

If I have some

Driving Under the Influence of Drugs and Alcohol

A Report Pursuant to House Bill 17-1315

November 2020



COLORADO
Division of Criminal Justice
Department of Public Safety

Colorado Department of Public Safety
Division of Criminal Justice
Office of Research and Statistics

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EXECUTIVE SUMMARY

As mandated by House Bill 17-1315 in Colorado, this report provides a comprehensive overview of the public safety impacts of drug-impaired driving, highlighting the drugs involved and the court outcomes of driving under the influence case filings from 2018.

Citations for impaired driving and trends

In 2018, Colorado prosecutors filed 26,255 cases with at least one DUI charge. Ninety-four percent of DUI case filings involved misdemeanor DUI charges.

Males in the 21-25 age group had the highest rate of DUI involvement, and a DUI case filing rate three times that of all Coloradans (1,777 vs. 574 case filings per 100,000 residents).

Impairment by alcohol, marijuana, other drugs

DUI case filings were matched with 15,152 alcohol test results and over four-fifths had a blood/breath alcohol content (BAC) over 0.08, indicating legal impairment.

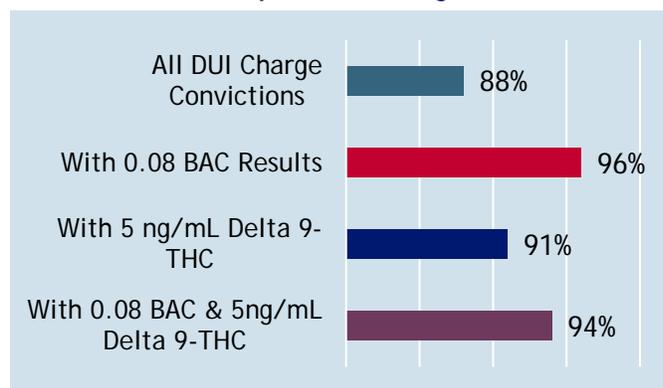
Marijuana confirmation screening was conducted for 3,335 cases in 2018, and 50% had Delta 9 tetrahydrocannabinol (Delta 9-THC) levels above the permissible inference level of 5ng/mL, indicating probable impairment.

In DUI case filings, the detection of stimulant drugs rose by 37% from 2016 to 2018. Excluding alcohol and cannabis, methamphetamine was the most frequently identified drug in DUI case filings, and was found in 25% (n = 747) of screened case filings.

The elapsed time from law enforcement stop to biological sample

The mean time from offense to blood draw was 77 minutes while the median time for a blood draw was 64 minutes.

Convictions for impaired driving



Data on dispositions were available for 92% (n=24,201) of DUI charges, and the conviction rate was 88%.

The conviction rate rose to 96% for DUI charges with a 0.08 BAC and 91% for charges with Delta 9-THC levels at or above 5ng/mL. Polydrug results tended to increase conviction rates, especially for charges linked to Delta 9-THC and alcohol toxicology (94%). Although Colorado does

Data sources: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at Denver Police Department. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

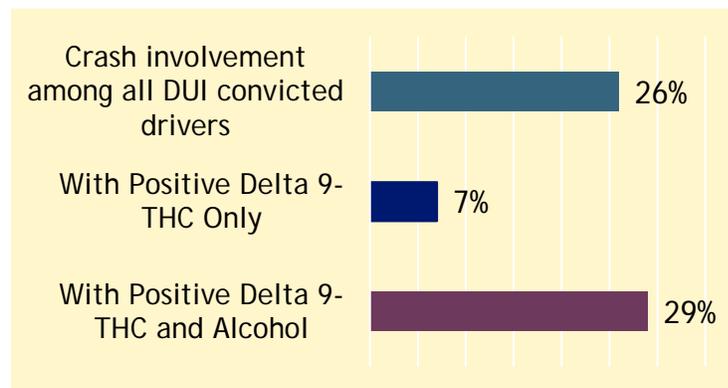


not have a legal impairment level for non-alcohol and marijuana drugs detected in toxicology, DUI charges associated with stimulants had a conviction rate of 88%.

Sentences imposed for impaired driving

Over 90% of all convicted DUI charges had at least one accompanying fine, surcharge/fee, and/or restitution order, averaging a total of \$1,979. The majority of DUI sentences included community service (86%), community supervision (81%), and/or jail time (66%).

Crash involvement



Twenty-six percent of drivers convicted of DUI were involved in crashes. However, crash involvement dropped to 7% for DUI convicted drivers linked to only Delta 9-THC toxicology results. However, polydrug involvement of alcohol and Delta-9 THC increased the occurrence of crash in DUI convicted drivers to 29%.

Data sources: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at Denver Police Department. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety

Limitations of the Report

The data analyzed for this report likely underrepresents the role of drug impairment on DUI cases. Testing for drugs is difficult and time consuming for law enforcement officers. Alcohol is faster, easier, and cheaper to screen for compared to other drugs, thanks to preliminary roadside breath screenings and the easy availability of evidentiary breath-testing devices. Once alcohol is detected, law enforcement generally has enough evidence to reliably achieve a conviction. Therefore, agencies do not consistently spend the additional money and time requesting toxicology blood testing for substances beyond alcohol. Testing refusals among individuals charged with DUI may also contribute to underreporting of substance use associated with impaired driving. Although not available for all court case filings, testing refusals among sentenced individuals was estimated to be 25%.

SECTION ONE

BACKGROUND AND OVERVIEW

Colorado policymakers have identified marijuana impaired driving as a public health and safety concern to monitor in the post-legalization period. In 2018, nearly 4% of adults 18 and older reporting driving after having used marijuana in the past month,¹ and 11% of Coloradoans in high school-aged drivers reported the same behavior in 2019.² These rates, especially among young drivers, might suggest a growing cultural acceptance of marijuana use and driving, illustrating the need to understand substance-affected driving and associated risks. Alcohol has historically been the focus of impaired driving policy and research. In fact, there is a wealth of information available on alcohol impaired driving while there is a dearth of research on the problem of drug impaired driving due in part to barriers discussed in previous editions of this report.³

This section reviews the statutory purpose of this annual report, summarizes driving under the influence (DUI) state laws, discusses complications related to the detection of drug impaired driving, and highlights the role of this report in understanding drug impaired driving. The inaugural report under the mandate of House Bill 17-1315 was published in July 2018 and focused on impaired driving cases filed in court during the 2016 calendar year.³ The second report focused on 2017 case filings and was published in June 2019.⁴ The current report focuses on case filings during the 2018 calendar year.

Purpose of this Report

House Bill 17-1315

In 2017, the Colorado General Assembly passed House Bill 17-1315 which directs the Colorado Department of Safety (CDPS), Division of Criminal Justice (DCJ), to “analyze the types of DUI offenses being committed by offenders” and issue an annual report.⁵ The bill calls for the report to include, among other things, the following:

- The number of citations for impaired driving
- The number of cases with indication of impairment by alcohol, marijuana, other drugs, or any combination of the these
- The number of convictions for impaired driving
- The number of convictions with evidentiary test results indicating impairment by alcohol, marijuana, Schedule I drugs (C.R.S. 18-18-203), other drugs, or any combination of these
- The elapsed time from law enforcement stop to biological sample

¹ Colorado Department of Public Health and Environment (2020). *Behavioral Risk Factor Surveillance System*. <https://marijuanahealthinfo.colorado.gov/health-data/behavioral-risk-factor-surveillance-system-brfss-data>.

² Colorado Department of Public Health and Environment (2020). *Healthy Kids Colorado Survey*. <https://marijuanahealthinfo.colorado.gov/health-data/healthy-kids-colorado-survey-hkcs-data>

³ Bui, B., Reed, J. (2019). *Driving Under the Influence of Drugs and Alcohol*. Colorado Department of Public Safety. https://cdpsdocs.state.co.us/ors/docs/reports/2019-DUI_HB17-1315.pdf

⁴ Bui, B., Reed, J. (2018). *Driving Under the Influence of Drugs and Alcohol*. Colorado Department of Public Safety. https://cdpsdocs.state.co.us/ors/docs/reports/2018-DUI_HB17-1315.pdf

⁵ Colorado Revised Statutes, 24-33.5-520.



Overview: Driving Under the Influence

Statutes

One of the goals of this report is to monitor the number of cases involving at least one driving under the influence (DUI) charge. DUI represents a specific criminal charge, and a broader grouping of charges that all relate to substance-affected driving. These charges in order of severity include underage drinking and driving (UDD), driving while ability impaired (DWAI), driving under the influence of alcohol, vehicular assault and vehicular homicide. The statute that governs DUI charges is located in C.R.S. 42-4-1301, and the definitions for DUI and DWAI specifically are provided below.

(f) "Driving under the influence" means driving a motor vehicle or vehicle when a person has consumed alcohol or one or more drugs, or a combination of alcohol and one or more drugs, that affects the person to a degree that the person is substantially incapable, either mentally or physically, or both mentally and physically, to exercise clear judgment, sufficient physical control, or due care in the safe operation of a vehicle.

(g) "Driving while ability impaired" means driving a motor vehicle or vehicle when a person has consumed alcohol or one or more drugs, or a combination of both alcohol and one or more drugs, that affects the person to the slightest degree so that the person is less able than the person ordinarily would have been, either mentally or physically, or both mentally and physically, to exercise clear judgment, sufficient physical control, or due care in the safe operation of a vehicle.

C.R.S. 42-4-1301 also sets a *per se* limit for DUI at 0.08 blood/breath alcohol content (BAC) and a permissible inference of impairment level for DWAI at 0.05 BAC; see Table 1 for a timeline of how these statutes and BAC impairment levels evolved.

Additionally, Colorado statutes include a felony law classification for DUI charges with three or more prior convictions of DUI, DWAI, vehicular assault, or vehicular homicide.⁶

Colorado's *expressed consent* statute states that individuals lawfully arrested for DUI must consent to taking a chemical test of his/her blood or breath for the purpose of determining the blood/breath alcohol content (BAC).⁷ Individuals who refuse to comply with chemical testing face an administrative revocation of their driver's license by the Colorado Division of Motor Vehicles among other associated consequences.

⁶ Colorado Revised Statutes, 42-4-1301.1(a).

⁷ Colorado Revised Statutes, 42-4-1301.1.

Table 1. Timeline of DUI law, *per se* and presumption of alcohol impairment limits, Colorado

Time Frame	DUI Statute	Illegal <i>per se</i> BAC limit	Illegal presumption BAC limit - DUI	Illegal presumption BAC limit - DWAI
Prior to 1955	13-4-30	None	None	None
1955-1972	13-4-30 (2)(b)	None	.15	.05
1973-1982	42-4-1202(2)(c)	None	.10	.05
1983-1988	42-4-1202(1.5)(a)	.15	.10	.05
1989-2003	42-4-1202(1.5)(a)	.10	.10	.05
2004-Present	42-4-1301(2)(a)	.08	.08	.05

Source: *Session Laws of Colorado, 1953, 1955, 1983, 1989; Colorado Revised Statutes, 1973, 2004.*

Note: Colorado first established an expressed consent to test statute in 1983.

In 2013, the legislature amended the impaired driving statute (C.R.S. 42-4-1301 (6)(a)(IV)) to create a section addressing driving under the influence of marijuana. The law established the following:

"If at such time the driver's blood contained five nanograms or more of delta 9-tetrahydrocannabinol[...Delta 9-THC...] per milliliter in whole blood, as shown by analysis of the defendant's blood, such fact gives rise to a permissible inference that the defendant was under the influence of one or more drugs."

Colorado's permissible inference level for Delta 9-THC reflects a compromise between inaction and declaring a *per se* limit. Underlying the difficulty of striking this balance, the scientific community has not found a direct relationship between blood concentrations of Delta 9-THC and driving impairment.⁸ Due to the uncertainty concerning specific Delta 9-THC levels and impairment, in 2018 the International Association of Chiefs of Police adopted a resolution against the establishment of a *per se* level for cannabis, declaring that "there is no scientific basis for the adoption of Delta 9-THC *per se* legislation."⁹

Challenges with Monitoring and Detecting Drug Impaired Driving in Colorado

Due in part to limitations with data infrastructure, it has historically been a significant challenge to measure the scope of driving under the influence of drugs (DUID) separately from alcohol impaired driving. In Colorado, there is no criminal charge specifying that the driver is drug impaired. The current statute, C.R.S. 42-4-1301, applies to driving under the influence of alcohol, drugs, or a combination of the two, making it difficult to delineate drug impairment court cases from alcohol impaired driving. Colorado does not have a central laboratory for all DUI toxicology testing, and therefore records are not compiled or standardized. Instead, four independent private and public laboratories process toxicology tests, and all have different reporting styles. In addition, the toxicology reports lack a common identifier with the court case files and thus cannot be linked easily with court case outcomes.

Furthermore, law enforcement agencies also encounter barriers in investigating DUID cases, which might contribute to reduced enforcement. Although preliminary alcohol test results administered in the field are not admissible in court, they provide evidence for law enforcement officers to make an arrest and further their investigations. In Colorado, law enforcement officers legally cannot conduct preliminary roadside testing for drugs, unlike in

⁸ Compton, R. (2017, July). *Marijuana-Impaired Driving - A Report to Congress*. (DOT HS 812 440). Washington, DC: National Highway Traffic Safety Administration.

⁹ International Association of Chiefs of Police (2018). *2018 Resolutions*. At <https://www.theiacp.org/sites/default/files/View%20the%20recently%20adopted%202018%20Resolutions.pdf>.



other European countries and US states, which are beginning to adopt roadside oral fluid testing.^{10,11,12} However, there are concerns that these devices may not meet effectiveness standards for detecting drugs of interest including Delta 9-THC.¹³

These toxicology testing deficits for drug impairment make roadside sobriety testing imperative, which necessitates enhanced training for law enforcement officials. Three training programs are available for Colorado law enforcement officers on roadside detection, including the Standardized Field Sobriety Testing (SFST), Advanced Roadside Impaired Driving Enforcement (ARIDE), and Drug Recognition Expert Training (DRE). DRE training is considered the gold standard for detecting drug impaired driving, and emerging literature has found evidence of the sensitivity of the roadside tests taught in DRE trainings to detect cannabis impairment.¹⁴ Although the DRE training has been shown to be more effective than SFST and ARIDE methods in detecting drug impairment, the increased time and certification requirements might contribute to the lower overall number of active DRE-trained officers.¹⁵ In 2019, Colorado only had 226 active DRE trained officers, compared to 5,592 active SFST operators, and 1,460 active ARIDE certificate holders.

In addition to facing challenges in roadside drug testing and sobriety testing, law enforcement agencies also encounter difficulties acquiring toxicology evidence in drug impairment cases. In Colorado, a suspect has the right to opt-out of blood testing by choosing to provide a breath sample only. Additionally, law enforcement historically has incurred more costs testing impaired drivers for drugs. In 2018, agencies typically spent \$100-500 per case to have drug testing completed, depending on the laboratory and how many drugs required confirmation testing. Drug testing can also make the traffic stop take much longer: the officer has to transport the suspect to a location where blood can be drawn, usually a hospital or emergency room. This delay can also impact the usefulness of drug toxicology results. For example, Delta 9-THC levels in the blood decreases rapidly in the first hour after use.¹⁶ Furthermore, chronic and/or medical use of cannabis can also confound drug impairment testing. Even lingering levels of Delta 9-THC have been detected in blood samples collected in as many as seven days post-use.^{17,18} In addition, labs are not mandated to test for a standard “panel” of drugs in DUI investigations, which might lower the number of drugs reported to law enforcement during their investigations. Each toxicology testing laboratory has varying

¹⁰ Doucette, M. L., Frattaroli, S., & Vernick, J. S. (2018). Oral fluid testing for marijuana intoxication: Enhancing objectivity for roadside DUI testing. *Injury Prevention*, 24(1), 78-80. <https://doi.org/10.1136/injuryprev-2016-042264>

¹¹ James Flegel, L., Timothy Fitzgerald, L., Gregory Primeau, T., Harris, M., Beatty, S., Perry Curtis, S., Brown, N. (2019). *ORAL FLUID ROADSIDE ANALYSIS PILOT PROGRAM*. Michigan State Police. michigan.gov/documents/msp/Oral_Fluid_Report_646833_7.pdf

¹² Alabama Department of Forensic Sciences. (n.d.). Oral Fluid Drug Testing Program. Retrieved September 26, 2020, from <https://adfs.alabama.gov/services/tox/toxicology-oral-testing-program>

¹³ Dobri, S. C. D., Moslehi, A. H., & Davies, T. C. (2019, June 1). Are oral fluid testing devices effective for the roadside detection of recent cannabis use? A systematic review. *Public Health*, Vol. 171, pp. 57-65. <https://doi.org/10.1016/j.puhe.2019.03.006>

¹⁴ Declues, K., Perez, S., & Figueroa, A. (2016). A 2-year study of delta 9-tetrahydrocannabinol concentrations in drivers: Examining driving and field sobriety test performance. *Journal of Forensic Science*, 61(6), 1664-1670. doi: 10.1111/1556-4029.13168.

¹⁵ Colorado Department of Transportation. (2020). SFST, ARIDE & DRE Information Training Guide. <https://www.codot.gov/safety/dre/sfst-aride-dre-info-training-grid>

¹⁶ Toennes, S., Ramaekers, J., Theunissen, E., Moeller, M., & Kauert, G. (2008). Comparison of cannabinoid pharmacokinetic properties in occasional and heavy users smoking a marijuana or placebo joint. *Journal of Analytical Toxicology*, 32, 470-477

¹⁷ Experimental protocol with abstinence monitored, not self-reported, on 25 subjects. See Karschner, E. L., Schilke, E. W., Lowe, R. H., Darxin, D., Pope, H. G., Herning, R., Lud Cadet, J., & Huestis, M. A. (2009). Do Δ^9 -tetrahydrocannabinol concentrations indicate recent use in chronic cannabis users? *Addiction*, 104(12), 2041-2048. doi: 10.1111/j.1360-0443.2009.02705.x.

¹⁸ Odell, M. S., Frei, M. Y., Gerostamoulos, D., Chu, M., & Lubman, D. I. (2015). Residual cannabis levels in blood, urine and oral fluid following heavy cannabis use. *Forensic Science International*, 249, 173-180. <https://doi.org/10.1016/j.forsciint.2015.01.026>



numbers and types of drug screening procedures, and some laboratories may only test for drugs outlined in the law enforcement officer's or prosecutor's request.

Contextualizing the Role of Linked DUI Court Case and Toxicology Data in Monitoring DUID in Colorado

In Colorado, state analysts have historically monitored impaired driving using crime and court data, but these data systems do not include information on the drug toxicology of those involved. For the crime statistics, Colorado's National Incident-Based Reporting System does capture DUI and DUID offense and arrest information, but the system does not collect BAC level results or other toxicology data. The court system's data are structured to capture BAC level but do not have a consistent way to capture toxicology levels for other impairing drugs. In 2018, DCJ's DUI court and toxicology analyses represented the first comprehensive report linking both of these datasets, and the continued analyses presented in this report and the 2019 report aim to provide continued monitoring of this identified gap in Colorado's data collection.¹⁹

To assess the prevalence of drug-impaired driving in Colorado, in addition to alcohol-impaired driving, researchers have used traffic fatality data. The National Highway Traffic Safety Administration (NHTSA) administers the Fatality Analysis Reporting System (FARS), which collects circumstantial information related to fatal crashes, including the toxicology results of drivers. The Colorado Department of Transportation (CDOT) and DCJ researchers have published an examination of the toxicology results of drivers using the FARS data.²⁰ However, FARS data have important limitations. First, FARS data focus on the subgroup of cases with a fatality. In 2019, for example, Colorado recorded 596 fatalities on roadways compared to 20,880 DUI arrests.^{21,22} Additionally, only about 45% of drivers involved in fatal crashes are tested for alcohol or drugs in any given year; the reasons for this are unclear and vary by state. Finally, while CDOT has improved data collection over the last several years, limitations remain. For example, prior to 2016, the reporting of specific metabolites of cannabis was sporadic and the Delta 9-THC level—the primary psychoactive metabolite of cannabis—was not captured consistently. Linked DUI court and toxicology data presented in this report complements FARS data by providing a means to assess trends in a larger sample of impaired drivers.

¹⁹ Bui, B.; Reed, J. (2019). See Section One, Footnote 3.

²⁰ Reed, J. (2018). *Impacts of Marijuana legalization in Colorado*. Report Pursuant to Senate Bill 13-283. Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety. See http://cdpsdocs.state.co.us/ors/docs/reports/2018-SB13-283_Rpt.pdf.

²¹ Colorado Bureau of Investigation (2020). *Colorado Crime Statistics*. Available at <https://coloradocrimestats.state.co.us/tops/>.

²² Colorado Department of Transportation (2020). *Colorado Fatalities since 2002*. Available at https://www.codot.gov/library/traffic/safety-crash-data/fatal-crash-data-city-county/Colorado_Historical_Fatalities_Graphs.pdf.



SECTION TWO

THE DUI CRIMINAL JUSTICE PROCESS

After reviewing some of the differences in alcohol versus drug driving impairment enforcement and data analysis in the preceding section, Section Two provides a chronological overview of the legal proceedings involved in pursuing DUI charges, which will contextualize the analysis of court cases presented in the following sections. Additionally, Section Two includes a discussion of probation assessment data.

DUI Charges and the Court Process

Arrest Process

Generally, a peace officer will stop a driver for a traffic infraction, and sometimes the officer will identify signs of impairment or recent substance use, including the smell of alcohol or cannabis, the sight of open containers, slurred speech, slowed reaction, or failure to follow instructions.

Once an officer has probable cause to suspect impairment, they might ask the individual to voluntarily perform a battery of psychophysical tests and, potentially, a preliminary breath alcohol test (PBAT) if the officer suspects alcohol impairment. If the officer suspects other drug impairment, they may call a DRE trained officer to assist with behavioral testing and/or proceed with toxicological exams.

The arresting officer will provide the person with a choice of a breath or blood test if alcohol is the suspected impairing substance. Once the choice is made, the person cannot renege and choose the other test. If the individual has a breath alcohol test result at or above 0.08 or refuses the test, the driver must surrender their license to law enforcement and has seven days to request a hearing by the Division of Motor Vehicles. However, if the driver chooses a blood test or the officer has reasonable grounds to suspect drug-related impairment and requires a blood test, the individual will not have to surrender their license because the results of a blood test are not readily available. Generally, if the PBAT result is above the *per se* limit, the officer may choose not to test for additional drugs.

Two possible paths exist when a legal case is initiated. These are described below.

Legal Process²³

Misdemeanor. When the case is charged as a misdemeanor, the arresting officer completes the Uniform Summons and Complaint form when the defendant is arrested. The law enforcement agency will file the original copy with the court and provide copies to both the defendant and the district attorney's (DA's) office.

The DA can add, amend or dismiss charges, either as part of plea agreement or because such actions better reflect the facts of the case. Because the case is a misdemeanor, the defendant is not entitled to a preliminary hearing. Rather, the defendant will be advised of their rights by the judge either while in jail or, if they are released on bond before seeing a judge, when they return to court. Thereafter, the case will be set for either an appearance of

²³ Attorney Han Ng and Colorado Traffic Safety Resource prosecutor Jennifer Knudsen provided this summary.

counsel (for the defendant to hire a lawyer or apply for the services of a public defender) or an arraignment (where the defendant will enter a plea of guilty or not guilty). If the defendant enters a “not guilty” plea, a trial date will be set and, most often, a date to litigate constitutional and/or evidentiary motions will be set prior to trial. If the defendant enters a guilty plea (usually as part of a plea agreement), the court may sentence the defendant immediately or, more likely, will set the case for a sentencing hearing and direct the probation department to meet with the defendant and prepare a pre-sentence investigation report in time for the sentencing hearing.

Felony. If the case is a felony, the law enforcement officer will arrest the defendant and submit a Warrantless Arrest affidavit to the court and to the DA’s office. The judge will advise the defendant of their rights, set a bond, and set a return date for filing of charges. If the defendant is unable to post bond, this date will be within three working days. If the defendant is able to post bond, a later date may be set. If the DA determines that misdemeanor charges are appropriate, a misdemeanor complaint will be filed, and the case will thereafter be treated as a misdemeanor. Otherwise, the case will continue to be treated as a felony.

Once the defendant obtains or waives counsel, the case will be set for a preliminary hearing in the district court. Meanwhile, the DA and the defense attorney may negotiate an agreement. If they agree to a misdemeanor, the preliminary hearing will likely be vacated and a date(s) for entering a plea and sentencing will likely be set in the county court. If they agree to a felony, the case will be bound over to the district court for an arraignment where the defendant will enter a plea.

Dispositions

There are six common dispositions in impaired driving cases. A *guilty* disposition occurs when the defendant either pleads guilty to the charge or is found guilty at trial. In the case of a *deferred judgment and sentence*, the defendant enters a conditional guilty plea but the final judgment is postponed. In these cases, the court sets a period of *probation supervision*, which includes written stipulations about the conditions of supervision, before sentencing or the entry of a conviction into the court record. If the defendant completes the supervision term successfully, the court may then *dismiss* the charges. However, if the defendant does not comply with the terms of the agreement then the individual will appear before the judge for a sentencing hearing, where the judge may choose to sentence the person under the original conditional plea. A *deferred dismissed* disposition is entered into the court record after the successful completion of probation supervision. For the purposes of this report, guilty, deferred judgment, and deferred dismissed dispositions are considered “guilty” outcomes when discussing conviction rates.

If the prosecution or court does not believe that the evidence will support the charges beyond a reasonable doubt, then charges can be *dismissed*. Dismissal of certain charges is often used as part of a plea deal, where the defendant will plead guilty to some charges in exchange for the dismissal of other charges. A *not guilty* disposition is entered when a defendant goes to trial and the jury or judge finds that the prosecution did not prove the charges beyond a reasonable doubt. Finally, a prosecutor may elect not to prosecute and instead offer a *diversion* program. This results in no charges filed as long as the defendant completes the terms of the diversion. For the purposes of this report, dismissed, not guilty, diversion, and not proven are categorized as “not guilty” outcomes.

Probation Assessment

Once convicted, the Alcohol and Drug Driving Safety (ADDS) program, administered by the Judicial Department's Division of Probation Services, "provides pre-sentence and post-sentence alcohol and drug evaluations on all persons convicted of" DUI or DWAI.²⁴ This includes administering the Adult Substance Use and Driving Survey (ASUDS), a questionnaire that asks about prior substance use, prior impaired driving, demographics, BAC in the present case, and other factors. The findings from the assessment result in a treatment recommendation that is provided to the sentencing judge and, if convicted, the Office of Behavioral Health for use by ADDS treatment providers.

²⁴ Colorado Revised Statutes, 42-4-1301.3.

