

# Comments on 2019 Columbia Police Department Incident-Based Data May 18, 2020

## Contents:

CPD Incident-Based Data, page 1
Credible Intelligence, page 3
Traffic Stops, page 8
Traffic Stop Strategies and Community Policing, page 13
Categories of Moving Violations, page 15
Post-Stop Actions, page 16
Results of Stops, page 16
Stop Analysis vs. Post-Stop Analysis, page 18
Searches, page 18
Contraband Found, page 21
Hit Rates by Category of Search, page 24
Arrests, page 26
The Significance of Contraband Found, page 28
Common Sense vs. Statistics, page 32
The Overall Impact of Stops, page 34
Conclusions, page 30

## CPD Incident-Based Data

Since 2015, Columbia Police Department has posted detailed data on traffic stops on the city website: <https://www.como.gov/police/data-reporting-forms/>

**2019 data is now posted.** The database is what CPD uses to extract the information required for the Vehicle Stops Report, but it is in an **“incident-based format,”** in which each of the more than 15,000 stops is listed individually in rows when displayed as a spreadsheet. Some details are left out, such as driver identity. The data allows a preview of the VSR, which will be released June 1, but it also allows much more detailed analysis.

Officers check off about 60 categories related to the stop (location of stop, violation, whether a search was conducted, and so on), then the VSR “aggregates” the data. For instance, a sum is given for the number of drivers arrested and then sums for each racial and ethnic group. Incident-based data can be looked at in many more ways. For instance, it’s possible to determine the number of male Asian drivers from 18 to 29 years of age who have been stopped for a lane violation, then asked to consent to a search which resulted in drugs being found.

The VSR provides minimal analysis. Stop disproportions are given in a way that’s difficult to understand—the disparity index in which each group’s proportion of incidents is divided by its proportion of driving-age residents. Rates per stop are given for arrests and searches and rates per search for contraband found, but no disproportions are presented. Using the CPD incident-based data, it’s possible to compare group rates for all categories of data—for instance, the rate of arrests per stop for black drivers divided by the rate for white drivers, which says, “Black drivers are affected at a rate X times the rate for white drivers.”

According to information recorded by Columbia officers, **black drivers were stopped at a rate per driver 4.63 times the rate for white drivers**. Considering just Columbia residents, for whom the census-based estimate of group driver proportions should be most accurate, the disproportion is 5.25.

Table 1. 2019 Traffic Stop Disproportions

2019 Columbia Police Department Data					
Group	Group Proportions of Drivers	All Traffic Stops	Group % of Stops	Stop Disparity Index	Stop Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	grp stops / total stops	group Stop%/ Benchmark	Grp DI/ White DI or W DI/Non-W DI
Asian	5.17%	259	1.7%	0.33	0.44
Black	9.96%	5250	35.0%	3.51	4.63
Hispanic	2.97%	247	1.6%	0.55	0.73
American	0.27%	67	0.4%	1.65	2.18
Other	1.92%	123	0.8%	0.43	0.56
White	79.71%	9069	60.4%	0.76	0.39
Total	100.00%	15015	100.0%		

Group proportions, the VSR’s benchmarks, are based on the numbers of driving-age residents of Columbia in the 2010 census. The benchmarks for some jurisdictions are misleading because large numbers of drivers cross borders and because groups can have different access to vehicles. Columbia’s benchmarks are reasonably accurate.

The disparity index for black drivers is 35.0%/9.96%: black drivers are stopped 3.51 times more than would be expected based on their proportion of the Columbia population. Dividing the black disparity index by the white disparity index gives a direct comparison of the stop rates per driver; black drivers are stopped at a rate 4.63 times the white rate. White drivers are stopped at a rate 39% of the rate for all other drivers.<sup>1</sup>

Follow this link for a spreadsheet which presents disproportions for all categories of information in the CPD database: [2019 CPD Disproportions](#).

### Disproportions and Legitimate Factors

Disproportions can be caused by many factors, so they do not prove officers are discriminating against black drivers--treating them differently than white drivers because of their group.

Some agencies have high stop disproportions against black drivers because the VSR’s benchmark group proportions of drivers are too low; the proportion of black residents is low but many black drivers are

<sup>1</sup> The VSR uses proportions of racial and ethnic groups but it would be just as easy (and perhaps clearer) if the number of driver-age residents were used for each group. Then analysis would start with the rate of stops per resident. There’s no reason disparity indexes have to be figured in order to compare, for instance, the rate of black stops to the rate of white stops.

attracted from surrounding jurisdictions by jobs, shopping, entertainment, schools and so on. Independence and Ladue are good examples.

Researchers say an observational study is the most dependable way to document the group proportions of drivers that officers encounter in their jurisdiction. Researchers figure out which intersections and which times of day would produce an accurate sample of drivers, then teams count them.<sup>2</sup>

Sometimes regional group proportions are likely to provide reasonable estimates of group proportions. The Missouri Census Data Center's **Circular Area Profiles, CAPS**, returns statistics from the American Community Survey for a specified radius around a point.<sup>3</sup> It reports the highest proportion of black residents for a 5-mile radius around the Columbia city hall: 10.1%, close to the VSR's 9.96%. Larger radii, up to 40 miles, return smaller and smaller proportions of potential black commuters, so there is unlikely to be an influx of black drivers.

Black drivers could be committing more violations than white drivers. Black drivers could be more likely to be reported by 911 calls. Black drivers could be more likely to drive cars with equipment defects or expired licenses. Black drivers could be in situations in which they are more likely to be observed committing violations than white drivers—in locations or at times officers are more likely to patrol. If a disproportion is caused by factors such as these, then CPD must provide documentation and clear explanations of why they do not involve discrimination, otherwise black drivers will assume they are victims of discrimination.

The following review of traffic stop data focuses on situations in which there are disproportions against black drivers and looks for legitimate reasons for the disproportions. Or if legitimate reasons cannot be identified, the review suggests the sorts of changes needed in policies, training and supervision so that the disproportions either decline or can be documented as based on facts, not bias.

The Vehicle Stops Reports for law enforcement agencies are sufficient to flag situations in which discrimination might be occurring—as long as missing disproportions are supplied. Incident-based data, such as supplied by CPD—allow a more detailed analysis, but only agencies have access to all the information needed to make complete determinations of the facts involved. Sometimes incident reports need to be examined, video recordings viewed, drivers interviewed, and so on.

And only agencies can work out the changes needed in policies, training and supervision. An outside observer can see the need for changes, but only law enforcement professionals can finetune a system that delivers bias-free policing.

## Credible Intelligence

In 2017, then Chief Ken Burton told a crowd at an NAACP meeting that officers need to “make it clear to people what racial profiling actually is—if it even exists in our community.” Facilitator Pam Hardin shot back, “I want to make it clear we are not discussing whether we have racial profiling but how we can address it. We know we have it.”

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<sup>2</sup> See my discussion of [Benchmarking Strategies](#).

<sup>3</sup> VSR benchmarks are drawn from census data for individuals 16 years of age and older. CAPS data cover all age groups. CAPS uses racial and ethnic groups in a slightly different way. CAPS uses American Community Survey data rather than 2010 Census data. ACS data are estimates but likely to be more accurate because they are up to date.

Law enforcement often defines racial profiling as the illegitimate use of race in a decision to make a stop or take another action. A Supreme Court ruling tells them a stop is legal as long as race was not the sole reason for it.<sup>4</sup>

The ruling and policies based on it seem commonsense, but there's a loophole. An officer can observe drivers running a stop sign all day long without stopping white drivers but intentionally stop every black driver. Most people would say the officer committed racial profiling, but the officer would say race was not the sole factor; the driver ran the stop sign.

Columbia Police Department's Racial/Bias-Based Profiling policy at the time of Chief Burton's remark allowed race to be a factor "in combination with other legitimate factors," which aligned it with the "sole factor" policies. Complaints about racial profiling were always rejected because officers were always careful to be able to cite violation. The violation could be very minor. It could be a pretext, but it was enough to validate the officer's action even if race had been a motivation.

Since August 2018, CPD has had a [Bias-Free Policing Policy](#) that requires officers to cite facts in order to document that actions are not based on stereotypes.<sup>5</sup> The policy uses the term, "**credible, timely intelligence**" (402.5). Or as the policy says in 402.6.1, when writing a report, "the involved officer should include those facts giving rise to the officer's reasonable suspicion or probable cause for the detention as applicable."

The idea of credible intelligence is used by Dr. Lorie Fridell in *Producing Bias-Free Policing* to provide a strategy to address discrimination in law enforcement. Discrimination against blacks occurs because the culture of the United States imposes the stereotype of blacks as prone to criminal activity:

Barring any direction to the contrary, officers told to engage in some high-discretion activity geared toward preventing or solving crimes will, says the science [of bias], default to the demographic groups they link through stereotypes to crime and violence. In most humans, this will be males of color between 18 and 25.<sup>6</sup>

The bias is not "explicit," something we are aware of, something we have thought about and affirmed. Instead, it is an "implicit bias" which we do not recognize we have but which runs counter to the deeper value we put on equality.<sup>7</sup>

The main strategy for addressing discrimination has been to look for biased officers and either fire them or help them eliminate their biases. This approach hasn't worked, in large part because supervisors cannot tell what's going on in an officer's mind; they can't discipline an officer for biased thinking.

Dr. Fridell says it's important to train officers about the dangers of explicit and implicit bias and to give them opportunities to have "counter-stereotypical" experiences with people of diverse backgrounds.

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<sup>4</sup> See [Comparison of Racial Profiling Policies](#) for more details.

<sup>5</sup> <https://www.como.gov/police/cpd-policies/>. Revisions were made March 19, 2020. See also my comments on Dr. Fridell's model policies and my [comments on CPD's policy](#), both on my website: [Love the Missouri Vehicle Stops Report](#).

<sup>6</sup> Fridell, Lorie. (2017) *Producing Bias-Free Policing: A Science-Based Approach*. Switzerland: Springer International Publishing. Page 20.

<sup>7</sup> Fridell. (2017) See Chapter 1, pages 1-5, for a discussion of explicit and implicit bias.

*Producing Bias-Free Policing* starts with a discussion of the science of bias. CPD uses Dr. Fridell's Fair and Impartial training program.

But what supervisors need in order to guide officers is observable behavior—behavior that can be specified in policies, targeted in training and documented by supervisors. Chief Justice Earl Warren introduced this idea in his decision in the 1968 [Terry v. Ohio](#) case. He wrote that a search would meet the constitutional standard of being “reasonable” if an officer could state “specific and articulable facts” documenting why a quick pat down of a suspect for a weapon was necessary to protect public safety.

Specific and articulable facts are often paraphrased as “reasonable suspicions,” but suspicion is a misleading standard; the facts behind the suspicion are what counts. The facts are what protect officers from being distracted by stereotypes and what provide supervisors with observable behavior to evaluate officer performance.

When a question of discrimination arises, as when disproportions flag a possible problem, supervisors need to key on facts, or as Dr. Fridell says here, actionable intelligence:

*When, in the context of police decision-making, is it legitimate NOT TO treat members of all demographic groups the same? The answer is: when there is actionable intelligence that justifies differential treatment.<sup>8</sup>*

Dr. Fridell uses different terms in different contexts. The facts adequate to make an arrest are probable cause evidence. “Actionable intelligence” is not that strong but it includes information about a specific individual in a specific location at a specific time. “Credible intelligence” is her broadest term, covering everything from evidence to suspicions that might lead an officer to become alert for criminal action.

In different situations, different evidentiary standards are appropriate. To take a case to court, a prosecutor needs “probable cause” evidence strong enough to convince a judge or jury to convict. For instance, an officer might testify that she found someone in possession of a gun that had been reported stolen. Her testimony and the gun would contribute to the probable cause evidence presented by the prosecutor.

