cannabis Public Health Advisory Council (CPHAC) “to assess and monitor” a variety of topics, such as “public health issues, trends, and impacts related to marijuana and

44. *See, e.g.*, VA. CODE ANN. § 18.2-248.A. (West 2022) (“Except as authorized in the Drug Control Act (§ 54.1-3400 et seq.), it is unlawful for any person to sell, give, distribute or possess with intent to sell, give, or distribute marijuana.”).

45. *See, e.g.*, CAULKINS ET AL., *supra* note 13, at xiii (“Legalization is not simply a binary choice between making the production, sale, and possession of the drug legal on the one hand and continuing existing prohibitions on the other. Legalization encompasses a wide range of possible régimes, distinguished along at least four dimensions: the kinds of organizations that are allowed to provide the drug, the regulations under which those organizations operate, the nature of the products that can be distributed, and price. These choices could have profound consequences for the outcomes of legalization in terms of health and social well-being, as well as for job creation and government revenue.”); Larkin, *Cannabis Capitalism*, *supra* note 13, at 104–40 (describing the issues).

46. Legislators generally choose that option either to take advantage of the supposed expertise of agency officials or to avoid making difficult, politically risky decisions themselves. Larkin, *Cannabis Capitalism*, *supra* note 13, at 138–40.

47. VA. CODE ANN. § 4.1-601.

48. VA. CODE ANN. §§ 4.1-604.2, 4.1-604.3, 4.1-604.33; *see also id.* §§ 4.1-606 (empowering the Board to issue regulations addressing, for example, illegal activities, secure transportation of cannabis between establishments, a testing program, health and safety warning labels, maximum THC content, advertising restrictions, and “guidelines to “promote personal and public safety, including child protection”); *id.* §§ 4.1-611 (charging the Board to “maintain a seed-to-sale tracking system”).

marijuana legalization,” as well as offer recommendations as to “health warnings, retail marijuana and retail marijuana products safety and product composition, and public health awareness, programming, and related resource needs.”⁴⁹ Finally, the act made it a crime (albeit, only a Class 4 misdemeanor, subject to, at most, a \$250 fine) to use marijuana while driving.⁵⁰ The law therefore addresses some of the regulatory features of a cannabis program.

But the most interesting feature of the legislation is what it does *not* contain. Even though secretaries of four state departments had found that “Virginia does not have robust data about drug-impaired driving,”⁵¹ the legislation does not direct the Office of State Police (OSP),⁵² the Virginia Department of Motor Vehicles (DMV),⁵³ VCCA, CPHAC, or any other Virginia agency to investigate cannabis-impaired driving, nor does it require any of those agencies to report to the legislature (and public) the results of such an inquiry.⁵⁴ The legislation also does not urge, or direct, the state police or DMV to conduct pilot projects in different counties to determine the number of people who have consumed cannabis before driving (and when they did so), even though other states

49. VA. CODE ANN. § 4.1-603.A.

50. VA. CODE ANN. §§ 18.2-11(d) (setting a maximum \$250 fine for a Class 4 misdemeanor); 4.1-1107.B. & 4.1-1107.D. (defining the use of cannabis while driving as a Class 4 misdemeanor).

51. BETTINA RING, SEC’Y OF AGRIC. & FORESTRY ET AL., REPORT TO THE VIRGINIA GENERAL ASSEMBLY AND GOVERNOR OF VIRGINIA: IMPACT ON THE COMMONWEALTH OF LEGALIZING THE SALE AND PERSONAL USE OF MARIJUANA 67 (2020) (hereafter 2020 VIRGINIA SECRETARIES REPORT).

52. *See* VA. CODE ANN. §§ 52-1 (creating the state police) & 52-4 (stating that the state police shall be responsible for “the promotion of highway safety”).

