An Introduction to Columbia Police Department Traffic Stop Data
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Directory

Overview

The Columbia Police Department is required by law to submit basic traffic stop data to the Attorney General for the annual **Vehicle Stops Report**. When the data reveal that members of racial and ethnic groups are affected disproportionately by officer actions, the public has a right to know from its law enforcement agency that its police department is free from discrimination or that the agency is taking steps to fix problems.

Disproportions do not prove discriminatory policing because disproportions can be caused by many legitimate factors. CPD must do what it can to **document that a disproportion is caused by legitimate factors**.

CPD might, for instance, be able to make a convincing case that a disproportion is the result of faulty benchmarks, or of different rates of violations among groups, or that officers are more likely to observe violations committed by some groups for reasons that are clearly independent of discrimination.

A disproportion might be the result of actions taken by officers on patrol, but it might also be the result of **upper-level officers directing patrol officers to follow specific tactics**. Officers assigned to patrol areas with a high proportion of minority drivers will stop a high proportion of minority drivers. The officers are obeying orders, but command staff must base their orders on legitimate factors.

The VSR collects and publishes basic data. CPD has much more detailed **incident-based data** that can be analyzed with more sophisticated techniques. Survey data, such as from Columbia's 2018 survey of residents, can also add insights.

When possible, CPD needs to document convincing intelligence to justify actions taken by officers and agency leaders. But CPD might find that it cannot easily assemble all the documentation it needs. It might need to **collect more data** or make information easier to retrieve.

Collecting more information does not have to be a burden for officers. Most of what is needed can be captured in simple check offs. Instead of writing reports which might never be looked at, they can speak into camera systems.

When a disproportion cannot be adequately explained, CPD has a responsibility to its stakeholders to explain what it is doing to make sure that law enforcement will be free of discrimination.

Discrimination and Bias-Free Policing, page 2

Looking at 590.650, the 2000 law that mandates the Vehicle Stops Report, it's not clear what problem it is intended to address. The first words in it are "**racial profiling**." They're in a heading that seems to list topics or summarize the law, but they never occur again, no definition is given.

Racial profiling is a problematic term. To the public it means the police profile of a criminal seems to always include the words "black male"—when officers see a black male, they seem to immediately think "criminal." According to Dr. Lorie Fridell, a national expert on fair and impartial policing and traffic stop analysis, officers, like most humans, will be influenced by stereotypes perpetuated by culture:

> 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.[1]

Law enforcement often defines racial profiling as stopping someone solely on the basis of race. Most everyone agrees this would be discrimination. But law enforcement understands its definition as meaning **race can be a factor as long as even a minor violation has been observed**. An officer can see

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[1] Fridell, Lorie. (2017) *Producing Bias-Free Policing: A Science-Based Approach*. Switzerland: Springer International Publishing. Page 83.

two drivers from different groups commit the same violation and decide to stop one or the other because of group membership. Dr. Fridell has campaigned to remove these **"solely"** policies.[2]

This racial profiling definition is based on a misreading of Justice Scalia's majority opinion in the 1996 Whren case. Scalia wrote that judges have to defer to an officer's presentation of evidence unless defense presents evidence that the defendant's Fourteenth Amendment right to equal protection has been violated.[3]

Later in the law, 590.650 says agencies are to have policies that control **race-based traffic stops**:
> 5. Each law enforcement agency shall adopt a policy on race-based traffic stops that:
> (1) Prohibits the practice of routinely stopping members of minority groups for violations of vehicle laws as a pretext for investigating other violations of criminal law.

What does "routinely" mean in this context? Can officers occasionally discriminate on the basis of race? If officers have reliable information that someone might be involved in serious criminal activity, are they not allowed to make a stop for a minor violation? Most agencies appear to have assumed their "solely" policies meet these criteria, so they have not been changed.

Pretext stops are standard procedure for law enforcement; every investigation starts with unproven suspicions. It's doubtful any law enforcement agency has enforced a policy that forbids pretext stops. And it's still unclear what "race-based" means; when is it appropriate to consider race when making a decision?

Dr. Fridell asks then answers this question:
> *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.[4]*

Differential treatment is discrimination when the differential treatment can't be justified by convincing facts applied equally to everyone.

It would be better if the law addressed **discriminatory policing**. A 2019 reform of 590.650, HB484, starts with a **definition of discrimination** that says **officers are not to base their actions on protected categories, such as race and ethnicity, and they must apply the same evidentiary standards to everyone**.

The Judiciary, the Legislature and Executive Responsibilities. Page 3.
In his Terry v. Ohio opinion, Chief Justice Earl Warren, "roughly sketched the perimeters of the constitutional debate over the limits on police investigative conduct." He wrote, in part:

> Encounters are initiated by the police for a wide variety of purposes, some of which are wholly unrelated to a desire to prosecute for crime. [n9] Doubtless some [p14] police "field interrogation" conduct violates the Fourth Amendment. But a stern refusal by this Court to condone such activity does not necessarily render it responsive to the exclusionary rule.

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[2] Fridell. (2017). Pages 34-35.
[3] See the discussion by H. Morley Swingle of court precedents in Missouri following from the Whren decision, provided by Bob Aulgur, retired Columbia Municipal Court judge. It might be posted on the webpage for the Columbia Chief's Committee on Vehicle Stop Data.
[4] Fridell. (2017) Page 35. Italics in the original.

Regardless of how effective the rule may be where obtaining convictions is an important objective of the police, [n10] it is powerless to deter invasions of constitutionally guaranteed rights where the police either have no interest in prosecuting or are willing to forgo successful prosecution in the interest of serving some other goal.

Proper adjudication of cases in which the exclusionary rule is invoked demands a constant awareness of these limitations. The wholesale harassment by certain elements of the police community, of which minority groups, particularly Negroes, frequently complain, [n11] will not be [p15] stopped by the exclusion of any evidence from any criminal trial.

In many situations, officers are not expecting to encounter serious crime and so acting on probable cause may not be their highest priority. For instance, in the Whren v. U.S. case, officers made a stop for a minor violation and then found drugs and made arrests. The defense argued that the question was "whether a police officer, acting reasonably, would have made the stop for the reason given." The violation was so minor, the defense said, that the officers must have been responding to the race of the suspects.

Justice Scalia wrote in the opinion for the unanimous Whren decision:

We of course agree with petitioners that the Constitution prohibits selective enforcement of the law based on considerations such as race. But the constitutional basis for objecting to intentionally discriminatory application of laws is the Equal Protection Clause, not the Fourth Amendment. Subjective intentions play no role in ordinary, probable cause Fourth Amendment analysis. [5]

In other words, the justices would not exclude the evidence because officers had observed a violation of law, albeit minor. The justices would listen to evidence of discrimination, but none had been offered

Law enforcement interpreted the Whren decision as allowing them to use stops for minor violations as a central tactic to control illegal drug traffic. Instead of laboriously building probably cause cases against suspects, they could stop as many drivers as possible in the hope of getting lucky once in a while. "Or, as an officer observed," as quoted in *Pulled Over*, "in trying to find contraband by stopping and searching vehicles 'you've got to kiss a lot of frogs before you find that one prince.'"[6]

Whren and co-defendant Brown had the opportunity to contest their stop because officers charged them, but the uncounted innocent drivers stopped in order to arrest Whren and Brown have no way to attain justice in court, as acknowledged by Chief Justice Warren.

Pulled Over is the result of a survey of Kansas City-area drivers conducted by University of Kansas professors Epp, Maynard-Moody and Haider-Markel. "I felt violated," is the way they describe the typical reaction of black drivers stopped for minor violations which they consider illegitimate. No matter how nice the officer is, they don't want to be kissed.[7]

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[5] Whren v. United States
[6] 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 977). University of Chicago Press. Kindle Edition.
[7] Ibid. Kindle Location 157.

Many advocates for vulnerable individuals tend to blame the courts, but the legislative and executive branches are just as responsible—or even more so. The courts have to enforce the laws they are given and judge the evidence collected by law enforcement agencies and presented by prosecutors.

Perhaps legislation could give drivers stopped for minor violations because of race the opportunity to bring civil suits against law enforcement agencies based on disparate impact, but governmental agencies are sometimes immune. The Law Enforcement Misconduct Statute recognizes disparate impact but only when the Attorney General brings a civil suit against a law enforcement agency. The End Racial Profiling Act has been presented to Congress for years but never passed.

By our Constitution, the executive branch is responsible for finding the right balance between protecting the public from criminal behavior and respecting the rights of individuals. Prosecutors are responsible for refusing cases based on evidence that should be excluded, even before judges hear it. Prosecutors can pressure officers to act responsibly.

Law enforcement agencies and the officials that oversee them are responsible for protecting drivers from discrimination, even if not forced to do so by legislation or court rulings. If the executive functions of government are not satisfactory, the public is responsible for electing new officials.

In Missouri, we don't have a Law Enforcement Misconduct Statute or an End Racial Profiling Act. Instead, we have 590.650. It would benefit from improvements, but even as it is, it gives the Governor, the AG and agencies the basic information they need to protect public safety and protect the rights of vulnerable people. The Governor can withhold funds from agencies. The Governor can direct the Department of Public Safety to provide a broad range of resources agencies need to address discrimination.

The AG has considerable influence over agencies, if not direct power. 590.650 sets minimum requirements for the VSR but the AG is free in many respects to add more features.

Local officials—elected sheriffs, mayors, council members and so on—either have direct control over law enforcement or can set policies and appoint personnel.

We the People have ultimate responsibility for protecting our freedom.

CPD's Bias-Free Policing Policy. Page 5

In 2018, CPD adopted a "bias-free policing policy" based on a model policy provided by Dr. Fridell. 402.5 reads:

> **Biased policing is strictly prohibited. Agency personnel may not consider the specified characteristics except when credible, timely intelligence relevant to the locality links a person or people of a specified characteristic to a specific unlawful incident, or to specific unlawful incidents, criminal patterns or schemes. In those circumstances, personnel may rely on these specified characteristics only in combination with other appropriate factors.**[8]

Dr. Fridell uses "actionable intelligence" to summarize the wording starting with "credible, timely intelligence." By "a person," she means a specific person or a specific group of individuals; ideally,

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[8] See link to 402 and Fridell. (2017). Pages 36ff.

officers are to be looking for specific people. That's the standard set by the Fourth Amendment. This wording allows the agency to act when a specific individual has not been identified, but Dr. Fridell warns the more general the link the more likely discrimination will occur. There's a slippery slope, she says, when officers stop focusing on specific individuals.

A crucial requirement in 402 is that:

> **Officers detaining any person shall be prepared to articulate sufficient reasonable suspicion to justify the detention independent of the individual's membership in a protected class**.[9]

"Detaining" means "stopping." "Reasonable suspicion" means that officers must be able to cite specific, articulable facts. Another section uses Fridell's term, "credible, timely intelligence." There's some flexibility in the terminology, but the sense is that officers' actions must be fact-based, not based on racial stereotypes.

"Reasonable suspicion" derives from the 1968 Supreme Court Terry v. Ohio decision that said officers could conduct a quick pat down to keep a weapon from being used if they could cite "specific and articulable facts" (p. 21). When there is no evidence that an officer has intentionally discriminated against an individual, the possibility of discrimination has to be assessed by the facts cited by the officer.[10]

"Actionable intelligence," "credible intelligence," "specific and articulable facts," "sufficient reasonable suspicion" all come down to someone's determination of whether facts cited by an officer are strong enough to preclude the influence of stereotypes.[11]

In court cases, judges have tended to accept loose standards. "Specific and articulable facts" in Terry v. Ohio quickly became "reasonable suspicion," and to vulnerable drivers "reasonable suspicion" seemed to become any suspicion, even those based only on stereotypes.

CPD's bias-free policing policy, as intended by Dr. Fridell, moves the criteria back to facts, but the criteria for facts still need to be worked out in practice, which will principally be the interaction between front-line supervisors and officers.

When a disproportion exists that's high enough raise concerns, CPD needs to have easy access to the facts officers were acting on. Robust facts applied uniformly to everyone provide evidence that officers are not being distracted by racial stereotypes. If supervisors see that the facts cited by officers are not strong enough to preclude the influence of stereotypes, then they coach the officers to substantiate stronger facts before acting.

For instance, officers are supposed to check off **investigatory stop** whenever at least part of the reason for a stop was investigatory. Under effective procedures, supervisors would get prompt reports on

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[9] 402.6.1 Boldface added.

[10] See Bob Aulgur's discussion of court precedents on stops in Missouri. Court precedents establish what judges will accept as evidence in court. They will always accept evidence obtained in a consent search, for instance, as long consent was clearly given. But agencies can establish their own policies on how officers are to perform. An agency could prohibit officers from asking for consent. If a case went to court the judge might accept the evidence even though the agency policy was violated. The agency might discipline the officer even though the evidence was accepted in court.

[11] Dr. Fridell uses "actionable intelligence" to cover situations in which agencies need more latitude to take actions that affect someone who has not been specifically identified.

incidents—weekly? —check officers' facts in situations in which the agency has a significant disproportion, and either tell the officers they are doing fine or let them know what improvements are needed.

