

Columbia Police Department Release of 2022 Incident-Based Traffic Stop Data

Introduction

2022 incident-based traffic stop data posted by the Columbia Police Department on the [city website](#) document the Black drivers are affected by officer actions disproportions large enough to raise concerns about discrimination: are different standards for evidence applied to groups?

Incident-based data (IBD) includes all information about each stop in one line in a spreadsheet. Data reported to the Attorney General for the Vehicle Stops Report (VSR) is aggregated: stops for each group of drivers are added together. IBD allows much more flexibility in how the information is analyzed, and still allow access to what happened in each stop.

I start with the IBD posted by CPD and then use pivot tables in Excel to compute rates and disproportions for each category of data. See my complete spreadsheets and the pivot tables I use to generate them.

Any member of the Columbia community can access this information and find situations in which discrimination might be occurring, but discrimination can be proven only by documenting the facts officers and supervisors act on. The information captured by data checkoffs is not detailed enough for proofs, so CPD must accept responsibility for producing convincing evidence that the facts officers know—their “actionable information” as Chief Jones says—justify stops and post-stop actions.

This report is preliminary. No one has checked my computations. Please forgive typos. Changes might be made to the data by CPD. More work can be done to see what happens in a series of actions in a stop, for instance, whether contraband found results in an arrest. Locations of stops need more attention; for instance, disproportions vary in Beats.

In his [memo to the City Manager](#) on 2021 data, Chief Geoff Jones looked at the facts officers acted on when they made investigative stops. He also said all consent and odor searches will be reviewed. It will be helpful to see his 2022 analysis. He might answer questions I raise. Why are Black drivers affected at such high disproportions? What can be done to make sure all drivers are treated fairly?

What concerns do you have about fair policing? What questions might the data help answer?

The rate of stops for Black drivers per driving-age resident is 4.81 times the rate for White drivers, up from 3.95 in 2021 Vehicle Stops Report (VSR) data. CPD disproportions are more than twice the 2021 statewide stop disproportion of 1.76. Disproportions for other situations that have been concerns, such as odor searches, remain high. The disproportion for consent searches has declined.

Because more information is being collected and released by CPD, a clearer understanding of what is and is not behind the disproportions is possible. Not enough stops for minor violations and investigative stops are reported to account for the size of the disproportions. Officers still might not be reporting facts accurately enough. Locations might prove to be a significant factor. Disproportions can vary widely over the [Beats](#) officers patrol.

The way forward is for law enforcement to use data to flag situations in which discrimination might be occurring then review each stop to see if officers are acting on facts that are convincingly independent of

racial stereotypes. Criteria for convincing facts need to be established with community input. Officers need feedback on the criteria they are applying and guidance when their criteria need improvement.

Agencies are required to submit 2022 data to the Attorney General by March 1. The AG will compile the data from all agencies and issue the 2022 VSR by June 1.

Headlines

Columbia Police Department has posted its 2022 Incident-Based Data on traffic stops to the [city website](#).

Here are the headlines I see in a preliminary analysis of the data. Discussion of each topic follows below.

1. **Black drivers were stopped at a rate per estimated driver 4.81 times the rate for White drivers, up from 3.95 in 2021.**
2. **Investigative stops**, in which officers act at least in part on suspicions, have an even higher disproportion, 7.49 based on rates per driver, but the 479 investigative stops (231 for Black drivers) are not enough to account for the overall disproportion.
3. The **Odor Search Disproportion remained high**. Black drivers were affected at a rate per driver 19.48 times the rate for White drivers. For the first time in 2022, CPD added checkoffs to capture information on the type of odor involved in searches. Most of the odor searches were for **the odor of marijuana**. Black drivers were affected at a rate per driver 23.64 times the rate for White drivers.
4. CPD had very high Consent Search disproportions before officers were given clearer criteria for their use in 2016. **In 2022 officers subjected Black drivers to consent searches at a rate per search 1.13 times the rate for White drivers, down from 1.43 in 2021.** This is a significant improvement, but the disproportion per driver is still 5.45. Some Beats had relatively low rates and disproportions for consent searches, but one Beat recorded 37 consent searches (almost a third of CPD's total) with a Black disproportion per stop of 1.36.
5. **Data Accuracy.** Some relatively minor glitches in the data need attention. For instance, 124 incidents appear to be duplicated in the dataset. In situations in which officers were expected to check off a main category such as Moving Violation and a subcategory such as Speeding, officers sometimes checked the main category but not the subcategory, and vice versa. The glitches are not likely to change major indicators but they could make a difference when a relatively small number of incidents are being studied.
6. **Checkoffs for minor violations were a major addition for 2022**, so that it would be possible to see if, for example, the stop disproportion against Black drivers was caused by stops such as going less than 5 mph over the limit. Only 23 of these violations were checked, 6 for Black drivers. The low count could be evidence that officers are not systematically targeting Black drivers for minor violations, but officers might not have been using the checkoffs as required. CPD needs to implement better policies related to officer use of data checkoffs.
7. One of the best uses of incident-based data is to figure rates and disproportions to flag possible discrimination and then **go back to the list of incidents to see details about the stops involved**. For instance, what was going on in stops in Beat 70D (the District) in which officers conducted a consent search? What violations did officers check off? Did the facts officers checked indicate a reason to be suspicious of the driver? Was Contraband found? Was an arrest made for contraband? What other facts would you like to have information on? You can do this sort of investigation for yourself with the IBD CPD has posted.

1. Basic Rates and Disproportions

Columbia Police Department 2022 Incident-Based Data: Basic Categories									
Group	Officer Perception	Asian	Black	Hispanic	Native American	Other	White	Total	
Group Population	2021 VSR ACS Estimates	6,452	10,661	3,301	258	4,654	78,132	102,321	
Category	Calculation								
Stops	Stops	Count of Stop ID	20	1			30	53	
	Rate Per Driver	Group Stops / Group Pop	0.014	0.188	0.051	0.085	0.006	0.039	0.052
	Stop Rate Disproportion	Non-W / W or W / B	0.36	4.81	1.29	2.18	0.15	1.00	
	Moving Violation Stop	Count	68	1022	113	14	17	1838	3072
	Rate Per Driver	Group Stops / Group Pop	0.011	0.096	0.034	0.054	0.004	0.024	0.030
	Stop Rate Disproportion	Non-W / W or W / B	0.45	4.08	1.46	2.31	0.16	0.25	1.28
	Equipment Stop	Count	14	265	15	5	3	401	703
	Rate Per Driver	Group Stops / Group Pop	0.002	0.025	0.005	0.019	0.001	0.005	0.007
	Stop Rate Disproportion	Non-W / W or W / B	0.42	4.84	0.89	3.78	0.13	0.21	1.34
	License or Registration Stop	Count	7	709	41	3	5	763	1528
	Rate Per Driver	Group Stops / Group Pop	0.001	0.067	0.012	0.012	0.001	0.010	0.015
	Stop Rate Disproportion	Non-W / W or W / B	0.11	6.81	1.27	1.19	0.11	0.15	1.53
	Investigative Stop	Count	5	231	10	2	5	226	479
	Rate Per Driver	Group Stops / Group Pop	0.001	0.022	0.003	0.008	0.001	0.003	0.005
	Stop Rate Disproportion	Non-W / W or W / B	0.27	7.49	1.05	2.68	0.37	0.13	1.62

Black drivers were stopped at a rate per driver 4.81 times the rate for White drivers, up from 3.81 in 2021. Black stops would have to be reduced by 900 to bring disproportion to about 1.00.

The VSR reports group disproportions as “disparity indexes,” in which each group’s proportion of stops is compared to its proportion of driver-aged residents. I prefer a calculation of rates per driver and then a straightforward comparison of rates among groups. Disparity indexes don’t tell us what we really want to know: Are groups treaded differently? And they are misleading in some situations, such as comparing jurisdictions with different group proportions of residents.