53. *See* VA. CODE ANN. § 52-4.2(a) (directing the DMV to “tabulate and analyze all accident reports and shall publish . . . statistical information . . . as to the number and circumstances of traffic accidents); *id.* § 52-4.2(b) (empowering DMV to “conduct further necessary detailed research to determine more fully the cause, control and prevention of highway accidents,” and “conduct experimental field tests . . . to prove the practicability of various ideas advanced in traffic control and accident prevention”).

54. Colorado has required such reports. *See* BECKY BUI & JACK K. REED, COLO. DEP’T OF PUBLIC SAFETY, DRIVING UNDER THE INFLUENCE OF DRUGS AND ALCOHOL: A REPORT PURSUANT TO HOUSE BILL 17-1315 7 (2018) (“[House Bill 17-1315] requires DCJ to report annually to the General Assembly specific information relating to substance-affected driving citations that occurred in the previous year.”).

have conducted such experiments.⁵⁵ Nor does the act require a Virginia agency to increase the number of Drug Recognition Experts (or others skilled in detecting drug impairment) available to test drivers suspected of drug-impairment or to provide additional education for state and local officers,⁵⁶ even though Virginia already falls well behind other states in the number of officers trained to detect drug-impaired drivers.⁵⁷

Why did the 2021 General Assembly legislators fail to take those steps to prevent deaths cause by cannabis-impaired driving? It was not for lack of knowledge that drug-impaired driving is a problem. Researchers have warned about the risks for decades.⁵⁸ In 2010, ONDCP Director Gil Kerlikowski deemed it as great a problem as alcohol-impaired driving.⁵⁹ Other states that legalized cannabis knew about the hazards that it posed to highway safety and took steps to address them.⁶⁰ The 2021 legislation also was not Virginia’s first stab at this problem.

55. The Michigan State Police concluded a pilot program to determine the value of roadside oral fluid testing, and it showed that such tests are an accurate preliminary indication of cannabis use. *See* MICH. ST. POLICE, ORAL FLUID ROADSIDE ANALYSIS PILOT PROGRAM—PHASE II, at 13, 15, 24-25, 35 (Jan. 2021), https://www.michigan.gov/documents/msp/PHASE_II_Oral_Fluid_Report_713339_7.pdf; MICH. ST. POLICE, ORAL FLUID ROADSIDE ANALYSIS PILOT PROGRAM 13, 15, 24, 30, 38-39 (Feb. 2019), https://www.michigan.gov/documents/msp/Oral_Fluid_Report_646833_7.pdf.

56. *See* NATHAN BAKER, DRUG-IMPAIRED DRIVING IN CANADA 28-30 (2018) (describing the Drug Recognition Expert (DRE) training regimen); Larkin, *Drugged Driving*, *supra* note 15, at 502 (“[DRE] training can educate officers to make better post-stop judgments about the sobriety of particular drivers.”). A less time- and resource-intensive training program is the Advanced Roadside Impaired Driving Enforcement course. BAKER, *supra*, at 28.

57. *See* 2020 VIRGINIA MARIJUANA COMM’N, *supra* note 7, at 19 (“Although Virginia officers already have access to DRE and ARIDE training, the state currently has far fewer officers with these certifications than other states. Virginia currently has 0.3 officers with DRE training per 100,000 residents, while the median for all states is 3.4.”).

58. *See, e.g.*, HINDIRK W.J. ROBBE & JAMES F. O’HANLON, NAT’L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP’T OF TRANSP., MARIJUANA AND ACTUAL DRIVING PERFORMANCE, DOT HS 808 078, 102-07 (1993) (discussing the impairing effects of THC on driving performance); HERBERT MOSKOWITZ & ROBERT PETERSON, MARIJUANA AND DRIVING—A REVIEW (1982).

59. *See* 2010 NATIONAL DRUG CONTROL STRATEGY, *supra* note 38, at 23.

60. *See* 2020 VIRGINIA MARIJUANA COMM’N, *supra* note 7, at 19 (“In the last five years, states that have legalized marijuana have trained eight times as many officers through the ARIDE program as Virginia.”).