The CPD disproportion in consent searches of black drivers dropped dramatically when officers were required to read drivers their rights and document the fact of consent. Black drivers were affected by consent searches at a rate 4.39 times the white rate in 2014 but in 2017 the rate was only 18% higher than the rate for white drivers.

Is that good enough, or should officers be required to cite the facts that made them suspicious? That question needs to be answered in part by the interaction between officers and supervisors and in part by the interaction between CPD and the public.

In 2018 the black consent search disproportion was back up to 1.53, suggesting officers may need more guidance from supervisors.

590.650 addresses only traffic stops, but the intention of the law and the implications of the VSR data go further. If groups are disproportionately affected by traffic stops, and if officers need more help avoiding racial discrimination in traffic stops, then the same issues will arise in other aspects of law enforcement, including use of lethal force. **At stake is needless loss of valuable lives**.[12]

The Vehicle Stops Report, page 7

Agencies collect data on **58 categories of officer actions** for the VSR, plus demographic information on drivers—age, gender, residency and race or ethnicity. The 58 categories are broken down by race. Stops are also broken down by age and gender. For 2018 reports, stops were also broken down by residency in the jurisdiction. This data is comprehensive enough to allow an initial assessment of agency performance.

A few more categories would be helpful. 590.650 says the reasons for citations and warning are to be included but these have never been written into the Code of State Regulations. Other helpful categories:
1. When consent is requested but refused,
2. when a drug dog is summoned but doesn't alert,
3. when an officer uses force,
4. when an officer handcuffs a driver or passenger before making an arrest,
5. whether it's alcohol or drugs in odor searches and contraband found,
6. whether an arrest is for an illegal weapon,
7. whether contraband was significant enough to result in a citation or an arrest,
8. and maybe a few more.

Stop disproportions for racial and ethnic groups are a weakness of the VSR. The disproportions are based on the group's proportion of driver-age residents in the jurisdiction in the most recent census data, its **benchmark**, but these are misleading when drivers cross boundaries in large numbers and for other reasons.[13] See the section on benchmarks below.

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[12] For a more thorough review of the CPD policy follow this link.
[13] Access to vehicles, access to public transportation, locations of housing and jobs, miles driven and so on also affect group proportions of drivers.

The VSR's measurement of disproportions, the **disparity index**, is also difficult to understand and can be misleading. The Executive Summary of the VSR even says it's better not to rely on them but to compare them by dividing non-white disparity indexes by the white disparity index.

Legislation has been offered that would strengthen the VSR, for instance, HB484 in the 2019 session.

2018 Columbia Stop Data, page 8

Here is the 2017 VSR data in a format that includes a computation of disproportions between groups in rates per driver:

Table 1.

	Computation	Asian	Black	Hispanic	Native A	Other	White	Total
Group Population%	VSR Benchmark	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
Stops	number of incidents	360	4062	228	7	223	7,557	12,437
Group% of Stops	grp stops/total stops	2.9%	32.7%	1.8%	0.1%	1.8%	60.8%	100.0%
Disparity Indexes	grp% of stops/grp% of Pop	0.56	3.28	0.62	0.21	0.94	0.76	
Disproportions	grp di/white di	0.74	4.30	0.81	0.27	1.23	1.00	

A **disparity index** is a group's percentage of stops divided by its benchmark percentage of the population. The black disparity index says black drivers are stopped 3.28 times more frequently than expected based on their proportion of the population: 32.7% / 9.96% = 3.28.

The black disparity index divided by the white disparity index is 3.28 / 0.76 = 4.30; black drivers were stopped at a rate 4.30 times the white rate in 2017. This metric is called a ratio of disparity. I usually refer to it as the "disproportion."[14]

Notice that the table says each disproportion is the group disparity index divided by the white disparity index, but mathematically this works out to, for instance, black stops per driver divided by white stops per driver, where drivers are taken to be the number of driving-age residents for each group. [15]

2018 stop disproportions are similar:

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[14] I use the term "disproportion" as the empirical comparison of rates. When an agency has failed to account for a disproportion with legitimate factors, I switch to the term, "disparity." HB484 follows this terminology.

[15] A mathematical explanation of why dividing disparity indexes produces a comparison of stop rates is on my website: Love Missouri Vehicle Stops Report. Stop rates and disproportions can be computed directly from stops reported by the agency and the number of driving-age residents of the jurisdiction. It's not clear why 590.650 says to start with proportions of each, probably because percentages are easier to understand than raw numbers, especially large ones.

Table 2.

2018 Stops by Population Estimate		Computation	Asian	Black	Hispanic	Native American	Other	White	Total
						Columbia Police Dept.			
	Group Population%	VSR Benchmark	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
Stops	Stops	number of incidents	426	4866	344	28	383	10660	16707
	Group% of Stops	grp stops/total stops	2.5%	29.1%	2.1%	0.2%	2.3%	63.8%	100.0%
	Disparity Indexes	grp% of stops/grp% of Pop	0.49	2.92	0.69	0.62	1.20	0.80	
	Disproportions	grp di/ whte di or whte di/ non-w di	0.62	3.65	0.87	0.78	1.49	0.45	
Resident Stops	Resident Stops	number of incidents	374	4199	264	24	317	8273	13451
	Resident % of Stops	Res Stops / Total Stops	87.79%	86.29%	76.74%	85.71%	82.77%	77.61%	80.51%
	Group% of Incidents	grp incid / total incid	2.78%	31.22%	1.96%	0.18%	2.36%	61.50%	100.00%
	Disparity Indexes	grp% of incid / grp% of pop	0.54	3.13	0.66	0.66	1.23	0.77	
	Disproportions	grp di/ whte di or whte di/ non-w di	0.70	4.06	0.86	0.86	1.59	0.41	

For 2018, stops were up by 4,000 to 16,707. Columbia has a relatively low number of officers per capita. CPD had de-emphasized traffic patrols but increased them in 2018. The black stop disproportion dipped to 3.65 from 4.30 in 2017.

For the first time, I computed a white disproportion to avoid the 1.00 that automatically occurs when the white disparity index is compared to itself. Here the white disparity index is compared to the disparity index for all other drivers. White drivers were stopped at rate 0.45 times the rate for all other drivers—less than half the rate.

For the first time in 2018, the AG had agencies require officers to record whether drivers lived in their jurisdiction. **Benchmarks should be more accurate for drivers who live in the jurisdiction**. Because the black stop disproportion goes up to 4.06, the disproportions in past years do not appear to have underestimated the stop disproportion against black drivers.

Why are black Columbia residents more likely to be stopped than black drivers traveling to Columbia? Perhaps officers patrol neighborhoods with a high proportion of black residents more than they patrol other city areas.

The Breakdown of Stops for Residents and Non-Residents, page 9
CPD released an advance report on the 2018 data in a memo to the Chief's Vehicle Stops Committee: 2018 Traffic Stop Data Breakdown

CPD and some other agencies like to analyze the data by breaking categories into subcategories and see the differences in the way groups are affected. The stop category is broken down into a resident category and a non-resident category. For black drivers, 86.29% of stops were of residents and 13.71% were of non-residents. For white drivers, 77.61% of stops were of residents and 22.31% of non-residents for a total of 100%.[16]

Instead of a disparity index for resident black drivers, the CPD table reports a "Ratio vs. Race, White" of 1.11 for black drivers. 86.29% / 77/61% = 1.11. For black drivers, the percentage of resident stops was 1.11 times the percentage of resident stops for white drivers.

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[16] Totals are sometimes above 100% in the CPD report because the percentages are calculated on total stops not total incidents in the category. The total of the percentages of white searches is, for instance, 118%.

CPD's analysis in effect says that the fact that black residents are slightly more likely to be stopped than non-residents is more important than the fact that black drivers are much more likely to be stopped than white drivers.

Notice that 1.11 is not a disparity index, although at a first look at the CPD table it might appear to be one. The metric is saying resident black drivers experience a larger share of black stops than resident white drivers experience of white stops, but the significance of this disproportion is not as intuitively clear as black drivers being stopped at a greater rate per driver than white drivers.

There is a disproportion, but is it caused by discrimination or by other factors? Is it high enough to be a concern? More below on the advantages of the technique of looking at a **breakdown** of a category into percentages of its subcategories. For instance, the category of stops can be broken down into reasons for stops.

Benchmarks: Group Proportions of Drivers, page 10

Because the VSR uses population-based benchmarks for group proportions of drivers, one factor independent of discrimination could always be faulty benchmarks. The benchmark for black drivers in Columbia is 9.96%. If the proportion of black drivers encountered by officers were really 20%, then Columbia's stop disproportion would be halved.

Researchers say an observational study is the most dependable way to document benchmarks. Researchers figure out which intersections and which times of day would produce an accurate sample of drivers, then teams count them.[17]

Sometimes regional group proportions are likely to provide reasonable estimates. The Missouri Census Data Center's **Circular Area Profiles**, CAPS, returns statistics from the American Community Survey for a specified radius around a point.[18] 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 proportions of potential black commuters, so there is unlikely to be an influx of black drivers.

Table 3.

Radius from City Hall (mi)	Asian	Black	Hispanic	Nat Am	Pacific Is	Other	White
5	5.20%	10.10%	3.70%	0.10%	0.00%	4.80%	76.10%
10	4.70%	9.60%	3.50%	0.10%	0.10%	4.50%	77.50%
20	3.80%	8.10%	3.10%	0.10%	0.10%	4.20%	80.60%
30	2.50%	8.10%	3.00%	0.20%	0.10%	3.40%	82.70%
40	2.10%	7.50%	2.70%	0.20%	0.10%	3.30%	84.10%

The stop disproportion does not seem likely to be caused by faulty benchmarks. So CPD needs to look elsewhere for explanations.

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[17] See my discussion of Benchmarking Strategies.

[18] 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 ethic 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.

Reasons for Stops: Moving Violations, page 10

Officers check off their reasons for making stops. The disproportions in the reasons officers give for making stops are also high for black drivers:

Table 4.

2018 Reasons for Stops by Population Estimate		Columbia Police Dept.						
Group		Asian	Black	Hispanic	Native American	Other	White	Total
Group Population%	VSR Benchmark	5.17%	9.96%	2.97%	0.27%	1.92%	79.71%	100.00%
Stops	number of incidents	426	4866	344	28	383	10660	16707
Moving Violation	number of incidents	269	2322	187	23	226	6233	9260
Group% of Stops	grp incid/total incid	2.9%	25.1%	2.0%	0.2%	2.4%	67.3%	100.0%
Disproportions	grp di/ whte di or whte di/ non-w di	0.67	2.98	0.80	1.09	1.51	0.52	
Equipment	number of incidents	54	832	75	2	85	1547	2595
Group% of Incidents	grp incid/total incid	2.1%	32.1%	2.9%	0.1%	3.3%	59.6%	100.0%
Disproportions	grp di/ whte di or whte di/ non-w di	0.54	4.30	1.30	0.38	2.28	0.38	
License	number of incidents	108	1955	101	6	82	3134	5386
Group% of Incidents	grp incid/total incid	2.0%	36.3%	1.9%	0.1%	1.5%	58.2%	100.0%
Disproportions	grp di/ whte di or whte di/ non-w di	0.53	4.99	0.86	0.57	1.09	0.35	
Investigative	number of incidents	5	178	16	0	11	194	404
Group% of Incidents	grp incid/total incid	1.2%	44.1%	4.0%	0.0%	2.7%	48.0%	100.0%
Disproportions	grp di/ whte di or whte di/ non-w di	0.40	7.34	2.21	0.00	2.36	0.24	

Disparity indexes are omitted to save space.

Are there alternative, legitimate reasons why black drivers are stopped for **moving violations** at a rate 2.98 times the white rate?

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.[19]

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.

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[19] 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.

Economic Factors, page 11

Economic factors could contribute to the disproportions. Black residents of Missouri are twice as likely as white residents to have incomes below the federal poverty level.[20] So 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. The CPD VSRs for 2017 and 2018 show disproportions for black drivers in license plate and equipment defect stops above 4.00, using the VSR's benchmarks. If CPD thinks a high disproportion for black drivers in these categories is the result of economic factors it should document why black drivers are affected differently.

CPD might, for instance, 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. A researcher might be able to use license plate renewal data

Assuming low-income drivers experience equipment stops at twice the rate for affluent drivers, there would be about a 15% disproportion for black drivers attributable to economic factors. If low-income drivers experience equipment stops at three times the rate for affluent drivers, the disproportion goes up to 25%.[21]

Investigative Stops, page 12

If faulty benchmarks do not account for the 4.06 disproportion for resident black stops, and moving, equipment and license plate violations could only account for a much lower disproportion, what is causing the stop disproportion? The only other category is stops for investigative reasons, but officers reported making only 178 of these for black drivers, not enough to skew the overall stop disproportion even though the black disproportion for investigative stops is 7.34.

I hypothesize that investigative stops do account for the black stop disproportion but officers are not accurately recording them, at least in part because the Code of State Regulations, which tells agencies how to apply the law, does not say anything about them.