Investigative Stops have the highest disproportion: 7.49. As Chief Jones pointed out in his [memo to the City Manager on 2021 IBD](#), if officers can be documented to have convincing reasons for initiating an investigation, reasons clearly independent of racial stereotypes, new rates and disproportions could be computed without the investigative stops. The 479 investigative stops, however, are not enough to account for the 4.81 disproportion. Other factors are playing more important roles in the overall disproportion. We need to keep working to identify those factors and make sure the same criteria are applied to all groups.

It’s possible that officers are not recording all the investigative stops they conduct, but this is the second year that detailed subcategories have helped clarified what stops qualify as investigative. And CPD deliberately added more subcategories, such as a checkoff for “pretext” stops to make sure officers know what’s expected of them. Still, in future years, investigative stops might turn out to be more numerous.

Expired license violations, with a Black disproportion of 6.81, might be more closely associated with socioeconomic status than racial or ethnic group. Using information on the residence of drivers, age of vehicle and Census income data might clarify the source of the disproportion.

Equipment violations, with a disproportion of 4.84, might also be linked to income. Vehicle age might be a factor. [University of Missouri researchers](#) were able to link CPD data to a database with vehicle age and recommended that vehicle age become part of the CPD's analysis. The 2022 IBD posted by CPD does not include vehicle age.

Moving Violation Stops have the highest count (1022) and the lowest disproportion (4.08) against Black drivers, but the disproportion still raises concerns about discrimination. The Chief's advisory committee on traffic stops [recommended](#) that more checkoffs be added to try to find out if high-discretion stops, such as stops for minor violations, were involved. In 2022 officers did not check off enough stops for going less than 5 mph over the limit to suggest that officers were using minor violations to target Black drivers. Low-discretion stops, such as speeding more than 10 mph over the limit, accounted for most speeding violation stops. Officers are unlikely to ignore such a dangerous violation for any driver but there's still a significant disproportion against Black drivers. See more in Section 7.

2. Investigative Stops

Columbia Police Department 2022 Incident-Based Data: Investigative Stop Categories								
Group	Officer Perception	Asian	Black	Hispanic	Native American	Other	White	Total
Group Population	2021 VSR ACS Estimates	6,452	10,661	3,301	258	4,654	78,132	102,321
Category	Calculation							
Count of Stop ID	Count	91	2007	167	22	28	3055	5370
Rate Per Driver	Group Stops / Group Pop	0.014	0.188	0.051	0.085	0.006	0.039	0.052
Stop Rate Disproportion	Non-W / W or W / B	0.36	4.81	1.29	2.18	0.15	0.21	1.34
Investigative Stops	Count	5	231	10	2	5	226	479
Rate Per Driver	Group Stops / Group Pop	0.001	0.022	0.003	0.008	0.001	0.003	0.005
Stop Rate Disproportion	Non-W / W or W / B	0.27	7.49	1.05	2.68	0.37	0.13	1.62
ALPR (license plate reader) Stops	Count	1	16	1	1	0	23	42
Rate Per Driver	Group Stops / Group Pop	0.000	0.002	0.000	0.004	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.53	5.10	1.03	13.17	0.00	0.20	1.39
911 Call Stops	Count	3	37	2	0	1	56	99
Rate Per Driver	Group Stops / Group Pop	0.000	0.003	0.001	0.000	0.000	0.001	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.65	4.84	0.85	0.00	0.30	0.21	1.35
Check Point Stops	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Bulletin Stops	Count	1	30	2	0	0	23	56
Rate Per Driver	Group Stops / Group Pop	0.000	0.003	0.001	0.000	0.000	0.000	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.53	9.56	2.06	0.00	0.00	0.10	1.86
Match Description Stops	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Observed Crime	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Officer Initiated Investigation	Count	1	141	4	2	4	111	263
Rate Per Driver	Group Stops / Group Pop	0.000	0.013	0.001	0.008	0.001	0.001	0.003
Stop Rate Disproportion	Non-W / W or W / B	0.11	9.31	0.85	5.46	0.60	0.11	1.81
Other Investigative Stops	Count	0	23	2	0	0	36	61
Rate Per Driver	Group Stops / Group Pop	0.000	0.002	0.001	0.000	0.000	0.000	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.00	4.68	1.31	0.00	0.00	0.21	1.29
Sum of Pretext Stop	Count	1	96	5	0	2	87	191
Rate Per Driver	Group Stops / Group Pop	0.000	0.009	0.002	0.000	0.000	0.001	0.002
Stop Rate Disproportion	Non-W / W or W / B	0.14	8.09	1.36	0.00	0.39	0.12	1.68
Sum of RS Drg Activity Investigati	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Sum of Welfare Check	Count	0	8	0	0	0	16	24
Rate Per Driver	Group Stops / Group Pop	0.000	0.001	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	3.66	0.00	0.00	0.00	0.27	1.15
Investigative Stop Worksheet 3/14/23								

Since 2004 the VSR has included a checkoff for Investigative Stops. Legislators were concerned about "pretext stops," stops using a minor violation as probable cause but without a concern for dangerous driving. Pretext stops are legal and can play an important role in protecting public safety but they can also degenerate into targeting groups. Officers were not told how to use the checkoff and they seldom used it.

CPD officers recorded only 56 stops as being related to bulletins. The disproportion against Black drivers was highest for this category: 9.56. How many bulletins were issued in 2022? What were the proportions of groups identified in the bulletins? Does the data include bulletins directing officers to patrol specific areas, perhaps because of high rates of violations or accidents in those areas? Are drivers in one group concentrated in those areas? Is selection of the area based on criteria clearly independent of racial stereotypes?

Mapping where stops occurred might help with this analysis. Density of stops might be visibly greater in areas targeted for increased patrols.

In 2019, officers were instructed to check off any stop that involved an "investigative desire," according to the Code of State Regulations. Officers can have bona fide reasons to make investigative stops, so checkoffs were added by the AG to catch two major situations: when officers are directed to make a stop for a specific vehicle described in a Call for Service (911 call) and when officers are directed to stop a suspect by an agency bulletin.

Checkoffs were also added for investigative stops made on the initiative of the officer and investigative stops that don't fit the other categories.

At the recommendation of the Chief's traffic stop advisory committee, CPD added the other checkoffs in the report, for instance, a stop made to investigate an alert from a license plate reader--ALPR. Concerns had been raised that the overall stop disproportion against Black drivers was caused or inflated by the use of investigative stops, such as officers responding to Calls for Service—911 calls. If the stops were identified by checkoffs, then they could be reviewed to tell whether officers were responding to actionable intelligence--facts that justified an investigation and were clearly independent of racial stereotypes.

CPD's Bias-Free Policing Policy uses the term "timely, credible intelligence." "Specific and articulable facts" from the [Terry](#) ruling is often referred to as a guide when officers might need to act on facts that are less than probable cause. Chief Jones likes to use "actionable information." "Reasonable facts" could be employed, but "reasonable suspicion" has encouraged officers for the last 60 years to just act on suspicions. Suspicions are too easily triggered by racial stereotypes. Suspicions should just be used as an alert to look for credible intelligence.

The checkoffs confirm that Black drivers are disproportionately affected by investigative stops, but officers have not checked off enough investigative stops to begin to account for the stop disproportion. Perhaps officers have still not mastered the use the checkoffs.

With the 2021 IBD Chief Jones reviewed investigative stops to assess whether officer actions were based on "actionable information." See his [memo to the City Manager](#) and my comments on it.

Consider the checkoff for a stop made because of an alert from a license plate reader that the owner has an outstanding warrant. Black drivers are affected at a rate per stop 5.10 times the White rate, flagging the possibility of discrimination. But the alert is enough factual evidence to justify an investigation to see if the driver is the owner; the evidence is clearly independent of race.

Disproportions related to warrants are probably caused at least in part by economic factors and municipal court procedures.