Virginia has had legislation on the books since 1988 giving the police the authority to request a blood sample from someone suspected of driving while drug-impaired.⁶¹ In 2020, a joint General Assembly legislative commission tasked with investigating the likely effects of legalization concluded that commercial legalization would likely increase cannabis use, that “people who drive after using marijuana can be at an increased risk of a vehicle accident,”⁶² and that the General Assembly should increase the number of DREs and ARIDE-trained officers to deal with the problem.⁶³ Atop that, a cannabis working group consisting of the secretaries of different Virginia departments—Public Safety and Homeland Security, Health and Human Resources, Finance, and Agriculture and Forestry—concluded in 2020 that, while there was no consensus about how to remedy the problem, “[i]mpaired driving is a serious concern related to the decriminalization and legalization of marijuana and that ‘it is universally agreed that preventing impaired driving is critical.’”⁶⁴ But the best proof that the legislators certainly knew about the potential adverse effects of cannabis on driving ability can be found in the text of the act itself. The 2021 legislation requires that all retail cannabis and cannabis products contain a “clear and legible” warning, “prominently displayed in bold print” on the package, that use of cannabis “impairs cognition and your ability to drive.”⁶⁵ In sum, the legislators’ inaction is not attributable to ignorance about the existence of drug-impaired driving. Something else is responsible.

Other possible explanations come to mind. Maybe the General Assembly members who voted for the legislation believed that the pre-existing level of drug-impaired driving did not pose a serious public health and safety problem, or that legalization would not multiply the instances

61. See JACK D. JERNIGAN, VA. TRANSP. RES. COUNCIL., STATUS REPORT ON VIRGINIA’S PROGRAM TO COMBAT DRUG-IMPAIRED DRIVING 1391 (Feb. 1989) (“Beginning on April 1, 1988, police officers in the Commonwealth of Virginia were given the statutory authority to require that drivers suspect of driving under the influence . . . submit a blood sample to be tested for drug content.”).

62. 2020 VIRGINIA MARIJUANA COMM’N, *supra* note 7, at 101-02.

63. *Id.* at 20 (“RECOMMENDATION 1 [¶] If marijuana is legalized in Virginia, the Virginia State Police and Department of Motor Vehicles should work together to train more officers to detect and enforce drug-impaired driving through the Drug Recognition Expert (DRE) and Advanced Roadside Impaired Driving Enforcement (ARIDE) training programs.”).

64. 2020 VIRGINIA SECRETARIES REPORT, *supra* note 51, at 66.

65. See VA. CODE ANN. § 4.1-1402.A.9.a & .b (capitalization and boldface omitted).

of cannabis-impaired driving wrecks. If so, the explanation for their inaction would be ignorance, which is not likely, as explained above. Perhaps the legislators who voted for the 2021 legislation were indifferent to the injuries and fatalities that drug-impaired driving will cause; perhaps they were reluctant to confront an issue that might not have a clear, easy, or simple answer; or perhaps they feared that, by highlighting this problem, constituents might conclude that legalization has more potential downsides than upsides. None of those motives is ennobling. Disinterest in saving lives, timidity in addressing a difficult problem, or dread that a majority of the public might upset the desire to satisfy a favored constituency won't earn anyone a chapter in an updated *Profiles in Courage*. As Part I showed, drug-impaired driving was a problem before 2021; that problem will increase in size and severity if the 2021 legislation ultimately takes effect as is; and it is foolish, venal, or cowardly to ignore it.