SECTION THREE

DATA AND METHODS

Data

House Bill 17-1315 mandated that the Division of Criminal Justice (DCJ) report annually to the General Assembly regarding specific information relating to substance-affected driving citations that occurred in the previous year. The mandate requires linking information across multiple data sets to provide a comprehensive analysis of impaired driving. Data were obtained for calendar year 2018 from the following entities:

- Colorado Bureau of Investigation, Toxicology Services (CBI)
- ChemaTox Laboratories, Inc. (ChemaTox)
- Denver Police Department, Denver Crime Lab (Denver PD)
- Colorado Department of Public Health and Environment, Laboratory Services Division (CDPHE)
- Colorado State Judicial Branch via DCJ's Colorado Justice Analytics Support System (CJASS)
- Denver County Court
- Colorado Department of Human Services, Office of Behavioral Health (OBH)

Case Filings

Traffic, misdemeanor, and felony case filings between 1/1/2018 and 12/31/2018 containing at least one DUI or DWAI charge were analyzed.²⁵ Case filings were obtained from the Colorado Judicial Branch and Denver County Court. The Denver County Court tracks misdemeanor cases in its court management system, information that is not available in the Judicial Branch data system. The number of case filings will not match with the information provided in Judicial reports due in part to differing time periods examined and DUI case definitions. Specifically, the Judicial Branch reports on a fiscal year basis and only reports on traffic cases with a DUI or DWAI case type rather than any case with a DUI or DWAI charge.

Toxicology

Alcohol-only Testing

Data were obtained from CDPHE regarding breath alcohol tests conducted on Intoxilyzers, the specific type of breathalyzer device used for evidentiary breath testing in Colorado. Law enforcement officers administer the breath alcohol tests, either at a jail or police department.

The Denver Crime Lab, in the Denver Police Department, provided results for blood alcohol tests performed for Denver cases only.

²⁵ C.R.S. 42-4-1301.

Drug and/or Alcohol Testing

CBI and ChemaTox laboratories offered both drug and alcohol toxicology screenings and confirmations. Both labs quantify marijuana and its cannabinoids including the primary psychoactive component, Delta 9-THC.

Despite these similarities, both laboratories might have had different capabilities to report the presence and quantification of drugs and their metabolites, depending on their laboratory protocols and equipment used. As a result, we developed different data cleaning procedures to capture the unique reporting practices surrounding varying limits of detection (LoD) and limits of quantitation (LoQ), which also differed depending on the metabolite of interest.²⁶ Some test reports did not display quantitative values, indicating that the drug's threshold for detection had been met, but not for quantification. Generally, these test results appeared on toxicology reports as values such as '< 1.0 ng/mL' indicating the presence of a metabolite, but with no corresponding quantitative value. These values were coded as positive results for the drug, but were not included in the analyses involving quantified levels, such as calculations for the mean and median toxicology levels.

Each laboratory's processes and procedures for DUI toxicology testing varied. In 2017, CBI transitioned from a nine-panel to an 11-panel drug screen on all blood vials that were submitted for a drug screen, with supplemental specialty testing upon request. ChemaTox gave each arresting officer the option of selecting either their five-panel, seven-panel, or 11-panel screens. CBI included results for three cannabinoids pertaining to marijuana whereas ChemaTox provided results for five cannabinoids.

Individual Assessment Data

The Office of Behavioral Health (OBH) in the Department of Human Services shared probation assessment data from its Alcohol/Drugged Driving Safety Coordinated Data System (ADDSCODS). Due to the sensitive nature of this dataset and the important legal protections under 42 CFR Part 2 of the Federal Code, OBH performed the data matching and provided de-identified data for analysis.

Methods

To undertake the analysis required in House Bill 17-1315, it was necessary to match individual cases across data sets and engage in two phases of data preparation, (1) data cleaning and (2) data linking. These are discussed below.

Data Cleaning

The data obtained for this analysis lacked consistent formatting and operational definitions of the variables across the datasets. The open source software R was the primary tool used to perform data cleaning.

Judicial Case Filings

Data obtained from the Colorado Judicial Branch included all charges for case filings that contained at least one charge within the DUI spectrum of charges during the 2018 calendar year, as explained in Section One. One case filing, or case, typically contains multiple

²⁶ See Armbruster, D. A. & Pry, T. (2008). Limit of Blank, Limit of Detection and Limit of Quantitation. *Clinical Biochemistry Review*, 29, S49-S52.

charges. Any charge of operating a vehicle under the influence or while ability impaired is referred to as DUI unless otherwise specified. Duplicate cases were common and occurred for a number of reasons including, but not limited to, the following:

- Cases were erroneously filed twice.
- DUI misdemeanors were re-filed as felonies.
- Duplicate tickets were submitted to the court by law enforcement.
- Charges from one case were consolidated to a different case.

Cases were matched on name, date of birth, and offense date to identify duplicates and were then manually reviewed. Duplicate cases were removed by matching law enforcement agency (LEA), LEA case numbers, arrest numbers, and offense dates. In 2018, 415 duplicate filings were removed from the analyses using this process.

Next, initial charges and amended charges were identified. Initial charges were mapped to the appropriate final charge. The presence of all charges, charge numbers, and charge sequences permitted the accurate mapping of initial charges to final amended charges. Finally, age was imputed based on dates of birth from other datasets, if available.

Denver Court Case Filings

The process of identifying and eliminating duplicates was the same as described above. The Denver Court data were similar to the Judicial data in many ways, however, this dataset lacked the critical variable of *charge number*, which complicated the mapping of initial to final charges. Consequently, mapping was accomplished manually.

Final Disposition Selection

Cases often contained multiple DUI charges. When this occurred, we identified the charge with the most serious disposition, and analyzed this subset of charges. For example, if a case had two final DUI charges with two different dispositions of 'dismissed' and 'guilty,' the 'guilty' disposition trumped the former regardless of severity of the charges (see Table 2). Dispositions were ranked from highest to lowest in the following order: guilty, deferred, deferred dismissed, diversion, not guilty, not proven, and dismissed.

Table 2. Example of selection of maximum finding for multiple DUI charge in a case

Initial Charge	Final Charge	Finding	Selected
DRIVING UNDER THE INFLUENCE	DRIVING WHILE ABILITY IMPAIRED	Guilty	Yes
DRIVING UNDER THE INFLUENCE <i>PER SE</i>	DRIVING UNDER THE INFLUENCE <i>PER SE</i>	Dismissed	No

CDPHE Breath Alcohol Tests

The CDPHE provided breath test results from September 2017 through December 2018. This allowed for analysis of DUI cases that were filed in 2018 with tests that occurred just prior to 2018.

Denver Crime Lab Alcohol Tests

Tests with 2018 offense dates were included in this dataset.

CBI Toxicology Tests

The CBI provided data from toxicology results spanning from 2017 to 2019, ensuring data were available to match cases filed in 2018. As mentioned previously, the CBI utilized an 11-panel drugs-of-abuse screen and offered specialty tests available upon request. The 11-panel drugs-of-abuse screen included testing for the following substances: barbiturates, benzodiazepines, buprenorphine, cannabinoids, carisoprodol, cocaine, fentanyl, methamphetamine, meprobamate, opiates, oxycodone, oxymorphone, and zolpidem. Any values that appeared for prescription drug screens generally appeared in a non-standard format and were manually corrected to better examine DUIs associated with prescription drugs. This dataset also contained results for BAC if requested by the arresting officer.

For this analysis, the CBI provided an additional dataset indicating whether the toxicology testing included an alcohol screen and/or a drugs-of-abuse screen; this dataset helped improve the accuracy of testing positivity estimates. Additionally, some cases contained multiple test results for the same substance if there were multiple blood draws taken. For these cases, the test with the shortest time period between offense time and blood draw was selected for analysis. If this information was not available, then the maximum value for the tested substance was used in the analysis.

ChemaTox Toxicology Tests

ChemaTox provided data for 2018 toxicology tests. ChemaTox offered law enforcement officers multiple options for screens including five-, seven-, and 11-panel screens. These screens did not always include cannabis. This dataset also contained results for BAC testing if the officer requested it.

Similar to the CBI dataset, the ChemaTox dataset also contained multiple results for the same substance due to multiple blood draws. The test results were consolidated using the same process that was used for the CBI toxicology tests.

Drug Categories used by Drug Recognition Experts

The DRE training program categorizes substances involved in DUI cases into seven categories based on behavioral effects observed by the officer. The DRE course manuals describe these categories as follows:

Central Nervous System (CNS) Depressants. Causes slowed reaction time, slowed information processing, decreased anxiety and tension, and induced sedation or drowsiness. Examples of drugs in this category include alcohol, barbiturates, and benzodiazepines.

CNS Stimulants. Impairment is exhibited as hyperactivity, increased heart rate, blood pressure, and body temperature, emotional excitement, and restlessness. Examples of drugs in this category include cocaine, methamphetamine, and pseudoephedrine.

Hallucinogens. Distortion of the user's perception, can result in synesthesia and hallucinations. Signs of impairment can include paranoia, body tremors, and disorientation. Examples of drugs in this category are psilocybin, MDMA, and LSD.



Dissociative Anesthetics. Inhibits the brain's perception of pain and can be exhibited as blank stares, disorientation, or a lack of communication. Examples of drugs in this category are ketamine, phencyclidine, and dextromethorphan.

Narcotic Analgesics. Drugs in this group relieve pain and produce euphoria. Signs of impairment include drowsiness, droopy eyelids, and depressed reflexes. The majority of drugs in this category are often referred to as opioids, and include: codeine, heroin, and methadone.

Inhalants. These are any drugs that can be inhaled and generally produce mind-altering results. There are many subcategories and these produce effects that can be similar to CNS depressants, stimulants, and hallucinogens. Toluene, paint thinners, and gasoline are a few examples of this drug category.

Cannabis. Interferes with the attention process and distorts the perception of time and distance. Signs of impairment can include reddening of conjunctiva, body and eyelid tremors, and relaxed inhibitions.

These seven categories are used in the toxicology results provided in the next section. Additionally, prescription drugs, such as antidepressants and anticonvulsants, among others, were included in the analysis. Note that some prescription drugs overlap with a DRE drug category. For example, sertraline is an antidepressant that could be categorized as a CNS depressant, but given that it is not typically abused or impairing, it categorized here as a prescription drug to avoid inflating the detection of potentially impairing CNS depressants. See Appendix A for a full list of drugs and their assigned categories.

Data Linking

The Fine-grained Records Integration and Linkage tool (FRIL) was employed to match court case filings to the toxicology results.²⁷ FRIL is an open source instrument created by Emory University and the Centers for Disease Control and Prevention. FRIL allows the user to specify pre-designated algorithms to better match datasets that lack variable standardization. FRIL was used to match court case filings to toxicology results. The OBH then linked the matched dataset to ADDSCODS and provided a de-identified dataset.

²⁷ For more information on FRIL see <http://fril.sourceforge.net/>.

SECTION FOUR

RESULTS

Descriptive analyses were undertaken for the 2018 DUI court, toxicology, and ADDSCODS datasets, and some of this information was compared with findings from prior analyses, that is, the 2016 and 2017 data reported in previous reports in this series.²⁸ The analysis of case filings was disaggregated by geographic region, client demographics, and legal characteristics including charge types, law classifications, and charge amendments. The analysis of toxicology data involved examining the blood draw timing, drug screening characteristics, and the quantification results for alcohol and Delta 9-THC. Using the toxicology linked data, we assessed the relationship between drug testing results and court outcomes including disposition and sentencing findings. The OBH probation assessment data of individuals who received a sentence with a stipulation for drug treatment complemented these analyses by providing additional contextual information on the history of prior offenses and crash involvement.

DUI Filings

In 2018, Colorado prosecutors filed 26,255 cases with at least one DUI charge (Table 3). Among these cases, a total of 93,441 charges were filed. In 2018, there were 199 fewer case filings (-1%) compared to 2017 (n=26,454) and 989 fewer cases (-4%) compared to 2016 (n=27,244).²⁹

The majority (92%, n=24,201) of case filings had dispositions by the date of data extraction, and 65% (n=16,943) of all case filings had a toxicology match. A total of 15,751 cases, or 60% of all case filings, had both a DUI disposition and a toxicology result match (Table 3).³⁰

Table 3. DUI case filings, 2018

Cases	Cases with Dispositions	Cases with Toxicology Match	Cases with Disposition and Toxicology Match
26,255	24,201	16,943	15,751

Data sources: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at Denver Police Department. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Population estimates for those aged 16 and older were obtained from the State Demography Office to calculate the state, county and judicial district rates of impaired driving case filings per 100,000 residents. As seen in Figure 1, the estimated state DUI court filing rate (per 100,000 residents 16 years of age and older) declined by 7%, from 616 in 2016 to 574 in 2018.

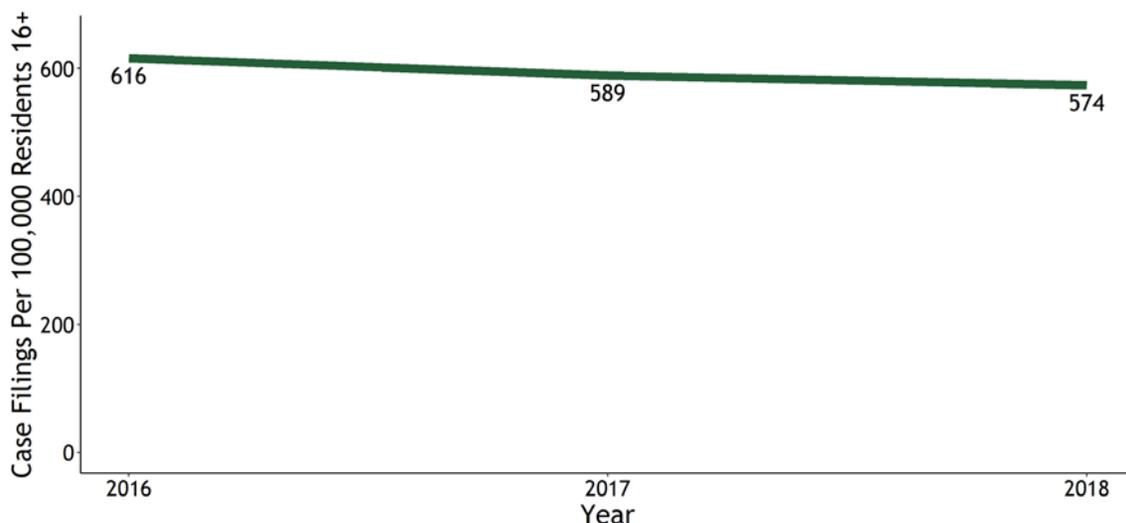
²⁸ Bui, B., Reed, J. (2018) & Bui, B., Reed, J. (2019). See Section One, Footnotes 3 & 4.

²⁹ Bui, B., Reed, J. (2018) & Bui, B., Reed, J. (2019). See Section One, Footnotes 3 & 4.

³⁰ Date of data extraction was January 9, 2020.



Figure 1. Estimated DUI case filing rates, 2016-2018

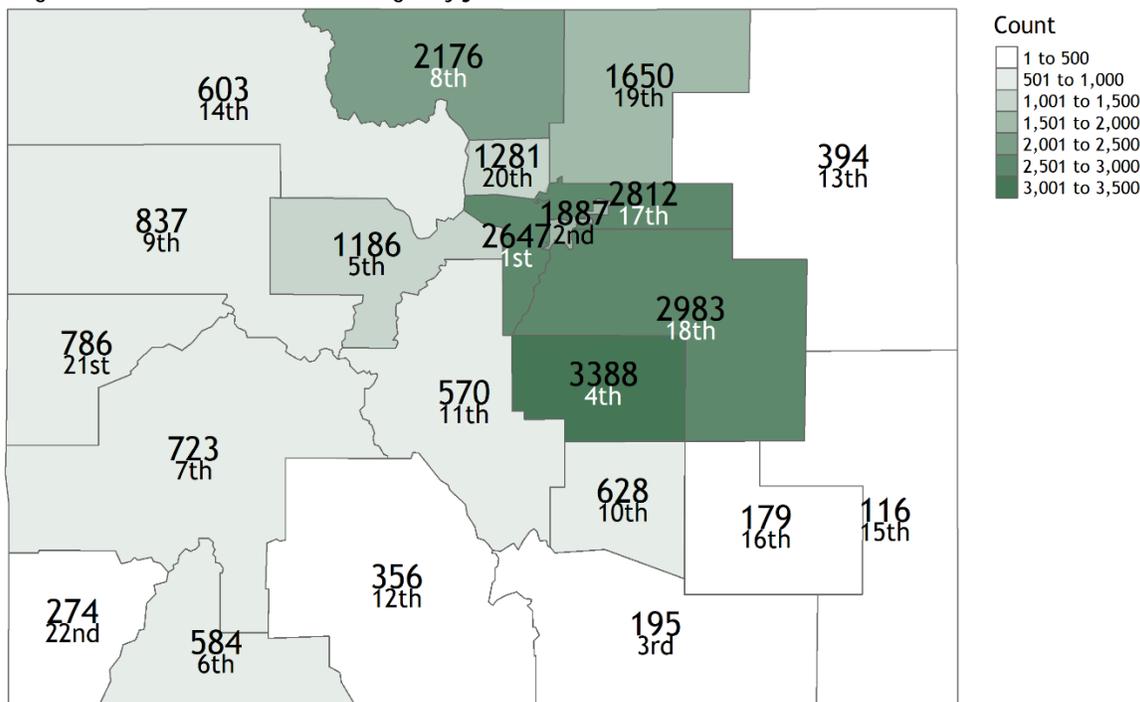


Data sources: State Judicial Department, Denver County Court, and Colorado State Demography Office; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

DUI Cases by Judicial District and County

The judicial districts containing urban counties had the greatest number of DUI case filings in 2018. The most case filings were in the 4th Judicial District (El Paso and Teller Counties), the 18th Judicial District (Arapahoe, Douglas, Elbert, and Lincoln Counties) and the 17th Judicial District (Adams and Broomfield Counties). See Figure 2 for the number of DUI filings by judicial district.

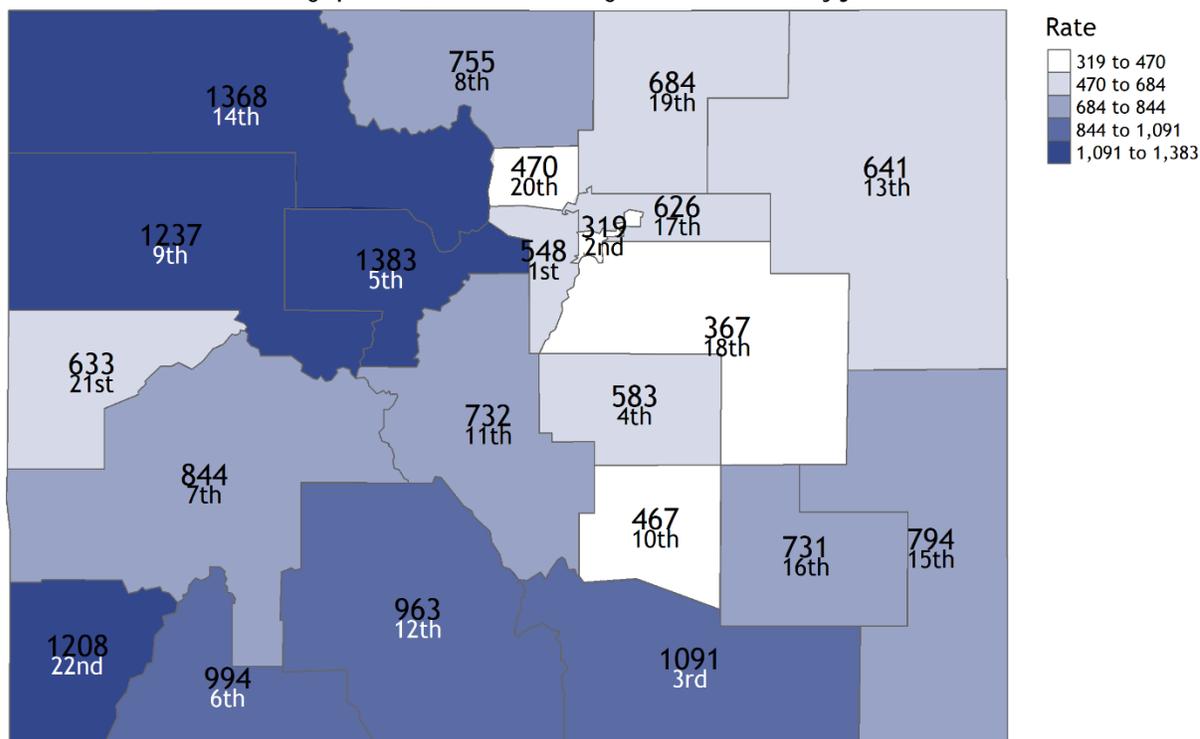
Figure 2. Number of DUI case filings, by judicial district, 2018



Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Figure 3 shows that 15 out of 22 judicial districts had DUI case filing rates above the overall state rate of 574 filings per 100,000 residents. Districts in northwestern and southwestern Colorado generally had the highest rate of case filings per 100,000 residents; in particular, 5th, 14th, 9th and 22nd Judicial Districts each had 1,200 or more case filings per 100,000 residents. Judicial districts in south central Colorado also had elevated case filing rates that ranged from 963 to 1,091 cases per 100,000 residents.

Figure 3. Rate of DUI case filings per 100,000 residents aged 16 and older, by judicial district, 2018

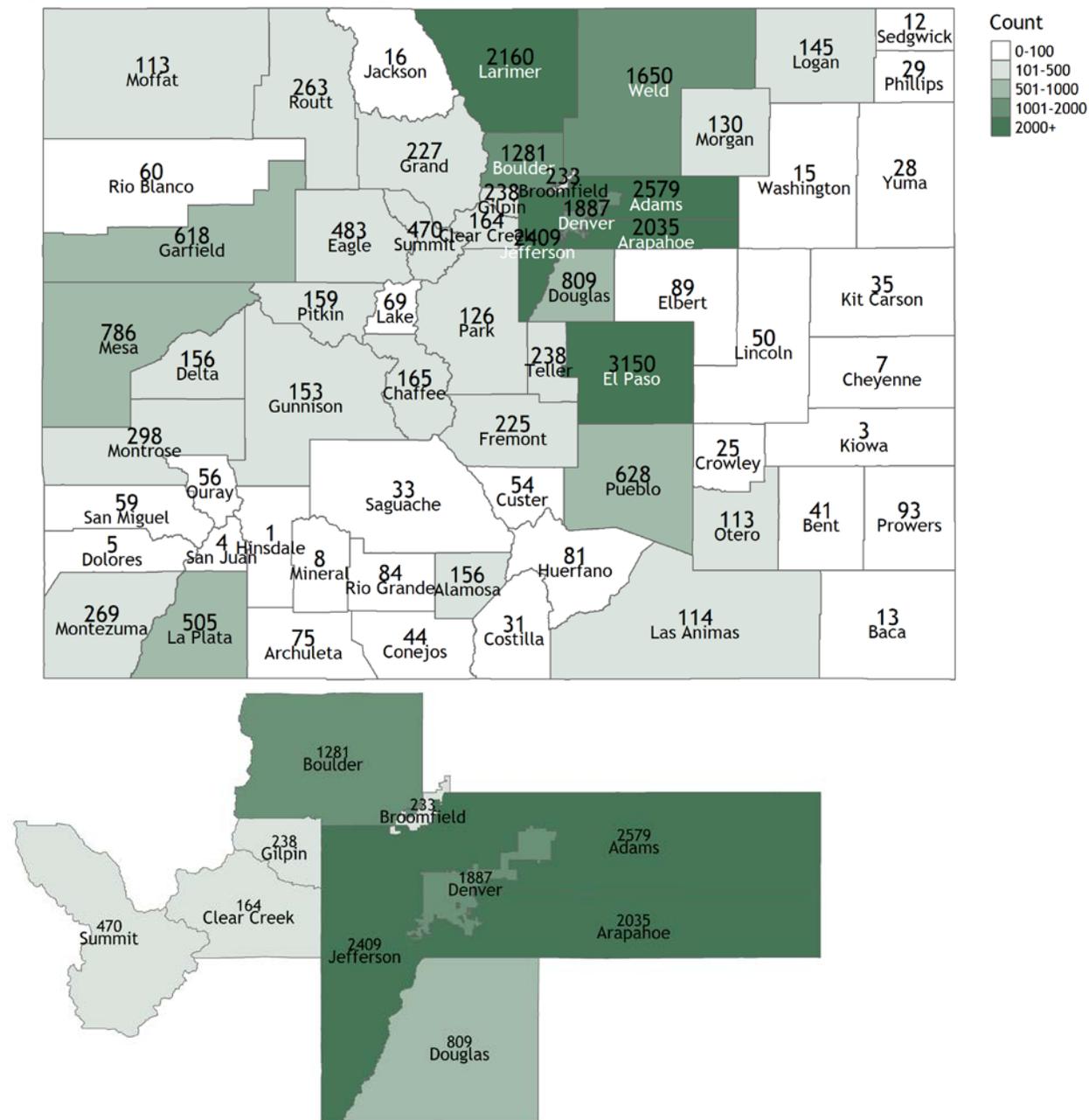


Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Figure 4 reflects the number of DUI case filings by county. El Paso, Adams, Jefferson, and Arapahoe counties all had the largest number of case filings from 2016 to 2018. The Colorado State Patrol, with statewide jurisdiction, had the highest number of case filings (n = 5,220) among law enforcement agencies in Colorado. The Colorado Springs Police Department (n = 1,899) and Denver Police Department (n = 1,888) had the second and third highest number of court case filings. See Appendix B for the number and rate of cases by county, and Appendix C for the number of cases by arresting agency for 2016-2018. Additional analyses were undertaken for counties with the highest population in 2018 -- Adams, Arapahoe, Denver, El Paso, and Jefferson counties -- to assess differences in court case characteristics.³¹ The findings are detailed in Appendix M.