The Constitution says we have a right to be free from “unreasonable searches and seizures,” and “no Warrants shall issue, but upon probable cause.” “Seizure” here means a stop or taking someone into custody—a detention. In the 1968 [Terry](#) case, however, the Supreme Court ruled that an officer could reasonably search a suspect for a gun if “specific and articulable facts” could be cited. So judges allow officers to conduct a quick pat down of a suspect for a weapon or search areas of a vehicle in which someone could quickly reach for a weapon even if their facts are only “reasonable suspicions.”

Credible intelligence to justify questioning an individual is even less substantial since at the beginning of an investigation the officer does not search or seize the individual. For instance, a call for service—a 911 call—is sufficient credible intelligence to justify an officer looking for a specific vehicle. The officer's own suspicions are also sufficient for the officer to become alert for evidence indicating criminal activity. “Alert” is a better model than “suspicious”; alert for facts, not suspicious because of stereotypes, vigilant guardians of everyone's safety and security. The suspicions justify the beginning of an investigation, but the investigation must uncover facts to justify further actions.

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<sup>8</sup> Fridell. (2017) Page 35. Italics in the original.

Because officers are thinking primarily about protecting public safety--heading off violent behavior--they want as much latitude in taking action as possible, but when they lack facts, they are responsible for building probable cause cases. For instance, they may have a tip that an older white male is selling fake IDs at a mall, but that information would not justify searching someone who happens to be an older white male. The officers need more specific information that they might be able to get from interviewing witnesses or watching surveillance recordings.<sup>9</sup>

In a recent Supreme Court [ruling](#), the justices said that intelligence that the owner of a car had a suspended driver license was sufficient for them to stop the car. As cases are presented, courts are continually refining the evidence officers must have for specific actions—and for prosecutors to take the charges to court. Judges will generally accept an officer's decision to conduct a quick pat down for a weapon without looking closely at how reasonable the suspicions were. Judges have even less inclination to second guess an officer's decision to begin an investigation, by, for instance, asking for consent to a search. They will accept the results of the consent search regardless of whether the officer started with credible intelligence, but the agency and the community the officer serves can hold the officer accountable for citing facts acceptable to the community.

Asking for consent, however, runs counter to the spirit of the Fourth Amendment guarantee of freedom from searches not based on facts. When drivers are asked for consent, they feel the same sort of vulnerability colonists felt when investigated by the British without probable cause. An element of coercion is always present.

Officers have great latitude in requesting consent for a search. If they are not careful to act on credible intelligence that the driver is involved in criminal activity, they might be distracted by the racial stereotype of blacks being susceptible to criminal action. As with other categories of officer action, law enforcement agencies have a responsibility to explain when disproportions are caused by factors independent of bias.

The people of the jurisdiction ultimately have the power to decide what constitutes credible intelligence in a situation, when the demands of public safety justify an infringement on individual rights. The public is likely to object to routine requests for consent to a search but accept consent searches when officers use them under special circumstances.

Dr. Lori Fridell reports the people of Austin, Texas, complained about the use of consent searches that resulted in a large disproportion against black drivers. The police chief ordered changes in consent search policies when he learned in 2010 consent search hit rates were below 20%:

Chief Knee did not find evidence that the requests were biased, but it became clear that the concerns were strong and unabated by his investigation and “results.” He explored the efficacy of those consent searches by looking at the hit rate. If an agency determined that 20 % of the consent searches were turning up seizable evidence such as guns and drugs, then that agency might decide that the crime control value was significant and retain the practice—hopefully working in other ways to strengthen trust and confidence. Chief Knee, however, found that the hit rate for the consent searches was very low; he determined that the crime control value of the practice was not sufficient to outweigh the harm to trust and confidence.<sup>10</sup>

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<sup>9</sup> Fridell, Lorie. (2017) *Producing Bias-Free Policing: A Science-Based Approach*. Switzerland: Springer International Publishing. See page 36 for a similar example using Hispanic men.

<sup>10</sup> Fridell (2017) page 82.

In the first incident-based data posted by CPD for 2015, black drivers in Columbia were affected by consent searches at a rate twice the rate for black drivers. The incident-based data allowed for the first time the “hit rate” for consent searches to be computed: white drivers were found with contraband at twice the rate per search for black drivers.

Chief Ken Burton changed the consent search policy after learning that the hit rates for consent searches were low. Officers were required to explain to drivers they could refuse consent and to obtain recorded consent. Perhaps, like Chief Knee, he reviewed “seizable evidence” and decided the searches were not providing “crime control” as they were being used. Under the current Bias-Free Policing Policy a review of credible intelligence would assure that officers are careful to act on convincing facts.

The change in procedures seems to have been enough to prompt officers to be more careful about basing actions on facts. For 2017, the first full year of the new procedure, the disproportion fell to 1.19, but it jumped back up to 1.53 in 2018.<sup>11</sup> In 2019 the disproportion fell again to 1.15, near equity.

Table 2. 2019 Consent Searches

2019 CPD Data				
Group	All Traffic Stops	Consent Searches	Rate Per Stop	Disproportion
Officer Perception	Count	Count	Searches / Stops	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	259	9	0.035	0.59
Black	5250	356	0.068	1.15
Hispanic	247	14	0.057	0.96
American Ind	67	0	0.000	0.00
Other	123	2	0.016	0.27
White	9069	537	0.059	0.92
Total	15,015	918	0.061	

I take these fluctuations to signal that **disproportions do not occur because officers are driven by explicit biases—biases that individuals are aware of. Some isolated incidents of intentional discrimination might occur; CPD needs to address these individually. Overall, officers can overcome implicit biases, such as racial stereotypes, if they are provided with the right policies, supervision and training.**<sup>12</sup>

CPD’s 2019 incident-based data document that black drivers are affected by officer actions during traffic stops differently than white drivers. CPD has a responsibility to either explain how the disproportion is caused by factors independent of bias or address the disproportion with improved policies, training and supervision. On the other hand, the decline in the consent search disproportion for black drivers documents that good policies, training and supervision are effective in achieving equal protection. The data flag possible problems but also document improvements.

<sup>11</sup> [Columbia Compilation 2001 to 2018](#) Here’s a summary of post-stop disproportions in VSR data going back to the first full year, 2001.

<sup>12</sup> Explicit biases are attitudes that someone is aware of and affirms. Implicit biases are those we have without being aware of them.

For instance, VSR data document that Ladue police officers have an exemplary record of treating drivers equally after a stop has occurred. In all of the situations in which officers have the highest discretion and are most likely to be distracted by stereotypes, Ladue Police Department has low disproportions or numbers of incidences so low that officers are clearly not misusing discretion.

Several year ago, Chief Rich Wooten, now retired, wanted to do something about Ladue’s high disproportions in VSR data. His approach was simple. Officers were to be more careful to act on violations that were a clear threat to public safety. Chief Ken Andresky continues the approach.

Disproportions in post-stop data immediately dropped, but because the VSR does not publish these disproportions few people noticed. Stop disproportions for black drivers remained high because less than 1% of Ladue residents are black and many more black drivers are attracted to Ladue for work, shopping, entertainment and schools. With estimates of group driver proportions more accurate than the VSR’s benchmarks, the stop disproportions are much lower too.

The officers in Independence and Florissant also have exemplary low disproportions in high-discretion post-stop actions, documenting that officers avoid the distractions of stereotypes. Both agencies, however, have high stop disproportions against black drivers that don’t appear to be the result of faulty benchmarks. Instead, the use of investigative stops might be causing the stop disproportion. In 2020 officers have been directed to record better information about investigative stops, so the agencies might be able to document that officers were acting on credible intelligence, and not of stereotypes.<sup>13</sup>

## Traffic Stops

Stops are broken down into **reasons for stops**: moving violation, equipment violation, license violation and investigative reason.<sup>14</sup>

Table 3. 2019 Reason for Stop

2019 Columbia Police Department Data		Reason for Stop									
Group	Group Proportions of Drivers	All Traffic Stops	Stop Disproportion Based on Group Proportions	Moving Violation	Disproportion Based on Group Proportions	Equipment Violation	Disproportion Based on Group Proportions	License Violation	Disproportion Based on Group Proportions	Investigative Reason	Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	Grp DI/ White DI or W DI/Non-W DI	Count	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	5.17%	259	0.44	145	0.55	61	0.46	62	0.29	8	0.26
Black	9.96%	5250	4.63	2017	3.97	1155	4.55	2311	5.60	409	6.82
Hispanic	2.97%	247	0.73	100	0.66	58	0.77	91	0.74	19	1.06
American	0.27%	67	2.18	45	3.27	11	1.60	15	1.34	1	0.62
Other	1.92%	123	0.56	61	0.62	24	0.49	43	0.54	6	0.52
White	79.71%	9069	0.39	4066	0.44	2032	0.40	3301	0.33	480	0.28
Total	100.00%	15015		6434		3341		5823		923	

**Socioeconomic factors** could contribute to the license and equipment disproportions. Black residents of Missouri are twice as likely as white residents to have incomes below the federal poverty level.<sup>15</sup> So

<sup>13</sup> See [A Tale of Four Cities](#). The fourth city is Webster Groves, where an unusually high number of stops on I-44 probable result in enough stops of black drivers to skew the stop disproportion.

<sup>14</sup> The VSR says “Violation Resulting in Stop,” but “Reason for Stop” better includes investigative stops.



black drivers may put off renewing their **license plates** and may drive older cars with more **equipment defects**, but economic factors seem unlikely to result in a disproportion this high.

For black drivers, the highest count and the highest disproportion for violations is for **license violations**—5.60. Officers always have probable cause evidence for license violations—they observe the expired tag or missing plate—but they could be looking more closely at one group of drivers, patrolling areas where one group is more likely to be driving, or ignoring violations for other groups.

Officers might identify license violations by using equipment which reads the plates and searches computer records. It would be interesting to have data on how often they ignore violations, but it might be difficult to tell whether they disproportionately ignore violations by one group.

The black disproportion in **equipment violations** is high too: 4.55. Drivers with low incomes might drive older cars and have more difficulty keeping up with maintenance. Officers need to be careful to apply the same standards to everyone. Black drivers complain about stops for violations that do not have a clear public safety reason—see below. Perhaps check-offs for categories of equipment violations would be useful. No brake lights, no headlights at night, no working wipers in a storm are all significant public safety concerns.

CPD might still be able to document that there is a closer correlation between equipment violations and the age of cars than between violations and race. Or CPD might be able to find a correlation between violations and economic status of the driver's census block or tract. CPD probably does not have the expertise to do this sort of analysis but city staff are adept at this using census data.

Assuming 10% of white drivers and 20% of black drivers in a hypothetical jurisdiction of 100,000 drivers are in the low-income category, 3% of the more affluent drivers are stopped for equipment violations and low-income drivers have equipment violation rates twice the affluent rate, 660 incidents would be involved for low-income drivers—120 for black drivers and 540 for white drivers. These increased numbers of equipment stops would produce a disproportion of 1.09 against black drivers—not a four-fold disproportion.

Table 4. Impact of Low Income

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<sup>15</sup> According to the U.S. Census Bureau's American FactFinder 13.6% of whites and 28.9% of blacks in Missouri were below the federal poverty level in 2015.

<b>Hypothetical Impact of Low Income on Equipment Stops</b>	White	Black	Total
Population	90,000	10,000	100,000
Low-Income Rate	10%	20%	11%
Low Income Count	9000	2000	11,000
Non-low Income	81,000	8,000	89,000
Equipment Violation Rate	0.030	0.030	0.030
Affluent Equip Violations	2430	240	2670
Increase Factor in Equipment Violation Rate Due to Low Income	2	2	2
Increased Rate	0.060	0.060	0.060
Low-Income Equipment Violations	540	120	660
Total Equipment Violations	2970	360	3330
Rate Per Driver	0.033	0.036	0.033
Disproportion	0.92	1.09	

If low-income drivers experience equipment stops at three times the rate for affluent drivers, the disproportion against black drivers goes up to 1.17: black drivers are affected at a rate 17% greater than the rate for white drivers. Factors other than socioeconomic factors must be involved in a four-fold disproportion.