Other considerations might still apply to investigative stop disproportions. Officers could be deployed in such a way that they encounter a disproportion of Black drivers. The ALPR devices might be disproportionately used in areas where Black drivers are concentrated and so on. Deployments involve locations, so studying the locations of stops might provide insights.

The Pretext stop checkoff suggests that officers are cooperating with the intent of the new checkoffs. Officers might be concerned that identifying a pretext stop would produce a backlash. But if officers have cited convincing facts to justify a stop for a minor violation, then a greater opportunity for community dialogue emerges about how to protect public safety while protecting the rights of vulnerable people.

As part of this process, quite a bit of work needs to be done. More checkoffs might be needed, and some of the current ones might turn out to be unnecessary. CPD might have to link to other databases, such as one that provides vehicle age, so that that factor can be included in rates and disproportions. Officers need to be trained in their use of checkoffs and the criteria for facts that justify each action. An efficient process must be found for evaluating the facts in each stop for which a disproportion raises concerns about discrimination. Alternative systemic causes of disproportions, such as officer assignment, need to be considered.

Using data for each Beat helps focus attention on locations where it is needed. Menu options in Excel pivot tables allow the data for each Beat to be seen separately.

3. Search Categories

For post-stop actions such as searches, rates can be based on stops—searches per stop—so that estimates of populations aren't needed; these estimates can be flawed, for instance, when non-resident drivers are a factor. Citywide group populations might not apply to Beats.

Rates per stop provide a better understanding of officers' use of the searches, but rates per stop provide a better understanding of the impact on drivers. Per driver, Black drivers are searched at a rate 8.63 times the White rate. Per stop, the disproportion is 1.79.

Columbia Police Department 2022 Incident-Based Data: Search Categories									
	Group	Officer Perception	Asian	Black	Hispanic	Native American	Other	White	Total
	Group Population	2021 VSR ACS Estimates	6,452	10,661	3,301	258	4,654	78,132	102,321
	Category	Calculation							
Stops	Stops	Count of Stop ID	91	2007	167	22	28	3055	5370
Searches	Search Initiated	Count	4	418	21	0	2	355	800
	Rate per Stop	Group Searches / Group Stops	0.044	0.208	0.126	0.000	0.071	0.116	0.149
	Disproportion	Non-W / W or W / B	0.38	1.79	1.08	0.00	0.61	0.56	
	Rate per Driver	Group Searches / Group Pop	0.001	0.039	0.006	0.000	0.000	0.005	0.008
	Disproportion	Non-W / W or W / B	0.14	8.63	1.40	0.00	0.09	0.12	
	Consent Search	Count	2	107	8	0	1	144	262
	Rate per Stop	Group Searches / Group Stops	0.022	0.053	0.048	0.000	0.036	0.047	0.049
	Disproportion	Non-W / W or W / B	0.47	1.13	1.02	0.00	0.76	0.88	
	Odor Search	Count	0	101	2	0	1	38	142
	Rate per Stop	Group Searches / Group Stops	0.000	0.050	0.012	0.000	0.036	0.012	0.026
	Disproportion	Non-W / W or W / B	0.00	4.05	0.96	0.00	2.87	0.25	
	Alcohol Odor Search	Count	0	2	0	0	0	9	11
	Rate per Stop	Group Searches / Group Stops	0.000	0.001	0.000	0.000	0.000	0.003	0.002
	Disproportion	Non-W / W or W / B	0.00	0.34	0.00	0.00	0.00	2.96	
	Marijuana Odor Search	Count	0	100	2	0	1	31	134
	Rate per Stop	Group Searches / Group Stops	0.000	0.050	0.012	0.000	0.036	0.010	0.025
	Disproportion	Non-W / W or W / B	0.00	4.91	1.18	0.00	3.52	0.20	
	Property Crime Arrest	Count	0	19	1	0	0	15	35
	Rate per Stop	Group Searches / Group Stops	0.000	0.009	0.006	0.000	0.000	0.005	0.007
	Disproportion	Non-W / W or W / B	0.00	1.93	1.22	0.00	0.00	0.52	
	Drug Dog Alert Srch	Count	0	14	2	0	0	28	44
	Rate per Stop	Group Searches / Group Stops	0.000	0.007	0.012	0.000	0.000	0.009	0.008
	Disproportion	Non-W / W or W / B	0.00	0.76	1.31	0.00	0.00	1.31	
	Incident to Arrest Srch	Count	2	108	5	0	1	106	222
	Rate per Stop	Group Searches / Group Stops	0.022	0.054	0.030	0.000	0.036	0.035	0.041
	Disproportion	Non-W / W or W / B	0.63	1.55	0.86	0.00	1.03	0.64	
	Inventory Srch	Count	0	8	0	0	0	11	19
	Rate per Stop	Group Searches / Group Stops	0.000	0.004	0.000	0.000	0.000	0.004	0.004
	Disproportion	Non-W / W or W / B	0.00	1.11	0.00	0.00	0.00	0.90	
	Plain View Contraband Srch	Count	0	88	1	0	0	53	142
	Rate per Stop	Group Searches / Group Stops	0.000	0.044	0.006	0.000	0.000	0.017	0.026
	Disproportion	Non-W / W or W / B	0.00	2.53	0.35	0.00	0.00	0.40	
	Reasonable Suspicion Search	Count	0	96	3	0	1	41	141
	Rate per Stop	Group Searches / Group Stops	0.000	0.048	0.018	0.000	0.036	0.013	0.026
	Disproportion	Non-W / W or W / B	0.00	3.56	1.34	0.00	2.66	0.28	
	Other Reason Srch	Count	0	16	1	0	0	19	36
	Rate per Stop	Group Searches / Group Stops	0.000	0.008	0.006	0.000	0.000	0.006	0.007
	Disproportion	Non-W / W or W / B	0.00	1.28	0.96	0.00	0.00	0.78	

Search Categories 3/14/23

Consent Searches are good indicators of whether officers need guidance to avoid discrimination. They take place after a stop has been made, so officers know the identity of the driver. Rates can be based on stops, so estimates of Beat jurisdictions are not needed. Officers are unlikely to ask for consent if there is a threat of danger, so they can take time to make sure they have actionable intelligence. If they have probable cause for a search, they do not need consent.

The statewide Black disproportion for consent searches has been below 1.00 for several years. CPD's disproportion has been very high in the past, but 1.13 is an improvement. Are officers applying the same standards to groups when they ask for consent to a search? See the discussion below on consent searches in Beats.

For 2022, a checkoff was added for type of odor. Most odor searches are now identified as being for marijuana odor. Black drivers are subjected to these searches at a rate per stop 4.91 times the White rate. In the past, few arrests have been made even when contraband was found. This situation can be

investigated in the incident-based data. See the discussion of hit rates and arrest rates for marijuana odor searches.

Since the [Rodriguez](#) decision required officers to articulate facts to justify a call for a drug dog, rates and disproportions have declined. White drivers are now affected at a rate per stop 1.31 times the Black rate. The requirements of the Rodriguez decisions are good guidance for officers in any situation in which they are allowed discretion in their actions. Facts that justify a stop are not enough to justify calling for a drug dog—or asking for consent or conducting a high-discretion search, such as odor. Law enforcement agencies must develop criteria for actionable information. Officers must be trained in the criteria and held accountable for acting on them. Holding officers accountable for acting on facts is always an important strategy in avoiding discrimination.

Plain View Contraband might seem to guarantee contraband would be found and an arrest made. But hit rates aren't perfect and the evidence isn't always strong enough to support an arrest charge. This situation can be investigated in the incident-based data. Are officers applying the same standards to everyone when they identify plain view contraband?

Reasonable Suspicion Searches are the equivalent of a Terry Search; in order to protect public safety, officers may do a quick search to make sure no weapon is available if they can articulate specific facts to support their suspicions. Do officers cite specific and articulable facts to back up their suspicions?