³¹ Colorado Department of Local Affairs. (2020). Population Totals for Colorado Counties. State Demography Office. <https://demography.dola.colorado.gov/population/population-totals-counties/>

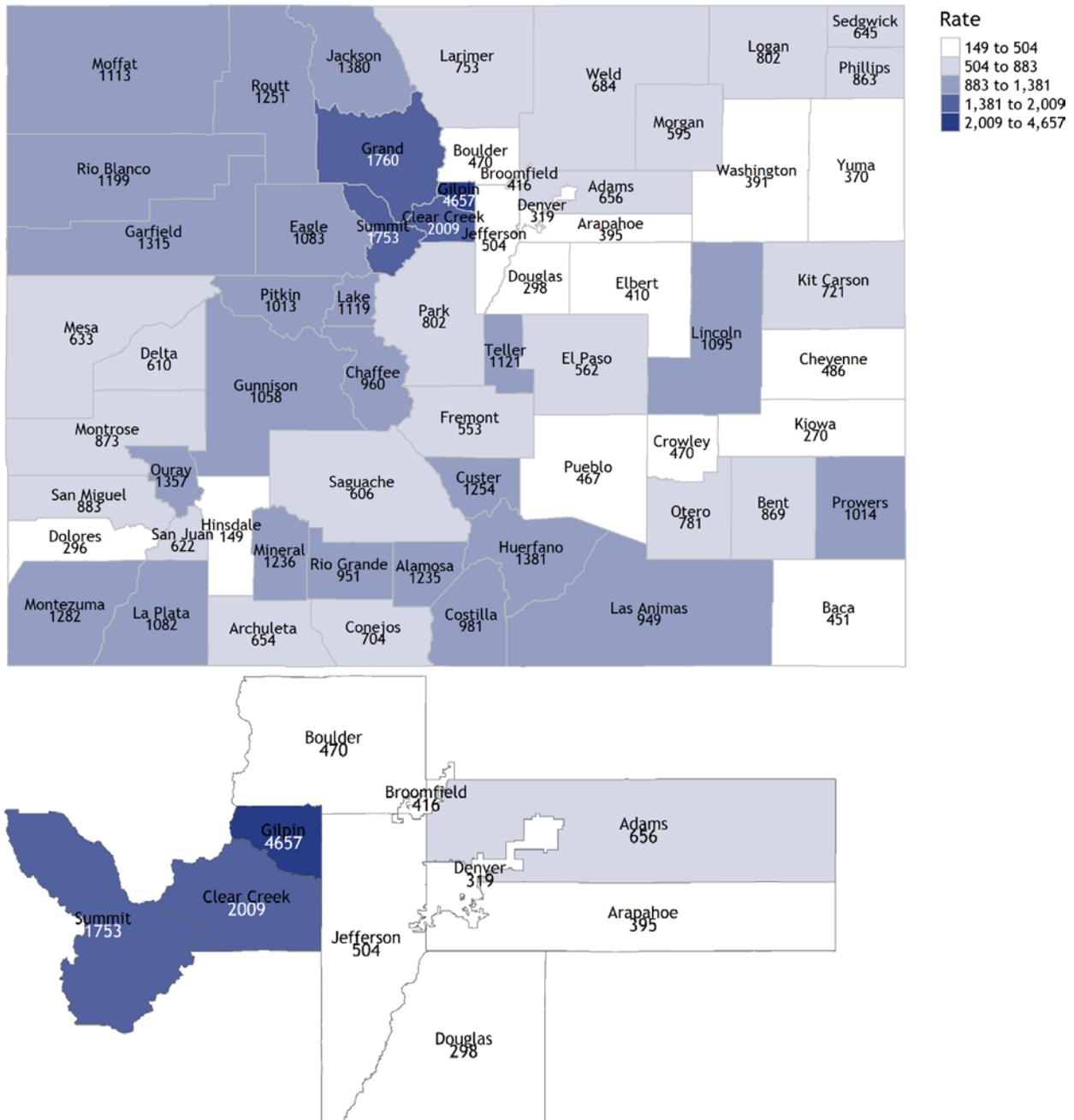
Figure 4. Number of DUI case filings by county, 2018



Data source: State Judicial Department and Denver County Court. Analyzed by: the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Nearly three out of four counties (72%) in Colorado had rates that were higher than the state rate. Figure 5 displays DUI case filing rates by county. Northwestern Colorado counties such as Gilpin, Clear Creek, Grand, and Summit counties had the highest filing rates in 2018. Gilpin County had 4,576 case filings per 100,000 residents aged 16 and older, which was eight times that of the state filing rate. Clear Creek, Summit, and Grand’s rates ranged from 1,753-2,009 filings per 100,000 residents aged 16 and older. However, these counties tend to attract a significant number of tourists, which may contribute to these higher rates. Hinsdale had the lowest DUI case filing rate with 149 cases per 100,000 residents aged 16 and older filed.

Figure 5. Rate of DUI case filings per 100,000 residents aged 16 and older, by county, 2018



Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Law Classification

DUI charges are filed under three primary law classifications: traffic, misdemeanor, and felony, with a small number of falling into the unknown category. Consistently from 2016 to 2018, over 94% of DUI charges were filed as misdemeanors (Table 4). There was a slight increase in the number and proportion of DUI charges that were filed as felonies from 2016 to 2018, with increasing to from 3.6% in 2016 to 4.2% of all DUI charges in 2018.

Table 4. Law classification of DUI charges, 2016-2018

	2016	2017	2018
n	27,244	26,454	26,255
Final Law Class			
Felony	987 (3.6%)	1,015 (3.8%)	1,115 (4.2%)
Misdemeanor	25,765 (94.6)	25,021 (94.6)	24,718 (94.1)
Traffic	134 (0.5)	126 (0.5)	119 (0.5)
Unknown	8 (0.0)	11 (0.0)	7 (0.0)
Final Non-DUI Charge	350 (1.3)	281 (1.1)	296 (1.1)

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Initial and Final Classification of DUI Charges

Since prosecutors have the discretion to modify charges as a case progresses through the system, it is important to compare the initial and final DUI charges and law classification amendments. Table 5 shows the number and proportion of initial law class compared to the final law class for the DUI charges. The majority of charges (n=24,902) were initially classified as misdemeanors while 1,193 charges were initially classified as felonies. Over 90% of initial DUI charges classified as felonies and misdemeanors maintained their original law class in the final charge. There were 85 initial DUI charges classified as a traffic class, representing predominantly underage drinking and driving infractions (UDD). Approximately 1% of DUI charges initially classified as felonies, misdemeanors, and traffic offenses were downgraded to a non-DUI charge (n=296).

Table 5. Initial and final law class of final DUI and final non-DUI charges, 2018

	Initial Law Class				
	Felony	Misdemeanor	Traffic	Unknown	Non-DUI Charge
n	1,193	24,902	85	49	26
Final Law Class n (%)					
Felony	1,109 (93.0%)	5 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.8%)
Misdemeanor	74 (6.2)	24,577 (98.7)	3 (3.5)	40 (81.6)	24 (92.3)
Traffic	0 (0.0)	37 (0.1)	81 (95.3)	0 (0.0)	0 (0.0)
Unknown	0 (0.0)	0 (0.0)	0 (0.0)	7 (14.3)	1 (3.8)
Final Non-DUI Charge	10 (0.8)	283 (1.1)	1 (1.2)	2 (4.1)	0 (0.0)

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Description of Individuals with DUI Case Filings

Of the 26,255 DUI case filings, three out of four involved males. Individuals charged in DUI case filings ranged in age from 14 to 90; the average and median ages were 35 and 32, respectively. Table 6 shows that individuals in the 26-34 age category accounted for 30% of all DUI court filings. Differences in the age distribution of DUI court case filings by gender were minimal. Individuals charged with a felony DUI were usually older; the average age for individuals with DUI felony charges was 45.6 years old versus 34.6 years old for non-felony DUI charges.



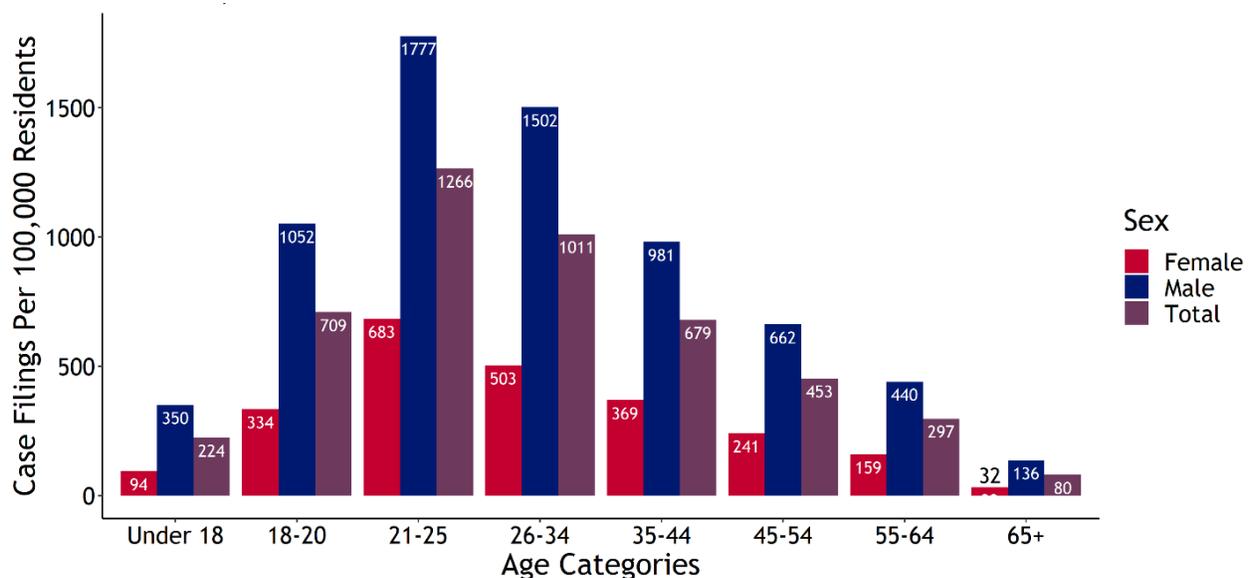
Table 6. DUI case filings, by age group and gender, 2018

	Overall	Male	Female
n	26,255	19,581	6,654
Age Category n (%)			
Under 18	328 (1.2%)	261 (1.3%)	67 (1.0%)
18-20	1,674 (6.4)	1,296 (6.6)	377 (5.7)
21-25	5,123 (19.5)	3,826 (19.5)	1,294 (19.4)
26-34	7,893 (30.1)	5,957 (30.4)	1,932 (29.0)
35-44	5,197 (19.8)	3,801 (19.4)	1,395 (21.0)
45-54	3,274 (12.5)	2,404 (12.3)	867 (13.0)
55-64	2,113 (8.0)	1,532 (7.8)	580 (8.7)
65+	646 (2.5)	504 (2.6)	142 (2.1)
Missing	14		

*Sum may be less or greater than 100.0% due to rounding.

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Figure 6. DUI case filing rates by age and gender, 2018



Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

DUI case filing rates were calculated by age and gender using population estimates, as seen in Figure 6. Case rates peak in the 21-25 age category for both males and females, reaching 1,777 cases filed per 100,000 residents in males and 683 cases files per 100,000 residents in females, with a steady decline in the subsequent age categories. Case filing rates were lowest in adults 65 years and older. Across all age groups, males had rates between 2.6-4.3 times higher than females in Colorado.

DUI Charge Amendments

Table 7 shows initial charges and the rates of charge maintenance, or initial charges that were unchanged as the final DUI charge compared to all initial charges. The most common

initial charge was DUI (n=21,351), and this was followed by DWAI (n=2,792). Twenty-six initial charges were not categorized as DUI charges, labeled in the table as “Other,” but were amended to a DUI final charge; the majority were amended to a DWAI charge (n =14, 54%).

Initial charges including UDD, DWAI, DWAI with 1-2 prior convictions, DUI with 3 or more prior convictions, vehicular assault, and vehicular homicide all had rates of maintaining their charge at over above 90% (Table 7). Although the most prevalent among initial charges, DUI charges had the lowest rate of charge maintenance at 61%. Appendix F displays how initial charges were modified as final charges, and as seen there, 28% of DUI charges with no noted priors (n=5,871) were downgraded to a less severe charge and 11% (n=2,318) were amended to a more severe charge, perhaps due to the discovery of prior DUI convictions.

Table 7. Initial DUI charges & maintained charge, 2018

	Initial Charge	Maintained Charge as Final Charge
n	26,255	
UDD	85	81 (95.3%)
DWAI	2,792	2,682 (96.1)
DUI	21,351	12,937 (60.6)
DWAI 1-2 Prior	153	152 (99.3)
DUI 1-2 Prior	584	507 (86.8)
DWAI 3+ Prior	39	29 (74.4)
DUI 3+ Prior	1,113	1,032 (92.7)
VEH. ASSAULT	84	77 (91.7)
VEH. HOMICIDE	28	28 (100.0)
OTHER	26	0 (0.0)

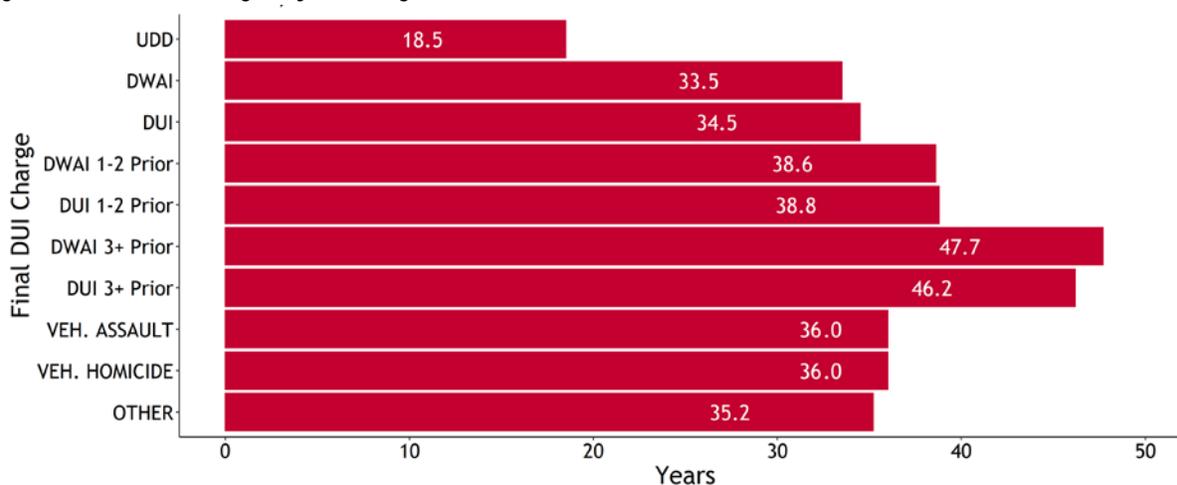
Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

DUI Charges and Demographics

As the severity of the DUI charge increased, the mean age tended to increase (Figure 7). The least severe charge, UDD, had the lowest mean age at 18.5, while felony charges for DWAI and DUI with three or more convictions had the highest mean age at 47.7 and 46.2, respectively. These trends reflect that older individuals had more time to log prior convictions. Both vehicular homicide and vehicular assault had slightly lower mean ages than the felony DUI charges (36 years).



Figure 7. DUI final charges by mean age, 2018



Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Males comprised the majority of individuals in all DUI charge categories. Any small differences by gender can be seen in Table 8. The most common final charge for both genders was DUI, with 49 and 51% of males and females charged, respectively. A slightly larger proportion of men were charged with DUI with three or more prior convictions, whereas females had a slightly higher proportion of DWAI charges compared to men.

Table 8. Final DUI charge by gender, 2018

	Male	Female
n	19,583	6,658
UDD	97 (0.5%)	22 (0.3%)
DWAI	6,213 (31.7)	2,348 (35.3)
DUI	9,627 (49.2)	3,359 (50.5)
DWAI 1-2 Prior	830 (4.2)	212 (3.2)
DUI 1-2 Prior	1,558 (8.0)	480 (7.2)
DWAI 3+ Prior	32 (0.2)	5 (0.1)
DUI 3+ Prior	930 (4.7)	125 (1.9)
VEH. ASSAULT	60 (0.3)	18 (0.3)
VEH. HOMICIDE	22 (0.1)	7 (0.1)
OTHER	214 (1.1)	82 (1.2)

*Sum may be less or greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety

Other Offenses Associated with DUI Case Filings

The three most common charges associated with DUI case filings in 2018 were careless driving, lane usage violation, and failure to display proof of insurance. See Appendices D and E for the frequency of the top 40 initial and final charges.

Particular charges of interest from cases filed in 2016-2018 can be seen in Table 9, including child abuse, vehicular assault, and vehicular homicide. For the vehicular assault and vehicular homicide charges, these groupings included non-DUI charges such as reckless vehicular



assault. Although still higher than in 2016, the number of child abuse and vehicular assault charges declined in 2018 from the 2017 levels. The number of vehicular homicide charges increased from 30 in 2016 to 42 in 2018, as seen in Table 9.

Table 9. Number of initial and final charges for child abuse, vehicular assault and vehicular homicide charges associated with DUI case filings, 2016-2018

Year	Child Abuse Charges	Change from 2016	Veh. Assault Charges	Change from 2016	Veh. Homicide Charges	Change from 2016
2016	664	N/A	195	N/A	30	
2017	737	11.0%	212	8.7%	41	36.7%
2018	685	3.2%	203	4.1%	42	40.0%

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Dispositions

Data on dispositions were available for 92% (n=24,201) of DUI-related charges. Nearly all cases (n=23,905) were adjudicated with a final DUI or DWAI charge.

DUI Dispositions

DUI dispositions remained consistent throughout the three years. From 2016 to 2018, approximately four-fifths of all DUI charges filings were found guilty, 5% received a deferred judgment, 3% received a deferred dismissed, and an additional 10% of cases were dismissed (Table 10). See Appendix G for more detail on dispositions of all charges.

Table 10. Disposition of DUI charges, 2016-2018

	2016	2017	2018
n	25,519	24,468	24,201
Guilty	20,545 (80.5%)	19,846 (81.1%)	19,315 (79.8%)
Deferred Judgment	1,182 (4.6)	1,185 (4.8)	1,205 (5.0)
Deferred Dismissed	745 (2.9)	548 (2.2)	682 (2.8)
Diversion	26 (0.1)	53 (0.2)	50 (0.2)
Dismissed	2,493 (9.8)	2,363 (9.7)	2,504 (10.3)
Not Guilty	178 (0.7)	192 (0.8)	152 (0.6)
Not Proven	2 (0.0)	1 (0.0)	0 (0.0)
Non-DUI Disposition**	348 (1.4)	280 (1.1)	296 (1.2)

**Aggregated dispositions for final charges that were not DUIs.

^Sum may be less than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 11 shows the variation in the distribution of disposition status by final charge. The proportion of guilty dispositions varied by the charge type, ranging from 67% for vehicular homicide to 99% for DWAI with 1 - 2 prior convictions. The DUI and vehicular homicide charges had the highest rate of dismissal. Note that many of the cells in Table 11 had few cases, meaning that caution should be used when interpreting this information.

Table 11. Disposition by Final DUI Charge, 2018

	UDD	DWAI	DUI	DWAI 1-2 Prior	DUI 1-2 Prior	DWAI 3+ Prior	DUI 3+ Prior	VEH. ASSAULT	VEH. HOMICIDE	Non-DUI Disposition
n	118	8,516	11,222	1,032	1,969	35	926	66	24	296
Guilty	88 (74.6%)	7,264 (85.3%)	8,130 (72.4%)	1,017 (98.5%)	1,896 (96.3%)	31 (88.6%)	818 (88.3%)	55 (83.3%)	16 (66.7%)	278 (94.0%)
Deferred Judgment	3 (2.5)	620 (7.3)	538 (4.8)	12 (1.2)	11 (0.6)	1 (2.9)	18 (1.9)	2 (3.0)	0 (0.0)	11 (3.7)
Deferred Dismissed	7 (5.9)	394 (4.6)	279 (2.5)	2 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Diversion	0 (0.0)	5 (0.1)	44 (0.4)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Dismissed	20 (16.9)	223 (2.6)	2,106 (18.8)	1 (0.1)	56 (2.8)	3 (8.6)	79 (8.5)	9 (13.6)	7 (29.2)	4 (1.3)
Not Guilty	0 (0.0)	10 (0.1)	125 (1.1)	0 (0.0)	5 (0.3)	0 (0.0)	11 (1.2)	0 (0.0)	1 (4.2)	0 (0.0)
Not Proven	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Missing	-	-	-	-	-	-	-	-	-	3 (1.0)

+ Sum may be less than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Time to Disposition

To examine the length of court proceedings, the difference between the dates of case filing and disposition was calculated. Nine charges had negative values for the time to disposition or were non-DUI final charges that had failed to reach a disposition; these charges were excluded from the analysis below. Among all charges examined, the time values ranged from 0 days to 717 days. On average, the time elapsed between case filing and disposition date was 165 days (median=136) for all DUI and non-DUI charges. Consistent with other criminal offense charges, the time to disposition for final DUI charges varied by the severity of law class, with felonies taking the longest time to resolve and traffic charges taking the least amount of time. Non-DUI final charges generally had the same pattern, even with the lower number of cases. See Table 12 for more details on time to disposition.

Table 12. Time to finding by law class and DUI final charge status, 2018

DUI Final Charge	Law Class for Charge	Mean Days	Median Days	Minimum Days	Maximum Days	Number of Cases
Yes	Felony	205.8	183	3	682	973
	Misdemeanor	164.0	135	0	717	22,803
	Traffic	108.3	83	12	582	118
	Unknown	173.0	148	63	303	5
No	Felony	181.0	197	60	345	5
	Misdemeanor	178.6	175	78	347	7
	Petty Offense	80.7	67	49	158	6
	Traffic	150.0	131	18	567	275
Overall		165.3	136	0	717	24,192

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Disposition status also affected the elapsed time from filing to finding date. Among DUI charges, those with a deferred dismissed disposition had the lengthiest time to finding (see Table 13). Given that individuals who received a deferred dismissed finding must successfully complete the terms of the deferral agreement, which is usually a term of probation supervision, these findings would understandably take the longest to resolve. Although the



least prevalent, charges with a diversion outcome (mean=85 days, median=64 days) resolved most efficiently compared to charges with other findings; this is likely because completing a diversion program avoids case processing. Non-DUI guilty charges resolved more quickly than DUI guilty charges, with means of 145 days versus 154 days.

Table 13. Mean and median time to finding for final DUI and non-DUI charges by disposition (days), 2018

DUI Final Charge	Aggregate Finding	Mean	Median	Minimum	Maximum	No. of Cases
Yes	Guilty	154.1	132	0	717	19,308
	Deferred Judgment	166.9	145	1	610	1,205
	Deferred Dismissed	463.7	460	54	708	682
	Diversion	84.8	64	2	685	50
	Dismissed	163.7	136	0	693	2,502
	Not Guilty	305.0	302	71	557	152
No	Guilty	145.4	126	18	567	278
	Deferred Judgment	200.5	230	43	346	11
	Deferred Dismissed	*	*	*	*	*
	Dismissed	*	*	*	*	*
Overall		165.3	136	0	717	24,192

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department, Denver County Court, and State Demography Office. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Child Abuse, Vehicular Assault, and Vehicular Homicide Dispositions in DUI Case Filings

For DUI cases with at least one charge for child abuse, vehicular assault, and vehicular homicide, findings from the charge with the most serious disposition are presented in Table 14. There were 626 cases that had at least one initial or final child abuse charge with a disposition recorded, which represented only 3% of all DUI cases with final dispositions. The majority of the child abuse cases were dismissed. Only one out of four child abuse cases resulted in a conviction, which included dispositions of guilty, deferred judgment, differed dismissed or diversion outcome.

Of the 188 DUI cases with a vehicular assault charge, 82% of the cases resulted in a conviction. For the most serious charge, vehicular homicide, over two-thirds (68%) received a conviction.

Table 14. Final child abuse, vehicular assault, and vehicular homicide charges associated with DUI case filings by the most serious disposition, 2018

	Child Abuse	Vehicular Assault	Vehicular Homicide
n	626	189	37
Guilty	81 (12.9%)	116 (61.4%)	24 (64.9%)
Deferred Judgment	52 (8.3)	38 (20.1)	1 (2.7)
Deferred Dismissed	18 (2.9)	0 (0.0)	0 (0.0)
Diversion	1 (0.2)	0 (0.0)	0 (0.0)
Dismissed	466 (74.4)	34 (18.0)	11 (29.7)
Not Guilty	8 (1.3)	1 (0.5)	1 (2.7)

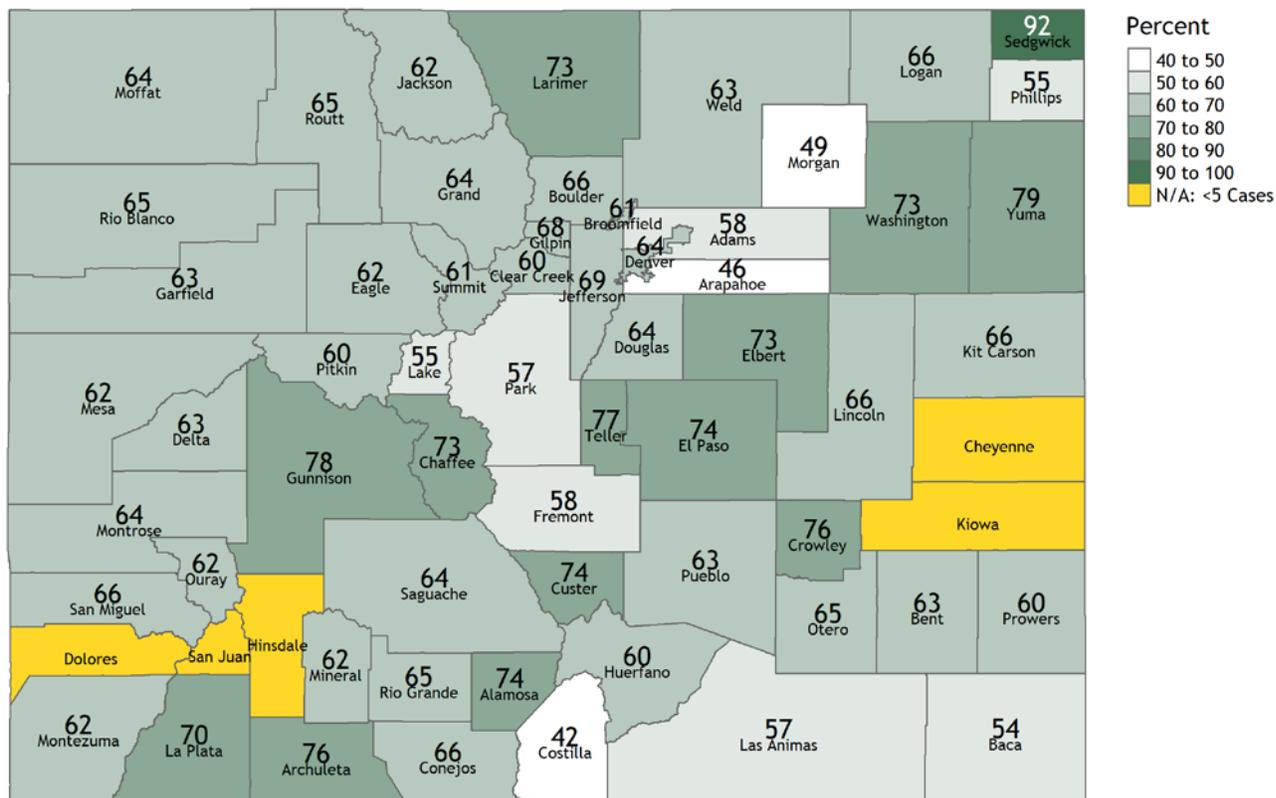
Data source: State Judicial Department, Denver County Court, and State Demography Office.
 Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Toxicology Findings

Nearly two-thirds (63%, n=16,943) of total DUI case filings (n=26,255) were linked to at least one toxicology breath or blood test result. Filings that did not link to a toxicology screen could have been due to limitations with our linking methods, a lack of testing availability, or testing refusals from drivers. Success with matching testing results varied by county, as seen in Figure 8. Among rural counties, Sedgwick had the highest matching rate at 92%, and Costilla County had the lowest (42%). Among urban counties, El Paso had the highest rate at 74%, and Arapahoe had the lowest toxicology matching rate among DUI cases filed (46%). The majority of matched cases, 89%, included test results for alcohol (n=15,152). A cannabis toxicology screen was available for 5,032 cases, or 30% of tests (some cases had both tests). For additional county maps marking alcohol and cannabis toxicology testing results, see Appendix J. Detailed findings from the analyses of toxicology data are presented below.