III. REASONABLE STEPS TO ADDRESS DRUG-IMPAIRED DRIVING

Unfortunately, we cannot automatically apply to drug-impaired driving the same countermeasures that we use for alcohol. Data establishes that a BAC of 0.08 g/dL impairs a person's ability to drive safely, but we do not know what concentration of THC in the blood (and the brain) renders someone incapable of driving safely.⁶⁶ As is true for alcohol, people develop a tolerance to THC, requiring a greater amount to achieve the same psychoactive effect. Plus, even if we knew what amount is disabling, we do not yet have accurate, easily administrable, relatively inexpensive roadside testing devices, such as Breathalyzers, in widespread use. Police officers use the Standard Field Sobriety Test (SFST) to determine whether a driver is inebriated, but that test does not measure cannabis intoxication well.⁶⁷ Breath and oral fluid testing

66. THC is lipophilic (fat soluble), and the brain contains a large amount of fatty tissue, so the presence of THC in the blood means that it is also in the brain. DuPont, *supra* note 6, at 201–02.

67. Compare, e.g., BAKER, *supra* note 54, at 10–25; Larkin, *Drugged Driving*, *supra* note 15, at 481–82 (both describing the SFST), with, e.g., W.M. Bosker et al., *A Placebo-Controlled Study to Assess Standardized Field Sobriety Tests Performance During Alcohol and Cannabis Intoxication in Heavy Cannabis Users and Accuracy of Point of Collection Testing Devices for Detecting THC in Oral Fluid*, 223 *PSYCHOPHARMACOLOGY* 439, 442–45 (2012) (describing particular 2021 technology).

devices are in the works, however, and they might be in police cruisers someday.⁶⁸ Until then, there are a variety of other steps that the Virginia General Assembly can and should take to address this issue.⁶⁹

One step is to collect the information necessary to determine the extent of the problem in Virginia. Given the General Assembly's postponement of the 2021 legislation until 2023, the General Assembly and Governor Glenn Youngkin have the opportunity to do just that. The question is how.

To start with, the state must address the problem that police officers often do not automatically or regularly test drivers for the presence of an impairing drug, regardless of whether the driver tests below or above the 0.08 percent blood-alcohol level that renders a driver impaired as a matter of law in the Commonwealth.⁷⁰ The reasons are that there is as yet no device equivalent to a Breathalyzer for cannabis detection in the Commonwealth; no procedure comparable to the SFST for roadside use; and, because there is no additional punishment for engaging in drunk *and* drugged driving, there is no obvious justification for

68. See, e.g., S.C.D. Dobri, A.H. Moslehi & T.C. Davies, *Are Oral Fluid Testing Devices Effective for the Roadside Detection of Recent Cannabis Use? A Systematic Review*, 171 PUB. HEALTH 57 (2019); Huiyan Jin et al., *Validity of Oral Fluid Test for Delta-9-Tetrahydrocannabinol in Drivers Using the 2013 National Roadside Survey Data*, 5 INJURY EPIDEMIOLOGY 3 (2018). W.M. Bosker et al., *A Placebo-Controlled Study to Assess Standardized Field Sobriety Tests Performance During Alcohol and Cannabis Intoxication in Heavy Cannabis Users and Accuracy of Point of Collection Testing Devices for Detecting THC in Oral Fluid*, 223 PSYCHOPHARMACOLOGY 439, 442 (2012).