Investigative stops could involve at least these situations:
1. 911 calls—calls for service. An officer might be dispatched to respond to the report of a suspicious driver or dangerous driving in a neighborhood. If not for the agency procedure of investigating the call, the officer would not have made the stop;
2. officers making a stop as part of an ongoing agency investigation, in which convincing evidence is being gathered against the suspect;
3. "high-discretion, crime-control-focused activities,"[22] Dr. Lorie Fridell's term for situations in which agencies target patrols to combat high rates of accidents, violations and crime;
4. officers conducting their own spontaneous investigations of suspicious behavior;
5. pretext stops in which officers have some sort of investigative motive but wait until the driver makes a violation—even a minor one—so that they can cite probable cause for the action;

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[20] 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.
[21] Ask to see my back-of-an-envelope computation. Confirmation by an expert would be best.
[22] Fridell. (2017). Page 83

6. stops made in response to alerts from electronic devices, as when a license plate scanner tells the officer the owner of the vehicle has a warrant;
7. DWI checkpoints, but these are excluded from the VSR by the current law.

Some of these situations give officers a high degree of discretion, which makes them vulnerable to stereotypes; others require officers to perform well-defined actions. An officer must obey dispatch when told to respond to a call for service, but while away from an assigned patrol area the officer might make several pretext stops.

If CPD discovers from an investigation of its internal data that **pretext stops** are contributing to the black stop disproportion, then, following its bias-free policing policy, it is required to find out what credible intelligence –probable cause, reasonable suspicions, specific and articulable facts—officers were acting on. As supervisors counsel officers to apply the same high standards for facts to everyone, disproportions will decline. Or so I hypothesize.

No-tolerance patrols--hotspot or saturation patrols--are one form of crime-control-focused activity. CPD leaders might order officers to make as many no-tolerance stops as possible in a specific area where shots have been fired. The officer is following orders, not acting on stereotypes. Dr. Fridell observes,

> Many complaints of bias reflect a concern about the actions of an individual officer. In contrast, a complaint of "**operational bias**" reflects concern about a department's policies or practices. As examples, the complaint in Chicago from community members was that the locations of seatbelt checkpoints were selected to target low-income, African-American neighborhoods. ….
> The key objective here is for the leader of an agency to be ready and willing to take such complaints seriously, instead of dismissing them in a knee-jerk reaction. Knowing what we now know about how bias manifests in even well-intentioned individuals, and because we have humans in policy-making positions within the departments, a police leader must acknowledge the possibility that an agency's practices could reflect or promote bias—even if wholly unintentional.[23]

If no-tolerance patrols are contributing to CPD's high stop disproportion against black drivers, then CPD has a responsibility to explain them to the public. Are they an effective way to control violent crime? Or do they alienate residents of the area so that officers lose the help they need to build probable cause cases against violent offenders? Would it be more effective to commit more resources to real investigations? Or to address the root causes of violence?

In the past, CPD has not been able to easily track investigative stops but improvements in data collection and analysis in the past year provide more information. VSR data will still include only a total of all types of investigative stops, but CPD should be able to use its incident-based data to break them down into subcategories.

I expect that, going forward, **CPD will increasingly document when an officer makes a stop in which there was an investigative reason and that CPD will be able to evaluate whether the officer can cite specific and articulable facts sufficient to dispel concerns that racial stereotypes might be playing a role. CPD will issue a report on its annual VSR detailing the reasons for disproportions and explaining what is being done when alternative reasons cannot be documented.**

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[23] Fridell. (2017) Page 81.

Until there is better internal data on types of investigative stops, analysis can't go much further with stop disproportions. GIS mapping of stops might reveal patterns but results so far have been inconclusive. Hotspots may be too small, too transient to show up. Officers may too often be out of assigned patrol areas.

The Breakdown of Reasons for Stops, page 14

The VSR stop data breaks down naturally into categories and subcategories. Stops breakdown into moving violations, equipment violations, license plate violations and investigative stops. Sometimes it's interesting to look at how situations are distributed for groups, as CPD did in its memo to the Chief's Vehicle Stops Committee. Here the data are analyzed on the basis of the percentages of subcategories for each group:

Table 5.

2018 Reasons for Stops as % of Total Reasons	Columbia Police Dept.	Asian	Black	Hispanic	Native American	Other	White	Total
Stops	number of incidents	426	4866	344	28	383	10660	16707
Reasons for stops	total of reasons given	436	5287	379	31	404	11108	17645
Moving Violation	number of incidents	269	2322	187	23	226	6233	9260
% of group stops	group incidents / group reasons for stops	61.7%	43.9%	49.3%	74.2%	55.9%	56.1%	52.5%
Disproportions	grp % / white %	1.10	0.78	0.88	1.32	1.00	1.00	
Equipment	number of incidents	54	832	75	2	85	1547	2595
% of group stops	group incidents / group reasons for stops	12.4%	15.7%	19.8%	6.5%	21.0%	13.9%	14.7%
Disproportions	grp % / white %	0.89	1.13	1.42	0.46	1.51	1.00	
License	number of incidents	108	1955	101	6	82	3134	5386
% of group stops	group incidents / group reasons for stops	24.8%	37.0%	26.6%	19.4%	20.3%	28.2%	30.5%
Disproportions	grp % / white %	0.88	1.31	0.94	0.69	0.72	1.00	
Investigative	number of incidents	5	178	16	0	11	194	404
% of group stops	group incidents / group reasons for stops	1.1%	3.4%	4.2%	0.0%	2.7%	1.7%	2.3%
Disproportions	grp % / white %	0.66	1.93	2.42	0.00	1.56	1.00	
Total %	sum of percents	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Officers are told on the VSR form to check more than one reason for a stop if appropriate. They might observe both an equipment and a license plate violation, for instance. So total reasons usually exceed total stops. Here percentages are based on the group's total reasons given for stops.[24]

44% of the reasons for black stops are moving violations while moving violations are the reason for 56% of white stops. The black percentage is 0.78 times the white percentage, or the white percentage is 1.28 times the black percentage (1/0.78). The exact significance of this disproportion isn't clear, but it doesn't seem to indicate black drivers are more likely to be committing moving violations than white drivers.

Because blacks are more likely to have incomes below the federal poverty level than whites, they might be more susceptible to equipment and license violations (more on this above). If economic factors made a huge difference in equipment and license plate stops, then one would expect the distributions to be further off. Perhaps the 1.31 disproportion suggests an upper limit for the effect economic factors could be having on license plate violation rates per driver disproportions for black drivers.

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[24] Missouri State Highway Patrol and a number of smaller agencies report just one reason for a stop.

CPD provided a distribution of percentages of reasons for stops in a memo to the Chief's Vehicle Stops Committee: 2018 Traffic Stop Data Breakdown. The CPD table is similar to the one above except here percentages are based on the total of reasons given instead of the total stops so that percentages add to 100.

See Breakdown of Percentages in Searches below for a clearer example of the usefulness of the breakdown technique.

Investigative Stops in Survey Data, page 15

In *Pulled Over*, KU professors Epp, Maynard-Moody and Haider-Markel report on a survey they conducted of 3000 drivers and officers in the KC area.[25] They found that black drivers feel violated when stopped by an officer who shows no interest in the possibility that they might have been threatening public safety by the way they were driving and instead ask questions such as, "What are you doing in this neighborhood?" and "How can you afford such a nice car?"

Pulled Over defines investigative stops from the point of view of drivers, taking their criteria from what drivers report in the survey. The authors explain:

> We coded the following reasons for the stop as traffic-safety justifications: speeding ≥7 mph over the posted limit, failure to stop at sign or light, dangerous driving, suspicion of impaired driving, roadside check for impairment, failure to turn on lights at night, and a small number of miscellaneous, safety-related reasons. We coded the following reasons for the stop as investigatory justifications: no reason given, speeding <7 mph over the posted limit, expired license plate or tag, vehicle equipment violation, failure to signal turn, failure to signal lane change, license plate light out, check of license/registration, driving too slow, warrant check, suspicion of criminal activity, failure to dim high beams, and a small number of miscellaneous, highly discretionary justifications.[26]

In the 2018 Columbia city survey of residents, black drivers were five times more likely than white drivers to report that they had been stopped for illegitimate reasons. The numbers are small. About 100 residents reported being stopped and about 10 of them were black. The disproportion may not be statistically significant, but it should be taken seriously because it backs up stop data and concerns raised in public discussion.

Post-Stop Disproportions, page 15

Post-stop disproportions are simpler to deal with than stop disproportions. Empirical benchmarks are available to compute them—the number of stops per group. They involve a narrower range of circumstances, which makes them easier to investigate; for instance, reasonable suspicion-weapon searches involve just the possibility of a weapon being present. The post-stop disproportions are often lower than the stop disproportions. When a disproportion occurs in one situation, it is easier for

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[25] 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
[26] 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 3424; page 173.

supervisors to track the facts cited by officers and give them feedback when their facts need to be more robust.

Looking just at post-stop disproportions ignores the overall impact of the stop on the driver. Discrimination could be occurring in two stages, the stop and then again in the post-stop action.

Take consent searches as an example. Rates can be based on the group's number of stops, for instance, black consent searches per black stops. Then the rates can be compared.

Table 6.

2018 Post-Stop Disproportions		Columbia Police Dept.						
Race		Asian	Black	Hispanic	Native American	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Consent Searches	Count	2	182	16	0	3	261	464
Rate	Incidents / Stop	0.005	0.037	0.047	0.000	0.008	0.024	0.028
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.19	1.53	1.90	0.00	0.32	0.73	

The rate for black drivers is 182 / 4866 = 0.037—that is, 37 consent searches per 1000 stops. The disproportion for black drivers is 0.037 / 0.024 = 1.53: black drivers are affected at a rate 1.53 times the white rate. Or, black drivers are 53% more likely to be affected than white drivers.

Analysis of an agency's VSR data is limited to disproportions because it contains only totals for the 58 categories by group, age, gender and residency. It is impossible to tell how the categories work together, for instance, the number of citations for Asian males over the age of 18. Or the disproportions which result when officers make an equipment stop then ask for consent to a search. **To see how the categories work together, the agency's internal incident-based data must be examined**.

But just the disproportions are powerful—especially the post-stop disproportions based on reliable benchmarks.

When agencies have a disproportion high enough to be a concern to stakeholders, then the agency owes them an explanation; the agency has an obligation as the institution entrusted with equal enforcement of the law to present convincing evidence that officers are not influenced by group characteristics and that they apply the same standards to everyone regardless of personal characteristics. We the People have established a list of protected groups: race, religion, national origin, age, and so on. Columbia's list is more extensive, but race is the main concern in the VSR because of our heritage of slavery and segregation.

If an agency can tell a disproportion is in whole or in part the result differential treatment of individuals because of race, it must say so and say what it is doing to fix the problem. Other laws require officers and agencies to provide equal protection. Intentional discrimination by officers must be identified and stopped.

Differential treatment can, however, be the result of many factors. Individuals in groups might violate laws at different rates. Socioeconomic factors might be involved in a disproportion. Circumstances might result in officers observing some violations and not others. Policies and enforcement tactics might contribute to disproportions.

If factors clearly independent of discrimination contribute to disproportions, the agency is responsible for presenting evidence so that stakeholders know that discrimination was not involved. If the agency cannot document convincing alternative factors, then it must look more closely at officer performance and at the tactics approved by command staff. A crucial point is whether agency personnel can cite convincing reasons for their actions, reasons so good that a reasonable skeptic would not conclude that the influence of racial stereotypes is involved.

Disproportions in Stop Outcomes, page 17

Stops can result in warnings, citations, arrests and searches—and no action by the officer. Officers sometimes record "other" outcomes.

Table 7.

2018 Stop Outcomes		Columbia Police Dept.						
Race		Asian	Black	Hispanic	Native Am	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Citations	Count	66	754	57	7	59	1522	2465
Rate	Incidents / Stop	0.155	0.155	0.166	0.250	0.154	0.143	0.148
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	1.09	1.09	1.16	1.75	1.08	0.92	
Warnings	Count	343	3750	268	22	294	8590	13267
Rate	Incidents / Stop	0.805	0.771	0.779	0.786	0.768	0.806	0.794
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	1.00	0.96	0.97	0.98	0.95	1.04	
No Action	Count	20	280	21	0	24	529	874
Rate	Incidents / Stop	0.047	0.058	0.061	0.000	0.063	0.050	0.052
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.95	1.16	1.23	0.00	1.26	0.87	
Other Result	Count	9	297	19	0	16	339	680
Rate	Incidents / Stop	0.021	0.061	0.055	0.000	0.042	0.032	0.041
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.66	1.92	1.74	0.00	1.31	0.56	
DriversArrested	Count	22	587	47	1	21	766	1444
Rate	Incidents / Stop	0.05	0.12	0.14	0.04	0.05	0.07	0.09
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.72	1.68	1.90	0.50	0.76	0.64	
Stops Resulting in Search	Count	6	679	45	0	14	675	1419
Rate	Incidents / Stop	0.014	0.140	0.131	0.000	0.037	0.063	0.085
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.22	2.20	2.07	0.00	0.58	0.51	

A high group disproportion for **warnings** and **no action taken** could indicate drivers in the group were stopped for reasons that would have been ignored for other drivers, but CPD disproportions are relatively low for these categories.