What "Other Reasons" for searches are involved?

4. Odor Searches Followed by Hits and Arrests

Columbia Police Department 2022 Incident-Based Data: Marijuana Odor Search > Marijuana Found > Drug Arrest								
Group	Officer Perception	Asian	Black	Hispanic	Native American	Other	White	Total
Group Population	2021 VSR ACS Estimates	6,452	10,661	3,301	258	4,654	78,132	102,321
Category	Calculation							
Marijuana Odor Search	Count	0	100	2	0	1	31	134
Rate Per Driver	Group Stops / Group Pop	0.000	0.009	0.001	0.000	0.000	0.000	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.00	23.64	1.53	0.00	0.54	0.04	
Marijuana Odor Search > Marijuana Found		0	72	2	0	1	22	97
Rate Per Search	Contraband Found / Search	#DIV/0!	0.720	1.000	#DIV/0!	1.000	0.710	0.724
Rate Disproportion	Non-W / W or W / B	#DIV/0!	1.01	1.41	#DIV/0!	1.41	0.99	
Marijuana Odor Search > Drug Arrest			29	0		1	5	35
Rate Per Search	Contraband Found / Search	#DIV/0!	0.290	0.000	#DIV/0!	1.000	0.161	0.261
Rate Disproportion	Non-W / W or W / B	#DIV/0!	1.80	0.00	#DIV/0!	6.20	0.56	
Marijuana Odor Search > Marijuana Found > Drug Arrest		0	27	0	0	1	4	32
Rate Per Contraband Found	Arrests / Contraband Found	#DIV/0!	0.375	0.000	#DIV/0!	1.000	0.182	0.330
Rate Disproportion	Non-W / W or W / B	#DIV/0!	2.06	0.00	#DIV/0!	5.50	0.48	

Worksheet Mari Odor Contra Fnd Arrests 3/14/23

Odor searches are an example of post-stop actions. Officers have made the initial stop. They have been face to face with the driver and probably already checked the driver's identification. They know the driver's group, age, residence, arrest record and so on.

Rates and disproportions for stops have to be based on estimates of drivers by group in the jurisdiction, based on census data for residents old enough to drive. These estimates can be flawed for some

jurisdictions, but Columbia's are adequate approximations of the drivers officers encounter on the streets. Post-stop actions can be analyzed on the basis of the number of stops. The disproportion in rates per stop is 4.91 but the rates per driver are a better reflection of the impact on the drivers.

One reason for the disproportion might be that violations by White drivers are ignored. Officer checkoffs are not good for capturing this sort of situation; officers are not expected to check off when they catch an odor but decide not to act.

Marijuana is found in about three quarters (72.4% for everyone) of the searches for both Black and White drivers, so officers seem to be keying on reasonable facts. But arrests are made on the contraband at low rates: less than 20% for all drivers. Arrests per search are even lower. Officers might be finding quantities too small to use as evidence, "scratch."

When the AG asked for feedback on the VSR, Chief Jones asked how officers should report contraband that was not probable cause of a citation or arrest. The AG said, Good question but did not provide help. If an officer finds a legal gun in a Reasonable Suspicion Search, it's important to have documentation that the officer's suspicions were based on facts.

Increasingly, marijuana is legal. How many arrests are prosecuted?

A driver's clothing might pick up odor from a neighbor legally using marijuana. Should odor really count as probable cause for a search? Should officers be required to cite additional evidence to support a search, at least by policy in Columbia? Under Article IVX of the Missouri Constitution, odor will no longer could as probable cause for a search.

Are officers applying the same standards to all drivers when they make the searches and when they make arrests? What are the criteria for facts that justify an odor search? What are the criteria for making an arrest? How are officers given feedback on their use of criteria?

5. Consent Searches in Beats

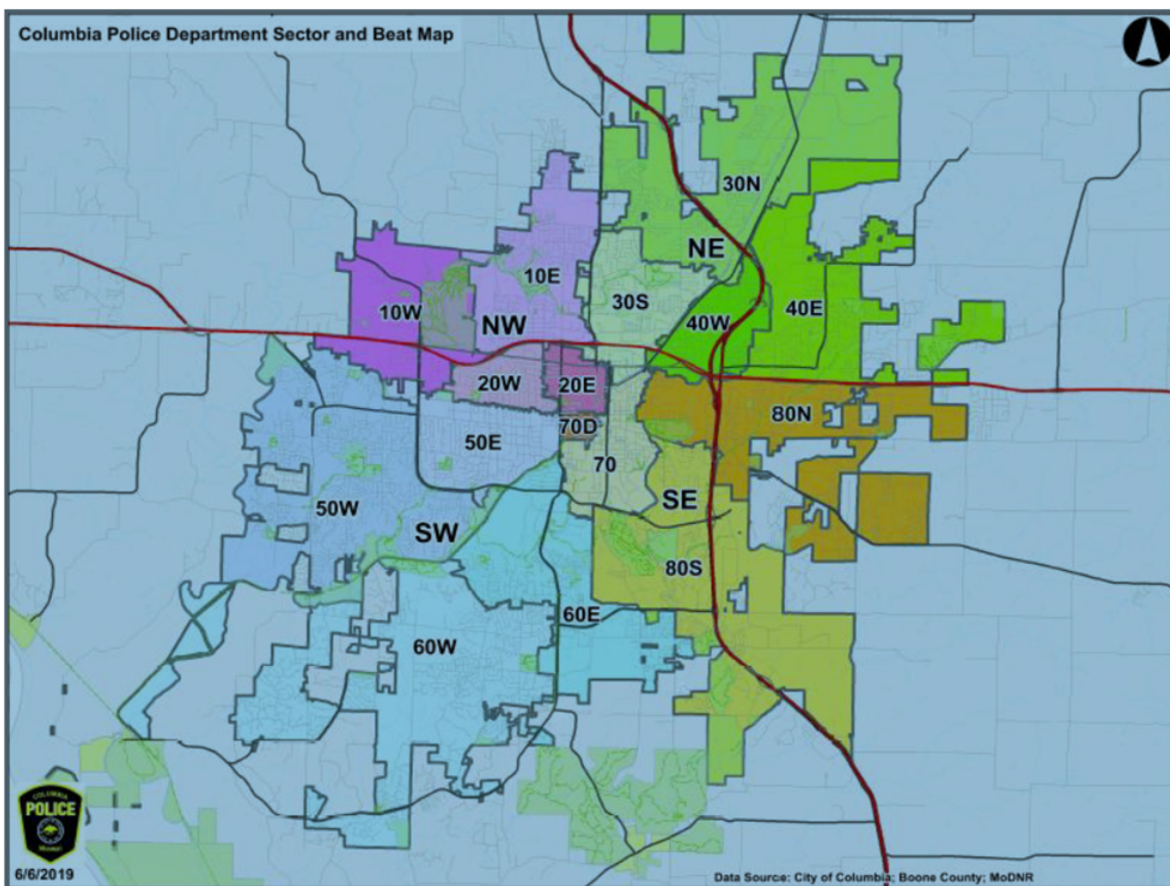
Because officer assignments are now included in the IBD, rates and disproportions can be studied in different Beats. Stops are problematic in Beats because group populations of drivers are difficult or impossible to estimate because drivers routinely cross boundaries. But post-stop actions, such as consent searches, allow focus on how groups are affected once officer and driver have been face to face.