69. See, e.g., AM. AUTO. ASS'N FOUND. FOR TRAFFIC SAFETY, *LEVERAGING AND ENHANCING ALCOHOL COUNTERMEASURES TO REDUCE DRUGGED DRIVING—ENFORCEMENT, LEGAL, AND POLICY-BASED APPROACHES* (2018); AM. AUTO. ASS'N FOUND. FOR TRAFFIC SAFETY, *LEVERAGING AND ENHANCING ALCOHOL COUNTERMEASURES TO REDUCE DRUGGED DRIVING—BEHAVIORAL AND EDUCATIONAL INTERVENTIONS* (2018); GOVERNORS HIGHWAY SAFETY ASS'N, *DRUG-IMPAIRED DRIVING: A GUIDE FOR STATES* (Apr. 2017); RYAN C. SMITH ET AL., AM. AUTO. ASS'N FOUND. FOR TRAFFIC SAFETY, *COUNTERMEASURES AGAINST PRESCRIPTION AND OVER-THE-COUNTER DRUG-IMPAIRED DRIVING* (Oct. 2018); VENKATRAMAN ET AL., *supra* note 4, 1-1 to 1-83; ED WOOD, *WEAKEST IN THE NATION* 90–96 (2018); DuPont et al., *supra* note 6, at 193-210; Paul J. Larkin, Jr., *Reconsidering Federal Marijuana Regulation*, 18 OHIO ST. J. CRIM. L. 99, 141 n.166 (2020); Paul J. Larkin, Jr., Robert L. DuPont & Bertha K. Madras, *The Need to Treat Driving under the Influence of Drugs as Seriously as Driving under the Influence of Alcohol*, THE HERITAGE FOUND., BACKGROUND No. 3316, at 4-5 (May 16, 2018).

70. See VA. CODE ANN. 18.2-269.

pursuing expensive laboratory tests that have no perceived usefulness.⁷¹ Accordingly, the legislature needs to direct state and local law enforcement officers, along with the Commonwealth Attorneys, to record data such as the number of motor vehicle stops and arrests due to suspicion of drug-impaired driving, the number of cases in which a driver was charged with and convicted of drug-impaired driving. To ensure a complete collection of the necessary information, the legislature should also consider requiring state hospitals, urgent care facilities, state or private emergency medical service companies, and related businesses to report their data regarding the number of people seriously injured or killed in motor vehicle crashes. In addition, the legislature should require that every driver involved in a motor vehicle accident resulting in a serious injury or fatality be tested for alcohol and cannabis to determine the number of such incidents. Also, the legislature should consider funding pilot projects in different Virginia counties to learn the number of people who drive after using cannabis. Finally, the General Assembly should debate whether, given the additive effect of THC and alcohol, it should lower the BAC standard for anyone who uses cannabis.⁷²

To collect, analyze, and report that data, the General Assembly should establish a new state agency (or authorize an existing one, such as the Virginia Department of Homeland Security or Virginia Department of Criminal Justice Services) to create a database similar to the FBI National Crime Information Center for data regarding alcohol- and drug-impaired driving. The agency's data should be reported to the Fatality Analysis Reporting System (FARS),⁷³ and its reports should be

71. See Larkin, *Drugged Driving*, *supra* note 15, at 483–87.

72. See *id.* at 514 (“Placing an additional restriction on the use of alcohol might move society toward the optimal position. Alcohol and marijuana have a synergistic effect, impairing one’s driving ability more than either drug would achieve by itself. Restricting the amount of alcohol that a person can consume before driving would at least lower the number of cases in which the marijuana-alcohol cocktail disables someone from handling a motor vehicle safely. To be sure, lowering the BAC level from 0.08 to 0.05 g/dL or lower is doubtless an indirect way to deal with the problem of marijuana-induced impairment. But it has at least three arguments in its favor: it will reduce the number of motor vehicle crashes; it may be the only tool available today to help lower the number of fatal crashes caused by substance use; and the cost that it imposes on individuals is trivial at best.”).

73. “FARS is a nationwide census providing NHTSA, Congress and the American public yearly data regarding fatal injuries suffered in motor vehicle crashes.” NHTSA,

publicly available at its website. By contrast, case-specific personally identifiable information should be accessible only by law enforcement authorities. Because highway safety is a matter of interstate concern, the General Assembly should also task that agency with the ongoing duty to liaise with agencies in other states that collect the same or comparable information, as well as with the federal agencies that do so, such as NHTSA, and to report those results to the legislature and public on an annual basis.