Figure 8. Percent of cases with matching toxicology results by county, 2018



Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Alcohol

The 15,152 DUI case filings with alcohol test results were obtained from CDPHE, the Denver Crime Lab, CBI, and ChemaTox. As seen in Table 15, over four-fifths of case filings with an alcohol toxicology test result had a blood/breath alcohol content (BAC) level that was 0.08 or more, which mirrors the proportion found in 2016 and 2017. Only 5% of the BAC tests detected no alcohol. The median BAC for cases with alcohol toxicology tests was 0.154 and the mean was 0.156, which is almost double the *per se* level.

Table 15. DUI case filings by BAC group 2016-2018

BAC Group n (%)	2016	2017	2018
N	15,924	15,856	15,152
Not Detected	429 (2.7%)	769 (4.8%)	727 (4.8%)
<0.05	486 (3.1)	524 (3.3)	523 (3.5)
0.05-0.079	1,389 (8.7)	1,286 (8.1)	1,227 (8.1)
0.08+	13,620 (85.5)	13,277 (83.7)	12,675 (83.7)
Median BAC	0.152	0.154	0.154
Mean BAC	0.158	0.160	0.156

*Sum may be greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Common Charges Associated with the Presence of Alcohol

There were 26,319 non-DUI charges associated with the presence of alcohol. The top 20 most common charges associated with the presence of alcohol can be found in Appendix H. The top three charges were careless driving (n=4,141), lane usage violation (n=2,634), and failure to display proof of insurance (n=2,265).

Marijuana

Cannabinoid screens were conducted for 5,032 case filings, representing one-fifth of all case filings (see Table 16). Of these, 34% indicated that no cannabinoids were detected.³² Cases with a positive cannabinoid screen (66%, n=3,335) were further confirmed for Delta 9-THC and other cannabis metabolites.³³ The testing positivity rate in 2018 was nearly identical to the 2017 rate, and both years' rates represent a decline from 2016's. Furthermore, among all case filings screened for cannabinoids (n=5,032), 57% tested positive for Delta 9-THC. The presence of Delta 9-THC recorded in a linked toxicology report might indicate the driver's recent use of cannabis preceding the offense. The median value of Delta 9-THC among individuals screened was 5.2 and the mean was 8.2 ng/mL, both of which are over the permissible inference level.

Table 16. Cannabinoid screen results among DUI case filings, 2016-2018

Screen Result n (%)	2016	2017	2018
Cannabinoids Not Present	1,061 (26.9%)	1,622 (33.8%)	1,697 (33.7%)
Cannabinoids Present	2,885 (73.1)	3,170 (66.2)	3,335 (66.3)
Total N	3,946	4,792	5,032

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 17 compares the various levels of Delta 9-THC detected among case filings undergoing confirmatory testing (n=3,335 in 2018). About a sixth of these case filings had no Delta 9-THC detected or levels that were less than one ng/mL, approximately one-third had levels

³² The cannabinoid screen is an enzyme-linked immunosorbent assay (ELISA) which primarily targets Delta-9 THC-COOH.

³³ The confirmation test is done via liquid chromatography-mass spectrometry (LC-MS).

between one and the permissible inference level of five ng/mL, and about half had a level at or above the permissible inference level.

Table 17. Delta 9-THC levels for case filings with Delta 9-THC confirmation test, 2016-2018

	2016	2017	2018
N	2,885	3,170	3,335
Delta 9-THC level n (%)			
None Detected	396 (13.7%)	431 (13.6%)	459 (13.8%)
Present but <1.0	90 (3.1)	63 (2.0)	88 (2.6)
1.0-4.9	1,030 (35.7)	1,069 (33.7)	1,134 (34.0)
5.0+	1,369 (47.5)	1,607 (50.7)	1,654 (49.6)
Median level (ng/mL)	5.9	5.4	5.2
Mean level (ng/mL)	8.7	8.2	8.2

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Common Charges Associated with Marijuana

A total of 6,303 final non-DUI charges were associated with the presence of Delta 9-THC; see Appendix I for the top 20 charges. Similar to alcohol, the top four charges were for careless driving (n=665), failure to display proof of insurance (n=437), lane usage violation (n=434), and speeding (n = 208).

Time to Blood Test

Time to blood test data is difficult to capture because it requires manual data entry from CBI's Requests for Laboratory Exam forms. This data entry was completed in 2017 but time constraints precluded this undertaking for the 2018 data. For the current analysis, instead, 2,012 ChemaTox records with draw time data were analyzed, although this represents only 12% of all DUI case filings with toxicology matches. Due to the lower number of cases available, the data from 2016 to 2018 were combined and the aggregate results are presented in Table 18. The higher mean time and lower median time in 2018 compared to 2017 and 2016 data may reflect the increased variability in the data due to the lower sample size.

Table 18. Descriptive statistics and toxicology source for time-to-test analyses by year, 2016-2018

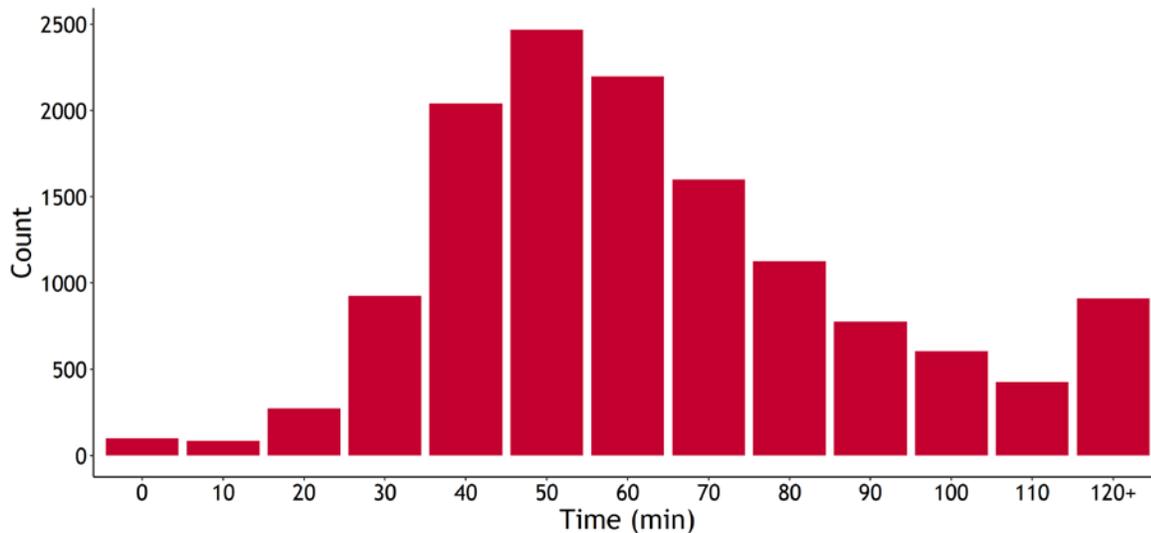
Year	Mean (min)	Median (min)	No. of Case Filings	Toxicology Source
2016	72.5	64	4,154	ChemaTox
2017	75.7	64	7,667	ChemaTox & Colorado Bureau of Investigation
2018	88.5	60.5	2,012	ChemaTox
All	76.6	64	13,833	

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

For the combined 2016 through 2018 data, 310 records reporting test times of over 200 minutes were excluded in an attempt to analyze measurements that might be more associated with impairment. This sample of case filings (n=13,539) was used in the analyses below.

The frequency for time-to-test is depicted in Figure 9. The time interval of 50-59 minutes (category 50 in Figure 9) had the greatest number of blood draws (n=2,469), accounting for 21% of the time categories. Nine percent (n=910) of records exceeded an elapsed time of 120 minutes from time of offense to time of blood draw.

Figure 9. Time-to-test for DUI case filings, 2016-2018 (n=13,539)

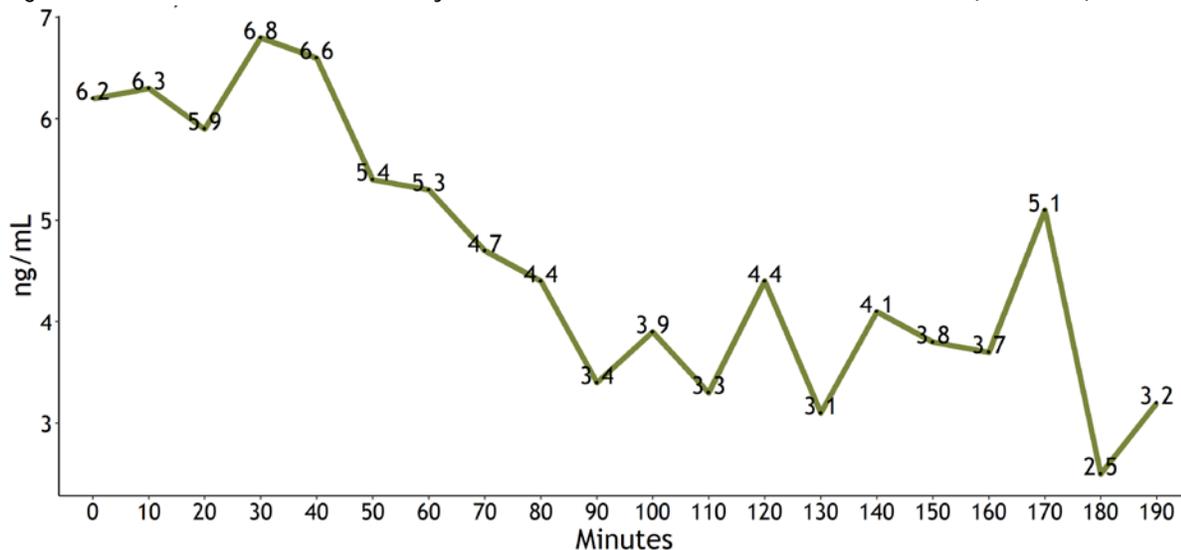


Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Marijuana and Time-to-Test

A comparison of time to blood test by median Delta 9-THC value for 2016 to 2018 can be seen in Figure 10. Median Delta 9-THC values peaked between 30-39 minutes for the time of the offense to blood draw and then gradually fell for blood draws collected between 40-99 minutes. The changes in the slope in the Delta 9-THC levels for blood draws collected after 100 minutes might highlight the fragility of this relationship, and/or the presence of a threshold where time to draw may be more reflective of residual Delta 9-THC in the driver.

Figure 10. Median Delta 9-THC value by time-to-test and number of cases, 2016-2018 (n=13,539)

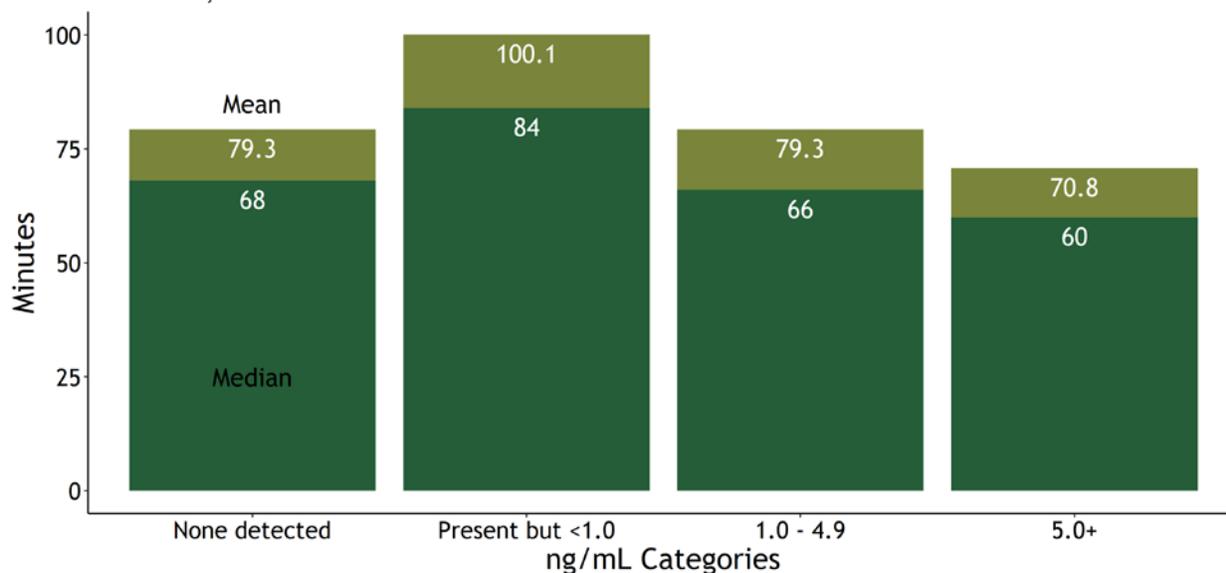


Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

In addition, we also compared the mean and median time to draw for each of the Delta 9-THC categories for case filings with positive cannabinoid screenings, as shown in Figure 11. The median and mean of the elapsed draw time for the quantified Delta 9-THC category

decreased as the Delta 9-THC values increased. This trend aligns with evidence in the research literature that Delta 9-THC levels peak early and then quickly dissipate.³⁴

Figure 11. Mean and median Delta 9-THC value by time-to-test, 2016-2018 (n=13,539)



Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Alcohol and Marijuana in Combination

An assessment of screening and toxicology polydrug results for cannabis and alcohol linked to DUI case filings found an inverse relationship between cannabinoid detection and positive alcohol tests. Table 19 shows alcohol screening, BAC results, cannabinoid screens, and Delta 9-THC results as a proportion of all DUI case filings. Case filings associated with 0.08 BAC results had lower cannabinoid detection rates compared to all that were screened for cannabis. Filings with high alcohol levels also had lower Delta 9-THC toxicology levels compared to all cases with Delta 9-THC confirmation testing. Conversely, filings not tested for alcohol had higher rates of cannabinoids detected and quantified levels at or above the permissible inference level for Delta 9-THC compared to case filings that were tested for alcohol. Filings indicating the presence of alcohol below 0.05 BAC had higher cannabinoid screening and detection rates than all DUI filings overall. These patterns highlight the prevalence of combined use of alcohol and cannabis (explored more fully below); however, these slight differences in the toxicology profile of impaired drivers who test at differing levels of BAC might be due in part to a lack of comprehensive drug testing for high alcohol impaired drivers.

³⁴ Toennes, 2008 (see Section One, Footnote 16).

Table 19. DUI case filings by BAC group, cannabinoid screen and Delta 9-THC group, 2018

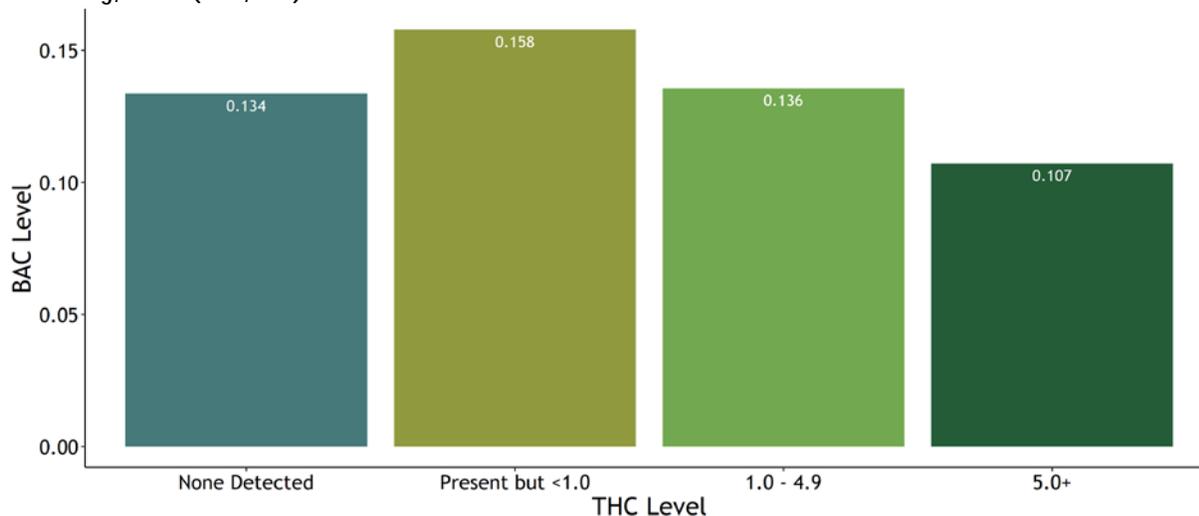
	n (%)	No BAC Test	BAC Group				Overall
			None Detected	Present but < 0.05	0.05 - 0.079	0.08+	
Screening	No Cannabinoid Screen	9,341 (84.1%)	62 (8.5%)	254 (48.6%)	1,016 (82.8%)	10,550 (83.2%)	21,223 (80.8%)
	Cannabinoid Screen	1,763 (15.9%)	665 (91.5%)	269 (51.4%)	211 (17.2%)	2,124 (16.8%)	5,032 (19.2%)
	n						26,255
Detected	No Cannabinoid Detected	445 (25.2%)	212 (31.9%)	75 (27.9%)	75 (35.5%)	890 (41.9%)	1,697 (33.7%)
	Cannabinoid Detected	1,318 (74.8%)	453 (68.1%)	194 (72.1%)	136 (64.5%)	1,234 (58.1%)	3,335 (66.3%)
	n						5,032
Delta 9-THC Confirmation Levels	None Detected	116 (8.8%)	68 (15.0%)	28 (14.4%)	17 (12.5%)	230 (18.6%)	459 (13.8%)
	Present but <1.0	30 (2.3%)	17 (3.8%)	*	*	36 (2.9%)	88 (2.6%)
	1.0 - 4.9	352 (26.7%)	141 (31.1%)	60 (30.9%)	48 (35.3%)	533 (43.2%)	1,134 (34.0%)
	5.0+	820 (62.2%)	227 (50.1%)	104 (53.6%)	68 (50.0%)	435 (35.3%)	1,654 (49.6%)
	n						3,335

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Delving further into the relationship between alcohol and marijuana toxicology, we also examined BAC levels in cases that were tested for alcohol and also had Delta 9-THC confirmation testing (n=1,816). As shown in Figure 12, BAC levels peaked to nearly double the legal impairment level for DUI case filings that also had confirmed levels below one ng/mL of Delta 9-THC; for the other Delta 9-THC levels, the BAC dropped. Among those charged in these filings who tested at or above the permissible inference level for Delta 9-THC, the average BAC was 0.107, which is still above the legal *per se* impairment level.

Figure 12. Mean BAC by Delta 9-THC toxicology levels for DUI case filings and receiving confirmation screening, 2018 (n=1,816)



Data Source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Other Polydrug Detection

Polydrug detection is the identification of any amount of two or more drugs in a toxicology result.³⁵ As highlighted earlier, polydrug detection is likely underreported because, when alcohol is obviously present, many officers do not request further drug testing due to the cost and time associated with additional testing.

From 2016 to 2018, as shown in Table 20, there was a slight increase in the number and proportion of polydrug detection in DUI toxicology screening. In 2018, 15% of filings linked to toxicology screening had positive polydrug results. The most prevalent combination of substances found was alcohol and Delta 9-THC, representing 42% of all polydrug results. Additionally, 5,010 filings with polydrug toxicology had Delta 9-THC detected, which was higher than the number of filings associated with polydrug alcohol toxicology (n=4,811). These results might suggest a higher proportion of cannabis use and/or impairment among individuals charged with DUIs and who were screened for both drugs and alcohol, but is difficult to conclude due to the lack of drug screenings among alcohol toxicology results.

Table 20. Drugs detected among DUI case filings and tested for alcohol or drugs, 2016-2018

		2016	2017	2018	Total
Total n		17,824	17,479	16,943	52,246
Drug Category n (%)					
No Drug	None Detected	165 (0.9%)	170 (1.0%)	174 (1.0%)	509 (1.0%)
	Alcohol Only	14,052 (78.8)	13,449 (76.9)	12,755 (75.3)	40,256 (77.1)
One Drug	Delta 9-THC Only	957 (5.4)	1,083 (6.2)	1078 (6.4)	3,118 (6.0)
	Single Other Drug	386 (2.2)	415 (2.4)	465 (2.7)	1,266 (2.4)
	n	15,395 (86.4)	14,947 (85.5)	14,298 (84.4)	44,640 (85.4)
Polydrug	Alcohol and Delta 9-THC	829 (4.7)	958 (5.5)	1039 (6.1)	2,826 (5.4)
	Alcohol and Other	380 (2.1)	430 (2.5)	414 (2.4)	1,224 (2.3)
	Delta 9-THC and Other	469 (2.6)	447 (2.6)	507 (3.0)	1,423 (2.7)
	Alcohol, Delta 9-THC, and Other	234 (1.3)	251 (1.4)	276 (1.6)	761 (1.5)
	Polydrug Not Alcohol or Delta 9-THC	352 (2.0)	276 (1.6)	235 (1.4)	863 (1.7)
	n	2,264 (12.7)	2,362 (13.6)	2,471 (14.5)	7,097 (13.5)

*Sum may be less or greater than 100.0% due to rounding. Values in bold represent totals for each.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD.

Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 21 shows case filings with a toxicology result by age group for the individual charged. The proportion of the cases in the alcohol only category increased with age; in cases among those under 18, only 45% had alcohol-only toxicology, compared to 80% among individuals 45-54 years old. Conversely, the proportion of cases in the Delta 9-THC Only category declined with age, as seen in Table 21. Minimal differences were found in the distribution of polydrug categories by age group.

³⁵ The findings presented here reflect drugs detected and not the number of metabolites.

Table 21. Drugs detected by age group among individuals charged with DUI and tested for alcohol or drugs, 2018

	Overall	Under								
		18	18-20	21-25	26-34	35-44	45-54	55-64	65+	
n	16,943	211	1220	3,679	4,923	3,021	2,009	1,401	476	
Drug Category										
No Drug	None Detected	12 (1.0%)	19 (5.7%)	21 (1.6%)	35 (0.6%)	34 (1.1%)	19 (0.9%)	25 (1.8%)	9 (1.9%)	
	Alcohol Only	12,755 (75.3)	94 (44.5)	648 (53.1)	2,732 (74.3)	3,853 (78.3)	2,351 (77.8)	1,598 (79.5)	1107 (79.0)	371 (77.9)
Single Drug	Delta 9-THC Only	1078 (6.4)	76 (36.0)	329 (27.0)	274 (7.4)	199 (4.0)	98 (3.2)	49 (2.4)	38 (2.7)	15 (3.2)
	Single Other Drug	465 (2.7)	*	24 (2.0)	40 (1.1)	117 (2.4)	121 (4.0)	70 (3.5)	74 (5.3)	18 (3.8)
Polydrug	Alcohol and Delta 9-THC	1,039 (6.1)	18 (8.5)	88 (7.2)	344 (9.4)	325 (6.6)	134 (4.4)	79 (3.9)	39 (2.8)	12 (2.5)
	Alcohol and Other	414 (2.4)	*	12 (1.0)	55 (1.5)	108 (2.2)	103 (3.4)	68 (3.4)	47 (3.4)	20 (4.2)
	Delta 9-THC and Other	507 (3.0)	9 (4.3)	73 (6.0)	100 (2.7)	141 (2.9)	87 (2.9)	55 (2.7)	28 (2.0)	12 (2.5)
	Alcohol, Delta 9-THC, and Other	276 (1.6)	0 (0.0)	24 (2.0)	83 (2.3)	83 (1.7)	36 (1.2)	26 (1.3)	16 (1.1)	8 (1.7)
	Polydrug Not Alcohol or Delta 9-THC	235 (1.4)	0 (0.0)	*	30 (0.8)	62 (1.3)	57 (1.9)	45 (2.2)	27 (1.9)	11 (2.3)

*Sum may be less or greater than 100.0% due to rounding.

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 22 shows the drugs detected by gender of the individuals charged. Similar to trends observed in DUI cases, males consistently outnumbered females in every drug category. Males had a slightly higher proportion of Delta 9-THC only results.

Table 22. Drugs detected by sex among individuals charged with DUI and tested for alcohol or drugs, 2018

	Male		Female	
	n		n	
Drug Category				
No Drug	None Detected		120 (1.0%)	54 (1.2%)
	Alcohol Only		9,371 (75.1)	3,375 (75.9)
Single Drug	Delta 9-THC Only		889 (7.1)	189 (4.2)
	Single Other Drug		314 (2.5)	151 (3.4)
Polydrug	Alcohol and Delta 9-THC		786 (6.3)	253 (5.7)
	Alcohol and Other		259 (2.1)	155 (3.5)
	Delta 9-THC and Other		385 (3.1)	122 (2.7)
	Alcohol, Delta 9-THC, and Other		224 (1.8)	52 (1.2)
	Polydrug Not Alcohol or Delta 9-THC		136 (1.1)	97 (2.2)

*Sum may be less or greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Other Drug Categories

Drug Schedules

Although only 11% of impaired drivers were screened for substances beyond alcohol and marijuana (n=3,028), we wanted to examine trends for other drugs involved in DUI court cases. DUI filings with positive testing results were examined by drug schedule; these drug schedule categories are not mutually exclusive because cases can involve multiple drugs. While Delta 9-THC is considered a Schedule I drug according to Colorado and federal statutes, we excluded it from this analysis to focus on trends involving illicit substances in Colorado.³⁶ Marijuana findings are already shown in Table 23. See Appendix A for a full list of drugs associated with DUI case filings in each of the scheduling categories.