What are the "Other Results" and why are black and Hispanic drivers disproportionately affected?

The CPD Breakdown analysis of stop outcomes also flags "Other Result." Outcomes for black drivers are concentrated in "Other Results" at a percentage 1.92 times the percentage for white drivers. The disproportion for Hispanic drivers is 1.74.

The VSR does not consider arrests and searches as outcomes of a stop. Some arrests are clearly stop outcomes, when the arrest is for a moving violation, for instance. Some arrests are the outcomes of searches; it would make analysis easier if they were considered separately. Then, it would be easier to track when contraband results in an arrest.

The CPD Breakdown analysis also flags searches and arrests, with disproportions for black drivers of 2.20 and 1.68 respectively and for Hispanic drivers of 2.07 and 1.90. So, by either metric, a closer look is appropriate to make sure officers cite credible intelligence applied in the same manner to all groups.

Some arrests and searches are automatic, so officer discrimination is unlikely to be the cause of a pattern. For instance, if officers discover there's a warrant for a driver, they are required by law to make an arrest. If officers make an arrest, they are required to make a search. Examining types of arrests and types of searches is more productive; see separate sections below on arrests and searches.

Consent Searches in Incident-Based Data, page 18

We already used consent searches as an example of how post-stop analysis works. CPD had a high **consent search** disproportion for years. In 2014, black drivers were subjected to consent searches at a rate 4.39 times the rate for white drivers.

Table 8.

Columbia Consent Search Disproportions by Year				
Year	Group	Consent Searches	Rate	Disproportion
		count	grp incidents / grp stops	grp rate / white rate
2001	Black	166	0.055	1.82
2009	Black	220	0.046	3.49
2013	Black	232	0.055	4.16
2014	Black	200	0.050	4.39
2015	Black	208	0.062	2.01
2016	Black	216	0.059	1.45
2017	Black	137	0.034	1.19
2018	Black	182	0.037	1.53

CPD posted incident-based data for 2015 in the fall of 2016.[27] The data allowed hit rates for consent searches to be computed, the rates at which contraband was found.

Table 9.

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%

Black drivers were twice as likely to be subjected to a consent search, but white drivers were close to twice as likely to be found with contraband. The hit rate for all drivers was not high enough to document that officers were basing their decisions to ask for consent on facts indicating criminal behavior—14.1%. The hit rate for black drivers was about 10%.

In response to the low hit rates and the disproportion, CPD's consent search policy was rewritten so that officers began explaining to drivers that they had a right to refuse and began recording consent. For the

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[27] The data is available on the Columbia website. Ask me for the ap I used to generate these tables.

last three months of 2016, after the police change occurred, the disproportion dropped from 2.04 to 1.45. For 2017 the disproportion dropped to 1.19, but in 2018 it was back up to 1.53.

With the incident-based data, strings of events can be tracked. Below are all traffic stops that lead to consent searches and then consent searches leading to contraband found.

Table 10.

2018 Post-Stop Analysis: Strings of Actions						
All_Traffic_Stops				All_Traffic_Stops		
Consent				Consent		
				Contraband_Found		
	Stop Reason > Search Type	Search Rate	Disproportion	Stop Reason > Search Type > Hit	Hit Rate	Disproportion
Group	Count	Searches / Stop Reason	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Hits/ Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	2	0.005	0.19	1	0.500	1.47
Black	182	0.037	1.53	43	0.236	0.69
Hispanic	16	0.047	1.90	2	0.125	0.37
Am Indian	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Other	3	0.008	0.32	2	0.667	1.96
White	261	0.024	0.73	89	0.341	1.44
Total	464	0.028		137	0.295	

In 2018, black drivers submitted to consent searches at a rate 53% greater than white drivers but officers found white drivers with contraband during consent searches at a rate 45% greater (1/0.69) times the black rate.

The hit rate for black drivers is up from about 10% in 2015 to 23.6% in 2018. Hit rates for white drivers and for all drivers are up too, from 14% to 29.5%, so officers have made some progress on identifying situations in which facts suggest the presence of contraband.

Keep in mind that a disproportion only flags the possibility of discrimination. A careful review of consent searches could find that officers are always acting on credible intelligence. But if supervisors find that officers cannot cite convincing facts or that they are applying a different standard for facts to groups, then the fix is straightforward; supervisors help the officers master the skill of identifying relevant facts.

And finally, an arrest added on to the string:

Table 11.

2018 Post-Stop Analysis: Strings of Actions			
All_Traffic_Stops			
	Consent		
	Contraband_Found		
	Driver Arrested		
	Search Type > Hit > Arrest	Arrest Rate	Disproportion
Group	Count	Arrest / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	0	0.000	0.00
Black	24	0.132	0.91
Hispanic	0	0.000	0.00
Am Indian	0	#DIV/0!	#DIV/0!
Other	0	0.000	0.00
White	38	0.146	1.23
Total	62	0.134	

Consent searches led to arrests 62 times. Black drivers were arrested at a rate 91% of the rate for white drivers**. If officers were basing requests for consent on indications of criminal behavior and not on racial stereotypes, one would expect higher arrests rates for everyone.**

Part of what's going on here is that contraband does not always result in an arrest or a citation. Sometimes the contraband is techically a violation of a law but the officer exercises discretion in issuing a warning or taking no action. **Consent searches have a high rate of officers reporting contraband that is not actionable—with a high disproportion against black drivers**. See more below in "Actionable and Non-Actionable Contraband."

With the CPD data that has been posted, it's possible to slice and dice in all sorts of ways. There aren't big differences, for instance, related to the reason for the stop. The disproportion for black drivers is largest for consent searches following moving violation stops. With more detailed internal data, it would be possible to see if consent searches tend to follow stops for minor violations—they could be following pretext stops conducted as part of no-tolerance patrols.

More detailed internal data has officers' names, so supervisors can easily retrieve, for instance, an officer's consent searches. Even if information about an investigation is not included, the supervisor can tell from the locations whether the officer was in a hotspot. Depending on how databases are linked, the supervisor can see information about the driver—home address, make of vehicle and so on. The supervisor can view a video of the stop and look at any, more detailed information about the stop in the incident report.

The crucial aspect of the stop regarding discrimination is whether the officer has or can articulate sufficient reasonable suspicion to justify the detention, paraphrasing CPD's Bias-Free Policing policy.

Other High-Discretion Post-Stop Disproportions, Page 20

Officers have considerable discretion in asking for consent. Courts have said they need have no probable cause or even reasonable suspicion—any sort of suspicion is enough, even one based on racial stereotypes. High-discretion post-stop situations are a good way to screen for potential discrimination.

Benchmarks don't have to be estimated. Officer and driver have been face to face. The situations are often simple enough that a supervisor can tell what happened from available documentation.

Here is what the VSR data say about high-discretion post-stop actions:

Table 12.

2018 High-Discretion Post-Stop Disproportions	Columbia Police Dept.	Asian	Black	Hispanic	Native Am	Other	White	Total
Group		Asian	Black	Hispanic	Native Am	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Consent Searches	Count	2	182	16	0	3	261	464
Rate	Incidents / Stop	0.005	0.037	0.047	0.000	0.008	0.024	0.028
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.19	1.53	1.90	0.00	0.32	0.73	
Drug Alcohol Odor Search	Count	4	329	14	0	5	153	505
Rate	Incidents / Stop	0.009	0.068	0.041	0.000	0.013	0.014	0.030
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.65	4.71	2.84	0.00	0.91	0.25	
Reasonable Suspicion-Weapo	Count	0	61	1	0	0	41	103
Rate	Incidents / Stop	0.000	0.013	0.003	0.000	0.000	0.004	0.006
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	3.26	0.76	0.00	0.00	0.38	
Drug-Dog Alert Searches	Count	0	24	2	0	0	66	92
Rate	Incidents / Stop	0.000	0.005	0.006	0.000	0.000	0.006	0.006
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	0.80	0.94	0.00	0.00	1.44	
Resisting Arrest	Count	1	17	1	0	4	10	33
Rate	Incidents / Stop	0.002	0.003	0.003	0.000	0.010	0.001	0.002
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	2.50	3.72	3.10	0.00	11.13	0.25	
Traffic Violation	Count	13	194	19	1	10	319	556
Rate	Incidents / Stop	0.031	0.040	0.055	0.036	0.026	0.030	0.033
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	1.02	1.33	1.85	1.19	0.87	0.76	

Resisting Arrest, Page 21

Resisting Arrest charges might result from situations in which officers have no option but to use force, or they might result from situations in which officers fail to use de-escalation skills. Because only 33 incidents occurred, CPD can review each one and report to the public whether use of force was unavoidable or whether the officer received additional de-escalation training.

In looking at the CPD internal data, it seems odd that 9 of the resisting arrest incidents follow stops for a license plate violation, and there's a large disproportion against black drivers:

Table 13.

2017 CPD Internal Data: License Stop>Resisting Arrest			
Reason for Stop:	License		
Search Type			
Hits:			
Outcome			
Arrest Charge	Resist_Arrest		
	Count	Arrest Charge / Stop Reason	Grp Rate/ White Rate
Asian	0	0.0000	0.00
Black	6	0.0036	2.84
Hispanic	0	0.0000	0.00
American Indian	0	0.0000	0.00
Other	0	0.0000	0.00
White	3	0.0013	1.00
Total	9		

Why would a license stop lead to an officer needing to use force? Because there are only 9 incidents, the incident-based data can be presented as an example of what the incident-based data looks like as a spreadsheet:

Table 14.

2 18 CPD Incident-Based Data Example: license violation leading to resisting arrest charge

incident_id	2 18 58789	2 18 65855	2 18 66298	2 18 99495	2 181 89	2 181 9 76	2 1812 475	2 18259732	2 18278685
address of stop	N FIFTH ST/ROGERS ST	HICKORY ST/WILKES BLVD	21 21 -BLK THIRD AVE.BLK	BANKS AVE/W WORLEY ST	E BUSINESS LOOP 7 /N PROVIDENCE RD	22 1 22 1-1 BALLENGER LN	3215 3215-A CLARK LN	I7 W/PARIS RD	HIGHVIEW AVE/JEWELL AVE
calltime	3/24/2 18 5:32:	4/4/2 18	4/4/2 18 9:39:	5/17/2 18 11:17:	5/3 /2 18 1 : 9:	5/3 /2 18 1:39:	6/13/2 18 1 :11:	11/24/2 18 8:5 :	12/17/2 18 1 :29:
Race	B	B	W	B	W	B	W	B	B
Age	3 --39	3 --39	18--29	18--29	18--29	18--29	3 --39	3 --39	4 +
Gender	M	M	M	M	M	M	F	M	M
Resident	Yes	Yes	Yes	Yes	Yes	Yes	No	Y	Y
Violation									
Speed				1					
Fail to Signal				1				1	
Moving				2				1	
License	1	1	1	1	1	1	1	1	1
Investigative Stop	1								
Outcome									
Citation	1	1	1		1				1
Warning				1					
Type of Search									
Consent Search				1					
Inventory					1				
Drug_Alcohol Odor									
Incident to Arrest					1	1		1	1
Plain View Contraband	1				1				
Suspicion Weapon						1			
Other Basis							1		
Contraband Found									
Drug_Alcohol	1							1	
Weapon						1			
Stolen Property									
Arrest Charge									
Warrant							1	1	
Drug Violation							1		
Resist Arrest	1	1	1	1	1	1	1	1	1
Traffic Violation	1				1	1			1
Other Violation					1			1	1

Rows with no information are left out; for instance, no equipment violations were checked. Descriptive information about the incidents is condensed. Each incident appears in a row when displayed as a spreadsheet; here they are transposed to appear as columns to fit a page.[28]

Besides the license plate violation, incidents involved other violations and/or searches for various reasons, all of which could have raised the level of conflict.

Only two incidents involved just the license violation.

A total of 19 arrest charges were filed over these 9 incidents, not just resisting arrest.

In 3 incidents, resisting arrest was the only charge, raising the question of what arrest was being resisted.

In the first incident, the officer checked "Traffic Violation" arrest but no traffic violation was checked. Did the officer consider the license violation to be a traffic violation? Was the license violation actually a driver license and not a license plate? What sort of investigation was involved? The officer might benefit from feedback from the supervisor.

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[28] A few odd things happened in generating this table. For instance, each incident number should start with 2018.

The officers appear to have conducted several searches before having to make an arrest for resisting. If the resistance had occurred early in the stop, the officer would have made an arrest and then conducted an "incident to arrest" search.

One Weapon was found and one incident involving drugs or alcohol occurred.

So, the stops appear to have started with routine violations, the officers noticed the expired plates and encountered other violations with an eventual loss of control. The data don't reveal whether the officers involved were doing everything that can be expected of them to de-escalate, but the data indicate that a closer review is called for, with implications for policies, training and supervision.

Traffic Violation Arrests, Page 23

Traffic violations are high discretion in the sense that officers can decide to take no action, give a warning, write a citation or make an arrest. Statewide, the traffic violation arrest disproportion for black drivers is 1.27. For Hispanic drivers it's 1.71. Some agencies have very high disproportions. CPD's is high enough to merit a review of incidents. Are officers applying the same standard to all drivers?