Education and drug treatment measures are also important. The legislature should consider funding assessment- and evidence-based interventions (for example, counseling, and, when appropriate, treatment) to all drivers (but especially those under age 21) who test positive for alcohol or illicit drugs.⁷⁴ The general assembly should also consider the potential benefits of education about the impairing effects of cannabis use and the harms to drivers and others from crashes. The Commonwealth can underwrite the costs of education from the overall budget or by allocating a specific portion of tax revenues from cannabis sales to education.⁷⁵

Enforcement is necessary for a law to be anything more than advice. Accordingly, the General Assembly should apply to every driver under age 21 who tests positive for any illicit drug the same zero-tolerance standard specified for alcohol, the use of which by members of this age group is illegal. Virginia law should also apply to every driver found to have been impaired by drugs the same responses, treatments,

FATALITY ANALYSIS REPORTING SYSTEM (FARS), <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars> (last accessed Jan. 1, 2022).

74. *See, e.g.*, ROBERT HOLMAN COOMBS, DRUG-IMPAIRED PROFESSIONALS (1997); ROBERT L. DUPONT & JOHN P. MCGOVERN, BRIDGE TO RECOVERY: AN INTRODUCTION TO 12-STEP PROGRAMS (1994) (both discussing drug treatment).

75. The South Carolina General Assembly has pending before it an interesting proposal in that regard. The South Carolina Compassionate Care Act, S. 150, 124th Sess. (2022), would legalize the sale of cannabis for medical use under regulations to be adopted by the South Carolina Department of Health and Environmental Control. To fund that department's responsibilities were the bill to become law, revenues generated by the law would be deposited into a South Carolina Medical Cannabis Fund. If the revenues exceed the implementation costs, three percent of that surplus would go to research into drug-impaired driving, and twelve percent for purposes related to drug abuse prevention, education, early intervention, and treatment. *See id.* (proposed Section 44-53-2020(B)(1), (2) & (6)). https://www.scstatehouse.gov/sess124_2021-2022/hj22/20220215.htm#p18.

remedies, and penalties that are specified for alcohol-impaired drivers, including administrative or judicial license revocation.

Of course, one reason why good policy recommendations are shelved while others become law is that the legislature is able to find a way to fund the latter without raising taxes on the public. That can be done here through the use of license fees on the businesses who sell cannabis and sales taxes on retail purchases. Doing so, as an economist would say, “internalizes” the cost of a dangerous product by making it pay its own way and achieving “optimal deterrence.”⁷⁶ Just as a plant and its customers should be made to bear the cost of pollution through monetary penalties, so too the cannabis industry and users can be made to pay for the increased medical, law enforcement, and other social costs resulting from legalization.

The General Assembly could achieve that goal by repurposing money that the Commonwealth expects to receive from fees and sales taxes imposed under the new legalization régime.⁷⁷ The 2021 legislation created the Cannabis Equity Reinvestment Fund (CERF) to advance the welfare of “persons families, and communities historically and disproportionately targeted and affected by drug enforcement.”⁷⁸ To ensure that the social costs of increased cannabis use are fully internalized, those monies could instead be sent to the Virginia Drug Investigation Special Trust Account (VDISTA), which is responsible for providing supplemental funds to the Virginia State Police “for use in the detection, investigation and apprehension of persons for the violation of the laws pertaining to the manufacture, sale or distribution of illegal drugs.”⁷⁹ The 2021 legislation will likely increase the number of people who use cannabis, the number who drive after doing so, and the number of cannabis-impaired drivers responsible for motor vehicle crashes, injuries, and fatalities. Moreover, the risk of being victimized by cannabis-involved crashes exists for people of *all* races. Accordingly, the repurposing of funds to the VDISTA would potentially benefit the same group of people that would benefit by CERF plus others who do not fit into

76. *See, e.g.*, GUIDO CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 73-75 (1970).

77. VA. CODE ANN. §§ 4.1-604(30), 4.1-606(C)(2) & 4.1-616.

78. VA. CODE ANN. § 2.2-2499.7.1. The 2021 legislation also created the Virginia Cannabis Equity Business Loan Fund to make zero- or low-interest loans to the same group of residents. VA. CODE ANN. § 4.1-1501.