Excluding cannabis, DUI case filings were most likely to involve Schedule II drugs, which represents substances with a high potential for misuse and use disorders. See Table 25 for a full list of the most commonly identified substances by drug category and classification. After Schedule II drugs, Schedule IV were the second most frequent category, which includes many prescription drugs that have a low potential for misuse and use disorders.

Table 23. DUI case filings, by scheduled drug category, 2016-2018

Drug Schedule	2016	2017	2018
n			
I	27	50	53
II	1,132	1,188	1,351
III	*	7	8
IV	948	838	720

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Drug Recognition Expert Drug Categories

For this analysis, drugs identified in DUI toxicology results were categorized into the seven DRE drug categories (see Appendix A), which are grouped based on common behavioral effects of the drugs and their potential for substance misuse. Finally, cannabis results are not included here but can be found in Table 17. Alcohol, which is a CNS depressant, was also excluded from these results.

The number of CNS stimulants detected rose by 37% from between 2016 and 2018, and was the most common drug category identified in toxicology testing (see Table 24). Following CNS stimulants, CNS depressants and narcotic analgesics were the most frequent DRE category found in charged driver's toxicology results. Note that the results presented in Table 24 likely underrepresent the number of drugs present in DUIs in those three years due to lower levels of comprehensive drug screening compared to alcohol and marijuana screening.

³⁶ Marijuana scheduling has become highly disputed as more states have begun to legalize medical marijuana and the FDA has approved a prescription drug that use cannabinoids as active ingredients. See: Haffajee, R. L., MacCoun, R. J., & Mello, M. M. (2018). Behind schedule-reconciling federal and state marijuana policy. *New England Journal of Medicine*, 379(6), 501-504. <https://doi.org/10.1056/NEJMp1804408>

Table 24. Number of DUI case filings with presence of toxicology results by Drug Recognition Expert Drug Categories and year, 2016-2018

DRE Category	2016	2017	2018
CNS Depressant	957	845	728
CNS Stimulant	887	978	1,219
Hallucinogen	20	26	20
Dissociative Anesthetic	*	7	8
Narcotic Analgesic	402	358	277
Inhalant	9	20	16
Prescription or Over the Counter Drug**	183	106	56

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Note: See Table 17 for Delta 9-THC results.

Note: ** indicates that this category contains medications not associated with substance misuse. See Appendix A for further information on the categorization.

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

As shown in Table 25 (also see Appendix K), in 2018, methamphetamine, a stimulant and Schedule II drug, was the most frequently identified drug in DUI case filings, excluding alcohol and cannabis. Methamphetamine was found in 25% of DUI cases screened for drugs. Similarly classified as methamphetamine, cocaine was the second most frequently identified non-alcohol and non-cannabis drug in DUI case filings. Table 25 shows that benzodiazepines were the second most common other drug category among DUI case filings, and within this category, alprazolam was the most commonly detected drug.

Table 25. Top 20 drugs (excluding alcohol and cannabis) found in DUI case filing toxicology results, by drug category and schedule, 2018

Drug	Drug Category	Schedule	No. of Case Filings
Methamphetamine	Stimulant	II	747
Cocaine	Stimulant	II	449
Amphetamine	Stimulant	II	82
Stimulants Total			1,278
Alprazolam	Benzodiazepines	IV	273
Diazepam or Chlordiazepoxide	Benzodiazepines	IV	188
Clonazepam	Benzodiazepines	IV	150
Zolpidem	Benzodiazepines	IV	106
Lorazepam	Benzodiazepines	IV	100
Midazolam	Benzodiazepines	IV	17
Benzodiazepines Total			834
Oxycodone	Opioid	II	67
Morphine	Opioid	II	63
Tramadol	Opioid		42
Codeine	Opioid	II	35
Heroin	Opioid	I	33
Hydrocodone	Opioid	II	30
Methadone	Opioid	II	29
Buprenorphine	Opioid	V	16
Fentanyl	Opioid	II	15
Opioids Total			330
Polyfluorinated ethane	Inhalant		16
Carisoprodol	Tranquilizer		14

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Toxicology and Dispositions

This dataset of court case filings linked with and toxicology results is uniquely situated to assess the relationship between toxicology and dispositions in Colorado. As described above, 16,943 toxicology tests were matched to 26,255 case filings. Of the case filings with toxicology tests, 15,751 DUI charges (93%) had reached disposition at the time of data analysis. Table 26 shows court case disposition by the absence or presence of a matched toxicology test (see Table 10 for overall dispositions). Most cases were found guilty, regardless of the presence of a toxicology result. Combining guilty, deferred, and deferred/dismitted charges, there was a slightly lower conviction rate for cases with no toxicology test (85%, n=7,157) when compared to those with a toxicology test (89%, n=14,042). Cases with no accompanying toxicology test also had a slightly higher dismissal rate.

Table 26. DUI charge dispositions by toxicology testing, 2018

	No Toxicology Test	Toxicology Test
N	8,450	15,751
Guilty	6,694 (79.2%)	12,618 (80.1%)
Deferred Judgment	337 (4.0)	868 (5.5)
Deferred Dismitted	126 (1.5)	556 (3.5)
Diversion	13 (0.2)	37 (0.2)
Dismitted	1,086 (12.9)	1,418 (9.0)
Not Guilty	90 (1.1)	62 (0.4)
Not Proven	0 (0.0)	0 (0.0)
Non-DUI Disposition+	104 (1.2)	192 (1.2)

+ Aggregated dispositions for final charges that were not DUIs.

^ Sum may be greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Alcohol and DUI Dispositions

Table 27 shows the number of DUI dispositions with a known alcohol test (n=14,110). Overall, these DUI charges tied to a BAC level over the per se level had a 96% conviction rate. Further highlighting the relationship between the per se level and dispositions, the proportion of guilty findings were over 50 percentage points higher for cases with an accompanying BAC level of 0.08 or more (89%) compared to the proportion of cases found guilty with results than less than 0.05 BAC (38%). Interestingly, dispositions linked to toxicology results with no alcohol detected or did not link to an alcohol test result had a higher proportion of guilty findings compared to cases with less than 0.05 BAC. Since this table shows information on alcohol tests only, the 400 cases with no alcohol detected and a guilty disposition may have had other drug test results.



Table 27. DUI case dispositions by alcohol testing and BAC groups, 2018

	No BAC Test	BAC Levels			
		None Detected	Present but < 0.05	0.05 - 0.079	0.08+
n	10,991	662	496	1,153	11,799
Guilty	7,673 (76.0%)	400 (60.4%)	189 (38.1%)	535 (46.4%)	10,515 (89.1%)
Deferred Judgment	507 (5.0)	35 (5.3)	23 (4.6)	171 (14.8)	469 (4.0)
Deferred Dismissed	190 (1.9)	13 (2.0)	13 (2.6)	163 (14.1)	303 (2.6)
Diversion	17 (0.2)	0 (0.0)	0 (0.0)	5 (0.4)	28 (0.2)
Dismissed	1,460 (14.5)	192 (29.0)	238 (48.0)	209 (18.1)	405 (3.4)
Not Guilty	100 (1.0)	*	*	6 (0.5)	40 (0.3)
Non-DUI Disposition	144 (1.4)	20 (3.0)	29 (5.8)	64 (5.6)	39 (0.3)

Note: * represents cell counts under five that were suppressed due to privacy concerns.

+ Aggregated dispositions for final charges that were not DUIs.

^ Sum may be less or greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD.

Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Marijuana and DUI Dispositions

Table 28 shows the dispositions of DUI charges by cannabinoid screening, cannabinoid detection, and known Delta 9-THC confirmation levels. Among DUI dispositions linked to a positive Delta 9-THC confirmation test, those at or above the permissible inference level had the highest proportion of guilty findings at 75%. However, guilty findings in the high Delta 9-THC group were 15 percentage points lower than the rate of guilty findings among DUI dispositions linked to toxicology levels above 0.08 BAC.

Similar to trends related to increasing convictions for the *per se* level for BAC, the impact of Delta 9-THC permissible inference level was examined. Conviction rates rose to 91% for charges linked to toxicology levels at or above 5ng/mL of Delta 9-THC. Turning to dismissals, which was the second most common disposition, DUI dispositions with a Delta 9-THC result less than the permissible inference level had dismissal rates of approximately 20 to 30% while those above had a dismissal rate of 7%.



Table 28. DUI case dispositions by Delta 9-THC testing and level categories among DUI charged individuals, 2018

	Delta 9-THC Confirmation Testing Levels					
	No Cannabinoid Screen	No Cannabis Detected	None Detected	Present but <1.0	1.0 - 4.9	5.0+
n	19,554	1,548	433	82	1,047	1,537
Guilty	15,922 (81.4%)	1150 (74.3%)	332 (76.7%)	55 (67.1%)	704 (67.2%)	1,149 (74.8%)
Deferred Judgment	881 (4.5)	75 (4.8)	7 (1.6)	*	62 (5.9)	177 (11.5)
Deferred Dismissed	561 (2.9)	30 (1.9)	6 (1.4)	*	20 (1.9)	64 (4.2)
Diversion	43 (0.2)	*	0 (0.0)	0 (0.0)	*	*
Dismissed	1,799 (9.2)	266 (17.2)	76 (17.6)	22 (26.8)	227 (21.7)	114 (7.4)
Not Guilty	132 (0.7)	6 (0.4)	*	*	*	9 (0.6)
Non-DUI Disposition+	216 (1.1)	18 (1.2)	11 (2.5)	0 (0.0)	30 (2.9)	21 (1.4)

Note: * represents cell counts under five that were suppressed due to privacy concerns.

+Aggregated dispositions for final charges that were not DUIs.

^Sum is greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by: Division of Criminal Justice, Colorado Department of Public Safety.

Alcohol, Marijuana, and DUI Dispositions

Confirmation values of alcohol and cannabis by disposition is displayed in Table 29. Guilty dispositions had medians of 0.16 and 5.5 for BAC and Delta 9-THC, respectively. While guilty DUI charges tended to be linked to toxicology results that were higher than the alcohol *per se* level and Delta 9-THC permissible inference level, dispositions of dismissed cases were lower with median levels of 0.06 and 2.8 for BAC and Delta 9-THC, respectively

Table 29. BAC and Delta 9-THC among DUI charged individuals with quantified toxicology levels, by disposition, 2018

Finding	BAC Mean*	BAC Median*	No. of BAC DUI Charges*	Delta 9-THC Mean ng/mL+	Delta 9-THC Median ng/mL+	No. of Delta 9-THC Charges+
Guilty	0.167	0.163	11,489	8.6	5.5	2,176
Deferred Judgment	0.109	0.099	680	9.9	7.7	248
Deferred Dismissed	0.101	0.090	484	12.6	9.6	88
Diversion	0.133	0.129	33	*	*	*
Dismissed	0.094	0.064	972	4.7	2.8	411
Not Guilty	0.156	0.146	50	9.3	7.7	14
Non-DUI Disposition Δ	0.076	0.062	139	6.3	4.1	54

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Δ Aggregated dispositions for final charges that were not DUIs.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD.

Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Final DUI charges with dispositions of guilty, deferred judgment, and deferred dismissed were combined to calculate overall conviction rates by BAC and Delta 9-THC groups (see Table 30). This analysis involved 3,037 DUI charges linked to toxicology testing results for both alcohol and Delta 9-THC. Only 60 of these records indicated no detection of either alcohol or cannabis. Fewer than a quarter (22%, n = 408) of all cases that had dispositions and tests for both alcohol and Delta 9-THC fell into both the 0.08+ BAC category and in the 5.0 ng/mL Delta 9-THC category. Generally, these findings convey the influence of either *per se* or



permissible inference level on convictions for both alcohol and cannabis polydrug related DUI cases.

Table 30. Count and conviction rate of final DUI charges, by BAC level and Delta 9-THC level, 2018 (n = 1,858)

	Delta 9-THC Groups							
	None Detected		Present but <1 Conviction		1.0 - 4.9		5.0+	
	N	Conviction Rate	N	Rate	N	Conviction Rate	N	Conviction Rate
N	319		54		714		771	
BAC Levels (%)								
None Detected	60	68.3%	17	47.1%	124	59.7%	206	89.8%
Present but < 0.05	23	47.8%	*	*	47	59.6%	95	88.4%
0.05 - 0.079	15	60.0%	*	*	45	91.1%	62	91.9%
0.08+	221	96.8%	32	90.6%	498	96.2%	408	98.0%

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Note: Final non-DUI charges were included in the analysis.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Polydrug Use and DUI Dispositions

Only slight differences were found in dispositions when comparing polydrug versus single drug detection (see Table 31). The proportion of DUI cases with guilty dispositions for one drug versus polydrug detection were very similar at 80% versus 83%. Conversely, cases where no drugs were detected had the highest rates of dismissal (80%) and lowest proportion of guilty findings (15%). These results highlight the potential role of negative drug testing on dispositions.

Table 31. Disposition of DUI charges, by single or polydrug detection, 2018

	Not Tested	Tested		
		None Detected	One Drug	Polydrug
n	8,450	163	13,318	2,270
Guilty	6,694 (79.2%)	25 (15.3%)	10,707 (80.4%)	1,886 (83.1%)
Deferred Judgment	337 (4.0)	*	757 (5.7)	109 (4.8)
Deferred Dismissed	126 (1.5)	0 (0.0)	522 (3.9)	34 (1.5)
Diversion	13 (0.2)	0 (0.0)	34 (0.3)	*
Dismissed	1,086 (12.9)	130 (79.8)	1,090 (8.2)	198 (8.7)
Not Guilty	90 (1.1)	0 (0.0)	53 (0.4)	9 (0.4)
Not Proven	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Non-DUI Disposition	104 (1.2)	6 (3.7)	155 (1.2)	31 (1.4)

Note: * represents cell counts under five that were suppressed due to privacy concerns.

+ Aggregated dispositions for final charges that were not DUIs.

^ Sum may be less or greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 32 shows drug categories and conviction rates for DUI charges from 2016 to 2018. Overall, DUI conviction rates were high at 90%, but there was variation depending on the toxicology results. For DUI charges where no toxicology results were detected, conviction rates ranged from 17 to 26% across all three years. DUI conviction rates linked to positive



alcohol results were all at or above 90% and were higher than the overall conviction rate for DUI charges (89%). In contrast, convictions for charges linked to Delta 9-THC only toxicology results were lower with rates spanning 69 to 76%. In 2018, DUI charges linked to polydrug non-alcohol and non-Delta 9-THC results increased by 7% from 2016.

Table 32. Conviction rate of final DUI charges, by single or polydrug detection, 2016-2018

	Drugs Detected	2016		2017		2018	
		No. of Charges	Conviction Rate	No. of Charges	Conviction Rate	No. of Charges	Conviction Rate
No Drug	None Detected	157	22.3%	157	25.5%	157	17.2%
Single Drug	Alcohol Only	13,323	91.9%	12,608	92.0%	11,775	92.7%
	Delta 9-THC Only	878	68.7%	1,007	75.5%	978	75.8%
	Single Other Drug	348	77.3%	374	84.0%	410	79.5%
Polydrug	Alcohol and Delta 9-THC	787	91.0%	890	91.6%	967	94.2%
	Alcohol and Other	346	89.9%	383	91.9%	378	92.3%
	Delta 9-THC and Other	426	91.1%	403	86.8%	443	83.5%
	Alcohol, Delta 9-THC, and Other	223	90.6%	231	90.9%	248	93.1%
	Polydrug Not Alcohol or Delta 9-THC	318	75.5%	249	85.1%	203	82.8%
	Total	16,806	89.3%	16,302	89.9%	15,559	90.3%

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety

Scheduled and DRE Drug Categories and DUI Dispositions

The majority of DUI dispositions that were linked to a positive toxicology result for one or more scheduled drugs was found guilty, and values for each of the schedules ranged from 75% to 100% (see Table 33). Caution should be used when reviewing these findings because of the few cases in some of the categories.

Table 33. DUI dispositions by scheduled drug category, 2018

Schedule	I	II	III	IV
n	44	1,190	7	660
Guilty	40	969	7	493
Deferred Judgment	0	36	0	40
Deferred Dismissed	0	7	0	12
Diversion	0	*	0	*
Dismissed	*	154	0	98
Not Guilty	0	*	0	*
Not Proven	0	0	0	0
Non-DUI Disposition	*	18	0	13

Note: * represents cell counts under five that were suppressed due to privacy concerns.

+ Aggregated dispositions for final charges that were not DUIs.

^ Sum is greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



DRE Drug Categories and DUI Disposition

Table 34 shows DUI dispositions linked to positive toxicology results for DRE drug categories. Overall, the majority of charges associated with a DRE drug category had guilty dispositions, with values ranging from 67% in the prescription drug category to 100% in the dissociative anesthetic category. Charges linked to presence of narcotic analgesics had the highest proportion of dismissed charges. However, small cell counts, especially in the dissociative anesthetic and inhalant categories, limit the ability to interpret differences across the different drug categories.

Table 34. DUI charge disposition, by Drug Recognition Expert Drug Categories, 2018

DRE Category	CNS Depressant	CNS Stimulant	Hallucinogen	Dissociative Anesthetic	Narcotic Analgesic	Inhalant	Prescription or Over the Counter Drug
n	654	1075	17	7	240	16	54
Guilty	497 (74.4%)	900 (83.7%)	16 (94.1%)	7 (100.0%)	168 (70.0%)	12 (75.0%)	36 (66.7%)
Deferred Judgment	41 (6.1)	30 (2.8)	0 (0.0)	0 (0.0)	10 (4.2)	*	*
Deferred Dismissed	14 (2.1)	*	0 (0.0)	0 (0.0)	*	0 (0.0)	0 (0.0)
Diversion	*	*	0 (0.0)	0 (0.0)	*	0 (0.0)	0 (0.0)
Dismissed	99 (14.8)	122 (11.3)	0 (0.0)	0 (0.0)	52 (21.7)	*	10 (18.5)
Not Guilty	*	*	0 (0.0)	0 (0.0)	*	*	*
Not Proven	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Non-DUI Disposition	13 (1.9)	16 (1.5)	*	0 (0.0)	*	0 (0.0)	*

Note: * represents cell counts under five that were suppressed due to privacy concerns.

+ Aggregated dispositions for final charges that were not DUIs.

^ Sum is greater than 100.0% due to rounding.

Data source: State Judicial Department, Denver County Court, CBI, and ChemaTox. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Sentencing Data

Sentencing data were obtained for all charges associated with operating a vehicle while impaired or under the influence of alcohol, drugs, or any combination of alcohol and drugs. However, only State Judicial cases were examined as it was not possible to link Denver Court sentencing data to specific charges. Sentencing data are complicated, as each sentence can be suspended, reduced, or amended before reaching resolution. To standardize the analyses, only initial sentences associated with the final DUI charge were used.

Monetary Sentences

Monetary sentences include fines, surcharges/fees, and restitution. Convicted individuals can receive all three monetary sentence types including multiple fines, fees, and surcharges. Table 35 shows the number of distinct charges which received each type of monetary sentence. Note that cells with few cases should be interpreted with caution. As seen in Table 35, over 90% of all DUI charges received at least one fine or surcharge/fee, compared to only 3% of charges that received a sentence containing restitution. Generally, the proportion of charges receiving restitutions tended to rise as the charge severity increased; vehicular homicide charges had the highest proportion issued restitution payments (56%).

Table 35. Number of DUI charges and percentages, by monetary sentence, 2018

Aggregate Final DUI Charge	Number of Convicted Charges	Fines		Surcharges/ Fees		Restitution	
		N	%	N	%	N	%
UDD	98	78	79.6	92	93.9	0	0
DWAI	8,278	8,002	96.7	8,018	96.9	134	1.6
DUI	8,944	7,760	86.8	7,769	86.9	274	3.1
DWAI 1-2 Prior	1,031	1,003	97.3	1,004	97.4	15	1.5
DUI 1-2 Prior	1,907	1,724	90.4	1,730	90.7	65	3.4
DWAI 3+ Prior	32	25	78.1	27	84.4	2	6.3
DUI 3+ Prior	836	724	86.6	754	90.2	30	3.6
VEH. ASSAULT	57	4	7.0	56	98.2	18	31.6
VEH. HOMICIDE	16	0	0	14	87.5	9	56.2
Total	21,199	19,320	91.1	19,464	91.8	547	2.6

Data source: State Judicial Department Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Looking at specific surcharges/fees, an estimated 19,651 DUI charges had sentences requiring a total of \$3,438,056 to be made to the Victim's Assistance Fund, making it the most common and most revenue generating monetary sentence. The most frequently issued fine was the Law Enforcement Assistance Fund (LEAF), representing 19,212 DUI charges and \$1,729,649. Finally, restitution from DUI charges in 2018 totaled \$1,278,518 (for more information, see Appendix L). Although informative of the severity of sentences, these totals represented the sentencing amounts, and not the amount that individuals eventually paid.

Table 36 shows the average dollar amount per individual receiving each monetary sentence category. On average, individuals were sentenced to pay \$548 in fines, \$1,525 in surcharges, and \$3,066 in restitution; however, the average amount was \$1,979, reflecting that not every individual sentenced received all three monetary types of fines/fees. Generally, the average amounts tended to increase with charge severity; UDD charges had the lowest total monetary

penalty, averaging \$343, compared to vehicular homicide, with the total average being \$6,529. Restitutions and surcharges tended followed a similar pattern.

Table 36. Mean monetary sentence for guilty charges with monetary penalties, by final DUI charge, 2018

Final DUI Charge	Surcharges/ Fees			Total Mean
	Fine	Fees	Restitutions	
UDD	\$97	\$284	\$0	\$343
DWAI	\$360	\$1,177	\$1,633	\$1,515
DUI	\$696	\$1,708	\$3,229	\$2,186
DWAI 1-2 Prior	\$696	\$1,870	\$2,582	\$2,536
DUI 1-2 Prior	\$770	\$1,929	\$2,842	\$2,543
DWAI 3+ Prior	\$214	\$1,970	\$33	\$1,832
DUI 3+ Prior	\$361	\$2,055	\$3,663	\$2,297
VEH. ASSAULT	\$1,170	*	\$8,315	\$4,853
VEH. HOMICIDE	\$0	\$985	\$10,074	\$6,529
Total Mean	\$548	\$1,525	\$3,066	\$1,979

Note: Only sentences that include some monetary penalty are included in these calculations.

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Supervision and Incarceration Sentences

Table 37 shows the number of DUI charges that received the following sentences: community service, probation, jail, community corrections, or prison. Average sentence lengths (in days) are provided in Table 38. These supervision and incarceration categories are not mutually exclusive and individuals may receive more than one of these sentences. The most common sentence for these charges was community service (n=18,280). Probation (n=17,068) and jail (n=13,929) followed for second and third most commonly issued sentence types among DUI charges. Generally, felony DWAI, felony DUI, vehicular assault, and vehicular homicide tended to have higher proportions receiving prison and community corrections sentences, whereas less severe charges tended to have greater percentage receiving community service, probation and jail sentences.



Table 37. Number and percentages of charges receiving supervision and incarceration sentence, 2018

Final DUI Charge	Convicted Charges	Community Service		Probation		Jail		Community Corrections		Prison	
		N	%	N	%	N	%	N	%	N	%
UDD	98	71	72.4	40	40.8	2	2.0	0	0.0	0	0.0
DWAI	8,278	7,826	94.5	7,035	85.0	5,234	63.2	2	0.0	1	0.0
DUI	8,944	7,369	82.4	6,906	77.2	5,676	63.5	5	0.1	2	0.0
DWAI 1-2 Prior	1,031	980	95.1	975	94.6	945	91.7	0	0.0	0	0.0
DUI 1-2 Prior	1,907	1,634	85.7	1,668	87.5	1,671	87.6	1	0.1	2	0.1
DWAI 3+ Prior	32	10	31.2	13	40.6	11	34.4	4	12.5	11	34.4
DUI 3+ Prior	836	363	43.4	396	47.4	371	44.4	220	26.3	176	21.1
VEH. ASSAULT	57	26	45.6	34	59.6	19	33.3	9	15.8	17	29.8
VEH. HOMICIDE	16	1	6.3	1	6.3	0	0.0	2	12.5	12	75.0
Total	21,199	18,280	86.2	17,068	80.5	13,929	65.7	243	1.1	221	1.0

Note: Only sentences that include some supervision or incarceration are included in these calculations.

Data source: State Judicial Department. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

On average in 2018, individuals with supervision and incarceration sentences received a total of seven days of community service, 629 days of probation, and 224 days of jail. As expected, sentence times varied by the severity of the offense. Note that some of the cells in Tables 37 and 38 have few cases; caution should be used when interpreting these findings. Similar the analyses of monetary sentences above, the results may not reflect the actual time each individual served due to outcomes like the suspension of parts of a sentence, earned good time, parole, or other factors.

Table 38. Mean supervision and incarceration sentence lengths for guilty charges (in days), by final DUI charge, 2018

Aggregate Final DUI Charge	Community Service	Probation	Jail	Community Corrections	Prison
UDD	0.9	354.0	*	0.0	0.0
DWAI	2.0	520.0	99.5	*	*
DUI	8.0	637.0	231.0	949.0	*
DWAI 1-2 Prior	2.5	781.0	461.0	0.0	0.0
DUI 1-2 Prior	2.8	831.0	461.0	*	*
DWAI 3+ Prior	3.5	1,205.0	246.0	*	1,128.0
DUI 3+ Prior	127.0	1,161.0	242.0	1,269.0	1,399.0
VEH. ASSAULT	5.9	1,320.0	189.0	1,460.0	1,481.0
VEH. HOMICIDE	*	*	0.0	*	5,110.0
Total Mean	7.0	628.5	224.1	1,289.0	1,568.6

Note: Only sentences that include some supervision or incarceration penalty are included in these calculations.

Note: * represents cell counts under five that were suppressed due to privacy concerns.

Data source: State Judicial Department. Analyzed by Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Probation Assessment Data

The Office of Behavioral Health in the Department of Human Services provided probation assessment data. This dataset represents information gathered as part of the probation intake process for individuals who will be sentenced for a conviction. The assessment data contains information not available in court case filings, including certain demographic characteristics, drug involvement, crash outcome, and DUI history. This analysis provides a more complete profile of individuals who were sentenced.

In 2018, 16,827 records were linked to the 26,255 case filings and available for analysis from the Alcohol/Drug Driving Safety Coordinated Data System (ADDSCODS). Because of the time lag between case filing, conviction, and the probation assessment, thousands of 2018 DUI case filings had not reached disposition nor received an assessment. Overall, in 2018, a smaller percentage of records were linked to the case filing data compared to earlier years (64% in 2018 vs. 70% in 2016 and 69% in 2017).