Beat Consent Searches: Sorted by Disproportions							
Beats	Stops: Count of Stop ID	Sum of Consent Srch					
	All	All	Black	White	Black Rate per Stop	White Rate per Stop	Disproportion: Black Rate / White Rate
Population	102321	102321	10661	78132			
Stops	5370	5370	2007	3055			
110	29	1	0	1	0.000	0.000	0.00
111	17	1	0	1	0.000	0.000	0.00
112	8	1	0	1	0.000	0.000	0.00
113	14	1	0	1	0.000	0.000	0.00
114	4	1	0	1	0.000	0.000	0.00
MUG1	51	1	0	1	0.000	0.000	0.00
NULL	70	2	0	2	0.000	0.001	0.00
60W	211	5	1	4	0.000	0.001	0.38
50E	357	4	1	3	0.000	0.001	0.51
80N	253	16	4	12	0.002	0.004	0.51
10W	173	11	4	7	0.002	0.002	0.87
20E	586	44	16	27	0.008	0.009	0.90
10E	272	17	6	10	0.003	0.003	0.91
30S	452	28	10	15	0.005	0.005	1.01
Grand Total	5370	262	107	144	0.053	0.047	1.13
30N	199	7	3	4	0.001	0.001	1.14
80S	277	9	4	5	0.002	0.002	1.22
40E	218	25	10	12	0.005	0.004	1.27
70E	390	15	7	8	0.003	0.003	1.33
40W	562	37	17	19	0.008	0.006	1.36
104	29	3	1	1	0.000	0.000	1.52
20W	185	15	9	6	0.004	0.002	2.28
60E	334	10	7	3	0.003	0.001	3.55
105	12	1	1	0	0.000	0.000	
108	1	0	0		0.000	0.000	
109	1	0		0	0.000	0.000	
210	1	0		0	0.000	0.000	
Blank	4	0	0	0	0.000	0.000	
50W	212	0	0	0	0.000	0.000	
70D	275	7	6	0	0.003	0.000	
80A	1	0		0	0.000	0.000	
MUG2	172	0	0	0	0.000	0.000	
Worksheet: Beat Consent Searches 3/14/23							
Below average Disproportion							
Above average Disproportion							

Many agencies statewide have low consent search disproportions and many Columbia beats do also. Why do some beats have high disproportions? Are officers basing their decisions on actionable facts, facts that are clearly independent of racial stereotypes?

If officers need help with the criteria for actionable facts for consent searches, they would probably benefit from similar training for other situations, leading to a decline in all disproportions.

Beats numbered 104 to 210 might be officer assignments, such as an officer assigned to investigate burglaries. MUG beats are probably MU games. CPD could provide more information. CPD posts a [Beat](#) map, this one is dated 2019:



Beat 50W conducts a substantial number of stops but performed no consent searches. Beat 70D (The District) performed 7 consent searches but none on White drivers; the disproportion is high but not displayed because of division by zero.

How are consent searches being used by officers in the Beats with relatively high counts and disproportions? Some Beats had relatively low rates and disproportions for consent searches, but one Beat recorded 37 consent searches (almost a third of CPD's total) with a Black disproportion per stop of 1.36. Another recorded 10 consent searches with a disproportion of 3.55.

Most CPD officers seem to be careful to conduct consent searches only when they have credible intelligence to support their decision, but the Beat data provide a way to identify officers who might need help telling when the facts they know are clearly independent of group stereotypes, and then to provide them with the guidance they need.

All high disproportions should be investigated in Beats. If some Beats have low disproportions then some factor related to location might be involved in the disproportions. Do officers encounter different situations? Is their training different? Are they being given adequate guidance when their disproportions raise concerns?

6. Data Accuracy

Most situations in which the possibility of discrimination is a concern are too complicated to analyze with data. Consider a supervisor who promotes a disproportionate number of workers in one group. Proof of discrimination might come down to a confession. Discrimination in housing rentals can be investigated by sending out sets of applicants. Loan applications can be investigated by comparing the qualifications of applicants.

Traffic stops are simple enough that checkoffs can be used to capture the basic facts involved. As Chief Jones told his advisory committee, he needs to document the facts officers were acting on in order to tell whether they were adequate to support actions taken, and guide them to act on what he has called “actionable information.”

If an agency trains officers in criteria for the facts they must act on and officers document their facts, then an objective analysis can be made of whether their actions meet the standards. The analysis does not try to determine whether the facts would support a charge in court or whether the officer should be disciplined. All that’s needed at this stage is an alert for a supervisor to counsel the officer on facts.

Community members can look at the data and engage in discussions concerning adequacy and possible improvements.

Supervisors can receive timely reports that include the facts officers checked off and the actions they based on them. Officers can receive prompt feedback on their actions. Either their facts are convincing or they are told what improvements are required.

Officers have a stake in accurately completing the checkoffs. If, for instance, they identify every investigative action and they identify their actionable information then they have the best defense against an accusation of discrimination. Even if there is a disproportion in how a group is affected, the officers are documented as acting on convincing facts. Community members might still challenge a conclusion but then discussion switches from accusations to objective facts.

For this process to work, the data must be convincing. For instance, statewide consent search disproportions were 1.45 against Black drivers in 2014, so officers do not appear to have been trying to hide use of the searches. CPD checked of 443 consent searches that year; Black drivers were affected at a rate per stop 4.39 times the White rate; there’s no reason to believe officers were hiding facts when the facts were not favorable.

By 2022, CPD consent searches dropped to 262 and the disproportion against Black drivers was down to 1.13. The officer response to the high disproportion almost 10 years ago was not to hide the number made but to be more careful about using them.

Survey data becomes important as a check on police data in this sort of situation. In a [2018 survey](#) conducted by Columbia, Black residents were 5 times more likely than White residents to report they

had been treated unfairly by CPD officers. In similar surveys Blacks equate fairness with officers acting on facts related to public safety. They regard a stop for a significant speeding violation as fair. They judge a stop unfair when it is for a minor violation and the officer interrogates them as if they were criminal suspects.¹ If CPD data document a decline in consent search disproportions and city survey data document a rise in trust by Black drivers, then each confirm the other.

In many agencies and statewide, disproportions have disappeared in consent searches as officers have learned they can be distracted by stereotypes, so the data reflect changes in officer performance as they occur.

Some problems with CPD data raise concerns. When they conduct an equipment stop they are expected to checkoff the main category and they are also expected to checkoff subcategories, such as a burned out license plate light. But they sometimes check the main category but not the subcategory.

124 stops appear to be duplicates. The “Cadcallid” (“Stop ID” in my tables) is the same for two incidents that appear to be the same but have minor differences, suggesting one is the update of the other. CPD reported the subcategories for Contraband Found but not the overall count of stops in which contraband was found. The information has probably just been left out of the version posted, but still, public confidence depends on reliable information.

Street locations seems to be clearer in 2022. Several years ago, Jerry East, former CPD data analyst, and I each tried to map locations but couldn’t get meaningful results. Here are a few of the location records in 2022 IBD:

1	cadcallid	street
75	2022006010	E STADIUM BLVD/S COLLEGE AVE
76	2022006025	N TENTH ST/E BROADWAY
77	2022006121	FAIRVIEW AVE/COATS ST
78	2022006150	1205 E BROADWAY
79	2022006351	W BROADWAY/N FAIRVIEW RD
80	2022006364	MUIRFIELD DR/NORFOLK CT
81	2022006416	170 W/N PROVIDENCE RD OFFR WB
82	2022006416	170 W/N PROVIDENCE RD OFFR WB
83	2022006508	1322 I70 E
84	2022006712	RANGE LINE ST/E BUSINESS LOOP 70
85	2022006716	CLARK LN/CONNECTOR
86	2022006725	3211-A CLARK LN
87	2022006730	MONTEREY DR/E NIFONG BLVD
88	2022007121	PARIS RD/N COLLEGE AVE
89	2022007947	4700 CLARK LN
90	2022008554	1310 SMILEY LN
91	2022008573	SMILEY LN/OAKLAND GRAVEL RD
92	2022009024	4215 FORUM BLVD

¹ 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.

Most of these would probably map ok in GIS software, but 81 and 82 might cause a problem with “offramp westbound.” (These two just happen to be duplicates.)

Locations need to indicate where an officer observed a violation that led to a stop and be in a format that can be read by GIS software. Longitude and Latitude would be most dependable for mapping. This information can probably be entered automatically, without extra effort by officers.