The stop category with the highest disproportion for black drivers is **Investigative stops**—6.82—but only 409 of them were recorded, not enough to explain the overall stop disproportion. Officers might not be recording all stops which involved an investigative motivation.

Attorney General Eric Schmidt amended the Code of State Regulations to require officers to record more information about investigative stops in 2020. Officers and agencies had received little guidance on identifying an investigative stop. They may have recorded only when they made a stop purely to find out more information, without observing any violation, but the VSR calls for officers to record all reasons for a stop. An officer might be directed by dispatch to look for a specific car, then follow the car until observing a violation before making the stop. The officer should check of the violation observed and the investigative reason.

With better data on investigative stops for 2020, it will be possible to see what officers are investigating and evaluate whether they are acting on credible intelligence applied equally to everyone.

Even though the VSR instructs officers to check off “all that apply” when recording reasons for a stop, some agencies record just one reason for a stop. Total reasons for stops equals total stops for these agencies.

Missouri State Highway Patrol is alone among large agencies in following this practice, up through 2018 data. All of the other agencies following this practice are smaller ones. They may be using software provided by MSHP. I have pointed out this potential problem to MSHP command staff for years but have just been told that MSHP follows the law. MSHP refused to share the 2020 check off sheet used by officers with me.

If officers record stops as instructed, the 2020 data will give the first opportunity to see whether officers record enough investigative stops to account for disproportions. The data might turn out to be inadequate. Some officers might not be following instructions to check off all investigatory reasons. Some agencies might have software problems; CPD's new software was not ready at the beginning of 2020. If the information is not sufficient, **more improvements in collection might be needed in subsequent years.**

The AG is providing investigative stop check offs in 2020 for Call for Service, Detective or Crime Bulletin, Officer Initiative, and Other Investigative Stop. In Columbia it might be useful to also have check offs for Computer-assisted Alert (a license plate scanner, etc.), and DWI Check Point.

The VSR law specifically excludes DWI check points from data collection. Officers, after all, are acting on orders to stop every driver they encounter in a specific location, so they have little discretion in deciding which drivers to stop. Command staff deciding where to order check points should be acting on credible intelligence about where DWI violations are a problem.

CPD could have a policy that gives officers clear direction on when computer-generated information is sufficient evidence to take an action, so that they are less likely to be distracted by stereotypes.

**Moving violations** are broken down into speed, lane violation, follow to close, failure to signal, commercial vehicle enforcement and other. The highest disproportion is for black drivers committing **lane violations**: they are affected at a rate 5.05 times the rate for white drivers. See more below on categories of moving violations.

Black drivers could be committing more moving violations than white drivers, but research generally shows we all have similar driving habits, regardless of race. In *Pulled Over*, University of Kansas professors Charles Epp, Stephen Maynard-Moody and Donald Haider-Markel report on studies of moving violations by group:

A recent observational study of Cincinnati drivers found that African Americans were marginally more likely to speed than whites, but the differences were not large (although blacks were somewhat more likely than whites to speed at higher rates of speed). In all, these studies suggest that if black drivers violate traffic laws more than whites—and this is by no means certain—the difference is not great.<sup>16</sup>

Officer discrimination is not likely to be involved in serious violations, violations that clearly pose a threat to public safety; officers just can't ignore them or invent them. CPD can look at its internal, incident-based data to see if a difference in group behavior can be documented, but, according to researchers, a disproportion of 2.98 is highly unlikely.

The highest traffic stop disproportion for black drivers is for the **30- to 39-year-old group**: 5.69. Why are these drivers disproportionately affected? Are officers acting on credible intelligence?

Table 5. Stop Disproportions for Drivers Aged 30-39

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<sup>16</sup> Epp, Charles R.; Maynard-Moody, Steven; Haider-Markel, Donald P. (2014-04-04). *Pulled Over: How Police Stops Define Race and Citizenship* (Chicago Series in Law and Society) University of Chicago Press. Kindle Edition location 1326; page 56.

2019 Columbia Police Department Data						
Group	Group Proportions of Drivers	All Traffic Stops	Age: 30-39	Group % of Stops	Stop Disparity Index	Stop Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	Count	grp stops / total stops	group Stop%/ Benchmark	Grp DI/ White DI or W DI/Non-W DI
Asian	5.17%	259	62	1.8%	0.34	0.49
Black	9.96%	5250	1393	39.4%	3.95	5.69
Hispanic	2.97%	247	82	2.3%	0.78	1.12
American Indian	0.27%	67	17	0.5%	1.78	2.56
Other	1.92%	123	26	0.7%	0.38	0.55
White	79.71%	9069	1959	55.4%	0.69	0.32
Total	100.00%	15015	3539	100.0%		

Agencies are required to collect data specified by the VSR law, but they collect much more information than required. CPD collects and makes public data on the times of stops, not required for the VSR. Most useful is the Day/Night distinction. Many more stops are made at **night** than during the day. The disproportion against black drivers is much higher at night—5.14—than during the day—3.24.

One of the greatest strengths of the incident-based data is that categories can be combined into strings that narrow down the circumstances in which a group is disproportionately affected and officers have to be more vigilant for facts. For black drivers in their Thirties, the nighttime disproportion goes even higher:

Table 6. Drivers 30-39: Nighttime Stops

2019 Columbia Police Department Data						
Group	Group Proportions of Drivers	All Traffic Stops	30-39 Nighttime Stops	Group % of Stops	Stop Disparity Index	Stop Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	Count	grp stops / total stops	group Stop%/ Benchmark	Grp DI/ White DI or W DI/Non-W DI
Asian	5.17%	259	47	1.8%	0.34	0.52
Black	9.96%	5250	1137	42.7%	4.29	6.58
Hispanic	2.97%	247	63	2.4%	0.80	1.22
American Indian	0.27%	67	12	0.5%	1.67	2.56
Other	1.92%	123	21	0.8%	0.41	0.63
White	79.71%	9069	1382	51.9%	0.65	0.27
Total	100.00%	15,015	2662	100.0%		

Again, the question is, if not discrimination, why does this disproportion exist? What is the credible intelligence that backs up officer and command staff decisions which result in this disproportion?

The VSR calls for officers to record the **locations of stops**. The Code of State Regulations, which implements 590.650, says officers are to record where they observe a violation and signal the driver to stop, not where the stop finally occurs: [15 CSR 60-10.020\(2\)\(J\)1](#). VSR locations don't always appear to

correspond to the extra information given in CPD's incident-based data for street addresses. The CPD database also has longitude and latitude coordinates generated by the software used by dispatch.

**"Other" locations** appear in CPD data to be mostly city streets, but the check off is probably intended for locations such as parks, parking lots, college campuses and so on. CPD added an extra category in 2019 for **"Private" locations**, which might include campuses, parks and parking lots, but only one stop was reported under this category. Officers might need more instruction in how to use the check off.

The lowest disproportion against black drivers is for **Interstate** and **US Highways stops**. About 2% of stops are on I-70—235 of them—and less than 1% on a US Highway (presumably US 63)—just 33 stops. Some of these stops might be on cross streets or ramps. Perhaps an officer follows a vehicle then makes the stop as it enters the divided highway. Columbia's state highways, such as Hwy163/Providence Road, are more like city streets than main routes to and from surrounding areas.

Group proportions of drivers on the four-lane-divided highways might be different on city streets. An observational study would probably be needed. Officers

## Traffic Stop Strategies and Community Policing

The Moving Violation disproportion might be the result of policing strategies—for instance, command staff selecting areas for officers to patrol more heavily. These patrols are sometimes called hotspot patrols, saturation patrols, zero-tolerance patrols and so on.

In a 2017 response to the VSR, [Vehicle Stops and Listening Tour Summary](#), Columbia City Manager Mike Matthes suggested saturation patrols contributed to the stop disproportion but formal patrols do not seem to have been ordered frequently and GIS mapping of stops using the location data do not seem to produce significant concentrations of stops outside of high traffic areas. Chief Jones has said CPD will not use saturation patrols, but it's standard practice for agencies to use data to determine locations where public safety requires increased patrols.

Officers could also use the tactic of waiting to observe a minor violation in order to have a pretext for making a stop. A pretext stop can be viewed as an investigative tool; the officer uses a pretext to investigate the possibility of a more serious violation.

Both approaches could be appropriate in some situations. For instance, data on criminal action, traffic accidents or traffic violations might alert an agency to the need to patrol some areas more heavily than others. Dr. Fridell says "operational bias" can result if agencies are not careful to make sure concentrated stops which have a disproportionate effect on one group are backed up by data. In this case, it's not officers but command staff who need to cite their credible intelligence.<sup>17</sup>

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<sup>17</sup> Fridell. (2017). Pages 81-83. Dr. Fridell gives examples of situations in which operational bias occurs and cites DDACTS as a system that agencies use to track crime: National Highway Traffic Safety Administration. (2014). Data-driven approaches to crime and traffic safety (DDACTS): Operational guidelines. Washington, DC: United States Department of Transportation.

Again, the basic principle is that agencies need to accept responsibility for documenting convincing reasons for disproportions so that drivers do not conclude they are being targeted because of race. If an agency cannot document convincing reasons, community support will be lost.

Black drivers have been documented by the Bureau of Justice Statistics's [Police-Public Contact Survey](#) and the survey conducted by the authors of *Pulled Over*<sup>18</sup> as being much more likely than white drivers to consider their stops to be illegitimate.

The [2018 Columbia city survey of residents](#) had the same result; black drivers reported illegitimate stops at a rate five times the white rate.<sup>19</sup> According to *Pulled Over*, black drivers consider a stop illegitimate when it is made for a reason that does not threaten public safety, such as driving a few miles per hour above the speed limit or having a license plate light out. They also object to officers asking insulting questions, such as how they can afford a nice car.

No-tolerance hotspot patrols and pretext stops are exactly the sort of thing black drivers have in mind when they say they have been stopped for illegitimate reasons. Consent searches also fall into this group of “high-discretion, crime-control-focused actions” which can easily lead to groups being treated differently because officers are not looking for credible intelligence or command staff allow operational bias to occur.<sup>20</sup>

From the perspective of officers, however, stops for minor violations provide an opportunity to build up information on community activities. Driving around all day in their patrol cars gives them little chance to meet community members except in traffic stops. One of the basic strategies of law enforcement is to know who is not involved in criminal activity. Any detective novel illustrates how important it is to know who didn't commit the crime—who had an irrefutable alibi. What feels like an insult could be an officer trying to verify that the driver is a good citizen.

In order to have community support, law enforcement needs to balance investigative strategies against diminished trust and cooperation. An occasional pretext stop or consent search backed up by credible intelligence is likely to win public support, but officers need other ways to make community contacts.

Kansas City PD had a problem a number of years ago in a Latino neighborhood. It had been an established community, but an influx of undocumented workers led to an increase of crime—much of it directed at the immigrants who could not appeal to officers for protection out of fear of deportation.

KCPD tried blanket patrols but they led to further reduction in trust. Finally, two officers proposed opening a community center where workers could get food, showers, help with finding jobs and so on—and the officers could get to know everyone. Undocumented workers who used the center were issued

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<sup>18</sup> Epp, Charles R.; Maynard-Moody, Steven; Haider-Markel, Donald P. (2014-04-04). *Pulled Over: How Police Stops Define Race and Citizenship* (Chicago Series in Law and Society) (Kindle Location 274-308). University of Chicago Press. Kindle Edition. The authors surveyed about 3000 drivers and officers in the Kansas City area, then analyzed the results.

<sup>19</sup> Columbia asked a question about illegitimate stops in 2018 at my suggestion. The question was dropped in the most recent survey, so there won't be data to document whether CPD reforms are working.