Demographics of Individuals Convicted of a DUI

Race/Ethnicity & Gender

Table 39 shows race, ethnicity and gender breakdowns for sentenced individuals. White males represented the largest population group (n=10,886) assessed in 2018. In comparing the distribution of race by gender, we found little variation among males and females. Note, however, that ethnicity is not systematically collected by Judicial; most Hispanics are included in the White category.

Table 39. Individuals who received probation assessments for DUI sentences, by race/ethnicity* and gender, 2018

	Overall	Male	Female
n	16,827	12,283	4,544
Race/Ethnicity* n (%)			
White	14,045 (83.5)	10,167 (82.8)	3,878 (85.3)
Black/African-American	909 (5.4)	710 (5.8)	199 (4.4)
Hispanic	1,191 (7.1)	923 (7.5)	268 (5.9)
American Indian/Alaskan Native	199 (1.2)	131 (1.1)	68 (1.5)
Asian/Pacific Islander	176 (1.0)	139 (1.1)	37 (0.8)
Other	307 (1.8)	213 (1.7)	94 (2.1)

*Ethnicity is not systematically collected by the State Judicial Department. Consequently, most Hispanics are in the White category.

**Sum may be less or greater than 100.0% due to rounding.

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Education

Educational attainment levels among individuals with community supervision sentences were consistent from 2016 to 2018. In 2018, 17% of individuals did not have a high school diploma or General Education Diploma (GED), and 46% earned a high school diploma or GED (see Table 40). The remaining 38% had some level of post-secondary education.



Table 40. Individuals who received probation assessments for DUI sentences, by educational attainment, 2016-2018

	2016	2017	2018
n	18,956	18,383	16,827
Education n (%)			
No HS Diploma/GED	3,553 (18.7)	3,237 (17.6)	2,788 (16.6)
HS Diploma/GED	8,099 (42.7)	7,953 (43.3)	7,704 (45.8)
Some College/College Graduate	7,210 (38.1)	7,091 (38.6)	6,335 (37.6)
Unknown	94 (0.5)	102 (0.6)	0

*Sum is greater than 100.0% due to rounding.

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Prior DUIs

Table 41 shows the history of prior DUI arrests from 2016 to 2018 for individuals who received probation assessments. Across the three years, over one-third of cases had at least one prior DUI. Between 6-8% of individuals had three or more prior arrests for DUI.

Table 41. Prior arrests among individuals who received probation assessments for DUI sentences, 2016-2018

	2016	2017	2018
n	18,956	18,383	16,827
Prior Arrests n (%)			
No Priors	11,795 (62.2)	11,556 (62.9)	10,531 (62.6)
1-2 Prior(s)	5,991 (31.6)	5,615 (30.5)	5,023 (29.9)
3 + Priors	1,170 (6.2)	1,212 (6.6)	1,273 (7.6)

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 42 provides information stratified by gender, education level, and race/ethnicity by history of prior DUI arrests. Males were more likely to have committed at least one prior DUI offense (39.9%) compared to females (31.7%). The recidivism likelihood was very similar across different levels of educational attainment: 38% of those without a high school diploma, 38% of those with a high school diploma, and 36% of those with some college or more had at least one prior DUI arrest. There was variation in recidivism by race/ethnicity, with 23% of those categorized as Other having a prior arrest while 52% of those classified as American Indian/Native American had a prior arrest. Prior DUI arrests were found in 38% of White, 33% of Black, 31% of those identified as Hispanic, and 27% of Asian/Pacific Islanders individuals convicted of DUI.



Table 42. Demographics for individuals who received probation assessments for DUI sentences, by number of prior DUI offenses, 2018

level		No Priors	1-2 Prior(s)	3 + Priors
n		10,531	5,023	1,273
Gender n (%)	Male	7,384 (60.1)	3,814 (31.1)	1,085 (8.8)
	Female	3,147 (69.3)	1,209 (26.6)	188 (4.1)
Education n (%)	No HS Diploma/GED	1,724 (61.8)	812 (29.1)	252 (9.0)
	HS Diploma/GED	4,755 (61.7)	2318 (30.1)	631 (8.2)
	Some College/College Graduate	4,052 (64.0)	1893 (29.9)	390 (6.2)
Race/Ethnicity n (%)	White	8,646 (61.6)	4,300 (30.6)	1,099 (7.8)
	Black/African-American	614 (67.5)	242 (26.6)	53 (5.8)
	Hispanic Origin	824 (69.2)	293 (24.6)	74 (6.2)
	American Indian/Alaskan Native	95 (47.7)	76 (38.2)	28 (14.1)
	Asian/ Pacific Islander	126 (73.3)	46 (26.7)	*
	Other	226 (77.4)	66 (22.6)	*

Sum is greater than 100.0% due to rounding.

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Probation assessment data included toxicology test outcomes and, unlike the linked court case data analyzed here, OBH's probation assessment data reported the number testing refusals. Among the 16,827 DUI cases in the 2018 probation assessment data, 4,210 cases had a documented testing refusal, representing a quarter of all cases in the dataset. It is not possible to determine if this testing refusal estimate would generalize to the DUI charged population as a whole.

With the linked probation assessment data, it was possible to explore differences in toxicology results by prior arrest involvement. Table 43 shows DUI case filings by alcohol confirmation levels for those who received an assessment. As the number of priors increased, both the mean and median BAC increased, which suggests a direct relationship between alcohol toxicology and prior conviction. Those with no priors had an average BAC of 0.158, which was lower than the average BAC for individuals with three or more prior offenses (0.189).

Table 43. Mean and median BAC for individuals who received probation assessments for DUI sentences, 2018

	N	Mean BAC	Median BAC
No Priors	7,152	0.158	0.153
1-2 Prior(s)	2,920	0.180	0.174
3 + Priors	601	0.189	0.188
Total	10,673	0.166	0.160

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health; CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 44 shows drugs detected in toxicology results stratified by history of DUI arrests for those who received an assessment. A higher percentage of those with no priors were drug or alcohol tested and tested positive for Delta 9-THC alone and with other drugs. Those with priors had lower rates of drug testing, which might signal an underreporting of Delta 9-THC detection.

Table 44. Drugs detected in toxicology testing for individuals who received probation assessments for DUI sentences, by number of prior DUI offenses, 2018

		No Priors	1-2 Prior(s)	3 + Priors	Overall
(%)		10,531 (62.6)	5,023 (29.9)	1,273 (7.6)	16,827
Drug Category					
Not Tested/Not Detected	Not Tested	2,875 (52.5)	1,953 (35.6)	652 (11.9)	5,480
	None Detected	*	*	0 (0.0)	*
Single Drug	Alcohol Only	5,860 (66.4)	2,459 (27.9)	508 (5.8)	8,827
	Delta 9-THC Only	524 (86.5)	80 (13.2)	*	606
	Single Other Drug	129 (51.4)	97 (38.6)	*	251
Polydrug	Alcohol and Delta 9-THC	705 (73.0)	220 (22.8)	41 (4.2)	966
	Alcohol and Other	172 (59.7)	88 (30.6)	28 (9.7)	288
	Delta 9-THC and Other	185 (69.5)	74 (27.8)	*	266
	Polydrug Not Alcohol or Delta 9-THC	72 (56.7)	45 (35.4)	10 (7.9)	127

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Crash Involvement

A quarter of DUI convicted drivers that received a probation assessment in 2018 were involved in a crash. As shown in Table 45, less than half (43%) of individuals involved in crashes did not report injuries and property damage associated with the events. However, a total of 909 individuals with probation assessments were involved in crashes with injuries, which underscores the public safety harms of impaired driving.

Table 45. Individuals who received probation assessments for DUI sentences and detailed crash involvement, 2018

N	16,827
Crash Involvement	
None	12,491 (74.2%)
Crash with No Injury and No Property Damage	1,893 (11.2)
Crash with Property Damage	1,516 (9.0)
Crash with Injury	334 (2.0)
Crash with Property Damage and Injury	575 (3.4)
Crash with Fatality	*
Crash with Property Damage and Fatality	*

Sum is greater than 100.0% due to rounding.

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

As seen in Table 46, there appears to be little difference in crash involvement by education level and race/ethnicity. However, females had a disproportionately higher rate of crash involvement. Although a higher proportion of American Indians/Alaskan Natives were not involved in crashes, the few cases in this category means this information should be interpreted with caution.



Table 46. Demographics for individuals who received probation assessments for DUI sentences, by crash involvement, 2018

		No Crash	Crash Involvement	Overall
n (%)		12,491 (74.2%)	4,336 (25.8%)	16,827
Gender	Male	9,260 (75.4)	3,023 (24.5)	12,283
	Female	3,231 (71.1)	1,313 (28.9)	4,544
Education	No HS Diploma/GED	2,092 (75.0)	696 (25.0)	2,788
	HS Diploma/GED	5,766 (74.8)	1,938 (25.1)	7,704
	Some College/College Graduate	4,633 (73.1)	1,702 (26.9)	6,335
Race/Ethnicity	White	10,412 (74.1)	3,633 (25.9)	14,045
	Black/African-American	676 (74.4)	233 (25.6)	909
	Hispanic Origin	876 (73.6)	315 (26.4)	1191
	American Indian/Alaskan Native	162 (81.4)	37 (18.6)	199
	Asian/ Pacific Islander	127 (72.2)	49 (27.8)	176
	Other	238 (77.5)	69 (22.5)	307

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Table 47 shows little variation in crash involvement by the history of prior DUI arrest, highlighting the public safety threat of all impaired drivers.

Table 47. Crash involvement for individuals who received probation assessments for DUI sentences, by number of priors DUIs, 2018

	No Crash	Crash	Overall
n (%)	12,491 (74.2)	4,336 (25.8)	16,827
Prior Arrest n (%)			
No Priors	7,846 (74.5)	2,685 (25.5)	10,531
1-2 Prior(s)	3,736 (74.4)	1,287 (25.6)	5,023
3 + Priors	909 (71.4)	364 (28.6)	1,273

Note: Sum is greater than 100.0% due to rounding.

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Colorado Department of Human Services, Office of Behavioral Health. Analyzed by Division of Criminal Justice, Colorado Department of Public Safety.

Table 48 illustrates the relationship between crash involvement and drugs detected in drivers, which varied by substances identified. Crash involvement was lowest among drivers who tested positive for Delta 9-THC alone (7%). However, 29% of drivers who tested positive for Delta 9-THC and alcohol were involved in a crash, which is similar to the prevalence for all sentenced drivers (26%). Drivers with polydrug toxicology with alcohol and other drugs or polydrug toxicology for other substances had the highest prevalence of crash involvement.



Table 48. Crash involvement for individuals who received probation assessments for DUI sentences, by drugs detected, 2018

		No Crash	Crash	Overall
		12,491 (74.2%)	4,336 (25.8%)	16,827
Not Tested/Not Detected	Not Tested	3,940 (71.9)	1,540 (28.1)	5,480
	None Detected	*	*	*
Single Drug	Alcohol Only	6,634 (75.2)	2,193 (24.8)	8,827
	Delta-9-THC Only	563 (92.9)	43 (7.1)	606
	Single Other Drug	179 (71.3)	72 (28.7)	251
Polydrug	Alcohol and Delta-9-THC	691 (71.5)	275 (28.5)	966
	Alcohol and Other	184 (63.9)	104 (36.1)	288
	Delta-9-THC and Other	210 (78.9)	56 (21.1)	266
	Polydrug Not Alcohol or Delta-9-THC	78 (61.4)	49 (38.5)	127

Note: Sum is greater than 100.0% due to rounding.

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Colorado Department of Human Services, Office of Behavioral Health. Analyzed by Division of Criminal Justice, Colorado Department of Public Safety.

Adjuncts to Treatment

Adjunct treatments for those with probation assessment data, stratified by prior DUI arrest, can be seen in Table 49. The most common adjunct was breath testing, and 71% of individuals were issued this treatment option (n=12,016), followed by the Victim Impact Panel at 26% (n=4,447). Although mandated medication for substance use disorders were the least common treatment adjuncts, individuals undergoing community supervision and/or drug treatment may still have utilized them.

Table 49 also shows adjuncts to treatment for each prior DUI arrest category for those who received a probation assessment. As the number of prior DUIs increased, individuals were increasingly mandated to undergo random urine testing, to use an Interlock device, to attend support groups, and to use substance use disorder medications, which suggests the more restrictive nature of these adjuncts compared to victim impact panels and breath testing.

Table 49. Treatment adjuncts for individuals who received probation assessments for DUI sentences, by number of priors DUI arrests, 2018

	Overall	No Priors	1-2 Prior(s)	3 + Priors
n	16,827	10,531	5,023	1,273
Breath Testing	12,016 (71.4%)	7,442 (70.7%)	3,766 (75.0%)	808 (63.5%)
Victim Impact Panels	4,447 (26.4)	2,852 (27.1)	1,304 (26.0)	291 (22.9)
Random Urine Testing	1,579 (9.4)	816 (7.7)	564 (11.2)	199 (15.6)
Interlock	987 (5.9)	421 (4.0)	433 (8.6)	133 (10.4)
Support Groups	484 (2.9)	177 (1.7)	198 (3.9)	109 (8.6)
Electronic Monitoring	290 (1.7)	165 (1.6)	99 (2.0)	*
Medication to Reduce Alcohol Use and/or Drug Use including Opioid Use Disorders	135 (0.8)	41 (0.4)	62 (1.2)	32 (2.5)

Percent is based on the number of unique cases in each prior DUI category and will not sum to 100%.

Note: * represents cell counts under 30 that were suppressed due to privacy concerns.

Data source: Probation assessment data, Colorado Department of Human Services, Office of Behavioral Health. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

SECTION FIVE

CONCLUSIONS

With the legalization of marijuana, DUID remains both a public health and safety issue of concern due to its association with impaired driving and crash risk, as CDPHE found in a recent literature review.³⁷ Although on the decline between 2016 and 2017, there were still 26,255 court cases with at least one DUI charge in Colorado in 2018, and of these, one out of eight cases involved an individual who tested positive for marijuana. This proportion likely undercounts marijuana impaired drivers due to barriers in collecting and analyzing comprehensive and meaningful toxicology data among suspected impaired drivers. Acting on concerns regarding one of the barriers, the cost of drug toxicology testing, the Colorado legislature provided increased funding to CBI to enable them to offer free drug and alcohol testing to law enforcement agencies investigating DUI cases. The funding went into effect in July 2019, and therefore subsequent reports will attempt to assess the legislation's preliminary impact on drug testing of DUI cases.

Despite the likely degree of underreporting of drug toxicology associated with DUI cases, the trends identified in this report mirror substance use patterns in Colorado identified in other sources of information. Firstly, this study identified alcohol and marijuana as the most commonly detected drugs involved in DUI court cases, and these are also the most frequently used drugs in Colorado according to national surveys.³⁸ In addition, this study identified that 75% of polydrug toxicology results indicated the presence of both alcohol and Delta 9-THC among drivers charged with DUI. Secondly, this study found a 37% rise in the presence of stimulants among individuals charged with DUI from 2016 to 2018, which aligns with a rise in methamphetamine-related treatment admissions, offenses, and drug overdose deaths in Colorado during that time.³⁹

This report documents high conviction rates (88%) for DUI charges overall, regardless of whether toxicology results were present. The results also suggest the influence of legal impairing levels for alcohol and marijuana in that having alcohol *per se* level associated with a DUI charge increased the conviction rate to 96%. Similarly, charges linked to a permissible inference level of Delta 9-THC increased convictions, but the effect size was smaller (91% conviction rate). Future reports will continue assess the influence of the permissible inference level on conviction rates.

Our findings also highlight emerging findings regarding the association between crash and substance use, which varied by drug type. Among all DUI convicted drivers, 26% were involved in crashes, compared to only 7% of drivers who tested positive for Delta 9-THC alone who were involved in crashes. However, crash involvement increased for drivers linked to a polydrug Delta 9-THC results, especially alcohol (29%). A CDPHE literature review also identified co-occurring alcohol and marijuana use as a risk factor for crash involvement.⁴⁰ Our study also found the highest rates of crash involvement for polydrug toxicology drugs involving

³⁷ Colorado Department of Public Health and Environment, Monitoring Health Concerns Related to Marijuana (2020). *Evidence statements*. See <https://marijuanahealthinfo.colorado.gov/evidence-statements>

³⁸ Substance Abuse and Mental Health Data Archive (2020). *Interactive NSDUH State Estimates*. See <https://pdas.samhsa.gov/saes/state>

³⁹ Colorado State Epidemiology Outcomes Workgroup. (2019). *Methamphetamine: Topical Brief Series*. Vol 1, Issue 1. See <https://www.coloradoseow.org/wp-content/uploads/2020/08/Colorado-SEOW-Methamphetamine-Brief.pdf>

⁴⁰ Colorado Department of Public Health and Environment, Monitoring Health Concerns Related to Marijuana (2020). (See footnote 33.)



alcohol and polydrug results not involving alcohol and or Delta 9-THC, such as methamphetamine. Similarly, studies involving drivers hospitalized with crash-related injuries have demonstrated the increased odds of crash culpability and serious injury for drivers testing positive for alcohol separately, and especially with polydrug involvement.⁴¹ Although all of these studies are still not able to estimate crash risk for drug impaired driving, improved enforcement, drug detection, and continued study will provide further actionable data to guide policy decision making.

⁴¹ See Drummer, O. H., Gerostamoulos, D., Di Rago, M., Woodford, N. W., Morris, C., Frederiksen, T., ... Wolfe, R. (2020). Odds of culpability associated with use of impairing drugs in injured drivers in Victoria, Australia. *Accident: Analysis and Prevention*, 135 (November 2019), 105389. <https://doi.org/10.1016/j.aap.2019.105389> and Hels, T., Lyckegaard, A., Simonsen, K. W., Steentoft, A., & Bernhoft, I. M. (2013). Risk of severe driver injury by driving with psychoactive substances. *Accident Analysis and Prevention*, 59, 346-356. <https://doi.org/10.1016/j.aap.2013.06.003>



Appendix A

DRE Category and Schedule of Drugs

DRE Category	Drug Category	Drug	Schedule	
CNS Depressant	Anesthetic	gamma-Hydroxybutyric acid (GHB)	I	
	Barbiturates	Butabarbital		
	Barbiturates	Butalbital		
	Barbiturates	Phenobarbital	IV	
	Benzodiazepines	Alprazolam	IV	
	Benzodiazepines	Clonazepam	IV	
	Benzodiazepines	Diazepam or Chlordiazepoxide	IV	
	Benzodiazepines	Diclozepam		
	Benzodiazepines	Demoxepam		
	Benzodiazepines	Etizolam		
	Benzodiazepines	Lorazepam	IV	
	Benzodiazepines	Midazolam	IV	
	Benzodiazepines	Nordiazepam	IV	
	Benzodiazepines	Oxazepam	IV	
	Benzodiazepines	Temazepam	IV	
	Benzodiazepines	Triazolam	IV	
	Benzodiazepines	Zolpidem	IV	
	Benzodiazepines	Zopiclone		
		Tranquilizer	Carisoprodol	IV
		Tranquilizer	Meprobamate	IV
CNS Stimulant	Stimulant	Modafinil	IV	
	Stimulant	Amphetamine	II	
	Stimulant	Cocaine	II	
	Stimulant	Methamphetamine	II	
	Stimulant	Phentermine	IV	
	Stimulant	Pseudoephedrine		
Dissociative Anesthetic	Anesthetic	Ketamine	III	
Hallucinogen		Lysergic acid diethylamide (LSD)	I	
	Sympathomimetic amine	Methylenedioxyamphetamine (MDA)	I	
	Sympathomimetic amine	Methylenedioxymethamphetamine (MDMA)	I	
Inhalant	Inhalant	Polyfluorinated ethane		
	Inhalant	Toluene		
Narcotic Analgesic	Kratom	Mitragynine		
	Opioid	Buprenorphine	V	
	Opioid	Codeine	II	
	Opioid	Fentanyl	II	
	Opioid	Heroin	I	
	Opioid	Hydrocodone	II	
	Opioid	Hydromorphone	II	
	Opioid	Methadone	II	



DRE Category	Drug Category	Drug	Schedule
Narcotic Analgesic	Opioid	Morphine	II
	Opioid	Oxycodone	II
	Opioid	Oxymorphone	II
	Opioid	Tapentadol	
	Opioid	Tramadol	
	Opioid	U-47700	
Cannabis	Cannabis	Cannabis	
Prescription Drug	Anesthetic	Bupivacaine	
	Anesthetic	Lidocaine	
	Anesthetic	Propofol	
	Antiarrhythmic	Flecainide	
	Antibiotic	Trimethoprim	
	Anticholinergic	Dicyclomine	
	Anticonvulsant	Carbamazepine	
	Anticonvulsant	Gabapentin	
	Anticonvulsant	Lacosamide	
	Anticonvulsant	Lamotrigine	
	Anticonvulsant	Levetiracetam	
	Anticonvulsant	Phenytoin	
	Anticonvulsant	Topiramate	
	Anticonvulsant	Valproic Acid	
	Antidepressant	Amitriptyline	
	Antidepressant	Bupropion	
	Antidepressant	Clomipramine	
	Antidepressant	Cyclobenzaprine	
	Antidepressant	Doxepin	
	Antidepressant	Duloxetine	
	Antidepressant	Mirtazapine	
	Antidepressant	Nortriptyline	
	Antidepressant	Trazodone	
	Antifungal	Fluconazole	
	Antihistamine	Cetirizine	
	Antihistamine	Chlorpheniramine	
	Antihistamine	Chlorcyclizine	
	Antihistamine	Diphenhydramine	
	Antihistamine	Doxylamine	
	Antihistamine	Hydroxyzine	
	Antihistamine	Promethazine	
	Antihypertensive	Diltiazem	
	Antihypertensive	Metoprolol	
	Antihypertensive	Verapamil	
	Antiparasitic	Levamisole	
	Antiplatelet	Ticlopidine	
	Antipsychotic	Aripiprazole	
	Antipsychotic	Brexpiprazole	
	Antipsychotic	Olanzapine	
	Antipsychotic	Quetiapine	



DRE Category	Drug Category	Drug	Schedule
Prescription Drugs	Antipsychotic	Ziprasidone	
	Antitussive	Dextromethorphan	
	SNRI	Atomoxetine	
	SSRI	Citalopram	
	SSRI	Fluoxetine	
	SSRI	Sertraline	
	SSRI	Venlafaxine	

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD.
Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix B

DUI Case Filings by Judicial District and County, 2016 - 2018

District	County	2016		2017		2018	
		Count	Rate (per 100,000 16 and older)	Count	Rate (per 100,000 16 and older)	Count	Rate (per 100,000 16 and older)
1	Gilpin	117	2,369	164	3,260	238	4,649
1	Jefferson	2,489	532	2,597	549	2,409	505
2	Denver	2,269	399	1,763	304	1,887	319
3	Huerfano	68	1,216	53	940	81	1,386
3	Las Animas	111	957	101	862	114	951
4	El Paso	2,750	512	3,074	561	3,150	562
4	Teller	176	870	207	997	238	1,123
5	Clear Creek	110	1,382	120	1,474	164	2,009
5	Eagle	568	1,303	527	1,196	483	1,084
5	Lake	70	1,176	81	1,331	69	1,122
5	Summit	395	1,502	411	1,548	470	1,741
6	Archuleta	85	793	70	630	75	653
6	La Plata	671	1,474	486	1,060	505	1,083
6	San Juan	8	1,365	1	165	4	618
7	Delta	204	816	166	658	156	610
7	Gunnison	186	1,361	187	1,330	153	1,068
7	Hinsdale		0	2	304	1	148
7	Montrose	224	680	220	655	298	873
7	Ouray	58	1,424	56	1,368	56	1,359
7	San Miguel	115	1,778	66	1,017	59	882
8	Jackson	6	529	10	874	16	1,375
8	Larimer	1,789	649	2,052	732	2,160	755
9	Garfield	633	1,379	681	1,470	618	1,314
9	Pitkin	150	969	173	1,114	159	1,018
9	Rio Blanco	43	853	78	1,563	60	1,209
10	Pueblo	656	500	556	418	628	467
11	Chaffee	115	705	173	1,032	165	963
11	Custer	18	448	44	1,035	54	1,251
11	Fremont	281	701	216	532	225	549
11	Park	78	530	85	560	126	800
12	Alamosa	189	1,534	192	1,549	156	1,249
12	Conejos	35	573	32	516	44	705
12	Costilla	25	814	28	898	31	982
12	Mineral	4	614	8	1,239	8	1,199
12	Rio Grande	72	813	64	725	84	952
12	Saguache	24	471	19	361	33	607



District	County	2016		2017		2018	
		Count	Rate (per 100,000 16 and older)	Count	Rate (per 100,000 16 and older)	Count	Rate (per 100,000 16 and older)
13	Kit Carson	65	1,054	52	910	35	613
13	Logan	103	561	113	620	145	797
13	Morgan	165	775	209	978	130	600
13	Phillips	15	449	24	717	29	863
13	Sedgwick	11	562	6	317	12	643
13	Washington	23	585	15	374	15	391
13	Yuma	37	480	27	352	28	368
14	Grand	167	1,329	200	1,571	227	1,760
14	Moffat	149	1,482	139	1,380	113	1,113
14	Routt	165	815	229	1,107	263	1,241
15	Baca	19	663	11	383	13	452
15	Cheyenne	20	1,414	10	706	7	484
15	Kiowa	9	828	7	634	3	270
15	Prowers	121	1,332	89	974	93	1,010
16	Bent	15	308	27	535	41	816
16	Crowley	14	296	37	711	25	484
16	Otero	96	674	143	995	113	785
17	Adams	2,853	755	2,830	735	2,579	656
17	Broomfield	235	447	202	372	233	417
18	Arapahoe	3,157	630	2,413	475	2,035	395
18	Douglas	1,016	400	910	346	809	298
18	Elbert	98	477	97	461	89	412
18	Lincoln	37	812	41	903	50	1,093
19	Weld	1,378	613	1,527	655	1,650	683
20	Boulder	1,426	537	1,277	477	1,281	472
21	Mesa	834	695	811	667	786	637
22	Dolores	11	661	8	480	5	297
22	Montezuma	213	1,029	237	1,136	269	1,282

Data source: State Judicial Department and Denver County Court, Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix C