I don’t see a way to tell in the posted data the month and day a stop occurred. Month and day of week are given. “StopTime” used to include month and date, I think, but now just seems to have time. CPD’s internal data must include month and day.

Overall, CPD needs to implement policies that lead to prompt and accurate checkoffs by officers, ongoing checks for accuracy, and monthly analysis of rates and disproportions supervisors can use to give feedback to officers.

Here is my check of whether officers checked both a stop in which at least one Moving Violation occurred and also the subcategory of moving violation.

	A	B	D	E	F	G	I	K	M	N	O	P	Q	T
	Moving Vio Stop	Careless Drvng MV Stop	Distract Drv MV Stop	Fail Sig MV Stop	Fail Yld MV Stop	Flw Too Close MV Stop	Lane Vio MV Stop	Red Lght Stp Sign MV Stop	Speed MV Stop	Less than 5 MV Stop	10 to 20 MV Stop	21+ MV Stop	5 to 11 MV Stop	Sum of Subcategories
1														
441	0	0	0	0	0	0	0	0	0	0	0	0	0	1
597	0	0	0	0	0	0	1	0	0	0	0	0	0	1
626	0	0	0	0	0	0	0	0	0	0	0	0	1	1
653	0	0	0	1	0	0	1	0	0	0	0	0	0	2
712	0	0	0	0	0	0	0	0	0	0	0	0	1	1
726	0	0	0	0	0	0	0	0	0	0	1	0	0	1
762	0	0	0	0	0	0	0	0	0	0	1	0	0	1
795	0	0	0	0	0	0	0	0	0	1	0	0	0	1
976	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1016	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1052	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1153	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1344	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1404	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1451	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1455	0	0	0	0	0	0	1	0	0	0	0	0	0	1

Some columns have been hidden to improve visibility. Most of these subcategories of moving violations were added by recommendation of the Traffic Stop Committee. The funnel in column A shows the filter is being used to shown only “0” entries. Column T is filtered to show stops in which the sum of the subcategories is more than 0.

There were 58 records in which “Moving Vio Stop” is not checked but at least one subcategory is checked.

3072 moving violations were checked.

In 2322 stops: at least one subcategory was checked.

In 750 stops, a moving violation was checked but no subcategory checked. The missing 750 stops in which no subcategory what checked off might help explain the source of group stop disproportions. For

instance, officers might have been neglecting to checkoff speeding stops of less than 5 mph over the limit. 750 stops of Black drivers for minor violations would go a long way toward pinpointing the source of the stop disproportion.

Officers were not checking off subcategories as instructed. Did performance improve during the year? Did some Beats do better than others at using the checkoffs? Are there group disproportions in stops for categories with incomplete data?

Some checkoffs have been part of the VSR for years. Many were added to capture information on minor violation stops in which officer discretion might result in disproportions. Some were added to better document actionable information which would support officer decisions, such as a School Zone checkoff supporting a stop for speeding less than 5 mph over the limit. No tolerance was enforced; the officer was protecting children.

Officers need to know CPD takes data seriously--that it's a high priority for them to complete the checkoffs accurately and promptly. Officers must be trained to record data correctly and be given feedback so they know they are performing correctly or they know what improvements are needed.

When considering the recommendation of additional checkoffs, the Traffic Stop Committee decided several were not necessary because CPD could link to the information in other databases.²

For instance, Chief Jones told the advisory committee that age of vehicles had been part of his informal training as a rookie:

As an example of what he was looking for, Chief Geoff Jones told the committee that as a new officer riding with his supervisor they had observed two cars with minor equipment violations. The supervisor asked him which one he would stop, then advised him to stop the older vehicle because an older vehicle is more likely to be associated with other violations or more serious criminal activity. The Chief said he now doubts the fairness of basing the decision to make a stop on the age of the vehicle because it unfairly affects individuals with lower incomes, and Black drivers are more likely to have low incomes. Both socioeconomic status and race are protected characteristics under the Bias-Free Policing Policy.³

[University of Missouri researchers](#) using multivariate analysis linked to vehicle age in a DMV database and found that age of vehicle correlated with disproportions for Black drivers. CPD should continue to track vehicle age as a variable and use it in analysis.

Use of force can be inferred in a traffic stop data, for instance, when an officer reports resisting arrest charges, but more information is available by linking with the main CPD database for use of force. Officers record more information about consent searches in another database, so it's possible to tell when consent is refused and any group disproportions involved in refusal. This information should be available when analyzing traffic stop data but officers do not have to reenter it as stop checkoffs.

²

<https://www.como.gov/wp-content/uploads/2021/08/2021-03-09-Data-Check-Off-Recommendations-approved-FINAL.docx.pdf> Page 2.

³ Ibid.

Checkoffs document that White drivers are much more likely to be arrested for DWI/BAC, but the checkoffs do not capture when an officer suspects drivers of intoxication but the field tests are negative. Is this information captured in another database or is a new checkoff needed?

After the [Rodriguez](#) decision on the use of drug dogs, CPD instituted a policy that a supervisor must review officer requests. The checkoffs for a Drug Dog Alert search document that White drivers are 1.31 times more likely to be searched than Black drivers, based on rates per stop. CPD should have a database that records when permission for a DDA search is withheld and when a search is not conducted because the dog does not alert. Traffic stop data should include this information, with rates and disproportions.

The Traffic Stop Committee recommendation on checkoffs says,

The committee considered recommending a check off for when the officer asked questions unrelated to the reason for the stop. Black drivers see their stops as illegitimate when an officer makes a stop for a minor violation then provides no explanation of the public safety reason for the stop, but instead questions the driver like a criminal. The committee decided the check off would probably not return useful information, but the situation deserves attention.⁴

At a later meeting, Pam Hardin reported an officer stopped her car then insisted passengers show identification. There might be some circumstances that justify this action but Columbia needs to know if Black drivers are disproportionately affected. What do CPD policies say about asking passengers for identification? Is this another case of officers teaching each other procedures, like stopping an older vehicle, that need to be addressed in official policies?

7. Minor Moving Violations

We often think of discrimination as defined by the intention of the individual: that someone has a bias that leads to intentionally treating individuals in different groups differently. But mental attitude is too difficult to detect and prove; CPD supervisors have complained that they cannot evaluate officers on the basis of what they are thinking.

A further complication is that we all have biases. They are part of the norms we all receive from the culture we grow up in. If we grow up eating spicy food, it's hard to appreciate something bland, but we can teach ourselves to appreciate new things—or at least to try new things. In the United States, racial biases have been part of our culture for 400 years. We can't leave them behind simply because we want to, but we can learn to appreciate the advantages of diversity.

Stanford psychologist Dr. Jennifer Eberhardt says we all have implicit biases but we can control them by taking a moment before acting to make sure known facts are clearly independent of racial stereotypes. Dr. Eberhardt summarizes her approach in the ten-minute TED Talk: [How racial bias works — and how to disrupt it](#). Eberhardt applies this insight to law enforcement. Officers need to understand the dangers of bias, principally that we all have them and the process of freeing ourselves from them is long and difficult, but they can control bias by making sure to act only on actionable facts.

In law enforcement, discrimination must be defined as applying different evidentiary standards to groups, regardless of intention. Then we can document the facts officers act on and determine whether they are clearly independent of biases, meet criteria for the action taken and are applied in the same way to everyone.

⁴ Ibid. Page 3

Checkoffs generally are an efficient way to document the facts officers knew when they acted. Checkoffs for minor violations provide an opportunity to see if one group is disproportionately stopped for a violation that is not likely to pose a threat of public safety and for which officers are given the discretion to ignore. Everyone commits these minor violations. It's unlikely one group commits more of them than another group, at least not on the magnitude of twice another group, especially not 4.81 times greater. If minor violations have high disproportions, then officers would benefit from feedback from supervisors that they need to think twice before they act on a minor violation: Do they know facts that document a public safety concern? Are they applying the same facts to everyone?