<sup>20</sup> Fridell. (2017). Page 83 for her section titled, “Reduce the Risk of Bias in High-Discretion, Crime-Control-Focused Activities.”

identification cards so that other officers who stopped them on the street would know they were trustworthy. Bad actors were easier to spot, crime went down, officers built back trust.<sup>21</sup>

Community policing looks different in every community. Columbia puts a high priority on community policing but is still working out how to achieve it. One good place to start is with the stops black drivers regard as illegitimate. Continued surveys of drivers will document whether community policing is successful.

### Categories of Moving Violations

The VSR breaks moving violations into categories: speed, lane violation, follow too close, fail to signal, commercial vehicle enforcement, and other moving violation:

Table 7. Moving Violation Categories

2019 CPD Moving Violation Categories								
Group	Officer Perception	Asian	Black	Hispanic	American	Other	White	Total
Group Proportions	VSR Benchmark	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15015
Group % of Stops	grp stops / total stops	1.7%	35.0%	1.6%	0.4%	0.8%	60.4%	100.0%
Stop Disparity Index	group Stop%/ Benchmark	0.33	3.51	0.55	1.65	0.43	0.76	
Disproportion Based on Group Proportions		0.44	4.63	0.73	2.18	0.56	0.39	
<b>Speed</b>	Count	60	662	30	24	28	1698	2502
Group % of Stops	grp stops / total stops	2.4%	26.5%	1.2%	1.0%	1.1%	67.9%	
Disparity Index	group Stop%/ Benchmark	0.46	2.66	0.40	3.55	0.58	0.85	
Disproportion Based on Group Proportions		0.54	3.12	0.47	4.17	0.68	0.54	
<b>Lane Violation</b>	Count	14	394	21	4	10	624	1067
Group % of Stops	grp stops / total stops	1.3%	36.9%	2.0%	0.4%	0.9%	58.5%	
Disparity Index	group Stop%/ Benchmark	0.25	3.71	0.66	1.39	0.49	0.73	
Disproportion Based on Group Proportions		0.35	5.05	0.90	1.89	0.67	0.36	
<b>Follow Too Close</b>	Count	1	18	1	1	0	33	54
Group % of Stops	grp stops / total stops	1.9%	33.3%	1.9%	1.9%	0.0%	61.1%	
Disparity Index	group Stop%/ Benchmark	0.36	3.35	0.62	6.86	0.00	0.77	
Disproportion Based on Group Proportions		0.47	4.37	0.81	8.95	0.00	0.40	
<b>Fail to Signal</b>	Count	1	18	1	1	0	33	54
Group % of Stops	grp stops / total stops	1.9%	33.3%	1.9%	1.9%	0.0%	61.1%	
Disparity Index	group Stop%/ Benchmark	0.36	3.35	0.62	6.86	0.00	0.77	
Disproportion Based on Group Proportions		0.47	4.37	0.81	8.95	0.00	0.40	
<b>Commercial Vehicle Violation</b>	Count	0	18	0	0	2	48	68
Group % of Stops	grp stops / total stops	0.0%	26.5%	0.0%	0.0%	2.9%	70.6%	
Disparity Index	group Stop%/ Benchmark	0.00	2.66	0.00	0.00	1.53	0.89	
Disproportion Based on Group Proportions		0.00	3.00	0.00	0.00	1.73	0.61	
<b>Other Moving Violation</b>	Count	64	750	40	15	23	1451	2343
Group % of Stops	grp stops / total stops	2.7%	32.0%	1.7%	0.6%	1.0%	61.9%	
Disparity Index	group Stop%/ Benchmark	0.53	3.21	0.57	2.37	0.51	0.78	
Disproportion Based on Group Proportions		0.68	4.14	0.74	3.05	0.66	0.41	
All Disproportions are	Grp Rate/ White Rate or W Rate/Non-W Rate							

For all categories, disproportions for black drivers are in the range of all traffic stops.

Many Moving Violations do not fall into the categories of Traffic Violations: 2343 of them are “Other” violations. For black drivers, 750 are recorded as “Other” moving violations, leading to a 4.14 disproportion. What are these “Other” moving violations?

<sup>21</sup> In this video, Chip Huth explains the KCPD West Side CAN project:  
<https://www.youtube.com/watch?v=1jllnuTMKbw&index=3&list=PLF6B83D43B9CB9DE0>

If a significant proportion of Other Moving Violations fall into identifiable categories, it would be helpful to make them into separate check offs. For instance, violations in a school zone or construction zone are made a priority in CPD's traffic stop policy. Officers apply a no-tolerance policy to them, so discretion is low. Perhaps seat belt violations are in the top ten moving violations. Are tinted windows a problem, or do these come under equipment violations? CPD has not released data on violations charged since 2015, so an outside analyst cannot tell which violations might merit check offs.

It would be useful to have data on how serious violations are. For instance, officers could be required to check off the number of miles per hour by which a driver exceeded the speed limit. It might also be possible to extract this information from other databases, so officers do not have to take the time to enter it. CPD probably has digital records of the details of citations and arrests already available for internal use. Databases can be linked.

In 2020, the **investigative stop** check-off might make this sort of situation easier to identify. A typical situation would be an officer receiving orders from dispatch to look for a green Ford sedan reported as moving erratically near the intersection of Providence and Broadway at 6:30 pm. The officer spots a car matching the description, follows the car for a few minutes, then makes a stop based on the observation of a failure to signal a lane change.

For the VSR data, the officer would check off investigative stop, call for service, moving violation and failure to signal. Because of the high stop disproportion against black drivers, CPD would review its data to see if credible intelligence is documented. Filtering the incident-based data on the basis of moving violations and calls for service, CPD might find that enough of them occurred to account for a significant part of the stop disproportion. The stop would be recognizable in the data as the sort of stop a black driver might consider illegitimate, but CPD would be able to document that there was a valid public safety concern: a person made a call for service to report dangerous driving.

## Post-Stop Actions

Disproportions for the actions officers take after a stop has been made are easier to analyze—**post-stop actions**. The officer has been face to face with the driver. Rates are based on group stops, so no estimates are involved. Usually, situations are simpler; it's easier to focus on the credible intelligence an officer used. A stop can involve multiple factors, but a consent search, for instance, comes down to the officer's discretion.

## Results of Stops

After a stop has occurred and the officer has had time to assess violations, the next step is to decide what actions to take. The VSR has check offs for citations, warnings, no action and other result. Officers might also decide to conduct a search or make an arrest, but these are handled separately.

Table 8. 2019 Result of Stop Disproportions Based on Number of Stops



2019 CPD Data: Result of Stop								
Group	Officer Perception	Asian	Black	Hispanic	American	Other	White	Total
Group Proportions of Drivers	VSR Benchmark from Census	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15,015
<b>Citations</b>	Count	33	565	27	12	12	1023	1672
Rate Per Stop	Category/ total stops	0.127	0.108	0.109	0.179	0.098	0.113	0.111
Disproportion		1.13	0.95	0.97	1.59	0.86	1.03	
<b>Warnings</b>	Count	214	4026	202	51	98	7278	11,869
Rate Per Stop	Category/ total stops	0.826	0.767	0.818	0.761	0.797	0.803	0.790
Disproportion		1.03	0.96	1.02	0.95	0.99	1.04	
<b>No Action</b>	Count	6	366	14	4	6	479	875
Rate Per Stop	Category/ total stops	0.023	0.070	0.057	0.060	0.049	0.053	0.058
Disproportion		0.44	1.32	1.07	1.13	0.92	0.79	
<b>Other Result</b>	Count	7	416	13	0	8	435	879
Rate Per Stop	Category/ total stops	0.027	0.079	0.053	0.000	0.065	0.048	0.059
Disproportion		0.56	1.65	1.10	0.00	1.36	0.64	
All Disproportions are	Grp Rate/ White Rate or W Rate/Non-W Rate							

Officers can issue citations, give warnings, take no action, or take an “other” action. These actions are evaluated by **rates per stop**, for instance, Hispanic citations per Hispanic stops:  $27/247=0.109$ . This decimal fraction is 109 thousandths. You can think of it as 109 citations per 1000 stops.

Rates are compared to see disproportions, for instance, the Hispanic rate divided by the white rate to give the information in the form: Hispanic drivers receive citations at a rate 0.97 times the white rate:  $0.109/0.113=0.97$ .

For all drivers, stops resulted in **citations** at a rate of 0.111 per stop, which can be thought of as 11% of the time. Disproportions are relatively low for all groups except American Indians. They had the lowest number of incidents—just 12—and that’s not enough to document a pattern, but if concerns about discrimination are raised, CPD could review each incident.<sup>22</sup> Are officers applying the same evidentiary standards to them?

Stops resulted in **warnings** 79% of the time, indicating officers are generally not taking a punitive attitude toward driver lapses; they are trying to help drivers avoid mistakes that could hurt them or others. Rates per stop for all drivers are about the same, indicating officers treat groups the similarly.

**Arrests** are covered separately, probably because they are not always the result of the stop. They might be made as the result of a search, for instance. Arrests occur in 12% of stops. See the section below on Arrests.

875 stops resulted in **No Action**. The disproportion against black drivers is 1.32. Is there a pattern behind these numbers? Perhaps officers are more likely to take no action when a stop involved an investigative intent; 2020 data might clarify this point.

<sup>22</sup> If officers issued citations at random, American Indians would be expected to have received about 8 instead of 12. If I used Excel’s Chi Square test correctly, there’s about a 9% chance of this outcome occurring, not enough to satisfy statisticians. But if CPD receives complaints, each incident could be reviewed to make sure officers were acting on credible intelligence.

The highest disproportion is for **“Other” actions** against black drivers: 1.65. Information in the Code of State Regulations, which implements the law, and from the AG does not clarify what an “other action” might be. It’s possible that officers sometimes record searches or arrests as “Other” actions, but these are supposed to be entered in their own categories. Supervisors need to check to make sure officers are using the categories as intended. Agencies need to explain what “Other” results are, especially when a high disproportion exists.

### Stop Analysis vs Post-Stop Analysis

Post-stop rates are based on stops. The rate for citations, for instance, is citations per stop. It focuses on just the officer’s decision to write a citation and ignores everything that happens as the officer makes the stop. Black drivers are issued citations at a rate of 565 citations per 5250 stops or 0.108. The white rate is 0.113, so the disproportion is  $0.108/0.113 = 0.95$ : black drivers are affected at a rate 95% of the white rate.

Rates per stop, however, ignore the disproportions in the initial stops. Black drivers are slightly less likely to receive a citation after a stop has occurred, but because black drivers are stopped at a rate per driver 4.63 times the white rate, they are still 4.42 times more likely to receive a citation, based on group proportions of drivers.

Table 9. Result of Stops Based on Benchmarks

2019 Columbia Police Department Data					Result of Stop				
Group	Group Proportions of Drivers	All Traffic Stops	Group % of Stops	Stop Disparity Index	Stop Disproportion Based on Group Proportions	Citations	Group % of Citations	Citation Disparity Index	Citation Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	grp stops / total stops	group Stop%/ Benchmark	Grp DI/ White DI or W DI/Non-W DI	Count	grp citations / total stops	citation% / Benchmark	Grp DI/ White DI or W DI/Non-W DI
Asian	5.17%	259	1.7%	0.33	0.44	33	2.0%	0.38	0.50
Black	9.96%	5250	35.0%	3.51	4.63	565	33.8%	3.39	4.42
Hispanic	2.97%	247	1.6%	0.55	0.73	27	1.6%	0.54	0.71
American	0.27%	67	0.4%	1.65	2.18	12	0.7%	2.66	3.46
Other	1.92%	123	0.8%	0.43	0.56	12	0.7%	0.37	0.49
White	79.71%	9069	60.4%	0.76	0.39	1023	61.2%	0.77	0.40
Total	100.00%	15015	100.0%			1672	100.0%	1.00	

Post-stop disproportions are valuable because they accurately reflect what officers do in just that category of action, but they ignore the overall effect on members of a group. According to the data, officers are treating drivers equally when they write citations, but because black drivers are stopped at a greater rate, they also receive citations at a greater rate per driver.