More detailed internal data will document the severity of violations that led to arrests. In 2015 the incident-based data released by CPD included Uniform Crime Report codes for violations, which was helpful.

One chief told me officers will make arrests if they are not sure of the identity of the driver. They don't want to release someone who might have a warrant.

Driving without a valid driver license is a traffic offence. A drivering license might be suspended or revoked because of excessive points, a DWI or an outstanding warrant. A disproportion in outstanding warrants might contribute to a disproportion in traffic violation arrests.[29]

Drug/Alcohol Odor Searches, Page 23

Drug/Alcohol Odor searches could involve a range of situations. An officer could, for instance, see a dangerous lane violation, detect a slur in the speech of the driver and then combine those observations with the odor of alcohol to decide to make a search.

At the other end of the spectrum, an officer could also make a search based solely on odor, with no evidence of intoxication. Interpreting an odor can be subjective, with no other evidence to validate the officer's decision to make a search. If there is an indication officers are misusing odor searches, then closer scrutiny by supervisors is warranted.

In Columbia, black drivers were affected by odor searches in 2018 at a rate 4.71 times the white rate, based on group stops.

An agency might be able to demonstrate that odor searches were justified because officers found contraband or observed erratic driving, or made an arrest for intoxicated driving. The agency would have to look at internal data because hits are reported in the VSR for all types of searches, not by individual categories of search.

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[29] Columbia municipal courts do not revoke licenses when they issue a warrant, I believe.

Table 15.

2018 CPD Incident-Based Data: Odor Searches and Hits							
					All_Traffic_Stops		
Authority for Search		Drug_Alcohol_Odor			Drug_Alcohol_Odor		
Contraband found					Contraband_Found		
	All Traffic Stops	Search Type	Rate	Disproportion	Stop Reason > Search Type > Hit	Hit Rate	Disproportion
Group	Count	Count	incidents / stop	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Hits/ Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	426	4	0.009	0.65	4	1.000	1.32
Black	4866	329	0.068	4.71	252	0.766	1.01
Hispanic	344	14	0.041	2.84	13	0.929	1.22
American Indian	28	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Other	383	5	0.013	0.91	1	0.200	0.26
White	10660	153	0.014	0.25	116	0.758	0.99
Total	16707	505	0.030		386	0.764	

Black drivers are searched for odor at a rate 4.71 times the rate for black drivers, but the two groups are found with contraband at almost the same rate.

Hit rates for odor searches appear to be reasonably high, indicating that whatever else is going on, officers are acting on facts that suggest criminal behavior—but in many incidents the contraband was not serious enough to result in an arrest or citation.

Of the 750 searches that resulted in contraband found, odor searches account for more than half. As discussed below in "Actionable and Non-Actionable Contraband," of the 386 hits, 163 were so minor that officers did not give a citation or make an arrest.

There is no breakdown into either alcohol, drugs being smelled, or alcohol, drugs or paraphernalia being found. There is no record for incidents of illegal alcohol being found, presumably an open container, although a status violation might be involved. Perhaps most of the incidents involve drugs, not alcohol; CPD would have to look deeper into internal records.

Officers made 76 arrests of black drivers for procession of drugs after an odor search and 51 arrests of white drivers; white drivers have an arrest/search rate 43% higher than the rate for black drivers:

Table 16.

Reason for Stop:						
Authority for Search	Drug_Alcohol_Odor			Drug_Alcohol_Odor		
Contraband found	Drug_Alcohol_Found			Drug_Alcohol_Found		
Outcome	Driver_Arrest			Driver_Arrest		
Arrest Charge				Drug_Violation		
	Search Type > Hit > Arrest	Arrest Rate	Disproportion	Stop > Hit > Arrest Charge	Arrest Charge Rate	Disproportion
	Count	Arrest / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Arrest Charge / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	4	1.000	2.32	2	0.500	1.50
Black	123	0.374	0.87	76	0.231	0.69
Hispanic	6	0.429	0.99	4	0.286	0.86
American Indian	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Other	0	0.000	0.00	0	0.000	0.00
White	66	0.431	1.14	51	0.333	1.43
Total	199	0.394		133	0.263	

Black drivers are less likely to be arrested per odor search and less likely to be arrested for a drug violation per odor search than white drivers. So, again, officers are finding probable cause for arrests, but data suggest increased suspicion of black drivers isn't warranted. If officers are acting on convincing facts, one would expect the outcomes to be closer. Acting on suspicion based on race not facts is discrimination.

Also, as we'll see below in "Actionable and Non-Actionable Contraband," more than half the hits are not significant enough to result in arrests or citations, and black drivers have many more of these non-actionable outcomes than white drivers.

CPD could report on the drug charges filed. Is marijuana the source of the odor? Officers would write citations for small quantities of marijuana rather than make arrests because of Columbia's ordinance on marijuana. Are officers making arrests for large quantities of marijuana or for other drugs? Is meth a problem in Columbia? What drugs have an odor officers could detect?

Officers made 8 DWI arrests of black drivers after an odor search, and 10 arrests of white drivers, for an arrest/search disproportion of 0.37 for black drivers; white drivers were affected by DWI arrests at a rate 2.09 times the black rate, but the low number of incidents may not document a pattern. With such a high disproportion, however, a chi-squared test would probably confirm the results are highly unlikely to occur just by chance. With such small numbers, it's just as well to switch from statistics to an examination of individual incidents.[30]

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[30] Overall, white drivers were arrested for DWIs at a rate 1.09 times the black rate.

Table 17.

Authority for Search	Drug_Alcohol_Odor	
Contraband found	Drug_Alcohol_Found	
Outcome	Driver_Arrest	
Arrest Charge	DWI_BAC	
	Stop > Hit > Arrest Charge	Arrest Charge Rate	Disproportion
	Count	**Arrest Charge / Search Type**	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	1	0.250	3.83
Black	8	0.024	0.37
Hispanic	2	0.143	2.19
American Indian	0	#DIV/0!	#DIV/0!
Other	0	0.000	0.00
White	10	0.065	2.09
Total	21	0.042	

The low number of DWI arrests, however, raises the question of how useful searches based on alcohol odor are for protecting public safety if they do not lead to the arrest of impaired drivers.

Data do not capture instances in which officers could take action but choose not to. For instance, the officer stops a white driver on the way home from work and ignores the odor of alcohol. But the officer stops a black driver on the way home from work and searches the car because of the odor of alcohol.

If an agency gets enough complaints that odor searches are made when there is no sign of impairment, it can look into the complaints, but individuals who feel officers have treated them unfairly are not likely to complain. The Bureau of Justice's Police-Public Contact Survey documents that black drivers are more likely than white drivers to report that officer actions were not legitimate:

> About eight in 10 drivers involved in traffic stops and six in 10 persons involved in street stops believed they were stopped for a legitimate reason. Regardless of the reason for the traffic stop, a smaller percentage of black drivers (67 percent) than Hispanic (74 percent) and white (84 percent) drivers believed the reason for the stop was legitimate.[31]

In the 2018 Columbia city survey of residents, black drivers were five times more likely than white drivers to report that they had been stopped for illegitimate reasons. The numbers are small. About 100 residents reported being stopped and about 10 of them were black. The disproportion may not be statistically significant, but it should be taken seriously because it backs up stop data and concerns raised in public discussion.

As for consent searches, officers have a high level of discretion in when to use odor searches so it's easy for racial stereotypes to be a distraction. Odor searches would be an attractive tool for officers to use in no-tolerance patrols. Perhaps a policy is needed to require officers to cite some evidence in addition to the odor for these searches, such as a lane violation or slurred speech. Perhaps drug odor should be treated as a reason to summon a drug dog.

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[31] From a Bureau of Justice press release on its 2011 Police-Public Contact Survey. See *Pulled Over*, location 201, note 10.

Officers are allowed to do a quick pat down of a person or check accessible areas of a vehicle if they think a weapon might be present because of the ruling in Terry v. Ohio. Courts apply a low standard for specific facts in this case for the sake of safety. A disproportion against black drivers of 3.26, however, justifies public concerns that officers might be acting on stereotypes.

In the 1968 Terry v. Ohio case, the Supreme Court ruled that an officer could search individuals he had observed for an extended period inspecting a business as if to rob it. Even though the officer did not have probable cause for a search, the search did not violate the Fourth Amendment protection from unreasonable searches, the Court said; it is reasonable for an officer with "specific and articulable facts" to make sure a suspect is not dangerous.

In the Terry case, the facts were bulges in the suspects' clothing suggesting weapons. The Court had in mind much more than suspicions.

When there is a disproportion against members of a group, the public has probable cause to ask for evidence that officers are acting on facts and not stereotypes. Because a reasonable suspicion-weapon search is just for a weapon and the importance of protecting public safety is clear, officers should get some leeway, but they still need to be held accountable for acting on facts, not stereotypes.

Table 18.

2018 CPD Incident-Based Data						
Authority for Search	Suspicion_Weapon			Suspicion_Weapon		
Contraband found				Weapon		
	Stop Reason > Search Type	Hit Rate	Disproportion	Search type > hit type	Hit Rate	Disproportion
	Count	Searches / Stop Reason	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Hits / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Black	61	0.013	3.26	15	0.246	0.78
Hispanic	1	0.003	0.76	0	0.000	0.00
American Indian	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Other	0	0.000	0.00	0	#DIV/0!	#DIV/0!
White	41	0.004	0.38	13	0.317	1.31
Total	103	0.006		28	0.272	

Black drivers are searched based on suspicion at a rate 3.26 times the rate for white drivers, but officers find white drivers with illegal weapons at a rate 31% higher than the rate for all non-white drivers—28% greater than the rate for black drivers. Hit rates are low for all drivers, which isn't surprising because officers do not have evidence of a weapon; they are just being careful:

Table 19.

2018 CPD Incident-Based Data						
Authority for Search	Suspicion_Weapon			Suspicion_Weapon		
Contraband found	Weapon			Weapon		
Outcome	Driver_Arrest			Driver_Arrest		
Arrest Charge				Other_Arrest		
	Search Type > Hit > Arrest	Arrest Rate	Disproportion	Stop > Hit > Arrest Charge	Arrest Charge Rate	Disproportion
	Count	Arrest / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Arrest Charge / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Black	11	0.180	1.23	4	0.066	2.69
Hispanic	0	0.000	0.00	0	0.000	0.00
American Indian	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Other	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
White	6	0.146	0.82	1	0.024	0.38
Total	17	0.165		5	0.049	

Using the internal CPD incident-based data, during the 61 reasonable suspicion searches of black drivers, officers found 15 weapons and made 11 arrests. During the 41 reasonable suspicion searches of white drivers, officers found 13 weapons and made 6 arrests.

Arrests were not necessarily made for illegal weapons. The data does not have a category for illegal weapon arrest charges, so officers probably enter them under "Other Arrest." There were 4 of these for black drivers and 1 for a white driver—not enough incidents do document a pattern.

Officers sometimes found a weapon, recorded it as contraband but did not make an arrest or write a citation. See the discussion of non-actionable contraband found below.

Keeping weapons out of reach during a stop is important for public safety, but because of the high disproportion against black drivers—3.26-- CPD should review the incidents to make sure officers acted on specific and articulable facts and not on racial stereotypes.

Drug-Dog Alert Searches. Page 28
In 2017 black drivers were searched after drug dogs alerted at a rate 1.34 times the rate for white drivers. In 2018, the disproportions more than reversed; white drivers were searched at a rate 1.44 times the rate for all non-white drivers.

What changed? I take the flip to suggest that a disproportion that looks like it is caused by discrimination and is therefore going to be difficult to change can be actually caused by procedures officers are trained to follow. If they are trained to act on facts independent of race, they start doing so quickly.

CPD may already have high standards for the facts needed to justify calling for a drug dog. Extra expense is involved. The drug-dog handlers are trained to make sure dogs are used in acceptable ways. Officers do not have to have probable cause of a violation to call for a dog, but a vague suspicion cannot be enough, especially when the suspicion results in a group disproportion.

Neither VSR data nor internal CPD data record when a dog is summoned but does not alert. A significant number of drivers may be required to wait while a drug dog is summoned, sniffs the car but fails to alert. No record of these incidents shows up in VSR or CPD released data.

Officers must make some record of every time a dog is summoned; dog handlers certainly keep these records. The information needs to be integrated into general record keeping so it is available to supervisors and the public.

Table 20.

2018 CPD Incident-Based Data						
Authority for Search	Drug_Dog			Drug_Dog		
Contraband found				Drug_Alcohol_Found		
Outcome						
Arrest Charge						
	Stop Reason > Search Type	Hit Rate	Disproportion	Search type > hit type	Hit Rate	Disproportion
	Count	Searches / Stop Reason	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Hits / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Black	24	0.005	0.80	20	0.833	1.06
Hispanic	2	0.006	0.94	2	1.000	1.27
American Indian	0	0.000	0.00	0	#DIV/0!	#DIV/0!
Other	0	0.000	0.00	0	#DIV/0!	#DIV/0!
White	66	0.006	1.44	52	0.788	0.93
Total	92	0.006		74	0.804	

White drivers are 44% more likely than black drivers to experience a drug-dog search, but less likely to have contraband found, 8% more likely to be arrested and 18% more likely to be charged with a drug violation.