On the other hand, low-discretion stops are not as likely to trigger racial stereotypes; officers cannot ignore someone driving 10 mph above the limit in a school zone.

Chief Jones' advisory committee on traffic stops recommended that he add checkoffs for a number of minor violations. Here are the results.

Columbia Police Department 2022 Incident Based Data: Moving Violation Stop Categories								
Group	Officer Perception	Asian	Black	Hispanic	Native American	Other	White	Total
Group Population	2021 VSR ACS Estimates	6,452	10,661	3,301	258	4,654	78,132	102,321
Category	Calculation							
Count of Stop ID	Count	91	2007	167	22	28	3055	5370
Rate Per Driver	Group Stops / Group Pop	0.014	0.188	0.051	0.085	0.006	0.039	0.052
Stop Rate Disproportion	Non-W / W or W / B	0.36	4.81	1.29	2.18	0.15	0.21	1.34
Moving Violation Stop	Count	68	1022	113	14	17	1838	3072
Rate Per Driver	Group Stops / Group Pop	0.011	0.096	0.034	0.054	0.004	0.024	0.030
Stop Rate Disproportion	Non-W / W or W / B	0.45	4.08	1.46	2.31	0.16	0.25	1.28
Careless Driving MV Stop	Count	0	60	6	0	1	74	141
Rate Per Driver	Group Stops / Group Pop	0.000	0.006	0.002	0.000	0.000	0.001	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.00	5.94	1.92	0.00	0.23	0.17	1.45
Commercial Vehicle MV Stop	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Distracted Driver MV Stop	Count	0	8	2	0	1	8	19
Rate Per Driver	Group Stops / Group Pop	0.000	0.001	0.001	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	7.33	5.92	0.00	2.10	0.14	1.81
Failure to Signal MV Stop	Count	3	81	11	2	2	105	204
Rate Per Driver	Group Stops / Group Pop	0.000	0.008	0.003	0.008	0.000	0.001	0.002
Stop Rate Disproportion	Non-W / W or W / B	0.35	5.65	2.48	5.77	0.32	0.18	1.48
Failure to Yield MV Stop	Count	1	26	2	1	2	35	67
Rate Per Driver	Group Stops / Group Pop	0.000	0.002	0.001	0.004	0.000	0.000	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.35	5.44	1.35	8.65	0.96	0.18	1.46
Follow Too Close MV Stop	Count	0	10	2	1	1	16	30
Rate Per Driver	Group Stops / Group Pop	0.000	0.001	0.001	0.004	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	4.58	2.96	18.93	1.05	0.22	1.43
Invalid Driv Lic MV Stop	Count	0	4	0	0	0	6	10
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	4.89	0.00	0.00	0.00	0.20	1.27
Lane Vio MV Stop	Count	5	122	25	2	0	209	363
Rate Per Driver	Group Stops / Group Pop	0.001	0.011	0.008	0.008	0.000	0.003	0.004
Stop Rate Disproportion	Non-W / W or W / B	0.29	4.28	2.83	2.90	0.00	0.23	1.33
Other MV Stop	Count	7	69	7	0	1	134	218
Rate Per Driver	Group Stops / Group Pop	0.001	0.006	0.002	0.000	0.000	0.002	0.002
Stop Rate Disproportion	Non-W / W or W / B	0.63	3.77	1.24	0.00	0.13	0.26	1.24
LghtStp Sign MV Stop	Count	8	122	14	0	3	219	366
Rate Per Driver	Group Stops / Group Pop	0.001	0.011	0.004	0.000	0.001	0.003	0.004
Stop Rate Disproportion	Non-W / W or W / B	0.44	4.08	1.51	0.00	0.23	0.24	1.28
Schol or Const Zone MV Stop	Count	0	2	0	0	0	12	14
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	1.22	0.00	0.00	0.00	0.82	0.89
Speeding MV Stop	Count	0	0	0	0	0	0	0
Rate Per Driver	Group Stops / Group Pop	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Less than 5 mph speeding MV Stop	Count	0	6	1	0	0	16	23
Rate Per Driver	Group Stops / Group Pop	0.000	0.001	0.000	0.000	0.000	0.000	0.000
Stop Rate Disproportion	Non-W / W or W / B	0.00	2.75	1.48	0.00	0.00	0.36	1.10
5 to 11 speeding MV Stop	Count	5	57	9	1	0	88	160
Rate Per Driver	Group Stops / Group Pop	0.001	0.005	0.003	0.004	0.000	0.001	0.002
Stop Rate Disproportion	Non-W / W or W / B	0.69	4.75	2.42	3.44	0.00	0.21	1.39
10 to 20 speeding MV Stop	Count	26	246	19	1	2	495	789
Rate Per Driver	Group Stops / Group Pop	0.004	0.023	0.006	0.004	0.000	0.006	0.008
Stop Rate Disproportion	Non-W / W or W / B	0.64	3.64	0.91	0.61	0.07	0.27	1.22
21+ speeding MV Stop	Count	2	30	5	1	0	57	95
Rate Per Driver	Group Stops / Group Pop	0.000	0.003	0.002	0.004	0.000	0.001	0.001
Stop Rate Disproportion	Non-W / W or W / B	0.42	3.86	2.08	5.31	0.00	0.26	1.27
Moving Violation Stop Categories 3/20/23								

Many of the stops for minor moving violations result in higher disproportions against Black stops than the overall disproportion for moving violations, 4.81. But the count of stops involved is not high enough to account for the overall stop disproportion against Black drivers.

Perhaps officers were not recording all the speeding violations that were less than 5 mph over the limit, but they were certainly using the other speed checkoffs. Accuracy of checkoffs can be monitored by comparing other written records.

The highest number of violations is for speeding 10 to 20 mph over the limit—with 789 stops recorded. These have one of the lowest disproportions for Black drivers, 3.64, but why should that disproportion be so high? I'm skeptical that Black drivers commit dangerous violations at a rate so much higher than White drivers. Officers are not likely to ignore these violations, no matter where they occur or who is driving. What factors could be involved other than discrimination?

I suspect a factor involved in stop disproportions is officers being assigned to patrol areas in which they are more likely to encounter Black drivers. CPD might have good reasons to assign officers to monitor driving in school zones where Black drivers are concentrated. Looking at stops as they occur in Beats might help. A map of the locations of stops might help.

8. Investigating the Stops

In Section 3. Odors, we looked at what goes on in searches based on the odor of Marijuana.

If you know how to use filters in Excel and can interpret the column headings, you can begin to use the Incident-Based Data posted by CPD to investigate concerns on your own about how officers conduct stops. Or contact me; I'll demonstrate.

Say you are concerned about officers in Beat 70D using odor searches. Filter the column for Beats (D) for 70D and the column for odor searches (AB) for "1." Excel shows a table of all stops with those two factors. There are only 9 of them, so it's not too bad reviewing the facts officers knew and the actions they took.

Next, you might filter on the column for Marijuana Found (T) or Other Drug Found (W). Marijuana was found in 2 of the stops; no Other Drugs were found.

Looking in column CF for Drug Violation Arrest, 1 was made, but it was for drug paraphernalia. So, it seems to turn out in this small sample, odor searches aren't especially effective in addressing serious criminal activity, but they do disproportionately affect Drivers of Color—all of these drivers were either Black or Hispanic.

Figuring rates and disproportions for all the categories in the data presents a useful summary. Black drivers were subjected to odor searches at a rate per driver 23.64 times the rate for White drivers. Each group was found with contraband at about the same rate. Black drivers were arrested at a higher rate than White drivers, but the arrest rate per search was low for everyone, about a quarter of the stops. I did a similar investigation of Consent Searches in 70D, here summarized by leaving out blanks and adding comments.