79. VA. CODE ANN. § 52-4.3.A.

that category of recipients.⁸⁰ As a result, that approach would not only internalize the costs of legalization on the responsible parties but also benefit a broader range of people than current law contemplates, making it a two-fer.

By addressing the drug-impaired driving problem, the General Assembly has the opportunity not only to protect the drivers on Virginia's roads from becoming a statistic in the NHTSA FARS, but also to begin a nationwide dialogue on the problem of drug-impaired driving.

80. Other criticisms can be leveled against the CERF as well. For example, the “communities” that “have been adversely impacted by substance use” and were “historically and disproportionately targeted by drug enforcement,” *supra* text accompanying note 78, might have *avored* aggressive enforcement of the drug laws because their neighborhoods were the scene of numerous drug-related violent offenses, and their families and neighbors were the victims of those crimes. In the past, black communities have supported aggressive prosecution of crime in predominantly black neighborhoods for that reason. *See, e.g.*, Terry v. United States, 141 S. Ct. 1858, 1860 & n.2 (2021); JAMES FORMAN, JR., LOCKING UP OUR OWN: CRIME AND PUNISHMENT IN BLACK AMERICA 36 (2018) (“As Stokely Carmichael had once joked, ‘I’m going to tell you what a white liberal is. You [are] talking about a white college kid joining hands with a black man in the ghetto, that college kid is fighting for the right to wear a beard and smoke pot, and we [are] fighting for our lives.’”) (footnote omitted); *id.* at 61, 158 (“Rev. Jesse Jackson equated drug dealers with Klansmen. ‘No one has the right to kill our children,’ he declared. ‘I won’t take it from the Klan with a rope; I won’t take it from a neighborhood with dope.’”) (footnote omitted); MICHAEL JAVEN FORTNER, BLACK SILENT MAJORITY: THE ROCKEFELLER DRUG LAWS AND THE POLITICS OF PUNISHMENT (2015) (chronicling the support in New York City’s black community in the 1960s and 1970s for tougher laws on drug trafficking); RANDALL KENNEDY, RACE, CRIME, AND THE LAW 301, 370–72, 375–76 (1997); Stephanos Bibas, *The Truth about Mass Incarceration*, NAT’L REV., Sept. 16, 2015, <https://www.nationalreview.com/2015/09/mass-incarceration-prison-reform/> (“Black Democrats, responding to their constituents’ understandable fears, have played leading roles in toughening the nation’s drug laws. In New York, black activists in Harlem, the NAACP Citizens’ Mobilization Against Crime, and New York’s leading black newspaper, the *Amsterdam News*, advocated what in the 1970s became the Rockefeller drug laws, with their stiff mandatory minimum sentences. At the federal level, liberal black Democrats representing black New York City neighborhoods supported tough crack-cocaine penalties. Representative Charles Rangel, from Harlem, chaired the House Select Committee on Narcotics Abuse and Control when Congress enacted crack-cocaine sentences that were much higher than those for powder cocaine. Though many have come to regret it, the War on Drugs was bipartisan and cross-racial.”); Randall Kennedy, *A Response to Professor Cole’s “Paradox of Race and Crime,”* 83 GEO. L.J. 2573, 2574–75 (1995); Paul J. Larkin, Jr. & David L. Rosenthal, *Flight, Race, and Terry Stops: Commonwealth v. Warren*, 16 GEO. J.L. & PUB. POL’Y 163, 209–14 & nn.230–43 (2018).

Colorado, as well as the Rocky Mountain High Intensity Drug Trafficking Task Force, have collected and reported the data on drug-impaired driving in that state since it legalized recreation-use sales in 2012. Colorado has done an excellent job in this regard, but few other states have followed its example. Perhaps Virginia can spur other states to address this issue by acting during the next legislative session to make data collection and analysis a reality, one that could be funded by the licenses for and sales of this newly state-legalized intoxicant.