Table 21.

2018 CPD Incident-Based Data						
Authority for Search	Drug_Dog			Drug_Dog		
Contraband found	Drug_Alcohol_Found			Drug_Alcohol_Found		
Outcome	Driver_Arrest			Driver_Arrest		
Arrest Charge				Drug_Violation		
	Search Type > Hit > Arrest	Arrest Rate	Disproportion	Stop > Hit > Arrest Charge	Arrest Charge Rate	Disproportion
	Count	Arrest / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate	Count	Arrest Charge / Search Type	Grp Rate/ White Rate or W Rate/Non-W Rate
Asian	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Black	13	0.542	0.87	6	0.250	0.69
Hispanic	2	1.000	1.61	2	1.000	2.75
American Indian	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Other	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
White	41	0.621	1.08	24	0.364	1.18
Total	56	0.609		32	0.348	

In 2017, 58 drug-dog alert searches were conducted with a hit rate of 0.598. A few more searches were conducted in 2018 with a significantly higher hit rate.

Are policy changes needed? Perhaps officers are calling for dogs when they suspect marijuana usage and finding only small amounts which do not result in arrests.

The decline in disproportions against black drivers suggests that officers can focus on facts and ignore stereotypes. They may be more careful about checking their facts for black drivers, which result in their higher hit rate. Officers should always apply the same well-chosen standards to all drivers.

Search Disproportions. Page 30

For searches, stops can be used as benchmarks and for contraband found searches can be used as benchmarks. The VSR uses this procedure for computing rates for total searches and total contraband found but does not compute disproportions.

Table 22.

2018 Search Disproportions		Columbia Police Dept.						
Group		Asian	Black	Hispanic	Native American	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Total Searches	Count	6	679	45	0	14	675	1419
Rate	Incidents / Stop	0.014	0.140	0.131	0.000	0.037	0.063	0.085
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.22	2.20	2.07	0.00	0.58	0.51	

Black drivers are searched at a rate 2.20 times the rate for white drivers. Some searches involve a low level of officer discretion; they almost always make a search if they make an arrest (incident to arrest search) or impound the car (inventory search). Officers might not make these searches if they had already made a search for a different reason.

A group's arrests for outstanding warrants affects its searches; the disproportion in black warrant arrests inflates the disproportion in black searches. See more below on warrant arrests.

We've already looked at high-discretion searches. Here are all searches:

Table 23.

2018 Type of Search Disproportions		Columbia Police Dept.						
Group		Asian	Black	Hispanic	Native American	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Consent Searches	Count	2	182	16	0	3	261	464
Rate	Incidents / Stop	0.005	0.037	0.047	0.000	0.008	0.024	0.028
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.19	1.53	1.90	0.00	0.32	0.73	
Inventory Searches	Count	0	11	3	0	2	11	27
Rate	Incidents / Stop	0.000	0.002	0.009	0.000	0.005	0.001	0.002
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	2.19	8.45	0.00	5.06	0.39	
Drug Alcohol Odor Search	Count	4	329	14	0	5	153	505
Rate	Incidents / Stop	0.009	0.068	0.041	0.000	0.013	0.014	0.030
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.65	4.71	2.84	0.00	0.91	0.25	
Incident to Arrest Searches	Count	2	112	12	0	6	162	294
Rate	Incidents / Stop	0.005	0.023	0.035	0.000	0.016	0.015	0.018
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.31	1.51	2.30	0.00	1.03	0.70	
Plain View Contraband Searches	Count	0	80	3	0	0	76	159
Rate	Incidents / Stop	0.000	0.016	0.009	0.000	0.000	0.007	0.010
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	2.31	1.22	0.00	0.00	0.52	
Reasonable Suspicion-Weapon Searches	Count	0	61	1	0	0	41	103
Rate	Incidents / Stop	0.000	0.013	0.003	0.000	0.000	0.004	0.006
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	3.26	0.76	0.00	0.00	0.38	
Drug-Dog Alert Searches	Count	0	24	2	0	0	66	92
Rate	Incidents / Stop	0.000	0.005	0.006	0.000	0.000	0.006	0.006
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	0.80	0.94	0.00	0.00	1.44	
Other Authority Search	Count	0	24	2	0	1	29	56
Rate	Incidents / Stop	0.000	0.005	0.006	0.000	0.003	0.003	0.003
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	1.81	2.14	0.00	0.96	0.61	

There are 112 incident-to-arrest searches for black drivers. Black drivers were charged with outstanding warrants 144 times, so the warrant arrests might account for this disproportion.

What might "Other Authority" mean, and why would black drivers be disproportionately affected?

Contraband Found Disproportions. Page 31

Searches must be considered in the context of what is found during them and their outcome. Officers check off information on "contraband found," incidents in which a search turns up something illegal or possibly illegal.

Table 24.

2018 Contraband Found Disproportions	Columbia Police Dept.	Asian	Black	Hispanic	Native American	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10660	16707
Stops Resulting in Discover: Hits	Count	4	263	14	0	5	217	503
Rate	Hits / Search	0.667	0.387	0.311	#DIV/0!	0.357	0.321	0.354
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	2.07	1.20	0.97	#DIV/0!	1.11	0.84	
Drugs Alco Paraphernalia Hits	Count	5	357	20	0	4	329	715
Rate	Hits / Search	0.833	0.526	0.444	#DIV/0!	0.286	0.487	0.504
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	1.71	1.08	0.91	#DIV/0!	0.59	0.94	
Currency Hits	Count	0	4	1	0	0	4	9
Rate	Hits / Search	0.000	0.006	0.022	#DIV/0!	0.000	0.006	0.006
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	0.99	3.75	#DIV/0!	0.00	0.88	
Weapon Hits	Count	1	47	1	0	2	30	81
Rate	Hits / Search	0.167	0.069	0.022	#DIV/0!	0.143	0.044	0.057
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	3.75	1.56	0.50	#DIV/0!	3.21	0.65	
Stolen Property Hits	Count	0	8	1	0	0	10	19
Rate	Hits / Search	0.000	0.012	0.022	#DIV/0!	0.000	0.015	0.013
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	0.80	1.50	#DIV/0!	0.00	1.22	
Other Contraband Hits	Count	0	8	0	0	2	4	14
Rate	Hits / Search	0.000	0.012	0.000	#DIV/0!	0.143	0.006	0.010
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	1.99	0.00	#DIV/0!	24.11	0.44	

"Stops Resulting in Discovery" counts all the incidents in which at least one piece of contraband was found. Incidents can have more than one hit.

A difficulty with the VSR's contraband found or hit data is that the data does not allow contraband to be linked to type of search. All hits are aggregated. Only incident-based data allows the two to be linked, such has hits per consent search, as we saw above.

I have always assumed that contraband found would automatically result in an arrest or at least a citation, but officers evidently have a high degree of discretion in whether to act on contraband found.

Actionable and Non-Actionable Contraband. Page 32

CPD's incident-based data provides an interesting revelation: many hits do not result in an arrest or a citation. For Columbia, of the 750 incidents with "contraband found," no arrest was made or citation given in 293 of them.

These 293 incidents count just those times contraband was found and no action was taken for anything in the stop. It leaves out incidents in which contraband was found and an action was taken on something other than the contraband. There are probably many more incidents in which officers find contraband that they do not consider actionable.

Table 25.

2018 CPD Incident-based Data: Actionable and Non-Actionable Contraband Found			
	All	Black	White
Stops		4866	10,660
All Searches (stops resulting in searches)	1418	679	674
Stops Resulting in Discovery (contraband found)	750	376	343
Contraband Found / Searches	0.529	0.554	0.509
Disproportions (B/W; W/B)		1.088	0.919
Search made but no arrest or citation	664	345	292
Contraband found but no arrest or citation: non-actionable hits	293	159	121
Actionable hits (contraband found minus non-actionable hits)	457	217	222
Actionable hits / search	0.322	0.320	0.329
Actionable Hits Disproportion		0.970	1.031
Non-actionable Hits / search	0.207	0.234	0.180
Non-actionable Hits Disproporiton (B/W, W/B)		1.304	0.767

Notice that the incident-based data returns 750 Stops Resulting in Discovery, but VSR data and the Chief's memo on VSR data say there were 503. The lower number is the result of accidently leaving out some incidents because of a change in data systems.

Sometimes officers find something that is contraband, or they could consider contraband, but they do not make an arrest or write a citation. In most of these incidents, they give a warning, but there's no way to tell from the data that has been released whether the warning is for something involved with the search or something that came out of some other aspect of the stop.

Black drivers are more likely to be involved in situations in which officers find contraband they do not consider actionable. Leaving out non-actionable contraband, black drivers are less likely to be found with contraband than white drivers; the disproportion is 0.97.

For non-actionable hits, black drivers are 30.4% more likely to be affected than white drivers. Are officers applying the same standard for checking off when something is technically illegal?

Table 26.

2018 CPD Incident-based Data: Non-Actionable Hits by Type of Contraband Found			
	Black	White	All
Drugs/Alcohol/Paraphernalia	152	112	276
Currency	0	1	1
Weapon Found	11	10	21
Stolen Property	1	3	4
Other	5	3	9

Many of the non-actionable hits involve Drugs, Alcohol or Paraphernalia. As discussed above, the three would better be separated in VSR data. Perhaps many of the non-actionable hits are for paraphernalia. Paraphernalia could involve empty ziplock bags or a scale someone uses for diet control. Drugs could be in small amounts. Drugs could be prescription medicine. Alcohol could involve open containers being taken to a city recycle bin, but probably not.

Perhaps the term "contraband" needs to be refined in 590.650 or the Code of State Regulations. It implies illegal objects, but it's important to know when officers find a legal gun in a reasonable suspicion search. Perhaps a check off for non-actionable contraband would be helpful so a search of incident-based data isn't necessary to resolve questions. We need some way of correcting the data that give misleading information about when drivers are breaking the law and about when officer actions might need monitoring.

Type of search makes a difference to non-actionable contraband found:

Table 27.

2018 CPD Incident-based Data: Non-Actionable Hits by Search Type			
	Black	White	All
Consent	19	48	72
Odor	114	43	163
Reasonable suspicion-weapon	7	12	19
Drug-Dog Alert	4	9	13
Inventory	0	0	1
Incident to Arrest	2	6	8
Plain View Contraband	31	28	60
Other	9	6	16

The hit rate for odor searches makes them look like an effective law enforcement tool, but most of the hits aren't real hits-- hits significant enough to trigger a citation or arrest. Again, drugs and alcohol are not documented well by the VSR. 163 times out of the 383 times officers checked off contraband found for odor searches, the contraband was not serious enough to be actionable. 114 out of 252 for black drivers. VSR data give the impression black drivers are committing serious violations more frequently than they really are.

Counting non-actionable hits in VSR and CPD data gives the impression that searches are more effective than they really are. For low-discretion searches, such as incident to arrest, this doesn't make much difference, but the public should know when high-discretion searches, such as consent and odor, find contraband important enough to result in an arrest or at least a citation.

Going one step further, prosecutors also make decisions about when a contraband violation is serious enough to be prosecuted. An officer might make an arrest for contraband the prosecutor decides not to take to court. It would be interesting to see what happens to charges filed. Who is prosecuted and who isn't? What penalty does the judge assign? Are their group disproportions?

I suggest a check off for VSR and CPD data for officers to indicate the outcome of contraband found: arrest, citation, warning, no action.

Actionable Contraband-Found Disproportions. Page 34
Black drivers were found with drugs, alcohol or paraphernalia at a rate 1.08 times the rate for white drivers, but looking just at contraband found during a stop that resulted in a citation or arrest for some violation (but maybe not the contraband), white drivers were affected at a rate 1.08 the rate for all non-white drivers:

Table 28.

2018 CPD Incident-based Data:	Actionable Contraband	Asian	Black	Hispanic	Am Ind	Other	White	All
Actionable Drugs/Alcohol/Para	Count	4	205	11	0	2	217	439
Rates	Hits / Searches	0.667	0.302	0.244	#DIV/0!	0.143	0.322	0.310
Disproportions	Rate/W Rate or W Rate/All N-W Rate	2.07	0.94	0.76	#DIV/0!	0.44	1.08	
Actionable Weapon Found	Count	1	36	1	0	2	20	60
Rates	Hits / Searches	0.167	0.053	0.022	#DIV/0!	0.143	0.030	0.042
Disproportions	Rate/W Rate or W Rate/All N-W Rate	5.62	1.79	0.75	#DIV/0!	4.81	0.55	

Black drivers were found with weapons 47 times, at a rate 1.56 times the rate for white drivers. Leaving out weapons that we can be sure from available data did not result in citations or arrests, black drivers were found with 36 for a disproportion of 1.79.

Considering actionable contraband found by search type, hit rates go down for everyone:

Table 29.