**Whatever the black disproportion that appears in post-stop analysis, keep in mind that the actual impact on black drivers is about four times that disproportion.**

### Searches

Black drivers are subjected to searches at a rate per stop 1.70 times the rate for white drivers.

Table 10. Search Disproportions

2019 CPD Search Disproportions				
Group	All Traffic Stops	Stops Involving Searches	Rate Per Stop	Disproportion
Officer Perception	Count	Count	Searches / Stops	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	259	20	0.077	0.65
Black	5250	1057	0.201	1.70
Hispanic	247	30	0.121	1.03
American Indian	67	0	0.000	0.00
Other	123	6	0.049	0.41
White	9069	1071	0.118	0.63
Total	15015	2184	0.145	

Searches occur under a wide variety of circumstance, some of which involve very little officer discretion, so it's better to look at individual categories.

Table 11. 2019 Search Categories

2019 CPD Data								
Group	Officer Perception	Asian	Black	Hispanic	American	Other	White	Total
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15,015
<b>Consent Searches</b>	Count	9	356	14	0	2	537	918
Rate Per Stop	Searches / Stops	0.035	0.068	0.057	0.000	0.016	0.059	0.061
Disproportion		0.59	1.15	0.96	0.00	0.27	0.92	
<b>Inventory</b>	Count	0	8	0	0	0	16	24
Rate Per Stop	Searches / Stops	0.000	0.002	0.000	0.000	0.000	0.002	#DIV/0!
Disproportion		0.00	0.86	0.00	0.00	0.00	1.31	
<b>Odor Searches</b>	Count	4	431	10	0	2	169	616
Rate Per Stop	Searches / Stops	0.015	0.082	0.040	0.000	0.016	0.019	0.041
Disproportion		0.83	4.41	2.17	0.00	0.87	0.25	
<b>Incident to Arrest</b>	Count	2	207	8	0	1	235	453
Rate Per Stop	Searches / Stops	0.008	0.039	0.032	0.000	0.008	0.026	0.030
Disproportion		0.30	1.52	1.25	0.00	0.31	0.71	
<b>Plain View Contraband</b>	Count	3	85	2	0	1	89	180
Rate Per Stop	Searches / Stops	0.012	0.016	0.008	0.000	0.008	0.010	0.012
Disproportion		1.18	1.65	0.83	0.00	0.83	0.64	
<b>Reasonable Suspicion- We</b>	Count	1	138	2	0	0	67	208
Rate Per Stop	Searches / Stops	0.004	0.026	0.008	0.000	0.000	0.007	0.014
Disproportion		0.52	3.56	1.10	0.00	0.00	0.31	
<b>Drug Dog Alert Search</b>	Count	2	58	0	0	0	128	188
Rate Per Stop	Searches / Stops	0.008	0.011	0.000	0.000	0.000	0.014	0.013
Disproportion		0.55	0.78	0.00	0.00	0.00	1.40	
<b>Other Basis</b>	Count	0	25	0	0	0	33	58
Rate Per Stop	Searches / Stops	0.000	0.005	0.000	0.000	0.000	0.004	0.004
Disproportion		0.00	1.31	0.00	0.00	0.00	0.87	
All Disproportions are	Grp Rate/ White Rate or W Rate/Non-W Rate							

Some searches are automatic so officers are unlikely to be distracted by stereotypes. For instance, if an officer finds from a computer records check that an **outstanding warrant** exists, an arrest is required and an **“Incident to Arrest”** search must be made unless a search has already been made for some other reason. Black drivers are arrested for outstanding warrants at a rate 2.42 times the white rate (more below). Each of these arrests results in a search which contributes to the overall search disproportion.

Outstanding Arrest Warrants might be issued for serious criminal violations, but they are usually the result of someone not settling a minor violation in municipal court. Affluent individuals just mail a check or hire a lawyer to fix the ticket,<sup>23</sup> but individuals with low incomes have difficulty even getting to court. The number of Outstanding Warrant Arrests was very low 10 years ago—just 21 for all groups—but in 2016 there were over 1000 of them. More recently, numbers have fallen because of municipal court reforms, but they edged back up in 2018.<sup>24</sup>

Other low-discretion searches are **inventory** and **plain-view contraband**. Officers should have no trouble citing probable cause for these searches, but discrimination could still occur if they ignore the evidence against some drivers because of race. An officer might, for instance, report a legal gun as

<sup>23</sup> Fixing tickets—getting a prosecutor to agree to a moving violation being changed to a parking violation—is common in some jurisdictions.

<sup>24</sup> See my [Compilation](#) of Columbia VSR data.

contraband when found with a driver from one group but not when found with a driver from another group. More below on the significance of contraband found.

See the discussion of **consent searches** above. Although the information does not appear in the VSR data or the data released, CPD officers evidently record in a separate database when they request consent but it is denied. They could be requesting consent more often than is apparent in this data, and the disproportions could be significantly different if some groups are more likely to deny consent than other groups. The VSR would benefit from a check off for consent requested/denied. Perhaps CPD can link its databases so this information appears in the stop data released.

Officers have high discretion in calling for a **drug dog**, but more restrictions have been applied in recent years—and jurisdictions can set their own guidelines for officers. In 2013 the drug-dog alert search disproportion against black drivers was 12.77, but in 2019 white drivers were affected at a rate 1.40 times the rate for all non-white drivers. What’s missing from the VSR data and the data released by CPD is when **officers call for a drug dog but it doesn’t alert**. Information on dogs being summoned might document that dogs are summoned for more black drivers but no search is recorded because the dog did not alert. Records are kept of when a dog is summoned, but analysis would be more efficient if the information were included in the traffic stop data so a separate database does not have to be consulted.

Black drivers are affected by **drug/alcohol odor searches** at a rate 4.41 times the white rate. More information needs to be recorded about **whether the odor was from drugs or from alcohol**, and, if drugs, **what the drug was**. Are officers applying the same standard to everyone? Or are they more likely to use the odor of alcohol as an excuse to search some drivers? Or, perhaps, they exercise a favorable bias against a group, ignoring the odor for them. Perhaps officers need more guidance on when it is appropriate to base a search on odor. A policy could direct them to use the odor of alcohol as the reason for a search only when they observe erratic driving. With more detailed data, possible policy changes would be easier to evaluate.

In the interest of public safety, officers are given considerable discretion in conducting a **“reasonable suspicion-weapon” search**. According to the 1968 Terry decision, officers need only cite “specific, articulable facts” to justify conducting a quick pat down of a person or a brief search of a vehicle to make sure no weapon is within reach. The necessity of public safety makes the quick search reasonable, according to Supreme Court interpretation of Constitutional standards.

Black drivers were affected by reasonable suspicion searches in 2019 at a rate 3.56 times the white rate. Supervisors need to make sure officers are citing adequate facts. The common term, “reasonable suspicion,” inadequately expresses the Supreme Court’s standard of “specific, articulable facts.” We all consider our own suspicions reasonable; officers need to base their actions on facts—“credible intelligence,” as required by the CPD Bias-Free Policing Policy.

## Contraband Found

The VSR mandates that officers record when they find **contraband**, illegal goods. Statewide in 2018, black drivers were found with contraband in 34% of searches, which was 94% of the white rate of 36% of searches. In Columbia in 2019, black drivers were found with contraband in 32% of searches, which was 120% of the white rate of 26% of searches.

In the years since agencies began reporting VSR data, there has been a trend toward higher contraband hit rates for black drivers, both for CPD and statewide:<sup>25</sup>

Table 12. Historical Consent Search and Contraband Found Disproportions for Black Drivers

Consent Searches and Hits for Black Drivers								
Agency	Year	Total Stops	Consent Searches	Consent Search Rate	Consent Search Disproportion	Total Stops Resulting in Discovery	Hit Rate: group hits/group searches	Hit Rate Disproportion
		count	count	grp incidents / grp stops	minority rate / white rate	count	grp incidents / grp stops	minority rate / white rate
Columbia Police Dept.	2001	3037	166	0.055	1.82	66	0.022	1.24
Columbia Police Dept.	2009	4766	220	0.046	3.49	119	0.177	0.78
Columbia Police Dept.	2013	4199	232	0.055	4.16	117	0.220	0.97
Columbia Police Dept.	2014	4004	200	0.050	4.39	150	0.277	0.90
Columbia Police Dept.	2015	3348	208	0.062	2.01	161	0.272	0.80
Columbia Police Dept.	2016	3691	216	0.059	1.45	241	0.394	0.98
Columbia Police Dept.	2017	4062	137	0.03	1.19	276	0.458	1.08
Columbia Police Dept.	2018	4866	182	0.037	1.53	263	0.387	1.20
Missouri State Totals	2001	189,074	6489	0.034	1.24	3329	0.018	1.25
Missouri State Totals	2009	297,828	11,618	0.039	1.45	5286	0.172	0.76
Missouri State Totals	2013	289,252	11,623	0.040	1.45	5632	0.188	0.72
Missouri State Totals	2014	304,169	11,055	0.036	1.39	5849	0.214	0.80
Missouri State Totals	2015	275,081	8317	0.030	1.10	5868	0.243	0.83
Missouri State Totals	2016	279,657	8702	0.031	1.09	7119	0.290	0.86
Missouri State Totals	2017	288,849	9059	0.03	1.05	8422	0.329	0.93
Missouri State Totals	2018	296,065	9830	0.033	1.07	8944	0.338	0.95

Statewide, white drivers have been consistently more likely to be found with contraband than black drivers, but the trend has been toward parity. In Columbia, for the two most recent years, black drivers have been found with contraband more frequently than white drivers.

As Dr. Fridell observed, page 6 above, contraband found provides an indication of the efficacy of searches. Columbia officers are finding contraband more frequently now than in 2001, so, overall, they appear to be conducting searches more frequently in situations in which criminal behavior is occurring. Types of searches can make a difference, as discussed above, and so can the nature of the contraband found.

Contraband is broken down into categories: drugs, stolen property, weapons:

Table 13. 2019 Categories of Contraband Found

<sup>25</sup> AGs have collected VSR data since 2000; 2001 was the first full year. I have compiled historical data on post-stop situations for about forty of the largest jurisdictions. Below is a sample covering CPD and overall state data on stops, searches and contraband found. See the [Compilation](#) posted on my website. Only post-stop situations are included because faulty benchmarks make the stop disproportions unreliable for some agencies.

2019 CPD Data: Contraband Found								
Group	Officer Perception	Asian	Black	Hispanic	American Indian	Other	White	Total
Group Proportions of Drivers	VSR Benchmark from Census Data	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15,015
<b>Contraband Found During Search</b>	Count	8	336	5	0	3	283	635
Rate Per Search	Contrabandfound / Search	0.400	0.318	0.167	#DIV/0!	0.500	0.264	0.291
Disproportion		1.51	1.20	0.63	#DIV/0!	1.89	0.84	
<b>Drugs/ Alcohol/ Parpernalialia</b>	Count	11	486	8	0	3	446	954
Rate Per Search	Contrabandfound / Search	0.550	0.460	0.267	#DIV/0!	0.500	0.416	0.437
Disproportion		1.32	1.10	0.64	#DIV/0!	1.20	0.91	
<b>Currency</b>	Count	0	5	0	0	0	11	16
Rate Per Search	Contrabandfound / Search	0.000	0.005	0.000	#DIV/0!	0.000	0.010	0.007
Disproportion		0.00	0.46	0.00	#DIV/0!	0.00	2.29	
<b>Weapon</b>	Count	1	63	1	0	1	56	122
Rate Per Search	Contrabandfound / Search	0.050	0.060	0.033	#DIV/0!	0.167	0.052	0.056
Disproportion		0.96	1.14	0.64	#DIV/0!	3.19	0.88	
<b>Stolen Property</b>	Count	0	16	0	0	2	7	25
Rate Per Search	Contrabandfound / Search	0.000	0.015	0.000	#DIV/0!	0.333	0.007	0.011
Disproportion		0.00	2.32	0.00	#DIV/0!	51.00	0.40	
<b>Other Contraband</b>	Count	1	12	0	0	0	20	33
Rate Per Search	Contrabandfound / Search	0.050	0.011	0.000	#DIV/0!	0.000	0.019	0.015
Disproportion		2.68	0.61	0.00	#DIV/0!	0.00	1.60	
All disproportions are:	Grp Rate/ White Rate or W Rate/Non-W Rate							

The disproportions are generally moderate except for searches finding stolen property. An arrest for possession of stolen property is not a check off for the VSR and CPD does not include the details of citations or arrests in its posted data, so the severity of the violations cannot be determined from posted data. A VSR check off for the outcome of contraband found would improve analysis. See more below on the significance of contraband found.