DUI Case by Arresting Agency, 2016 and 2017

Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Adams County Sheriff's Office	576	566	370	-35.8%
Adams State Public Safety	4	4	2	-50.0%
Alamosa Police Dept	79	91	72	-8.9%
Alamosa Sheriff's Office	22	44	29	31.8%
Alma Police Dept	2			-100.0%
Antonito Police Dept	8	1	3	-62.5%
Arapahoe County Sheriff's Office	280	204	301	7.5%
Arapahoe District Attorney	5	1		-100.0%
Archuleta County Sheriff's Office	19	15	21	10.5%
Arvada Police Dept	459	467	388	-15.5%
Aspen Police Dept	41	50	62	51.2%
Ault Police Dept	8	7	3	-62.5%
Aurora Police Dept	2,221	1,570	1,255	-43.5%
Avon Police Dept	101	130	107	5.9%
Baca County Sheriff's Office	4	4	8	100.0%
Basalt Police Dept	47	27	22	-53.2%
Bayfield Police Dept	9	3	5	-44.4%
Bent County Sheriff's Office	5	18	19	280.0%
Berthoud Police Dept	2	1	3	50.0%
Black Hawk Police Dept	31	40	29	-6.5%
Blue River Police Dept			4	
Boulder County Sheriff's Office	217	190	150	-30.9%
Boulder District Attorney	1	3	1	0.0%
Boulder Police Dept	479	351	279	-41.8%
Breckenridge Police Dept	62	74	78	25.8%
Brighton Police Dept	233	222	210	-9.9%
Broomfield County Sheriff's Office	234	199	229	-2.1%
Brush Police Dept	32	12	11	-65.6%
Buena Vista Police Dept	27	27	23	-14.8%
Burlington Police Dept	18	19	10	-44.4%
Calhan Town Marshal	6	1	1	-83.3%
Campo Police Department	1			-100.0%
Canon City Police Dept	52	62	62	19.2%
Carbondale Police Dept	86	102	147	70.9%
Castle Rock Police Dept	181	163	128	-29.3%
Cedaredge Marshall Office	3	5	5	66.7%
Centennial Police Dept	280	174	7	-97.5%
Center Police Dept	10	3	6	-40.0%
Chaffee County Sheriff's Office	22	26	37	68.2%
Chatfield State Park Rangers	1	1		-100.0%
Cherry Creek State Park-Aurora	2	1	3	50.0%



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Cherry Hills Police Dept	34	53	41	20.6%
Cheyenne County Sheriff's Office	19	7	4	-78.9%
Clear Creek Sheriff's Office	21	28	64	204.8%
CO Div of Gaming-Gilpin			1	
CO Div of Wildlife	2	1	5	150.0%
CO Div of Wildlife Central Cty	1			-100.0%
CO Div of Wildlife Craig			1	
CO Div of Wildlife Hot Sulphur			1	
CO Div of Wildlife Pueblo	2	2	2	0.0%
CO Div Parks Law Enf	8	13	10	25.0%
CO Div Wildlife Jackson			1	
CO MH Institute at Pueblo	2	5		-100.0%
CO School of Mines PD	6	1	1	-83.3%
CO Springs Police Dept	1,614	1,899	1,899	17.7%
CO State University PD	181	200	129	-28.7%
Collbran Town Marshall	3	1		-100.0%
Colorado Attorney General	1			-100.0%
Colorado State Patrol	4,586	4,821	5,220	13.8%
Columbine Valley Police Dept	16	17	25	56.3%
Commerce City Police Dept	201	219	229	13.9%
Conejos County Sheriff's Office	12	4	9	-25.0%
Cortez Police Dept	133	126	159	19.5%
Costilla County Sheriff's Office	19	21	13	-31.6%
Teller County County Court			1	
Craig Police Dept	75	51	42	-44.0%
Creede Police Dept	1			-100.0%
Crested Butte Marshal	18	13	15	-16.7%
Cripple Creek Police Dept	12	24	41	241.7%
Crowley County Sheriff's Office	11	30	19	72.7%
Custer County Sheriff's Office	16	41	48	200.0%
Dacono Police Dept	70	41	30	-57.1%
DeBeque Police Dept	6	3	1	-83.3%
Del Norte Police Dept	16	6	4	-75.0%
Delta County Sheriff's Office	20	26	17	-15.0%
Delta District Attorney	1			-100.0%
Delta Police Dept	50	42	40	-20.0%
Denver Police Dept	2,269	1,791	1,888	-16.8%
Dillon Police Dept	39	23	20	-48.7%
Teller County District Court			1	
Dolores County Sheriff's Office	7	4	2	-71.4%
Douglas County Sheriff's Office	397	360	289	-27.2%
Douglas District Atty	1			-100.0%
Durango Police Dept	280	221	201	-28.2%
Eagle County Drug Task Force	1			-100.0%
Eagle Police Dept	73	49	40	-45.2%
Eagle Sheriff's Office	96	67	85	-11.5%
Eaton Police Dept	11	14	11	0.0%



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Edgewater Police Dept	194	128	61	-68.6%
El Paso County Sheriff's Office	424	359	451	6.4%
El Paso District Attorney	23	15	11	-52.2%
Elbert County Sheriff's Office	76	68	58	-23.7%
Elizabeth Police Dept	11	7	9	-18.2%
Empire Police Dept			1	
Englewood Police Dept	180	173	147	-18.3%
Erie Police Dept	83	69	71	-14.5%
Estes Park Police Dept	58	45	46	-20.7%
Evans Police Dept	90	104	112	24.4%
Fairplay Police Dept	3	3	1	-66.7%
Federal Heights Police Dept	37	72	59	59.5%
Firestone Police Dept	21	18	40	90.5%
Florence Police Dept	22	15	24	9.1%
Fort Lupton Police Dept	112	148	182	62.5%
Fort Morgan Police Dept	52	90	56	7.7%
Fountain Police Dept	141	185	157	11.3%
Fowler Police Dept	14		1	-92.9%
Frederick Police Dept	52	42	49	-5.8%
Fremont County Sheriff's Office	150	88	75	-50.0%
Fremont District Attorney	1			-100.0%
Frisco Police Dept	48	42	36	-25.0%
Fruita Police Dept	20	27	19	-5.0%
Ft Collins Police Dept	464	441	495	6.7%
Ft Lewis St College Security	3	10	6	100.0%
Garden City PD			12	
Garfield County Sheriff's Office	107	101	115	7.5%
Garfield District Attorney	5	6	1	-80.0%
Georgetown Police Dept	8	11	8	0.0%
Gilpin County Sheriff's Office	48	92	144	200.0%
Glendale Police Dept	23	27	18	-21.7%
Glenwood Springs Police Dept	155	211	110	-29.0%
Golden Police Dept	131	189	199	51.9%
Granby Police Department	15	21	17	13.3%
Grand County Sheriff's Office	55	69	91	65.5%
Grand District Attorney	1			-100.0%
Grand Junction Police Dept	400	346	275	-31.3%
Greeley Police Dept	350	442	493	40.9%
Green Mountain Falls Marshall	2			-100.0%
Greenwood Village Police Dept	136	124	123	-9.6%
Gunnison County Sheriff's Office	38	47	24	-36.8%
Gunnison Police Dept	58	71	57	-1.7%
Haxtun Police Dept	2		3	50.0%
Hayden Police Dept	1	4	5	400.0%
Highline State Park -Loma	1			-100.0%
Hinsdale County Sheriff's Office		2	1	
Holyoke Police Dept	10	11	8	-20.0%



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Hotchkiss Police Dept	1	4	4	300.0%
Hudson Municipal Court		1		
Hudson Police Dept	2	4	23	1050.0%
Huerfano County Sheriff's Office	2	11	39	1850.0%
Huerfano District Attorney	3			-100.0%
Hugo Marshal	1	2	1	0.0%
Idaho Springs Police Dept	25	33	37	48.0%
Ignacio Police Dept	5	3	5	0.0%
Island Acres St Pk. - Palisade			1	
Jackson County Sheriff's Office	5	9	14	180.0%
Jackson Lake State Park-Orchard		2		
Jefferson County Sheriff's Office	313	384	307	-1.9%
Jefferson District Attorney		1		
Johnstown Police Dept	32	28	42	31.3%
Keenesburg Police Dept	3	2	3	0.0%
Kersey Police Dept	5	10	12	140.0%
Kiowa City Police Dept.	2	4	1	-50.0%
Kiowa County Sheriff's Office	8	3	1	-87.5%
Kit Carson County Sheriff's Office	26	21	10	-61.5%
Kremmling Police Dept	4	7	8	100.0%
La Jara Police Dept	3	3	13	333.3%
La Junta Police Dept	18	49	45	150.0%
La Plata County Sheriff's Office	198	113	116	-41.4%
Lafayette Police Dept	81	97	92	13.6%
Lake County Sheriff's Office	38	51	37	-2.6%
Lakeside Police Dept	6	18	17	183.3%
Lakewood Police Dept	606	534	532	-12.2%
Lamar Police Dept	67	41	43	-35.8%
Larimer County Sheriff's Office	487	548	665	36.6%
Larimer District Attorney	2		4	100.0%
Las Animas County Sheriff's Office	11	8	17	54.5%
LaSalle Police Dept	33	27	26	-21.2%
Leadville Police Dept	18	12	18	0.0%
Limon Police Dept	6	15	17	183.3%
Lincoln County Sheriff's Office	7	5	5	-28.6%
Littleton Police Dept	126	91	96	-23.8%
Lochbuie Police Dept	33	29	19	-42.4%
Log Lane Police Dept	4	24	7	75.0%
Logan County Sheriff's Office	46	31	70	52.2%
Lone Tree Police Dept	92	83	74	-19.6%
Longmont Police Dept	380	340	350	-7.9%
Louisville Police Dept	65	99	95	46.2%
Loveland Police Dept	359	490	474	32.0%
Manassa Police Dept		1		
Mancos Police Dept	2	2		-100.0%
Manitou Springs Police Dept	60	122	94	56.7%
Manzanola Police Dept		1		



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Mead Police Department		1	1	
Meeker Police Dept	8	7	12	50.0%
Mesa County Sheriff's Office	158	153	175	10.8%
Mesa District Attorney		2	9	
Metro Auto Theft Task Force	1			-100.0%
Milliken Police Dept	38	37	19	-50.0%
Mineral County Sheriff's Office	1		1	0.0%
Moffat County Sheriff's Office	28	17	7	-75.0%
Moffat District Attorney	1			-100.0%
Monte Vista Police Dept	29	18	37	27.6%
Montezuma County Sheriff's Office	31	54	37	19.4%
Montrose County Sheriff's Office	39	38	51	30.8%
Montrose County Sheriff's Office-Nucla	4		1	-75.0%
Montrose Police Dept	84	81	108	28.6%
Monument Police Dept	21	20	33	57.1%
Morgan County Sheriff's Office	32	34	17	-46.9%
Morrison Police Dept	20	26	85	325.0%
Mountain View Police Dept	22	15	6	-72.7%
Mountain Village Police Dept	4	3	3	-25.0%
Mt. Crested Butte Police Dept	33	29	24	-27.3%
Nederland Marshal's Office	8		5	-37.5%
New Castle Police Dept	18	7	19	5.6%
North Metro Task Force	2	5		-100.0%
North Sterling Res State Park	1			-100.0%
Northglenn Police Dept	258	224	264	2.3%
Norwood Police Department		3	1	
Nunn Police Dept	1		4	300.0%
Oak Creek Police Dept	1	5	5	400.0%
Olathe Police Dept	7	7	7	0.0%
Otero County Sheriff's Office	7	19	5	-28.6%
Ouray Police Dept	5	5	7	40.0%
Ouray Sheriff's Office	21	14	14	-33.3%
Pagosa Springs Police Dept	37	29	24	-35.1%
Palisade Police Dept	17	21	11	-35.3%
Palmer Lake Police Dept	4	4		-100.0%
Paonia Police Dept	2	4	5	150.0%
Parachute Police Dept	43	27	21	-51.2%
Park County Sheriff's Office	50	57	99	98.0%
Park District Attorney		1		
Parker Police Dept	189	158	114	-39.7%
Phillips County Sheriff's Office	1	13	17	1600.0%
Pikes Peak Community College			1	
Pitkin County Sheriff's Office	58	70	67	15.5%
Pitkin District Attorney	1	5		-100.0%
Platteville Police Dept	32	21	21	-34.4%
Prowers County Sheriff's Office	31	31	24	-22.6%
Pueblo Community College PD	1			-100.0%



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
Pueblo County Sheriff's Office	173	148	136	-21.4%
Pueblo Police Dept	334	269	318	-4.8%
Pueblo State Park Rangers	3	11	11	266.7%
Rangely Police Dept	16	44	19	18.8%
Red Rocks Community College Police Dept	3	1	4	33.3%
Ridgway Marshall's Office	3	1	3	0.0%
Rifle Gap/Falls St Pk Rangers	1		1	0.0%
Rifle Police Dept	63	55	64	1.6%
Rio Blanco County Sheriff's Office	14	21	21	50.0%
Rio Grande County Sheriff's Office	9	16	7	-22.2%
Rocky Ford Police Dept	8	6	6	-25.0%
Routt County Sheriff's Office	21	34	32	52.4%
Sagauche County Sheriff's Office	8	5	7	-12.5%
Salida Police Dept	39	83	67	71.8%
San Juan County Sheriff's Office	6	1	4	-33.3%
San Miguel County Sheriff's Office	16	15	15	-6.3%
San Miguel District Attorney	1			-100.0%
Sedgwick County Sheriff's Office	7	6	10	42.9%
Sheridan Police Dept	74	49	48	-35.1%
Silt Police Dept	8	9	27	237.5%
Silverthorne Police Dept	29	34	26	-10.3%
Simla Police Dept	2	6	8	300.0%
Snowmass Village Police Dept	16	20	14	-12.5%
South Fork Police Department		2	2	
Southern Ute Tribal Police	1			-100.0%
Springfield Police Dept	8	2	3	-62.5%
Stagecoach State Park Rangers		2		
Steamboat Springs Police Dept	74	80	92	24.3%
Sterling Police Dept	34	58	51	50.0%
Stratton Police Dept	2		1	-50.0%
Summit County Sheriff's Office	84	88	132	57.1%
Teller County Sheriff's Office	80	86	81	1.3%
Teller District Attorney 4th	2	1		-100.0%
Telluride Marshal	81	31	22	-72.8%
Thornton Police Dept	455	514	467	2.6%
Timnath Police Dept	6	7	11	83.3%
Trinidad Police Dept	31	33	29	-6.5%
Trinidad State Park Rangers			5	
Univ CO at CO Springs	1	5	6	500.0%
Univ CO Health Sciences PD-Denver	6	4	7	16.7%
Univ Hlth Scien PD Fitzsimmons	7	3	1	-85.7%
Univ of CO Police	65	30	101	55.4%
Univ of Northern CO PD	3	4		-100.0%
Vail Police Dept	61	52	30	-50.8%
Washington County Sheriff's Office			7	
Weld County Sheriff's Office	134	166	161	20.1%
Weld District Attorney		1	1	



Arresting Agency	2016	2017	2018	Percent Change from 2016 to 2018
West Metro Task Force	40	44	48	20.0%
Westminster Police Dept	341	441	460	34.9%
Wheat Ridge Police Dept	121	114	112	-7.4%
Wiggins Police Dept		1	1	
Windsor Police Dept	44	56	57	29.5%
Winter Park/Fraser Police Dept	55	74	66	20.0%
Woodland Park Police Dept	48	67	70	45.8%
Wray Police Dept	1	4	3	200.0%
Yuma County Sheriff's Office	6	9	11	83.3%
Yuma Police Dept	14	4	4	-71.4%

Data source: State Judicial Department and Denver County Court, Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix D

Common Initial Charges, Excluding DUI Charges, 2018

Initial Charge	Count
1 CARELESS DRIVING	7,554
2 FAILURE TO DISPLAY PROOF OF INSURANCE	4,461
3 LANE USAGE VIOLATION	4,435
4 DRIVING UNDER RESTRAINT	2,671
5 ALCOHOL-OPEN CONTAINER/DRINK IN VEHICLE	2,101
6 DRIVER'S LICENSE-DRIVING W/OUT	1,851
7 SPEEDING 10-19 OVER LIMIT	1,698
8 RECKLESS DRIVING	1,395
9 CONTROLLED SUB-POSS SCH 1/2/FL/KT/CT	1,053
10 NO INSURANCE-DRIVER	1,010
11 DRIVING UNDER RESTRAINT-ALCOHOL-RELATED	936
12 FAILING TO REPORT ACCIDENT-CALL POLICE	891
13 HEADLAMPS-FAILURE TO DISPLAY	707
14 NO INSURANCE-OWNER	672
15 DRUG PARAPHERNALIA-POSSESS	666
16 LEAVING SCENE/ACCIDENT-DAMAGE ONLY	648
17 VIOLATION P/O-CRIMINAL	618
18 CHILD ABUSE-KNOWINGLY/RECKLESS-NO INJURY	532
19 DRIVING AFTER REVOCATION PROHIBITED (HTO)	518
20 ALCOHOL-UNDER 21- POSSESS/CONSUMP	496
21 SEAT BELT NOT USED	491
22 LICENSE PLATES-EXPIRED	489
23 SIGNALING VIOLATION	471
24 LEAVING SCENE/ACCIDENT-UNATTENDED VEH	464
25 OBSTRUCTING A PEACE OFFICER	455
26 SPEEDING 20-24 OVER LIMIT	451
27 WEAPON-PROHIBITED USE-DRUNK W/GUN	437
28 MARIJUANA-POSSESS OPEN CONTAINER IN VEH	424
29 CONTROLLED SUBSTANCE-POSS SCH 3/4/5	423
30 CARELESS DRIVING RESULTING IN INJURY	417
31 SPEEDING 25-39 OVER LIMIT	415
32 FAIL OBEY TRAFFIC CONTROL DEVICE	411
33 RED LIGHT-FAIL TO STOP	410
34 MARIJUANA-UNDER21- POSSESS/CONSUMP	374
35 TURNING IMPROPERLY	373
36 RESISTING ARREST	369
37 REGISTRATION-FICTITIOUS PLATE	350
38 TURNING W/O SIGNALING	309
39 SPEEDING 5-9 OVER LIMIT	292
40 VEHICULAR ELUDING	261

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix E

Common Final Charges, Excluding DUI, 2018

Final Charge	Count
1 CARELESS DRIVING	7,560
2 LANE USAGE VIOLATION	4,488
3 FAILURE TO DISPLAY PROOF OF INSURANCE	4,456
4 DRIVING UNDER RESTRAINT	2,630
5 ALCOHOL-OPEN CONTAINER/DRINK IN VEHICLE	2,098
6 DRIVER'S LICENSE-DRIVING W/OUT	1,849
7 SPEEDING 10-19 OVER LIMIT	1,674
8 RECKLESS DRIVING	1,585
9 CONTROLLED SUB-POSS SCH 1/2/FL/KT/CT	1,017
10 NO INSURANCE-DRIVER	1,007
11 DRIVING UNDER RESTRAINT-ALCOHOL-RELATED	960
12 FAILING TO REPORT ACCIDENT-CALL POLICE	885
13 HEADLAMPS-FAILURE TO DISPLAY	699
14 NO INSURANCE-OWNER	669
15 DRUG PARAPHERNALIA-POSSESS	667
16 LEAVING SCENE/ACCIDENT-DAMAGE ONLY	650
17 VIOLATION P/O-CRIMINAL	594
18 DRIVING AFTER REVOCATION PROHIBITED (HTO	517
19 CHILD ABUSE-KNOWINGLY/RECKLESS-NO INJURY	516
20 ALCOHOL-UNDER 21- POSSESS/CONSUMP	491
21 SEAT BELT NOT USED	489
22 LICENSE PLATES-EXPIRED	487
23 LEAVING SCENE/ACCIDENT-UNATTENDED VEH	467
24 SIGNALING VIOLATION	463
25 OBSTRUCTING A PEACE OFFICER	455
26 CONTROLLED SUBSTANCE-POSS SCH 3/4/5	441
27 SPEEDING 20-24 OVER LIMIT	441
28 WEAPON-PROHIBITED USE-DRUNK W/GUN	437
29 MARIJUANA-POSSESS OPEN CONTAINER IN VEH	423
30 FAIL OBEY TRAFFIC CONTROL DEVICE	411
31 RED LIGHT-FAIL TO STOP	409
32 CARELESS DRIVING RESULTING IN INJURY	408
33 SPEEDING 25-39 OVER LIMIT	403
34 MARIJUANA-UNDER21- POSSESS/CONSUMP	378
35 TURNING IMPROPERLY	369
36 RESISTING ARREST	362
37 REGISTRATION-FICTITIOUS PLATE	352
38 TURNING W/O SIGNALING	309
39 SPEEDING 5-9 OVER LIMIT	304
40 UNSAFE OR DEFECTIVE VEHICLE	262

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix F

Final DUI Charges by Initial Charge, 2018

	Aggregate Initial Charge										
	Overall	UDD	DWAI	DUI	DWAI 1-2 Prior	DUI 1- 2 Prior	DWAI 3+ Prior	DUI 3+ Prior	VEH. ASSAULT	VEHI. HOMICIDE	OTHER
n	26,255	85	2,792	21,351	153	584	39	1,113	84	28	26
Aggregate Final Charge n (%)											
UDD	119 (0.5)	81 (95.3)	4 (0.1)	33 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (3.8)
DWAI	8,568 (32.6)	3 (3.5)	2,682 (96.1)	5,838 (27.3)	0 (0.0)	25 (4.3)	2 (5.1)	4 (0.4)	0 (0.0)	0 (0.0)	14 (53.8)
DUI	12,992 (49.5)	0 (0.0)	14 (0.5)	12,937 (60.6)	1 (0.7)	11 (1.9)	3 (7.7)	22 (2.0)	0 (0.0)	0 (0.0)	4 (15.4)
DWAI 1-2 Prior	1,042 (4.0)	0 (0.0)	34 (1.2)	814 (3.8)	152 (99.3)	33 (5.7)	1 (2.6)	4 (0.4)	0 (0.0)	0 (0.0)	4 (15.4)
DUI 1-2 Prior	2,038 (7.8)	0 (0.0)	3 (0.1)	1,488 (7.0)	0 (0.0)	507 (86.8)	0 (0.0)	38 (3.4)	0 (0.0)	0 (0.0)	2 (7.7)
DWAI 3+ Prior	37 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	29 (74.4)	8 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)
DUI 3+ Prior	1,056 (4.0)	0 (0.0)	0 (0.0)	16 (0.1)	0 (0.0)	4 (0.7)	4 (10.3)	1,032 (92.7)	0 (0.0)	0 (0.0)	0 (0.0)
VEH. ASSAULT	78 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	77 (91.7)	0 (0.0)	1 (3.8)
VEH. HOMICIDE	29 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.2)	28 (100.0)	0 (0.0)
OTHER	296 (1.1)	1 (1.2)	55 (2.0)	225 (1.1)	0 (0.0)	4 (0.7)	0 (0.0)	5 (0.4)	6 (7.1)	0 (0.0)	-

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix G

DUI Final Charge by Disposition, 2018

	Guilty	Deferred Judgment	Deferred Dismissed	Dismissed	Diversion	Not Guilty	Awaiting Disposition	Sum
DUI Final Charge								
UDD	88	3	7	20			1	119
DWAI	7,264	620	394	223	5	10	52	8,568
DUI	8,127	538	279	2,106	44	125	1,773	12,992
DWAI 1-2 Prior	1,017	12	2	1			10	1,042
DUI 1-2 Prior	1,896	11		56	1	5	69	2,038
DWAI 3+ Prior	31	1		3			2	37
DUI 3+ Prior	818	18		79		11	130	1,056
VEHICULAR ASSAULT	55	2		9			12	78
VEHICULAR HOMICIDE	16			7		1	5	29
Non- DUI Final Charge								
ALCOHOL-UNDER 21- POSSESS/CONSUMP	2							2
ASSAULT 3-KNOW/RECKLESS CAUSE INJURY	1							1
CARELESS DRIVING	89	3	2	1			1	96
CONTROLLED SUBSTANCE-POSS SCH 3/4/5	1							1
CONTROLLED SUBSTANCE-UNLAWFUL USE	1							1
CRIMINAL MISCHIEF-\$20,000-\$100,000	1							1
CRIMINAL MISCHIEF-UNDER \$300							1	1
DISOBEY POLICE OFFICER	1							1
DISORDERLY CONDUCT-OFFENSIVE GESTURE	1							1
DISORDERLY CONDUCT-UNREASONABLE NOISE	1							1
DRIVER'S LICENSE-PERMIT UNAUTH PERSON/DR	2							2
DRIVING UNDER RESTRAINT-ALCOHOL-RELATED	1							1
FAILED TO DRIVE IN SINGLE LANE	1							1
FALSE REPORTING-FALSE IDENTIFICATION	1							1
FOLLOWING TOO CLOSELY		1						1
HARASSMENT-STRIKE/SHOVE-ETHNIC INTIMIDAT	1							1
IMPROPER MOUNTAIN DRIVING	4							4
LEAVING SCENE/ACCIDENT-UNATTENDED VEH	1							1
MARIJUANA-UNDER21- POSSESS/CONSUMP				1				1
PARKS/REC PASS-FAIL TO SHOW UPON REQUEST	1							1
RECKLESS DRIVING	154	7						161
REGISTRATION-FICTITIOUS PLATE	1							1
SPEEDING 10-19 OVER LIMIT	1							1
SPEEDING TOO FAST FOR CONDITIONS	2							2
SPOT/AUXILIARY LAMP VIOLATION	1							1
TURNING W/O SIGNALING	1							1
UNSAFE OR DEFECTIVE VEHICLE	4							4



	Guilty	Deferred Judgment	Deferred Dismissed	Dismissed	Diversion	Not Guilty	Awaiting Disposition	Sum
VEHICULAR ASSAULT-RECKLESS	3						1	4
VEHICULAR ELUDING	1							1
Total	19,590	1,216	684	2,506	50	152	2,057	26,255

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix H

Top 20 Common Final Charges Associated with Alcohol Presence, Excluding DUI, 2018

Final Charge	Number
CARELESS DRIVING	4,141
LANE USAGE VIOLATION	2,634
FAILURE TO DISPLAY PROOF OF INSURANCE	2,265
ALCOHOL-OPEN CONTAINER/DRINK IN VEHICLE	1,162
DRIVING UNDER RESTRAINT	1,105
SPEEDING 10-19 OVER LIMIT	1,036
DRIVER'S LICENSE-DRIVING W/OUT	952
RECKLESS DRIVING	710
NO INSURANCE-DRIVER	491
FAILING TO REPORT ACCIDENT-CALL POLICE	427
HEADLAMPS-FAILURE TO DISPLAY	409
DRIVING UNDER RESTRAINT-ALCOHOL-RELATED	393
NO INSURANCE-OWNER	357
ALCOHOL-UNDER 21- POSSESS/CONSUMP	328
LEAVING SCENE/ACCIDENT-DAMAGE ONLY	276
LICENSE PLATES-EXPIRED	273
SIGNALING VIOLATION	270
SPEEDING 20-24 OVER LIMIT	269
SPEEDING 25-39 OVER LIMIT	246
FAIL OBEY TRAFFIC CONTROL DEVICE	241

Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix I

Top 20 Common Final Charges Associated with Delta 9-THC Presence, Excluding DUI, 2018

Charge	Count
CARELESS DRIVING	665
FAILURE TO DISPLAY PROOF OF INSURANCE	437
LANE USAGE VIOLATION	434
SPEEDING 10-19 OVER LIMIT	280
MARIJUANA-UNDER21- POSSESS/CONSUMP	240
DRIVING UNDER RESTRAINT	239
MARIJUANA-POSSESS OPEN CONTAINER IN VEH	194
RECKLESS DRIVING	181
DRIVER'S LICENSE-DRIVING W/OUT	179
ALCOHOL-OPEN CONTAINER/DRINK IN VEHICLE	165
DRUG PARAPHERNALIA-POSSESS	145
CONTROLLED SUB-POSS SCH 1/2/FL/KT/CT	129
NO INSURANCE-OWNER	90
NO INSURANCE-DRIVER	88
HEADLAMPS-FAILURE TO DISPLAY	84
SEAT BELT NOT USED	82
LICENSE PLATES-EXPIRED	81
ALCOHOL-UNDER 21- POSSESS/CONSUMP	76
CONTROLLED SUBSTANCE-POSS SCH 3/4/5	71
SIGNALING VIOLATION	63

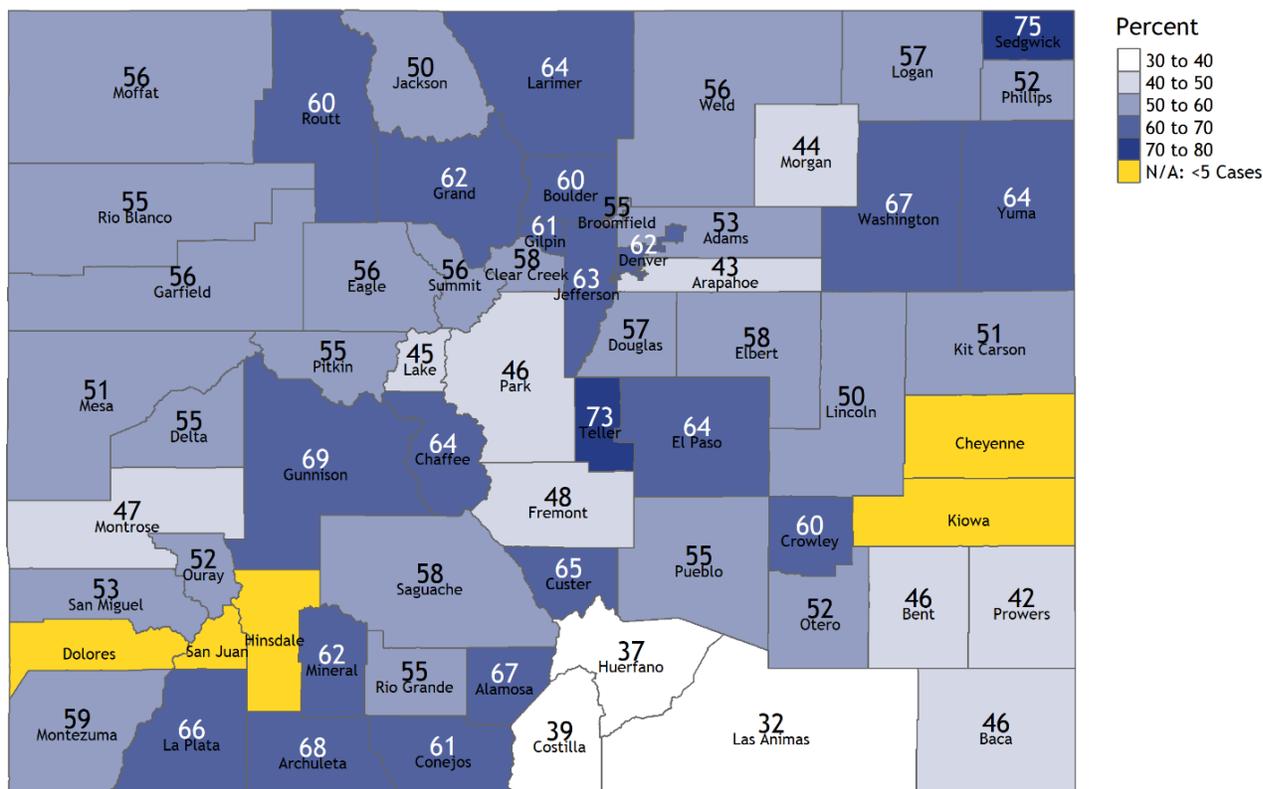
Data source: State Judicial Department and Denver County Court. Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix J

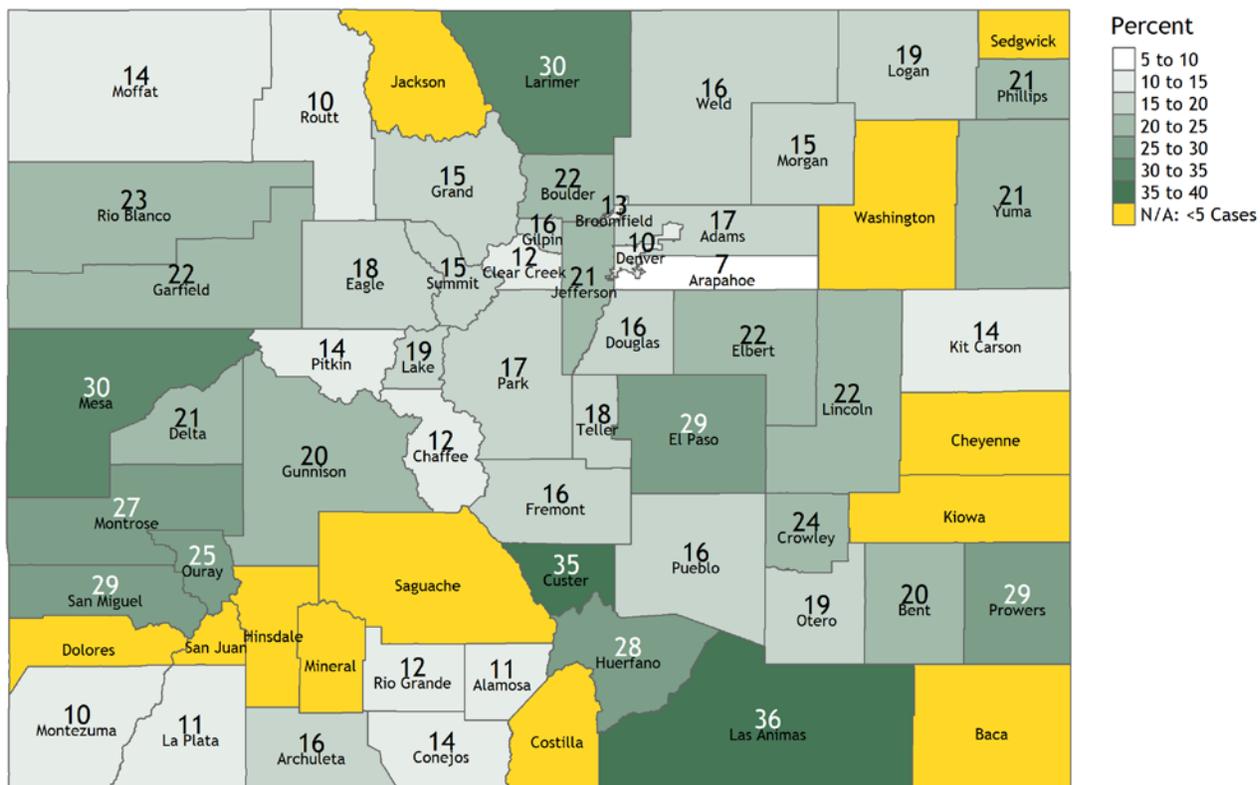
Regional Toxicology Testing

Percent of DUI Case Filings with Matching Toxicology Results for Alcohol, 2018



Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Percent of DUI Case Filings with Matching Toxicology Results for Cannabinoids, 2018



Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Appendix K

Case Filings and Drugs Detected, 2016 -2018

Drug	2016	2017	2018
Alcohol	15,495	15,099	14,484
Marijuana (Delta 9-THC)	2,489	2,742	2,900
Methamphetamine	567	632	747
Cocaine	337	354	449
Alprazolam	481	367	273
Clonazepam	206	184	150
Diazepam or Chlordiazepoxide	165	154	188
Zolpidem	107	105	106
Lorazepam	115	129	100
Amphetamine	33	40	82
Oxycodone	125	106	67
Morphine	145	115	63
Tramadol	49	45	42
Codeine	16	34	35
Heroin	7	24	33
Hydrocodone	49	42	30
Methadone	33	21	29
Midazolam	12	12	17
Buprenorphine	*	21	16
Polyfluorinated ethane	8	20	16
Fentanyl	6	8	15
Carisoprodol	41	21	14
Butalbital	15	11	13
MDMA	17	24	12
Phenobarbital	5	5	10
Temazepam	*	*	9
Diphenhydramine	15	18	8
Citalopram	33	11	8
Ketamine	*	7	8
Hydroxyzine	13	5	7
MDA	*	*	7
Lamotrigine	20	14	5
Hydromorphone	0	*	5
Meprobamate	10	9	*
Sertraline	11	7	*
Trazodone	29	5	*
Levetiracetam	*	*	*
Lidocaine	9	*	*
Venlafaxine	23	17	*
Fluoxetine	14	10	*
Trimethoprim	*	*	*
Topiramate	13	6	*
Promethazine	6	*	*
Cyclobenzaprine	7	*	*



Drug	2016	2017	2018
Dextromethorphan	*	*	*
Amitriptyline	7	*	*
Cetirizine	*	*	*
Doxylamine	*	*	*
Mirtazapine	6	*	*
Carbamazepine	*	*	*
Valproic Acid	*	*	*
Chlorpheniramine	*	0	*
Fluconazole	*	*	*
Metoprolol	0	*	*
Mitragynine	0	*	*
Oxymorphone	*	0	*
Phenytoin	*	0	*
Verapamil	0	*	*
Atomoxetine	0	0	*
Butabarbital	0	0	*
Clomipramine	0	0	*
Diclozepam	0	0	*
Gabapentin	0	0	*
LSD	0	0	*
Tapentadol	0	0	*
Aripiprazole	0	*	0
Brexiprazole	0	*	0
Bupivacaine	*	*	0
Demoxepam	0	*	0
Dicyclomine	*	0	0
Diltiazem	*	0	0
Etizolam	*	*	0
Flecainide	0	*	0
Lacosamide	*	0	0
Levamisole	0	*	0
Olanzapine	*	0	0
Pseudoephedrine	*	*	0
Toluene	*	0	0
Triazolam	*	0	0
U-47700	0	*	0
Ziprasidone	0	*	0
Zopiclone	*	0	0
Quetiapine	15	5	0
Bupropion	*	*	0
Doxepin	0	*	0
Duloxetine	0	*	0
Modafinil	*	*	0
Oxazepam	0	*	0

Note: * represents cell counts under 5 that were suppressed.

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix L

Monetary Sentences for Offenders, 2018

Sentencing Description	Sentence Type	Number of DUI Cases	Total Amount	Average Amount
Victims Assistance Fund	Surcharges	19,651	\$3,438,056.19	\$174.60
Rural Youth Alcohol/Sub Abuse Surcharge	Surcharges	19,396	\$99,537.00	\$5.13
LEAF Fine	Fine	19,212	1729649.41.00	\$89.99
Brain Injury Fund (Traumatic)	Surcharges	19,208	\$387,223.00	\$20.08
Persistent Drunk Driving Surcharge	Surcharges	18,960	\$2,019,522.50	\$106.39
Alcohol Evaluation Fee	Surcharges	18,882	\$3,781,515.00	\$199.98
Victim Compensation Fund	Surcharges	18,826	\$778,579.44	\$41.33
Genetic Testing Surcharge	Surcharges	18,814	\$47,120.00	\$2.50
Driving Under the Influence/Ability Impaired	Fine	17,898	\$8,802,748.34	\$459.31
Court Costs	Surcharges	17,508	\$390,094.00	\$22.27
Court Security Fund	Surcharges	17,469	\$87,375.00	\$5.00
Probation Supervision Fee	Surcharges	12,955	\$14,769,465.24	\$846.24
Cost of Prosecution-Charge Agency	Surcharges	4,592	\$756,311.34	\$163.35
Public Defender Accounts Receivable	Surcharges	4,063	\$103,680.00	\$25.24
Useful Public Service	Surcharges	3,384	\$298,483.00	\$87.87
Request for Time to Pay	Surcharges	1,887	\$47,250.00	\$25.00
Cost of Care - Probation/Adult	Surcharges	1,175	\$2,296,955.05	\$1,296.98
Family Friendly Surcharge	Surcharges	662	\$753.00	\$1.13
Restitution	Restitution	530	\$1,278,518.06	\$2,299.49
Drug Standardized Assessment	Surcharges	400	\$20,242.00	\$50.48
Cost of Prosecution-Sheriff	Surcharges	361	\$56,745.71	\$152.54
Traffic Fine	Fine	205	\$45,830.00	\$218.24
Cost of Care - Jail	Surcharges	179	\$44,512.00	\$239.31
District Attorney Cost Recovery	Surcharges	129	\$13,274.05	\$101.33
Court Ordered Contribution	Surcharges	106	\$21,650.00	\$204.25
Warrant/Extradition Fee Sheriff	Surcharges	80	\$10,647.98	\$118.31
Drug Test - Cost Recovery	Surcharges	50	\$1,013.45	\$19.87
Address Confidentiality Fund	Surcharges	43	\$1,204.00	\$28.00
Misdemeanor Fine	Fine	39	\$19,950.00	\$475.00
Felony Fine	Fine	13	\$19,600.00	\$1,306.67
Minor in Possession of Alcohol	Fine	8	\$200.00	\$25.00
Sex Offender Evaluation Fee	Surcharges	5	\$4,400.00	\$880.00
Cost of Proceedings	Surcharges	4	\$787.00	\$196.75
Cost of Prosecution-Jud Pd Cst	Surcharges	4	\$56.04	\$14.01
District Attorney Local Payment	Surcharges	3	\$108.00	\$36.00
Assessed Costs - Other	Surcharges	2	\$1,988.65	\$994.33



Sentencing Description	Sentence Type	Number of DUI Cases	Total Amount	Average Amount
Assessed Costs - Sheriff	Surcharges	2	\$96.25	\$48.13
Drug Offender Surcharge	Surcharges	2	\$1,300.00	\$650.00
Juvenile Fine	Fine	2	\$800.00	\$400.00
Outstanding Judge/Warrant Fee	Surcharges	2	\$55.00	\$27.50
Alt Def Counsel Cost Recovery	Surcharges	1	\$25.00	\$25.00
Cost of Care - Outside Agency	Surcharges	1	\$102.75	\$102.75
County Traffic Fine	Fine	1	\$50.00	\$50.00
Offender Identification Fund	Surcharges	1	\$128.00	\$128.00

Data source: State Judicial Department; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Appendix M

Descriptive Analysis of Most Populous Counties

We identified the top five counties in terms of population- Arapahoe, Denver, Douglas, El Paso and Jefferson counties. The top five counties in Colorado comprised 39% of all DUI case filings. Descriptive statistics comparing the case filings and DUI charges from these cases for the five counties compared to the remaining 59 counties in Colorado are presented in the tables below.

Descriptive Statistics by Most Populous Counties, Population Status 2018

	Level	Overall	Top Five Counties	Bottom 59 Counties
n		26,255	10,290	15,965
Initial Charges n (%)	UDD	85 (0.3)	14 (0.1)	71 (0.4)
	DWAI	2,792 (10.6)	1,184 (11.5)	1,608 (10.1)
	DUI	21,351 (81.3)	8,312 (80.8)	13,039 (81.7)
	DWAI 1-2 Prior	153 (0.6)	17 (0.2)	136 (0.9)
	DUI 1-2 Prior	584 (2.2)	266 (2.6)	318 (2.0)
	DWAI 3+ Prior	39 (0.1)	14 (0.1)	25 (0.2)
	DUI 3+ Prior	1,113 (4.2)	419 (4.1)	694 (4.3)
	VEHICULAR ASSAULT	84 (0.3)	44 (0.4)	40 (0.3)
	VEHICULAR HOMICIDE	28 (0.1)	17 (0.2)	11 (0.1)
	OTHER	26 (0.1)	3 (0.0)	23 (0.1)
Final Charge n (%)	UDD	119 (0.5)	19 (0.2)	100 (0.6)
	DWAI	8,568 (32.6)	2,952 (28.7)	5,616 (35.2)
	DUI	12,992 (49.5)	5,880 (57.1)	7,112 (44.5)
	DWAI 1-2 Prior	1,042 (4.0)	123 (1.2)	919 (5.8)
	DUI 1-2 Prior	2,038 (7.8)	739 (7.2)	1,299 (8.1)
	DWAI 3+ Prior	37 (0.1)	13 (0.1)	24 (0.2)
	DUI 3+ Prior	1,056 (4.0)	429 (4.2)	627 (3.9)
	VEHICULAR ASSAULT	78 (0.3)	43 (0.4)	35 (0.2)
	VEHICULAR HOMICIDE	29 (0.1)	17 (0.2)	12 (0.1)
	OTHER	296 (1.1)	75 (0.7)	221 (1.4)
Initial Law Classification n (%)	Felony	1,193 (4.5)	433 (4.2)	760 (4.8)
	Misdemeanor	24,902 (94.8)	9,839 (95.6)	15,063 (94.4)
	Petty Offense	0 (0.0)	0 (0.0)	0 (0.0)
	Traffic	85 (0.3)	14 (0.1)	71 (0.4)
	Unknown	49 (0.2)	1 (0.0)	48 (0.3)
	Final Non-DUI Charge	26 (0.1)	3 (0.0)	23 (0.1)



Descriptive Statistics Continued

	Level	Overall	Top Five Counties	Bottom 59 Counties
Final Law Classification n (%)	Felony	1,115 (4.2)	427 (4.1)	688 (4.3)
	Misdemeanor	24,718 (94.1)	9,769 (94.9)	14,949 (93.6)
	Petty Offense	0 (0.0)	0 (0.0)	0 (0.0)
	Traffic	119 (0.5)	19 (0.2)	100 (0.6)
	Unknown	7 (0.0)	0 (0.0)	7 (0.0)
	Final Non-DUI Charge	296 (1.1)	75 (0.7)	221 (1.4)
Toxicology Testing n (%)	No Toxicology Test	9,312 (35.5)	3,623 (35.2)	5,689 (35.6)
	Toxicology Test	16,943 (64.5)	6,667 (64.8)	10,276 (64.4)
Alcohol Screening n (%)	Yes	15,151 (57.7)	6,072 (59.0)	9,079 (56.9)
Cannabinoid Screening n (%)	Yes	5,032 (19.2)	1,892 (18.4)	3,140 (19.7)
Drug Screening n (%)	Yes	3,028 (11.5)	1,008 (9.8)	2,020 (12.7)
BAC Levels n (%)	None Detected	727 (4.8)	303 (5.0)	424 (4.7)
	Present but < 0.05	523 (3.5)	190 (3.1)	333 (3.7)
	0.05 - 0.079	1,227 (8.1)	401 (6.6)	826 (9.1)
	0.08+	12,674 (83.7)	5,178 (85.3)	7,496 (82.6)
	Missing	11,104	4,218	6,886
BAC (mean (SD))		0.16 (0.07)	0.16 (0.08)	0.15 (0.07)
Delta 9-THC Levels (%)	None Detected	459 (13.8)	188 (15.7)	271 (12.7)
	Present but <1.0	88 (2.6)	20 (1.7)	68 (3.2)
	1.0 - 4.9	1,134 (34.0)	440 (36.8)	694 (32.4)
	5.0+	1,654 (49.6)	547 (45.8)	1,107 (51.7)
	Missing	22,920	9,095	13,825
Delta 9-THC (mean ng/mL (SD))		8.23 (9.62)	7.51 (9.13)	8.64 (9.87)
Disposition n (%)	Guilty	19,312 (79.8)	7,976 (84.9)	11,336 (76.6)
	Deferred Judgment	1,205 (5.0)	395 (4.2)	810 (5.5)
	Deferred Dismissed	682 (2.8)	119 (1.3)	563 (3.8)
	Diversion	50 (0.2)	1 (0.0)	49 (0.3)
	Dismissed	2,504 (10.3)	757 (8.1)	1,747 (11.8)
	Not Guilty	152 (0.6)	73 (0.8)	79 (0.5)
	Not Proven	0 (0.0)	0 (0.0)	0 (0.0)
	Non-DUI Disposition	296 (1.2)	75 (0.8)	221 (1.5)
	Missing	2,054	894	1,160

Data source: State Judicial Department, Denver County Court, CBI, CDPHE, ChemaTox, and Denver Crime Lab at DPD; Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Initial and final law class of final DUI and final non-DUI charges, Five Most Populous Counties, 2018

	Initial Law Class				
	Felony	Misdemeanor	Traffic	Unknown	Non-DUI Charge
n	433	9839	14	1	3
Final Law Class n (%)					
Felony	426 (98.4)	1 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Misdemeanor	6 (1.4)	9,759 (99.2)	0 (0.0)	1 (100.0)	3 (100.0)
Traffic	0 (0.0)	5 (0.1)	14 (100.0)	0 (0.0)	0 (0.0)
Unknown	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Final Non-DUI Charge	1 (0.2)	74 (0.8)	0 (0.0)	0 (0.0)	0 (0.0)

Data source: State Judicial Department and Denver County Court: Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

Initial and final law class of final DUI and final non-DUI charges, Bottom 59 Counties in Population, 2018

	Initial Law Class				
	Felony	Misdemeanor	Traffic	Unknown	Non-DUI Charge
n	760	15063	71	48	23
Final Law Class n (%)					
Felony	683 (89.9)	4 (0.0)	0 (0.0)	0 (0.0)	1 (4.3)
Misdemeanor	68 (8.9)	14,818 (98.4)	3 (4.2)	39 (81.2)	21 (91.3)
Traffic	0 (0.0)	32 (0.2)	67 (94.4)	0 (0.0)	1 (4.3)
Unknown	0 (0.0)	0 (0.0)	0 (0.0)	7 (14.6)	0 (0.0)
Final Non-DUI Charge	9 (1.2)	209 (1.4)	1 (1.4)	2 (4.2)	0 (0.0)

Data source: State Judicial Department and Denver County Court: Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Final DUI Charges by Initial Charge, Five Most Populous Counties, 2018

	Initial Charge									
	UDD	DWAI	DUI	DWAI 1-2 Prior	DUI 1-2 Prior	DWAI 3+ Prior	DUI 3+ Prior	VEH. ASSAULT	VEH. HOMICIDE	OTHER
n	14	1,184	8,312	17	266	14	419	44	17	3
Final Charge n (%)										
UDD	14 (100.0)	0 (0.0)	5 (0.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
DWAI	0 (0.0)	1,163 (98.2)	1,775 (21.4)	0 (0.0)	9 (3.4)	1 (7.1)	1 (0.2)	0 (0.0)	0 (0.0)	3 (100.0)
DUI	0 (0.0)	9 (0.8)	5,862 (70.5)	0 (0.0)	6 (2.3)	0 (0.0)	3 (0.7)	0 (0.0)	0 (0.0)	0 (0.0)
DWAI 1-2 Prior	0 (0.0)	4 (0.3)	96 (1.2)	17 (100.0)	6 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
DUI 1-2 Prior	0 (0.0)	0 (0.0)	497 (6.0)	0 (0.0)	241 (90.6)	0 (0.0)	1 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)
DWAI 3+ Prior	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	11 (78.6)	2 (0.5)	0 (0.0)	0 (0.0)	0 (0.0)
DUI 3+ Prior	0 (0.0)	0 (0.0)	14 (0.2)	0 (0.0)	2 (0.8)	2 (14.3)	411 (98.1)	0 (0.0)	0 (0.0)	0 (0.0)
VEH. ASSAULT	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	43 (97.7)	0 (0.0)	0 (0.0)
VEH. HOMICIDE	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	17 (100.0)	0 (0.0)
OTHER	0 (0.0)	8 (0.7)	63 (0.8)	0 (0.0)	2 (0.8)	0 (0.0)	1 (0.2)	1 (2.3)	0 (0.0)	0 (0.0)

Data source: State Judicial Department and Denver County Court: Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.



Aggregate Final DUI Charges by Aggregate Initial Charge, Bottom 59 Counties in Population, 2018

	Aggregate Initial Charge									
	UDD	DWAI	DUI	DWAI 1-2 Prior	DUI 1-2 Prior	DWAI 3+ Prior	DUI 3+ Prior	VEH. ASSAULT	VEHI. HOMICIDE	OTHER
n	71	1,608	13,039	136	318	25	694	40	11	23
Aggregate Final Charge n (%)										
UDD	67 (94.4)	4 (0.2)	28 (0.2)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.3)
DWAI	3 (4.2)	1,519 (94.5)	4,063 (31.2)	0 (0.0)	16 (5.0)	1 (4.0)	3 (0.4)	0 (0.0)	0 (0.0)	11 (47.8)
DUI	0 (0.0)	5 (0.3)	7,075 (54.3)	1 (0.7)	5 (1.6)	3 (12.0)	19 (2.7)	0 (0.0)	0 (0.0)	4 (17.4)
DWAI 1-2 Prior	0 (0.0)	30 (1.9)	718 (5.5)	135 (99.3)	27 (8.5)	1 (4.0)	4 (0.6)	0 (0.0)	0 (0.0)	4 (17.4)
DUI 1-2 Prior	0 (0.0)	3 (0.2)	991 (7.6)	0 (0.0)	266 (83.6)	0 (0.0)	37 (5.3)	0 (0.0)	0 (0.0)	2 (8.7)
DWAI 3+ Prior	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	18 (72.0)	6 (0.9)	0 (0.0)	0 (0.0)	0 (0.0)
DUI 3+ Prior	0 (0.0)	0 (0.0)	2 (0.0)	0 (0.0)	2 (0.6)	2 (8.0)	621 (89.5)	0 (0.0)	0 (0.0)	0 (0.0)
VEH. ASSAULT	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	34 (85.0)	0 (0.0)	1 (4.3)
VEH. HOMICIDE	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.5)	11 (100.0)	0 (0.0)
OTHER	1 (1.4)	47 (2.9)	162 (1.2)	0 (0.0)	2 (0.6)	0 (0.0)	4 (0.6)	5 (12.5)	0 (0.0)	0 (0.0)

Data source: State Judicial Department and Denver County Court: Analyzed by the Office of Research and Statistics, Division of Criminal Justice, Colorado Department of Public Safety.