Stop ID	2022028734	2022053976	2022069608	2022139680	2022209755	2022209755	202225008	Comment
Street	1034 E WALNUT ST	ST/LOCUST ST	E ASH ST/N FIFTH ST	ST/N EIGHTH ST	N TENTH ST/PARK AVE	N TENTH ST/PARK AVE	1110 E WALNUT ST	
Stop Time	10:19 PM	2:36 PM	11:32 PM	12:41 AM	11:44 PM	11:44 PM	2:04 AM	
Beat	70D	70D	70D	70D	70D	70D	70D	
Race	B	B	B	B	B	B	O	All Black or Other
Resident Y/N	Y	Y	Y	Y	Y	Y	Y	
Sex	M	M	M	M	F	F	M	2 females
Age	40-64	18-29	18-29	18-29	30-39	30-39	18-29	Most under 40
Location	Other	City Street	City Street	City Street	City Street	City Street	City Street	
Search Initiated	1	1	1	1	1	1	1	
Search Length	0-15 MINUTE	0-15 MINUTE	0-15 MINUTE	0-15 MINUTE	0-15 MINUTE	0-15 MINUTE	0-15 MINUTE	
Search Driver and Property	1	1	1	0	1	1	1	
Search Driver	0	0	0	1	0	0	0	
Drp Para Fnd	0	0	0	0	1	1	0	
Other Drp Fnd	0	0	0	0	0	1	0	What was the other drug?
Para Fnd	0	0	0	0	0	1	0	
Consent Srch	1	1	1	1	1	1	1	
Odor Srch	0	0	1	0	0	0	0	Why were Consent and Odor both conducted
Odor Mari Srch	0	0	1	0	0	0	0	Why were Consent and Odor both conducted
Incident to Arrest Srch	0	0	0	1	0	0	0	Search conducted when arrest made.
Pln Vw Cont Srch	0	0	0	0	0	1	0	Why were Consent and Plain View both conducted
Equip Stop	1	0	0	0	0	0	0	What was the Equipment violation?
Investigative Stop	0	0	0	0	1	0	0	
Off Initiat Investigation	0	0	0	0	1	0	0	
Pretext Stop Invest	0	0	0	0	0	1	0	Why wasn't Investigative Stop checked off?
License or Registration Stop	1	1	1	0	1	1	0	Were these used as pretexts?
Moving Vio Stop	0	0	0	1	0	0	1	Were these minor violations?
Fail Yld MV Stop	0	0	0	1	0	0	0	
Other MV Stop	0	0	0	0	0	0	1	
Drug Viol Arrest	0	0	0	0	1	1	0	No drug found for first one
Othr Arrest	0	0	0	1	1	0	0	What were the other charges?
Warrant Arrest	0	1	0	0	0	0	1	If warrant arrest was made why was consent used?
Arrest	0	1	0	1	1	1	1	Were any arrests made for contraband found in consent search?
Citation	1	0	0	0	0	0	0	
Lic Cit	1	0	1	0	0	0	0	
Moving V Cit	0	0	0	1	0	0	0	
Wam	0	0	1	1	0	0	0	
Wam Lic	1	0	1	0	0	0	0	
Wam Mov	0	0	0	1	0	0	0	
hour stop	22	14	23	0	10	0	5	
Day of Wk	Sun	Wed	Mon	Sun	Wed	Wed	Thu	
Day Night	night	day	night	night	day	night	night	
Month	February	March	March	June	September	September	September	

70D Consent Searches with Comments 3/21/23

The major questions I have are related to the use of multiple searches. Why did the officer in 2022069608 use a consent search and an odor search? And the officer in 2022209755 use a consent search and a plain view contraband search? As discussed above, consent searches contribute to drivers' perceptions that they are unfairly forced to comply when officers do not have evidence of criminal activity.

In 2022069608, the officer made a stop for a license violation that was significant enough to result in a citation. If there was an odor of marijuana, why also subject the driver to a consent search? No contraband was found in either search. The driver was Black. What criteria did the officer follow for the searches? Does the officer need to be reminded to be more careful about actionable information?

How often do officers use similar tactics on White drivers? This sort of investigation is easy to do with the IBD. Filter the stops for both consent and odor searches; there were 17 of them. 13 were for Black drivers and 4 were for White drivers. The disproportion does not prove discrimination, but it creates a reasonable suspicion that officers were treating groups differently. Concerned citizens cannot prove discrimination with the data but we can demand our police department prove officers are acting on convincing facts, and, if it cannot document these facts, demand policies, training and supervision change to address our concern.

In 2022209755, the officer made a stop for a violation that could have been ignored; the consent search would compound the perception of unfair treatment. Why not just conduct the plain view contraband search? The officer did find contraband but we can't tell from the checkoffs in which search. An arrest was made for a drug violation, so the officer appears to have had actionable information available.

CPD's [Bias-Free Policing Policy](#) (402) requires officers to consider the characteristics of protected groups only in limited circumstances, as part of the identification of a specific individual, for instance. They are to be trained on the dangers of bias. They are to act on "timely, credible intelligence," similar to the Chief's "actionable information." They are to record their facts so that they are easy to review if necessary.

Progress has been made on implementing these features of the BFPP, but when it comes to evaluating officer performance the BFPP has to follow the state legal requirement that officers be evaluated on the basis of whether they stop a higher proportion of drivers in a group than the group's proportion of all drivers in the jurisdiction, as stated in [590.650](#), the law that mandates the VSR.

The law is counterproductive because it does not address discrimination. Officers who patrol areas with concentrations of drivers in one group will stop more of those drivers without committing discrimination. Officers who patrol areas with a low concentration of drivers in one group can stop every member of that group they encounter because of their group and not be suspected of discrimination.

The BFPP sets up a situation in which it is natural to use the information officers have checked off to make sure they are acting on facts and not being distracted by racial stereotypes. Rather than review every incident in which group proportion of stops does not match group proportion of the population, it makes sense to compute rates and disproportions, then review incidents starting with the situations with the highest disproportions. Officers who have checked off actionable information are commended. Officers who have not recorded credible intelligence are trained in the criteria required for facts. If performance does not improve, they are subject to discipline.

Disproportions might remain after all officers have been documented to be acting on convincing facts, facts clearly independent of racial bias. Groups might be violating laws at different rates. Socioeconomic factors could lead to drivers in one group driving older vehicles with more equipment defects. Differences in driving habits, however, are likely to result in low-level disproportions, on the order of 20%, not the four-fold disproportions in Columbia.

As discussed, locations might be behind the disproportions. Officers might be assigned to patrol areas in which drivers of one group are more likely to be encountered. Officer assignments might be based on the assumption that Black drivers are more likely to be committing violations. Officers are not being distracted by racial stereotypes, but command staff might be. To avoid systemic discrimination, or what Lori Fridell calls “operational bias,” command staff must base officer assignments on objective criteria, such as documentation of the locations of criminal activity.⁵

Conclusions

The Incident-Based Data supply objective evidence to support:

1. Increased attention to data: collecting it, analyzing it, using it to guide officer performance and explaining it to the public,
2. Development of criteria required for actions that are identified as resulting in disproportions that raise concerns,
3. The use of linked databases to investigate situations such as the effect of vehicle age on equipment stops, consent denied and use of force,
4. Full implementation of the Bias-Free Policing Policy, as amended to evaluate officers based on the actionable information they based decisions on,
5. Reform of CPD policies to align them with the Bias-Free Policing Policy.⁶

Questions? Comments?

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5/15/23
2022 IBD release 5 15 23

⁵ Fridell, Lorie. (2017) *Producing Bias-Free Policing: A Science-Based Approach*. Switzerland: Springer International Publishing. Page 81

⁶When I was a member of the Traffic Stop Committee, I drafted a follow-up recommendation, “[Vehicle Stop Data Collection, Analysis and Application by Columbia Police Department](#),” which covers many of the concerns discussed here.