Black drivers were identified as having **weapons as contraband** 63 times; white drivers had weapon contraband 56 times, resulting in a black disproportion in per-search rates of 1.14. It could be that officers record weapons as contraband even when they are not illegal. For instance, an officer could find a legal weapon in a suspicion search. It wouldn't be contraband but the search served it's intended purpose. An explanation is needed, but the disproportion is not high enough to be a major concern. See more on weapons found and arrests.

Officers are sometimes required to make a search. They must make a search if they make an arrest; they cannot take someone into custody without making sure the person does not have, for instance, a weapon. If a vehicle is impounded, officers make sure nothing dangerous or illegal is in it.

As noted above, if an arrest is made because a driver has not paid a fine for a minor violation in the past, there would be no reason to expect contraband, so the hit rate is likely to be low:

Table 14. 2019 OWA Followed by Contraband Found

2019 CPD Data		Outstanding Warrant Arrest Leading to Contraband Found					
Group	All Traffic Stops	Outstanding Warrant	Rate Per Stop	Disproportion	OWA > CF	Rate Per OWA	Disproportion
Officer Perception	Count	Count	Arrests / Total Stops	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	CF / OWA	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	259	2	0.008	0.54	0	0.000	0.00
Black	5250	182	0.035	2.42	29	0.159	0.99
Hispanic	247	1	0.004	0.28	0	0.000	0.00
American Indi	67	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Other	123	0	0.000	0.00	0	#DIV/0!	#DIV/0!
White	9069	130	0.014	0.46	21	0.162	1.03
Total	15015	315	0.021		50	0.159	

Hits occur in 15.9% of searches that follow OWAs, according to the incident-based data. Rates for black and white drivers are similar. It's possible that the contraband was found in another type of search conducted during the same stop.

### Hit Rates by Category of Search

The CPA 2019 incident-based data allows hit rates to be determined for each category of searches:

Table 15. 2019 Search Categories Followed by Contraband Found



2019 CPD Data	Contraband Found by Search Categories							
Group	Officer Perception	Asian	Black	Hispanic	American Ind	Other	White	Total
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15,015
<b>Stops Involving Searches</b>	Count	20	1057	30	0	6	1071	2184
<b>Consent Searches</b>	Count	9	356	14	0	2	537	918
<b>Consent Search Hits</b>	Count	4	83	2	0	0	88	177
Rate Per Search	CF / Search	0.444	0.233	0.143	#DIV/0!	0.000	0.164	0.193
Disproportion		2.71	1.42	0.87	#DIV/0!	0.00	0.70	
<b>Inventory Searches</b>	Count	0	8	0	0	0	16	24
<b>Inventory Hits</b>	Count	0	2	0	0	0	3	5
Rate Per Search	CF / Search	#DIV/0!	0.250	#DIV/0!	#DIV/0!	#DIV/0!	0.188	0.208
Disproportion		#DIV/0!	1.33	#DIV/0!	#DIV/0!	#DIV/0!	0.75	
<b>Odor Searches</b>	Count	4	431	10	0	2	169	616
<b>Odor Search Hits</b>	Count	2	188	2	0	2	91	285
Rate Per Search	CF / Search	0.500	0.436	0.200	#DIV/0!	1.000	0.538	0.463
Disproportion		0.93	0.81	0.37	#DIV/0!	1.86	1.24	
<b>Incident to Arrest Search</b>	Count	2	207	8	0	1	235	453
<b>Incident to Arrest Hits</b>	Count	0	58	0	0	1	59	118
Rate Per Search	CF / Search	0.000	0.280	0.000	#DIV/0!	1.000	0.251	0.260
Disproportion		0.00	1.12	0.00	#DIV/0!	3.98	0.93	
<b>Plain View Searches</b>	Count	3	85	2	0	1	89	180
<b>Plain View Hits</b>	Count	2	46	1	0	0	42	91
Rate Per Search	CF / Search	0.667	0.541	0.500	#DIV/0!	0.000	0.472	0.506
Disproportion		1.41	1.15	1.06	#DIV/0!	0.00	0.88	
<b>Reasonable Suspicion- Weapon Searches</b>	Count	1	138	2	0	0	67	208
<b>RS-W Hits</b>	Count	1	34	1	0	0	25	61
Rate Per Search	CF / Search	1.000	0.246	0.500	#DIV/0!	#DIV/0!	0.373	0.293
Disproportion		2.68	0.66	1.34	#DIV/0!	#DIV/0!	1.46	
<b>Drug Dog Alert Search</b>	Count	2	58	0	0	0	128	188
<b>Drug Dog Alert Hits</b>	Count	0	23	0	0	0	47	70
Rate Per Search	CF / Search	0.000	0.397	#DIV/0!	#DIV/0!	#DIV/0!	0.367	0.372
Disproportion		0.00	1.08	#DIV/0!	#DIV/0!	#DIV/0!	0.96	
<b>Other Basis Searches</b>	Count	0	25	0	0	0	33	58
<b>Other Basis Hits</b>	Count	0	5	0	0	0	9	14
Rate Per Search	CF / Search	#DIV/0!	0.200	#DIV/0!	#DIV/0!	#DIV/0!	0.273	0.241
Disproportion		#DIV/0!	0.73	#DIV/0!	#DIV/0!	#DIV/0!	1.36	
<b>All Disproportions are:</b>	<b>Grp Rate/ White Rate or W Rate/Non-W Rate</b>							

Overall hit rates are highlighted in red. They go from a high of contraband being found in 51% of **Plain View Contraband** searches to a low of 19% for consent searches.

An explanation is needed about Plain View searches; if officers see contraband before making a search, why is contraband found only half the time? Perhaps officers see something they think is illegal, but it turns out to be ok—the gun turns out to be a toy. What could have been an illegal drug is prescription medicine. Disproportions are relatively low—1.15 for black drivers—but an explanation from CPD would be helpful.

Officer discretion is not the cause of the low hit rates in **incident to arrest** and **inventory searches**. They are required to make these searches whether or not they expect to find contraband. Incident to arrest

searches could occur after another search. For instance, an officer might find plain-view contraband and then conduct a more thorough search after making an arrest.

Hit rates for **high discretion searches** might confirm officers are acting on reliable intelligence. The hit rate for **drug/alcohol odor searches** is high enough—46%—to suggest officers are acting on reliable indicators of criminal behavior but few arrests are made for the contraband. See more on odor searches leading to arrests below.

In 2015, the first year CPD released its incident-based data, the hit rate for **consent searches** was 14.1%:

Table 16. 2015 Consent Searches Followed by Contraband Found

2015 Columbia PD Incident-Based Data			
Group	Consent Searches	Contraband Found	Hit Rate
Black	208	21	10.1%
White	227	42	18.5%
Total	446	63	14.1%

Chief Burton changed the consent search policy to require officers to explain to drivers they could refuse consent and require officers to obtain recorded consent. The change in procedures brought the disproportion against black drivers down, perhaps because officers became more careful about when they asked for consent, and that brought the hit rate up.

In 2019 the consent search hit rate for black drivers was above 20%--23%--and 1.42 times the white hit rate, which suggests officers are being more careful to act on facts. The low hit rate for white drivers—16%--suggests officers might be using consent searches on white drivers without credible intelligence.

Officers have a high degree of discretion in calling for a **drug dog**, and the 37% hit rate seems relatively high, but officers, presumably do not perform a search unless the dog has alerted, so 63% of alerts are false. No record is presented of the times a drug dog is summoned but does not alert. CPD keeps records of when dogs are summoned although this information is not included in released data. Are groups disproportionately affected by officers’ decisions to call for a drug dog? Are officers acting on credible intelligence when they call for a dog?

## Arrests

Black drivers are **arrested** at a rate per stop 1.34 times the white rate. As noted above, black drivers are disproportionately affected by **outstanding warrant arrests**—mostly for minor violations which they are not able to address promptly in municipal court. When outstanding warrant arrests are left out, the black arrest disproportion goes down to 1.17; black criminality is not as pronounced as the overall arrest rate might suggest.

Table 17. 2019 Categories of Arrests

2019 CPD Data	Group		Asian	Black	Hispanic	American Indian	Other	White	Total
	<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15015
<b>Arrests</b>	<b>Driver Arrested</b>	Count	26	740	25	5	8	951	1755
	Rate Per Stop	Arrests / Total Stops	0.100	0.141	0.101	0.075	0.065	0.105	0.117
	Disproportion	Grp Rate/ White Rate or W Rate/Non-W Rate	0.96	1.34	0.97	0.71	0.62	0.78	
<b>Violation Alleged</b>	<b>Outstanding Warrant</b>	Count	2	182	1	0	0	130	315
	Rate Per Stop	Arrests / Total Stops	0.008	0.035	0.004	0.000	0.000	0.014	0.021
	Disproportion		0.54	2.42	0.28	0.00	0.00	0.46	
	<b>Drug Violation</b>	Count	5	115	2	0	0	140	262
	Rate Per Stop	Arrests / Total Stops	0.019	0.022	0.008	0.000	0.000	0.015	0.017
	Disproportion		1.25	1.42	0.52	0.00	0.00	0.75	
	<b>Resisting Arrest</b>	Count	1	29	1	0	0	14	45
	Rate Per Stop	Arrests / Total Stops	0.004	0.006	0.004	0.000	0.000	0.002	0.003
	Disproportion		2.50	3.58	2.62	0.00	0.00	0.30	
	<b>Offense Against Person</b>	Count	0	7	0	0	0	20	27
	Rate Per Stop	Arrests / Total Stops	0.000	0.001	0.000	0.000	0.000	0.002	0.002
	Disproportion		0.00	0.60	0.00	0.00	0.00	1.87	
	<b>Traffic Violation</b>	Count	17	335	14	5	7	565	943
	Rate Per Stop	Arrests / Total Stops	0.066	0.064	0.057	0.075	0.057	0.062	0.063
	Disproportion		1.05	1.02	0.91	1.20	0.91	0.98	
	<b>DWI/BAC</b>	Count	1	61	7	0	1	153	223
	Rate Per Stop	Arrests / Total Stops	0.004	0.012	0.028	0.000	0.008	0.017	0.015
	Disproportion		0.23	0.69	1.68	0.00	0.48	1.43	
	<b>Property Crime</b>	Count	0	12	0	0	0	15	27
	Rate Per Stop	Arrests / Total Stops	0.000	0.002	0.000	0.000	0.000	0.002	0.002
	Disproportion		0.00	1.38	0.00	0.00	0.00	0.82	
	<b>Other Arrest Charge</b>	Count	2	127	3	0	1	96	229
	Rate Per Stop	Arrests / Total Stops	0.008	0.024	0.012	0.000	0.008	0.011	0.015
	Disproportion		0.73	2.29	1.15	0.00	0.77	0.47	
	All Disproportions are:	Grp Rate/ White Rate or W Rate/Non-W Rate							

The highest arrest disproportion is 3.87 for **resisting arrest** charges against black drivers. Officers are expected to be able to de-escalate confrontations. Do they need more training for situations involving black drivers? Or are they already doing everything that can be expected of them? One chief with a similar disproportion found that most of the incidents in his jurisdiction involved drivers fleeing convenience store robberies—officers had no opportunity to de-escalate. Only 45 CPD resisting arrest charges were filed in 2019, so supervisors can review each of them as they occur—less than one per week.