2018 CPD Incident-based Data	Actionable Hits by Search Type							
		Asian	Black	Hispanic	Am Ind	Other	White	All
Consent Searches	Count	2	182	16	0	3	262	465
Consent Search Hits	Count	1	43	2	0	2	89	137
Actionable Hits	Count	0	24	0	0	0	41	65
Rate	Actionable Hit/Search	0.000	0.132	0.000	#DIV/0!	0.000	0.156	0.140
Disproportion	Rate/W Rate or W Rate/All N-W Rate	0.000	0.843	0.000	#DIV/0!	0.000	1.324	
Odor Searches	Count	4	329	14	0	5	153	505
Odor Searches Hits	Count	4	252	13	0	1	116	386
Actionable Hits	Count	4	138	8	0	0	73	223
Rate (AH / Search Type)	Actionable Hit/Search	1.000	0.419	0.571	#DIV/0!	0.000	0.477	0.442
Disproportion	Rate/W Rate or W Rate/All N-W Rate	2.096	0.879	1.198	#DIV/0!	0.000	1.120	

The rate for all contraband found during consent searches is 29.5 per 100 searches, twice the 0.140 rate for actionable contraband. The black rate for contraband found is 23.6 per 100 searches. See Table 10 for consent search contraband found on page 19. Disproportions remain about the same.

Compare actionable odor search hits to odor hits, Table 15 on page 24. When some of the non-actionable hits are left out, a disproportion against white drivers emerges; they are being found with more actionable contraband than black drivers during odor searches.

An examination of internal records could determine exactly when contraband was actionable, making the significance of the data clearer. If officers checked off when they acted on contraband found, the examination would be unnecessary.

One of the points Dr. Jeff Milyo makes in his Veil of Darkness study is that officers appear to be efficient in their use of searches—they are finding contraband—but when much of the contraband is not

actionable, the efficiency disappears and the efficacy of, especially, consent and odor searches becomes questionable.[32]

## The Breakdown of Percentages in Searches. Page 36

As discussed above in "The Breakdown of Reasons for Stops," CPD likes to consider how groups are affected by categories of incidents. Categories of data are examined as subsets of other categories in a memo Chief Jones provided to his committee advising him on data: 2018 Traffic Stop Data Breakdown

Stops are broken down into citations, warnings and so on. Searches are broken down into consent, inventory, drug/alcohol odor and so on. Then the distribution of incidents for each group is examined as percentages. For instance, for black drivers consent searches are 26.8% of total searches, inventory searches are 1.62% of total searches, and so on.[33]

CPD compares group percentages, for instance, consent searches are 38.67% of white searches. 26.8% / 38.7% is 0.67; the black percentage is 0.67 times the white percentage. CPD calls this a "Ratio vs. Race, White."

The significance of a Ratio vs. Race, White is easiest to see in the CPD data with drug-alcohol odor searches. Black drivers experience many more drug/alcohol odor searches than white drivers do, 329 to 153—more than twice as many. Odor searches account for a bigger percentage of all searches for black drivers than for white drivers. 48.45% of all searches of black drivers are for odor. Odor searches are 22.67% of white searches, so the "Ratio vs. Race, White" is 2.14: 48/24. That almost half of all black searches were for an odor of drugs or alcohol when less than a quarter of white searches were for odor triggers an intuitive sense that an important disproportion exists.

Figure 1.

% vs. Total Searches from Report: Black

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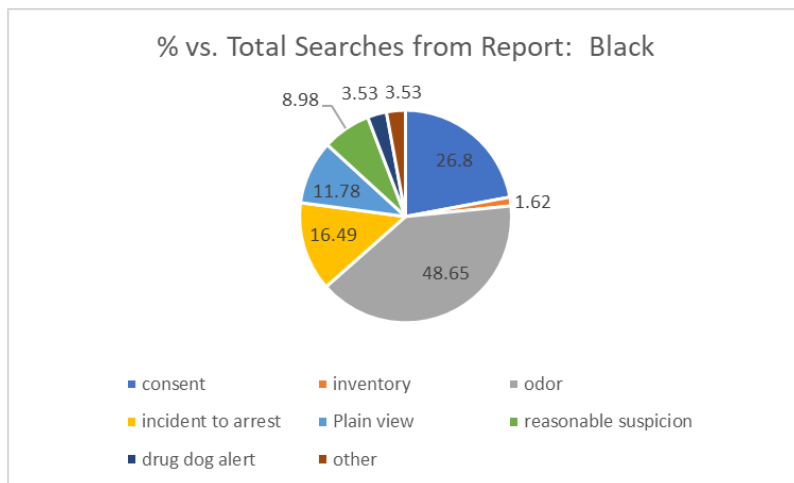
[32] Dr. Milyo's "Driving While Black" study is on the Vehicle Stops Committee webpage: DWB in COMO – Milyo. Part of Dr. Milyo's case for efficiency is on Columbia's rate of arrests compared to other Missouri studies, but the data he was working with probably did not allow him to tell when an arrest resulted from contraband found.
[33] CPD computes the percentages by dividing, for instance, consent searches by total searches, but officers sometimes conduct more than one search in stop, so the percentages total more than 100%.

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Figure 2.
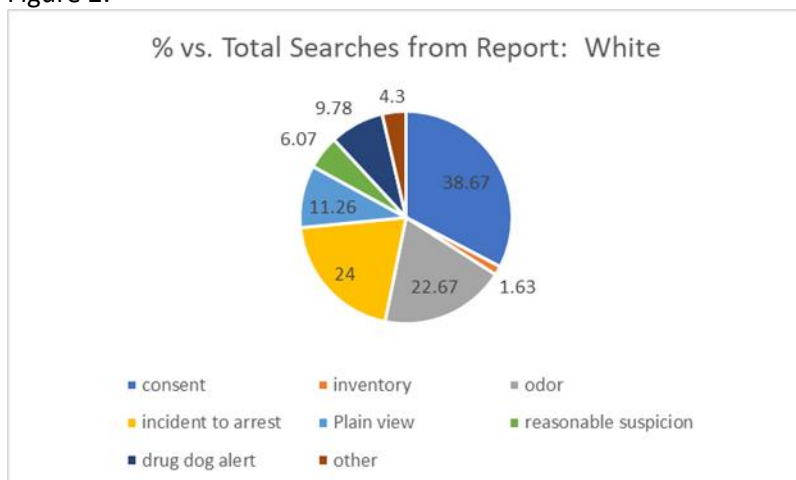
A disproportion based on search rates per stop confirms the disproportion based on group percentages of odor searches. In 2018, the rate of odor searches for black drivers was 68 per 1000 stops. The rate for white drivers was 14 per 1000 stops. The disproportion was 68/14 = 4.71. Black drivers were 4.71 times more likely to be searched for odor than white drivers, based on group stops.

So, both metrics flag a situation which deserves closer scrutiny. Are officers acting on convincing evidence of criminal behavior or are they distracted by racial stereotypes? In support of officers, the incident-based data document that drivers are found with contraband at fairly high rates, about 76% for both black and white drivers. Keep in mind, however, that many times the contraband was not significant enough to result in a citation or arrest.

There still might be an issue that officers sometimes ignore an odor for white drivers; this sort of information is not documented by traffic stop data. It would be helpful to know what odor was detected—alcohol or drugs—and what contraband was found—alcohol, drugs or paraphernalia—and so on.

In *Pulled Over*, KU professors Epp, Maynard-Moody and Haider-Markel use a comparison of percentages in a breakdown of stop categories to evaluate data from a survey of over 3000 Kansas City area drivers and officers. In the inner suburbs, black drivers report being stopped for investigatory reasons about 65% of the time. Investigatory stops account for about 30% of white stops. The ratio of percentages is 65/30, about 2.15.[34]

Arrest Disproportions. Page 37
We've looked at two high-discretion categories of arrest charges. Here are all the arrests taken together:

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[34] 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. Figure 3.7, page 71.

Table 30.

2018 Arrest Disproportions	Columbia Police Dept.	Asian	Black	Hispanic	Native American	Other	White	Total
Group		Asian	Black	Hispanic	Native American	Other	White	Total
Total Stops	Count	426	4866	344	28	383	10,660	16,707
Driver Arrested	Count	22	587	47	1	21	766	1444
Rate	Incidents / Stop	0.05	0.12	0.14	0.04	0.05	0.07	0.09
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.72	1.68	1.90	0.50	0.76	0.64	
Outstanding Warrant Arrests	Count	2	144	5	0	2	134	287
Rate	Incidents / Stop	0.005	0.030	0.015	0.000	0.005	0.013	0.017
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.37	2.35	1.16	0.00	0.42	0.50	
Drug Violation Arrests	Count	3	15	6	0	1	136	161
Rate	Incidents / Stop	0.007	0.003	0.017	0.000	0.003	0.013	0.010
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.55	0.24	1.37	0.00	0.20	3.09	
Resisting Arrest	Count	1	17	1	0	4	10	33
Rate	Incidents / Stop	0.002	0.003	0.003	0.000	0.010	0.001	0.002
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	2.50	3.72	3.10	0.00	11.13	0.25	
Violation Against Person	Count	0	4	1	0	0	7	12
Rate	Incidents / Stop	0.000	0.001	0.003	0.000	0.000	0.001	0.001
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.00	1.25	4.43	0.00	0.00	0.79	
Traffic Violation	Count	13	194	19	1	10	319	556
Rate	Incidents / Stop	0.031	0.040	0.055	0.036	0.026	0.030	0.033
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	1.02	1.33	1.85	1.19	0.87	0.76	
DWI BAC	Count	5	80	17	1	4	206	313
Rate	Incidents / Stop	0.012	0.016	0.049	0.036	0.010	0.019	0.019
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.61	0.85	2.56	1.85	0.54	1.09	
Property Crime	Count	1	8	1	0	2	8	20
Rate	Incidents / Stop	0.002	0.002	0.003	0.000	0.005	0.001	0.001
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	3.13	2.19	3.87	0.00	6.96	0.38	
Other Arrest Reason	Count	3	125	10	0	3	86	227
Rate	Incidents / Stop	0.007	0.026	0.029	0.000	0.008	0.008	0.014
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.87	3.18	3.60	0.00	0.97	0.35	
Total Arrest Charges	sum of charges	28	587	60	2	26	906	1609
Rate	Incidents / Stop	0.066	0.121	0.174	0.071	0.068	0.085	0.096
Disproportion	Grp Rate /W Rate or W Rate/ Non-W Rate	0.77	1.42	2.05	0.84	0.80	0.73	

Drug violation arrests are surprisingly low for black drivers, especially considering the large disproportion in drug/alcohol odor searches.

What arrests come under the "Other Arrest Reason" category? Why are black drivers disproportionately affected?

The only category of arrest charges related to searches is "Drug Violation Arrests," but a driver could be also be arrested for currency, weapons, stolen property and "other" contraband. These other categories would presumably come other the "Other Arrest Reason" category. Perhaps the VSR should contain

check offs for the outcome of different types of contraband being found, but perhaps that's too much to ask of officers. Because CPD has a high disproportion for "other arrest reasons" it should report on these reasons.

Much of the black disproportion of 1.42 in Total Arrest Charges comes from Outstanding Warrant Arrests, Traffic Violation Arrests and Other Arrest Reasons. Officer discretion could be playing a major role in Traffic Violation Arrests and perhaps in the Other category.

In all situations, officers must be acting on facts and applying the same standards for facts to all drivers. If there is a public concern about a disproportion, CPD should monitor officer performance to make sure they are acting on appropriate facts.

Outstanding Warrant Arrests are worth considering on their own.

Arrest Disproportions: Outstanding Arrest Warrants. Page 39

Outstanding Warrant Arrests are one of the best examples of low-discretion officer actions. Officers are required by law to make an arrest if they know a warrant has been issued for a driver they have stopped.

If there is a warrant for a serious offence, officers will try to find the individual, but most warrants officers detect in traffic stops are for minor violations that should have been settled by paying a fine in municipal court. Affluent individuals send in a check. Individuals with limited means are more vulnerable to having a warrant issued.

The 2.35 disproportion against black drivers is not likely to be affected by officer discretion, unless officers sometimes choose not to look for a warrant or ignore one they should have acted on. CPD could check for officers failing to act on warrants they should have seen.

The disproportions for OWAs are most likely to result from socioeconomic factors and from the way municipal courts function. Outstanding warrants will decline if the courts make it easier for individuals to meet their obligations.

Municipal courts across the state have been implementing reforms, some of them required by recent legislation.

Here are Columbia outstanding warrant statistics from 2017:

Table 31.

Outstanding Warrant Disproportions 2017		Columbia Police Dept.						
Subcategory	Calculation	Asian	Black	Hispanic	Native Am	Other	White	Total
Total Stops	Count	360	4062	228	7	223	7557	12,437
Outstanding Warrant Arrests	Count	5	272	5	0	0	220	502
OWA Rate	incidents / stop	0.014	0.067	0.022	0.000	0.000	0.029	0.040
OWA Disproportions	grp rate/white rate	0.48	2.30	0.75	0.00	0.00	1.00	

Total warrant arrests have been almost halved by municipal court reforms in Columbia. Notice that the rates per stop are down significantly for 2018.

Arrests for the principal groups affected, black and white, are down significantly. The black disproportion is down only slightly because the white rate declined as much as the black rate.

The VSR data give the impression that officers might be targeting black drivers for arrests, but a large proportion of the arrests are for outstanding warrants that require arrests.