Maybe that dialogue would also spur the Biden Administration to treat drug-impaired driving with the same importance that the Obama Administration did.⁸¹ There is no uniformity across states that have similar cannabis régimes. That is likely due in part to the states' unwillingness to allocate sufficient funds to collect and analyze the available data, but it might also be due to disagreement over what data should be collected and what importance that data should have. The President could task the NHTSA to collaborate with other relevant agencies—such as ONDCP, the National Institute on Drug Abuse, the Substance Abuse and Mental Health Services Administration (SAMHSA), and U.S. Centers for Disease Control and Prevention (CDC)—to recommend model information-gathering responsibilities by tasking those agencies with a variety of assignments:

- Identify each category of drug-impaired driving information that the federal government, states, and localities should collect;
- Identify each category of research that traffic safety agencies at every level of government should conduct and share with each other and with the public;
- Define national standards and funding needs regarding subjects such as (a) who should be tested in the case of a motor vehicle crash (e.g., fatally or seriously injured drivers, every driver), (b) under what conditions testing should be done (e.g., fatality, serious injury); (c) what should be measured (e.g., which drugs and metabolites), and (d) how and by whom testing should be done (e.g., matrices and appropriate cut-off levels for detection, physicians or phlebotomists for blood-drawing versus police officers for oral swabs); and
- Identify gaps in the testing and reporting of data to FARS.

81. See 2010 NATIONAL DRUG CONTROL STRATEGY, *supra* note 38, at 23.

The Biden Administration could lead the effort to save lives on America's roadways. All that is necessary is the political will to take up that burden.

CONCLUSION

The 2021 Virginia General Assembly act failed to address the problems that legalization will increase cannabis use, that some of those users will drive a short while afterwards, and that their uninformed or selfish decisions to do so can prove dangerous or fatal to themselves or others. Those problems did not spring like Athena from Zeus's head in 2021. They have been widely recognized for decades and became a prominent public policy issue no later than 2010, when ONDCP identified drugged driving as a public health problem equal in importance to drunk driving. Fortunately, the 2021 act did not automatically permit the widespread commercial sale of cannabis. Because that law required the General Assembly to re-pass the commercial distribution features of last year's statute and because the General Assembly did not re-pass commercial cannabis sales in its 2022 session, the General Assembly can correct the mistake that it made in 2021. Regardless of whether it ratifies its 2021 legalization decision in whole or in part, the Virginia General Assembly can save lives by taking the reasonable steps noted above.

APPENDIX

The table below identifies fatalities related to cannabis in Colorado from 2006 to 2019. It can be found at 7 ROCKY MTN. HIGH-INTENSITY DRUG TRAFFICKING AREA STRATEGIC INTEL. UNIT, THE LEGALIZATION OF MARIJUANA IN COLORADO: THE IMPACT 10 (2020).

Traffic Deaths Related to Marijuana Where an OPERATOR Tested Positive for Marijuana			
Crash Year	Total Statewide Fatalities	Fatalities with Operators Testing Positive for Marijuana	Percentage Total Fatalities
2006	535	37	6.9%
2007	554	39	7.0%
2008	548	43	7.9%
2009	465	47	10.1%
2010	450	49	10.9%
2011	447	63	14.1%
2012	472	78	16.5%
2013	481	71	14.8%
2014	488	94	19.3%
2015	547	115	21.0%
2016	608	149	24.5%
2017	648	162	25.0%
2018	632	144	23.0%
2019	596	149	25.0%

• Of the 149 marijuana-related traffic deaths: 101 were drivers, twenty-two were pedestrians, twenty were passengers, and six were bicyclists
NOTE: In 2019, 66% of operators' blood was tested after being involved in a fatal crash.