Resisting Arrest charges are the only way the VSR documents officer **use of force**. Officers might use force without filing a resisting arrest charge. It would be helpful to have a check off that is more direct. The check off could break down use of force into categories such as use of defensive tactics, showing a weapon, firing a weapon and so on. Officers could also record use of force against them by drivers or passengers.

White drivers are disproportionately charged with **DWI/BAC offenses** and **offenses against a person**. Are officers applying the same standards for everyone? Discrimination against any group is a concern.

Black drivers are charged with DWI/BAC offenses at a rate 69% of the white rate; they appear to be careful to avoid this offense. But they are charged with **drug offenses** at a rate 1.42 times the white rate. Officers presumably have probable cause evidence of possession of illegal drugs, but CPD should make sure they are applying the same evidentiary standards to everyone.

Information on type of drug would be useful—marijuana, meth, cocaine, heroin, and so on. Small amounts of marijuana result in citations, not arrests.

The number of **traffic violation arrests** had been declining in recent years, but it increased from 556 in 2018 to 943 in 2019. The disproportion against black drivers declined from 1.33 to 1.02. One factor might be the traffic violation of **not having a valid driver license**. CPD’s traffic stop policy addresses actions officers should take involving driver licenses. Officers must be sure who the driver is—sure that a positive identification has been made. An officer who is not sure about the identification might arrest the driver in order to make a positive identification at the station—fingerprints, photo, and so on. The data would be more useful if information were collected on driver licenses as traffic violations and as the reason for arrest charges.

Black drivers are charged with **“Other” offenses** at a rate 2.29 times the white rate. What are these other offenses? Are officers acting on credible intelligence? Weapons and stolen property are categories of contraband found but they are not listed as possible arrest charges, so they might be recorded as “Other.” Weapons violations and possession of stolen property should be an arrest category for the VSR and for CPD’s internal data. A review of other offenses that are included in the “Other” category might suggest other check offs.

Even though “weapon” is not an arrest charge, the incident-based data tell when an arrest was made during an incident in which a weapon was found:

Table 18. 2019 Searches Followed by Weapon Found Followed by Arrest

<b>Weapon Found and Arrest</b>								
Group	Officer Perception	Asian	Black	Hispanic	American Indian	Other	White	Total
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15015
<b>Stops Involving Searches</b>	Count	20	1057	30	0	6	1071	2184
Rate Per Stop	Searches / Stops	0.077	0.201	0.121	0.000	0.049	0.118	0.145
Disproportion		0.65	1.70	1.03	0.00	0.41	0.63	
<b>Weapon Found</b>	Count	1	63	1	0	1	56	122
Rate Per Search	Contrabandfound / Search	0.050	0.060	0.033	#DIV/0!	0.167	0.052	0.056
Disproportion		0.96	1.14	0.64	#DIV/0!	3.19	0.88	
<b>Weapon and Arrest</b>	Count	0	36	0	0	0	32	68
Rate Per Weapon Found	Arrest / Weapon Found	0.000	0.571	0.000	#DIV/0!	0.000	0.571	0.557
Disproportion		0.00	1.00	0.00	#DIV/0!	0.00	1.05	
All Disproportions are:	Grp Rate/ White Rate or W Rate/Non-W Rate							

Arrests were made in more than half of the incidents in which a weapon was reported as found, although the arrest could have been of a violation unrelated to the weapon. Rates for black and for white drivers were equal. A check off for weapons charges would made this result transparent in VSR data, without having to filter the incident-based data.

### The Significance of Contraband Found

A remaining concern is that no information is available on the **significance of the contraband found**—what Dr. Fridell referred to as “seizeable evidence,” evidence that is strong enough that an officer decided to write a citation or make an arrest.

In 2019, arrests were made in only 7% of incidents in which consent searches resulted in contraband found. Black drivers were arrested at a rate twice that of white drivers, but even so only 10% of the contraband found in a consent search resulted in an arrest of a black driver.

Table 19. Consent Searches Followed by Contraband Found Followed by Arrest

2019 Searches Leading to Contraband Found Leading to Arrests, Etc.				
Group	All Traffic Stops	Consent Searches > Contraband Found > Arrest	Rate Per Consent Search	Disproportion
Officer Perception	Count	Count	CS>CF> A/ Consent Searches	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	259	1	0.111	2.29
Black	5250	35	0.098	2.03
Hispanic	247	0	0.000	0.00
American	67	0	#DIV/0!	#DIV/0!
Other	123	0	0.000	0.00
White	9069	26	0.048	0.51
Total	15014	62	0.068	

Keep in mind that the data tell us when an arrest occurred in a stop in which a consent search was followed by contraband found, but not whether the arrest was for the contraband found or for some other violation. Perhaps the officer wrote a citation for marijuana found in the search but arrested the driver because of an outstanding warrant. There could be more incidents in which contraband did not result in an arrest but they can't be identified without more information.

What is the contraband that officers report but do not consider significant enough to result in an arrest? Are they applying the same standards to all drivers? Because only 62 of these incidents were documented in the 2019 data, clerical staff could alert supervisors when one occurs so the supervisor can review the circumstances and let the officer know whether the intelligence met the standard for credibility.

The data can also be looked at from the perspective of when contraband did not result in an arrest:

Table 20. Consent Searches Followed by Contraband Found Followed by No Arrest

Consent Searches Leading to Contraband Found Leading to No Arrests								
Group	Officer Perception	Asian	Black	Hispanic	American Indian	Other	White	Total
<b>Consent Searches</b>	Count	9	356	14	0	2	537	918
Rate Per Stop	Searches/ total stops	0.035	0.068	0.057	0.000	0.016	0.059	0.061
Disproportion	Grp Rate/ White Rate or W Rate/Non-W Rate	0.59	1.15	0.96	0.00	0.27	0.92	
<b>Consent Searches &gt; Contraband Found</b>	Count	4	83	2	0	0	88	177
Rate Per Search	CS>CF/ Consent Searches	0.444	0.233	0.143	#DIV/0!	0.000	0.164	0.193
Disproportion		2.71	1.42	0.87	#DIV/0!	0.00	0.70	
<b>Consent Searches &gt; Contraband Found &gt; No Arrest</b>	Count	3	48	2	0	0	62	115
Rate Per Search	CS>CF>NA/ Consent Searches	0.333	0.135	0.143	#DIV/0!	0.000	0.115	0.125
Disproportion		2.89	1.17	1.24	#DIV/0!	0.00	0.83	

This situation corresponds to what *Pulled Over* says black drivers identify as an illegitimate stop. The officer does not identify probable cause for a search but convinces the driver into surrendering constitutional rights; the driver might report being coerced into consenting. Then contraband is rarely found, and when it is found, it results in an arrest about half the time (48 out of 83). The stop could have started with a minor violation the officer would usually ignore, but this information will not be available until officers record investigative stops more thoroughly.

Again, the analysis is imperfect because there is no direct information on when contraband results in an arrest, a citation, a warning or no action. And limited information is recorded on investigative stops. And limited information on type of contraband—for instance, marijuana or meth. This missing information should be collected.

**Odor Searches** involve the same sorts of concerns as consent searches:

Table 21. Odor Searches Followed by Contraband Found Followed by No Arrest, Arrest, Etc.

Odor Search, Contraband Found, Arrests, Etc.								
Group	Officer Perception	Asian	Black	Hispanic	American Indian	Other	White	Total
<b>All Traffic Stops</b>	Count	259	5250	247	67	123	9069	15014
<b>Odor Searches</b>	Count	4	431	10	0	2	169	616
Rate Per Stop	Searches/ total stops	0.015	0.082	0.040	0.000	0.016	0.019	0.041
Disproportion		0.83	4.41	2.17	0.00	0.87	0.25	
<b>Odor Searches &gt; Contraband Found</b>	Count	2	188	2	0	2	91	285
Rate Per Search	OS>CF/ Odor Searches	0.500	0.436	0.200	#DIV/0!	1.000	0.538	0.463
Disproportion		0.93	0.81	0.37	#DIV/0!	1.86	1.24	
<b>Odor Searches &gt; Contraband Found&gt; No Arrest</b>	Count	2	111	0	0	2	54	169
Rate Per Contraband Found	OS>CF>NA/ CF	1.000	0.590	0.000	#DIV/0!	1.000	0.593	0.593
Disproportion		1.69	0.99	0.00	#DIV/0!	1.69	1.00	
<b>Odor Searches &gt; Contraband Found&gt; Arrest</b>	Count	0	77	2	0	0	37	116
Rate Per Contraband Found	OS>CF> A/ CF	0.000	0.410	1.000	#DIV/0!	0.000	0.407	0.407
Disproportion		0.00	1.01	2.46	#DIV/0!	0.00	1.00	
<b>Odor Searches &gt; Contraband Found&gt; Drug Violation Arrest</b>	Count	0	34	1	0	0	18	53
Rate Per Contraband Found	OS>CF> DVA/ CF	0.000	0.181	0.500	#DIV/0!	0.000	0.198	0.186
Disproportion		0.00	0.91	2.53	#DIV/0!	0.00	1.10	
All Disproportions are:	Grp Rate/ White Rate or W Rate/Non-W Rate							

Black drivers are searched based on odor at a rate 4.41 times the white rate, but contraband is found at a rate per search 81% of the white rate. Of the 285 stops in which an odor search was conducted and contraband was found, no arrest was made for any reason 169 times—which probably undercounts the number of times no arrest was made for the contraband. Arrests were made in 116 of the stops, but they could have been for anything that occurred during the stop and not for the contraband.

The relatively high hit rate for odor searches makes them appear to be an effective law enforcement tool, but if the contraband found is not “seizeable” as evidence and does not have a high “crime control value,” then department use of them should be reviewed—especially because of the high disproportion against black drivers.

Again, the basic concern is that CPD be able to document that discrimination does not occur, that officers are acting on credible intelligence, and the same standards are applied to all drivers. If data is missing or not easily available, CPD needs to fill the gaps. If credible intelligence cannot be documented, then CPD needs to explain the changes it is making to policies, supervision and training.

When the AG proposed reforms to the data collected for the VSR, Columbia Chief Geoff Jones asked whether officers should record contraband that did not result in citations or arrests—he used the terms “shake” and “residue.” The AG agreed the question was worth considering but gave no guidance.

It’s worth knowing when a reasonable suspicion-weapon search finds a gun, even if the gun was legal. The point of the search is not so much to discover contraband as to keep everyone safe. It is worth knowing when an officer finds a trace amount of meth, or a powder suspected of being meth. The contraband is not actionable, but it is sufficient intelligence for detectives to begin an investigation.<sup>26</sup>

It is important to know when contraband is found, but the public should also know how significant it was. **The VSR needs a check off for when contraband found results in a citation, warning, arrest, or no action.**

CPD can probably access data on stop outcomes in digital form from its other databases, but it might be advantageous to collect the information in the same database as traffic stop data so that analysis can be performed more efficiently. The 2015 data that CPD posted contained the Uniform Crime Report codes for arrest charges which presumably came from another database, so linking appears to be possible.

### Common Sense vs. Statistics

From an officer’s perspective, each incident is experienced and remembered individually. The officer is confident that he or she observed what was happening and responded reasonably. Depending on patrol area, an officer might remember stopping many more white drivers than black drivers or asking many more white drivers for consent than black drivers—and that’s really what happened overall for CPD officers. Since whites outnumber blacks in Columbia, officers might be expected to stop, on average, 10 white drivers for every black driver.

If the officer’s patrol area includes a large proportion of black drivers, then, of course, the officer stops more black drivers; it’s common sense.

But the data allow a different perspective to emerge; overall patterns in officer actions. Officers can see the disproportions against black drivers only by comparing group rates.