Municipal court reforms help, but if black drivers initially had fewer stops and fewer violations they must answer for in municipal court, they would have fewer outstanding warrants. Disproportions are cumulative for black drivers. First they are stopped more often and searched more often, then they are given more citations and more arrest charges. All along the line, officers must be careful to apply the same appropriate standards to all groups.

Statistical Techniques, page 40

Almost everything discussed here involves nothing more complicated than rates and comparisons of rates.

For officers who take seriously their commitment to equal protection—which includes most of them—rates are enough to make them think twice about whether they are really looking for facts, or just being distracted by stereotypes.

From the perspective of most officers, black drivers are seldom stopped or subjected to post-stop actions. Unless an officer is assigned to patrol an area of Columbia with a concentration of black drivers, the officer probably stops only a handful of black drivers. Unless the officer is told she subjects black drivers to consent searches at a rate much higher than her rate for white drivers, she probably would not know. From her perspective, she does the searches on many more white drivers than black drivers.

In an extreme case, an officer might subject black drivers to consent searches twice in a year, so he does not think he is over-using consent searches, but if he only stopped 10 or 20 black drivers, his rate per black stop is way high and so is his disproportion.

If officers know when their actions result in disproportions against a group, they are likely to self-police. This may be why the overall state disproportion for consent searches for black drivers has declined so dramatically in the last three years.

In some situations, a concern might arise about whether a disproportion is large enough that something needs to be done about it, but **the disproportions that are usually the subject of public discussion are always statistically significant**. With a disproportion of something like 1.50 and with something like 50 incidents being involved, a chi-squared test will always say the disproportion just couldn't have happened by chance.

Statisticians often work with a 95% confidence level, which says the situation is so unusual that it would only occur purely by chance 5% of the time if officers had been picking drivers randomly. This is a low standard when discrimination is involved and even one instance is of concern.[35]

Many of the disproportions that raise concerns are statistically significant down to numbers of incidents so small that it's easy to review each one to make sure officers are acting on convincing

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[35] Dr. Milyo gives results for 1%, 5% and 10% confidence intervals.

facts. And this is the goal. Disproportions are useful for spotting potential problems, but discrimination always occurs case by case.

Much more can be done with the data, however, than check for disproportions—especially CPD's internal, incident-based data. **Dr. Jeff Milyo** used a multivariate statistical technique to demonstrate that there is no statistical difference in the way CPD officers treat drivers just before and just after light conditions make it possible to see drivers before a stop. Read his "Driving While Black" study on the Vehicle Stops Committee webpage: DWB in COMO – Milyo

Dr. Fridell explains multivariate techniques in *By the Numbers*.[36] She gives the example of a study that:
> …examined the effect of driver characteristics (that is, race, gender, age) and stop characteristics (for instance, reason for the stop) on five stop outcomes: whether or not a search was conducted, whether or not a consent search was conducted, whether a discretionary versus nondiscretionary search was conducted, whether a search produced contraband, and whether the officer invoked a formal sanction versus providing only a warning.[37]

Such studies can reveal broader patterns and suggest more nuanced responses by law enforcement.

Frank Baumgartner is the lead author of *Suspect Citizens*,[38] a study based on the North Carolina equivalent of the VSR. The authors look at the data for all larger agencies, not just one agency. They start by comparing rates for stops and post-stop situations, and make some observations, then they move to a multivariate analysis, which allows them to consider all the variables included in the data at once: race, age, gender, time of day, whether the stop was for a public safety issue or was investigatory, whether contraband was found. The rates were good indicators, they found, but the multivariate analysis allowed more detailed conclusions:
> …These multivariate results corroborate and extend the findings from our earlier presentations of simple ratios and percentages. Minorities are much more likely to be searched and arrested than similarly situated whites, controlling for every variable that the state of North Carolina mandates to be collected when traffic stops are carried out.[39]

Whatever method of analysis flags situations that need more attention, from the point of view of an agency guiding officers with policies, training and supervision, the bottom line comes down to whether officers are basing their decisions to act on the same trustworthy evidentiary standards for all individuals. **The data analysis just tells the agency where to look: at the reasons cited by** officers in situations with high disproportions. Can they "articulate sufficient reasonable suspicion to justify the detention independent of the individual's membership in a protected class"?[40]

At some point the question passes from quantitative considerations—disproportions and confidence intervals—to qualitative considerations, Dr. Fridell says.[41] **Researchers offer up their best assessments of situations in which individuals might be subjected to discrimination, then stakeholders –law enforcement and members of the public—try to reach a consensus about what the right evidentiary**

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[36] *By the Numbers*. Page 339.
[37] *By the Numbers.* Page 342.
[38] Baumgartner, F., Epp, D., & Shoub, K. (2018). *Suspect Citizens: What 20 Million Traffic Stops Tell Us About Policing and Race*. Cambridge: Cambridge University Press. doi:10.1017/9781108553599
[39] *Suspect Citizens*. Page 93.
[40] CPD Policy 402.6.1
[41] *By the Numbers*. Pages 368-372.

standards might be and how to write them into policies, cover them in training and apply them through supervision.

Dr. Fridell goes so far as to say communities can skip the quantitative part—the data collection and analysis. If everyone agrees that officers need help ignoring racial stereotypes because we're all vulnerable to implicit biases, then the corrective steps are the same whether specific problems are flagged or not:

> Data collection imperfectly measures biased policing; all the other components of the Comprehensive Program described here actually do something about it. It is legitimate therefore, in an era of finite resources, to decide that resources might more effectively be dedicated to, for instance, training, instead of measurement.[42]

There is still, of course, an advantage in knowing, for instance, that resisting arrest situations are not a problem but odor searches are. There is an advantage in knowing that drug-dog alert searches used to be a problem but no longer are.

In Missouri, deciding to collect data isn't an issue. All agencies are required to collect a basic level of data adequate to flag problematic situations. Most larger agencies have records systems to help them keep track of what crimes are occurring and where, so it's not much of leap to use the data to see whether groups are disproportionately affected.

Dr. Fridell's Comprehensive Program is discussed in Chapter 3 of *Producing Bias-Free Policing.*[43] CPD has multiple copies of the book.

Survey Data. Page 42

Traffic stop data does not document when an officer chose not to do something, but **survey data**, including data from the Columbia survey, is very good at doing this. If one group reports that officers make stops for minor violations that could have been ignored and another group reports that officers make stops only for violations that pose a clear threat to public safety, then the agency needs to look back at those stops for minor violations. Do they make the city safer or do they alienate residents whose help officers depend on?

The Columbia survey data is minimal: fewer than 100 respondents had been stopped. But the proportion of black respondents saying their stops were illegitimate is so high that the results should not be ignored, especially since they confirm the stop data. If the questions are repeated in the next annual survey, enough data will be available to deliver statistically significant results. An additional survey could be conducted now, based on a random sample of drivers stopped by officers.

Depending on complaints is not sufficient. Drivers who feel they have been mistreated will also feel they will be mistreated if they complain. Before the Bias-Free Policing Policy was adopted with fanfare in the fall of 2018—with Dr. Fridell skyping congratulations—complaints of racial profiling were evaluated on the basis of whether the officers could cite at least a minor violation, so complaints were always denied. According to the definition of racial profiling used by CPD, as long as any violation had been cited, racial profiling did not occur. See the discussion of "solely" policies above.

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[42] Fridell. (2017). Page 71.

[43] A few brief pages are enough to get started on. Pages 34-36 on bias-free policing policies; pages 81-83 on operational bias; and pages 83-85 on high-discretion, crime-detection-focused activities.

Traffic stop data has its limitations as we have seen time and again. Surveys have their limitations. All of the data for *Pulled Over* derives from what drivers say about their experiences. No attempt is made to verify the accuracy of what they are saying. But still, traffic and survey data complement each other.

Pulled Over included surveys of officers. Asking similar questions of Columbia officers might provide helpful information. It would be interesting to ask how they define racial profiling. Is it legal for race to be a factor in an action as long as a violation has been observed? Or do their answers indicate they understand what the Bias-Free Policing Policy now requires of them?

See additional comments above on the *Pulled Over* survey and the Police-Public Contact Survey.

CPD's Bias-Free Policing Policy Revisited. Page 43

CPD now has a **Bias-Free Policing Policy** that clearly tells officers they are not to let racial stereotypes distract them from their job of recognizing when facts warrant police action. There's still a lot of work to be done in implementing the policy.

The policy on consent searches, 322.5, has to be understood in the context of the Bias-Free Policing Policy and comply with its requirements:

> 402.2. Actions based on racial characteristics are prohibited.
> 402.5. Officers must act on credible, timely intelligence.
> 402.6.1 Officers "shall be prepared to articulate sufficient reasonable suspicion to justify the detention independent of the individual's membership in a protected class." And if a report is required, the "officer should include those facts giving rise to the officer's reasonable suspicion or probable cause for the detention as applicable."

In most situations, officers are already citing facts; they must always cite probable cause for citations and arrests. Under the new policy, officers would have to cite the facts that justify a consent search. Not an essay, but enough to convince a supervisor or an objective outside observer. Video and audio recordings would often fill in details. Officers could dictate their facts into their body cameras.

The point isn't to have evidence to prove the officer was discriminating, but for the supervisor to be able to tell when the officer needs guidance. If an officer does not respond to guidance, then the supervisor would start documenting performance lapses as part of a due-process disciplinary procedure.

Officers must be trained on the new expectations of them. If they are used to thinking that "racial profiling" does not occur as long as they have not acted "solely" on race--as long as they can cite a minor violation--then the training may take some time to sink in.

For the new policy to work, CPD must have better data and an adequate system to determine when disproportions are not the result of legitimate factors.

Supervisors must learn to monitor the data so they can give officers prompt feedback on their performance. A procedure might be necessary for alerting them when they need to review an incident. In situations in which disproportions are known to exist, the supervisor tells the officer when facts cited are sufficient and when improvement is needed. Discipline would only be needed if the officer does not respond to coaching.

The most difficult task might be working out the fine points of when a fact is sufficient. Officers are likely to demand more latitude in when, for instance, they can ask for consent or conduct a pretext stop. They are motivated by a commitment to protect public safety by catching criminals. Members of groups disproportionately affected are likely to demand stricter evidentiary standards. They know how it feels when an officer does not have a public safety reason for taking an action but is responding to a stereotype. They have experienced the humiliation of officer suspicion that they are criminals.

In high-discretion actions, officers are most likely to default to suspicions based on stereotypes, but we want to be able to trust our officers to exercise good judgement. **Alertness is a better paradigm than suspicion**. We want them to be alert for facts that reliably indicate criminal behavior and make decisions in borderline situations that don't result in racial disproportions. They may occasionally err to one side or the other of which facts are sufficient; that's ok. That's normal.

So, how should Columbia define a pretext stop? What does the definition need to say regarding data officers need to check off? What does the definition say regarding survey questions for drivers? Would a record of past weapon violations justify a pretext stop? A record of domestic abuse? How reliable does a tip have to be?

Pulled Over considered a stop for a license violation to be an investigative stop, but CPD may consider them necessary in order to set a standard for respect for the law. An expired license might correlate with an uninsured vehicle, which many people would consider a public safety issue.

Facts are also relevant to the actions of command staff, as discussed above in the context of what Dr. Fridell calls "operational bias." When is it appropriate for command staff to order no-tolerance patrols and other forms of "high-discretion, crime-control-focused activities"?

Command staff need to be able to back up their decisions with documentation of specific threats to public safety and demonstrate that the tactic will address the problem—that, for instance, no-tolerance patrols stopping large numbers of ordinary drivers will reduce violent crime. And they need to convince affected drivers that no other tactic would be effective enough—that, for instance, officers building trusting relationships with residents of a neighborhood would not lead to probable-cause evidence to use in court against violent offenders.

We'll know we are making progress when disproportions in high-discretion situations decline and when surveys show all drivers report officers are acting to protect public safety.

Conclusions. Page 44

Disproportions against any group need to be investigated to make sure that officers are applying the same high standards for the facts they base their actions on for everyone, regardless of protected category.

The data collected for the VSR provide good opportunities to begin this process. Sometimes an agency will have to troubleshoot its benchmarks. The VSR requires an agency to compute its own disproportions, but the math is simple. Sometimes an agency will find it needs to collect more data to answer questions raised by the disproportions or raised by stakeholders.

Traffic stop data gives clues about the skills officers have or might need help with. If officers are good at focusing on facts and not on racial stereotypes when they make traffic stops, they will probable do the

same when they are called to help with domestic disputes or respond to violent crimes. If they learn to de-escalate tensions in traffic stops, their ability to use force appropriately in other circumstance will probably improve too.

VSR data is a simplified form of the CPD internal, incident-based data. The data posted by CPD on the city website is also simplified. Supervisors and researchers have access to much more information: information on officers and drivers, locations, date and time of day, charges filed and so on. Locations of stops can be mapped. It might be possible to use census blocks to detect patterns in the socioeconomic status of drivers.

If we take advantage of the richness of the data, we can reach a consensus on how CPD should ensure public safety.

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Love Missouri Vehicle Stops Report

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