If officers can see from the data that they stop, on average, black drivers at a much higher rate than white drivers—even though they stop more white drivers than black drivers—they are in a better position to assess their performance as a department and individually. They can see why it’s important to check facts before acting.

An officer who patrols an area with a high proportion of black drivers needs to look carefully at his or her post-stop rates. A high consent search disproportion might tell her that she is much more likely to be suspicious enough of black drivers to ask for consent, but she rarely finds contraband significant enough to result in an arrest. She would then be in a position to rethink on her own whether asking for consent is an effective tactic, or just alienates people whose help she needs to control serious crime.

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<sup>26</sup> What officers identify as contraband during a search might turn out to be legal after further analysis or investigation, but officers cannot record this information at the time of the search. Groups might be affected disproportionately by the decisions of prosecutors to take action or of judges and juries to convict. Traffic stop data cannot be expected to cover all aspects of discrimination in the criminal justice system.



An officer who patrols an area with a high proportion of white drivers would probably find that he has a very low stop disproportion against black drivers, based on VSR benchmarks, but post-stop disproportions might help him see that his actions impact black drivers unequally. Perhaps he's dispatched to look for a black driver reported by a resident as being suspicious. He might decide to assess for himself whether there is credible intelligence of suspicious behavior.

Thinking statistically can help officers look beyond personal experience to see overall patterns. The statistics used in this analysis are pretty simple—no more complicated than rates and comparisons of rates. University of Missouri professor Dr. Jeffrey Milyo used the data to perform a “veil of darkness” analysis of CPD officers which concluded there is no statistical difference between the way officers act just before and just after there is enough light that they might be able to identify a driver's group before making a stop.<sup>27</sup>

This sort of multivariate analysis aims at proving within the limits of probability whether discrimination is occurring in stops made under these circumstances. The conclusion takes the form of there being a low probability that a stop disproportion could have been caused by officers' targeting a group, which is important to document. But enough instances could be occurring of officers acting on explicit bias to raise community concerns. Even one act of discrimination is a concern.

And if targeting is not the cause of the stop disproportion, then further steps are still needed to determine whether bias is involved in some other way, perhaps command staff deploy officers in ways that unfairly impact a group of drivers.<sup>28</sup>

And discrimination might still be occurring in post-stop situations, such as odor searches. The Veil of Darkness method is the only effective way researchers have found to examine discrimination, and it applies only to stops before and after darkness. That's enough to give a community more confidence in officers, but it's also important to have tools that pin point situations in which disproportions suggest officers need to be more careful about acting on credible intelligence.

The analysis presented here draws a more modest conclusion: disproportions in some situations are high enough that more work needs to be done to determine whether officers are basing their actions on credible intelligence.

Anyone can extract the information in my tables from the posted data using Excel tools.

1. Open the posted spreadsheet.
2. Enable filters on the top row.
3. Click the filter for the Race column.
4. Select A for Asian. Excel displays 259 in the lower left corner—the number of stops for drivers officers identified as Asian.
5. Filter the Gender column for males; Excel says 163 male Asian drivers were stopped.
6. Remove the filter for males and filter instead for Asian consent searches; there were 9.
7. Figure the rate per stop for consent searches for Asian drivers:  $9/259 = 0.035$ —35 consent searches for every 1000 stops of Asian drivers.

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<sup>27</sup> Milyo, Jeffrey. 2018. [“DWB in COMO: Understanding Race Disparities in Vehicle Stops and Searches.”](#) See pages 23-24 for a summary of the results of his Veil of Darkness study.

<sup>28</sup> See Dr. Fridell's discussion of “operational bias.” Fridell (2017) page 81.

8. Repeat for white drivers and compute the disproportion: Asian drivers were affected by consent searches at a rate 59% of the rate for white drivers.

I use formulas to get this sort of count of incidents and then figure rates, but it's still just basic spreadsheet skills. Sometimes there aren't enough incidents to document a reliable pattern. Recall the high disproportion against Native Americans for citations, page 17. But this isn't usually a problem for white and black drivers. As long as there are 30 incidents, a disproportion that looks significant is statistically significant.

And remember, the disproportions aren't expected to prove a problem exists; the disproportions are just a way to screen for situations in which supervisors should make sure officers are acting on credible intelligence.

### The Overall Impact of Stops

The incident-based data allows a series of officer actions to be traced. Above we looked at what happens when an officer conducts a search based on odor: odor search followed by contraband found followed by arrest, and so on—Table 21. The post-stop analysis with disproportions based on stops, searches and contraband found allowed us to see specific situations in which officers might need help focusing on credible intelligence—for instance, the evidentiary standard they apply when identifying contraband.

As observed above, post-stop analysis ignores any disproportion that originates in the stop, so even when a post-stop disproportion against black drivers is relatively low—take the 1.15 disproportion for consent searches—the overall disproportion based on an estimate of group driver proportions ends up being very high. Even though the black post-stop consent search disproportion has declined significantly, a black driver on the streets of Columbia is five times more likely to submit to consent search than a white driver.

Table 22. Consent Search Disproportions Based on Group Benchmarks

2019 Columbia Police Department Data					Probable Cause/Authority for Search				
Group	Group Proportions of Drivers	All Traffic Stops	Group % of Stops	Stop Disparity Index	Stop Disproportion Based on Group Proportions	Consent Searches	Group % of Citations	Citation Disparity Index	Citation Disproportion Based on Group Proportions
Officer Perception	VSR Benchmark from Census Data	Count	grp stops / total stops	group Stop%/ Benchmark	Grp DI/ White DI or W DI/Non-W DI	Count	grp citations / total stops	citation% / Benchmark	Grp DI/ White DI or W DI/Non-W DI
Asian	5.17%	259	1.7%	0.33	0.44	9	1.0%	0.19	0.26
Black	9.96%	5250	35.0%	3.51	4.63	356	38.8%	3.89	5.31
Hispanic	2.97%	247	1.6%	0.55	0.73	14	1.5%	0.51	0.70
American	0.27%	67	0.4%	1.65	2.18	0	0.0%	0.00	0.00
Other	1.92%	123	0.8%	0.43	0.56	2	0.2%	0.11	0.15
White	79.71%	9069	60.4%	0.76	0.39	537	58.5%	0.73	0.36
Total	100.00%	15015	100.0%			918	100.0%	1.00	

Looking at post-stop disproportions tends to be most helpful when trying to identify situations in which officers might need improved policies, training and supervision. Looking at disproportions based on

group proportions tends to be most helpful when trying to assess the vulnerability of a group to law enforcement actions.

The disproportions do not prove officers were intentionally discriminating against black drivers. Black drivers might turn out to be disproportionately affected because of investigatory stops, and officers might turn out to have credible intelligence to validate the stops—they were answering a call for service. Once we have dependable data on investigatory stops, we will be better able to investigate what's causing disproportions.

## Conclusions

CPD has several disproportions against black drivers which raise concerns, but some of them can probably be accounted for by documenting the credible intelligence officers based their actions on. In particular, the stop disproportion might involve investigations in which officers have convincing reasons to look for criminal activity. Data collected in 2020 for investigative stops should help clarify this situation.

If officers are being distracted by racial stereotypes, the low disproportion against black drivers for consent searches indicates that officers can quickly learn the skills needed to control implicit bias by concentrating on facts.

In several situations, more categories of check offs would make analysis easier, both in terms of telling what is causing a disproportion and documenting the credible intelligence used by officers. CPD needs to research the possibility of linking databases to minimize the work officers do entering information. Sometimes, an extra check off might be the best solution.<sup>29</sup>

CPD has a responsibility to provide explanations for the disproportions documented by its data. CPD has struggled to do this for several years, starting with a draft effort by former City Manager Mike Matthes in 2017: [Vehicle Stops and Listening Tour Summary](#).

Stop disproportions are difficult to explain, and probably cannot be explained without more information on officers' use of investigatory stops, so a full explanation might not yet be possible. But CPD should be able to explain several situations, for instance, what is involved in "other" arrest charges: Are they for weapons violations? How many odor searches involve alcohol? How many involve marijuana? How often do the odor searches result in arrests or citations? Do these arrests and citations justify the disproportion against black drivers?

Columbia is doing far more work on traffic stop data than any other jurisdiction in Missouri that I know of. The responsibility is new to law enforcement. Local agencies do not get clear guidance on what they should be doing, although I think Dr. Lorie Fridell points the way with her 20 years of research on

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<sup>29</sup> Columbia Chief Geoff Jones formed an advisory committee to recommend improvements in data collection and analysis. I'm a member. See [meeting reports](#) for February and March 2020 for an account of the discussions about adding data check offs. If the reports aren't available, ask me for copies. The committee hasn't been meeting recently because of the covid threat.

analyzing traffic stop data, her development of training programs for bias-free policing and her sketch of what a comprehensive approach looks like.<sup>30</sup>

The information needed in order to see patterns in officers' treatment of groups is the same information supervisors need to evaluate officer performance, as discussed in Dr. Fridell's "Comprehensive Program to Produce Fair and Impartial Policing," Chapter 3 in *Producing Bias-Free Policing*. Officers learn to look for "credible intelligence" in order to offset the effect of stereotypes. They record their credible intelligence in incident reports and databases. When the data reveal a pattern of disproportionate treatment of groups, the same data can often document that officers were acting on appropriate facts. If any doubt remains, supervisors look more closely at the data, incident reports, body camera recordings, comments by drivers and so on. Officers get positive feedback if they are citing appropriate facts. If the facts are missing, they are coached on looking for and recording facts.

From Dr. Fridell's perspective the problem is not explicit bias—racial bigotry, intentional targeting of black drivers. The VSR backs her up. If explicit bias were the problem, consent search disproportions would just stay high. Because they have fallen dramatically statewide in the last few years and have fluctuated in Columbia as policies have been evolving, it's clear that officers are not intentionally targeting black drivers but need guidance on appropriate use of consent searches. The guidance is just the most basic principle of law enforcement: check your facts.

Because they take their professional responsibilities seriously and are not controlled by explicit biases in the first place, officers quickly respond to the coaching. The disproportions quickly decline or CPD has the documentation it needs to convince the public that officers are acting on facts, not stereotypes.

Dr. Fridell does not address community policing in her book, but it is mentioned favorably as an effective strategy used in a number of jurisdictions to produce bias-free policing.<sup>31</sup> Or turning the question around, bias-free policing is an important element of community policing. Transparency is certainly a key element in both of them, with data and policies open for community discussion aimed at reaching a consensus on how best to protect public safety while guarding against discrimination.

A crucial aspect of community policing comes out in Dr. Fridell's use of the term "credible intelligence." As discussed above (page 5), she uses the term to cover a range of evidence from probable cause, through "specific, articulable facts," to the vague suspicions that might lead an officer to begin an investigation. Dr. Fridell often writes of "appropriate" factors and actions without defining them precisely. Precise determination of when intelligence is credible needs to be left to the law enforcement agency and its community.

What intelligence gives officers the opportunities they need to intervene in situations in which public safety is threatened? What limits need to be imposed on evidentiary standards in order to protect everyone's constitutional rights?

These questions have to be answered by all stakeholders in the community. Officers need to explain the difficulties they encounter trying to keep us safe. Members of the public need to tell the officers when

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<sup>30</sup> Fridell, Lorie. (2017) *Producing Bias-Free Policing: A Science-Based Approach*. Switzerland: Springer International Publishing. See especially Chapter 3.

<sup>31</sup> Ibid. See, for instance, page 93.

the strategies and tactics are counterproductive. Through community dialogue based on objective information, a consensus will emerge on appropriate policing.

Also see [An Introduction to Columbia Police Department Traffic Stop Data](#) for a more detailed examination of 2018 data, in which many of the same issues occur.

This analysis is geared to someone willing to do a deep dig into the data. For a lighter dose of dat, with reference to several agencies who data supports officer performance, see [A Tale of Four Cities](#).

For more documents covering aspects of the VSR, see my website: [Love the Missouri Vehicle Stops Report](#).

Comments? Questions? Corrections?

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