

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
Richmond Division

UNITED STATES OF AMERICA,

v.

Criminal Action No. 3:21cr42

KEITH RODNEY MOORE,  
Defendant.

**OPINION**

Black drivers have a problem in Richmond, Virginia. Richmond Police Department (“RPD”) officers stop Black drivers five times more frequently than white drivers. The defendant in this case, Keith Rodney Moore, is one of the Black drivers stopped by RPD officers. On December 5, 2020, RPD officers pulled Moore over in the Highland Park neighborhood of Richmond. Moore fled the scene, but the officers caught him, arrested him, and ultimately found a gun in Moore’s car.

On May 4, 2021, a grand jury indicted Moore for possessing a firearm and ammunition as a convicted felon. Moore has moved to dismiss the indictment, claiming that RPD’s officers selectively stop Black people, and that this selective enforcement led to his current charges. (ECF Nos. 32, 66.) As part of his evidence, Moore introduced two experts, Dr. Eli Coston and Dr. Marvin Chiles. The government has moved to exclude both. (ECF Nos. 70, 82.) These three motions—Moore’s motion to dismiss the indictment, and the government’s two motions to exclude—pend before the Court.

The Court will deny the government’s motions to exclude the defense experts’ testimony. Both experts offer relevant evidence. Coston’s data and analysis is reliable. And, using reliable sources to develop his testimony, Chiles provided insights into Richmond’s institutional character.

Additionally, the Court will grant Moore’s motion to dismiss the indictment on selective

enforcement grounds. Moore presents abundant evidence that Black drivers represent a disproportionate share of the individuals pulled over for traffic stops in Richmond. Moore has shown both elements of a selective enforcement claim: discriminatory intent and discriminatory effect.

## **I. MOTIONS TO EXCLUDE THE DEFENDANTS' EXPERTS**

First, the Court will address the government's motions to exclude the testimony of Dr. Coston and Dr. Chiles.

### ***A. Legal Standard for Expert Testimony***

Federal Rule of Evidence 702 permits expert testimony "in the form of an opinion or otherwise" by—

[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education . . . if the proponent demonstrates to the court that it is more likely than not that:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert's opinion reflects a reliable application of the principles and methods to the facts of the case.

Fed. R. Evid. 702.<sup>1</sup> In other words, the Court must ensure that expert testimony is both relevant and reliable.

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<sup>1</sup> "Rule 702 applies whether the trier of fact is a judge or a jury." *UGI Sunbury LLC v. A Permanent Easement for 1.7575 Acres*, 949 F.3d 825, 833 (3d Cir. 2020). But the standards relax when the judge sits as the trier of fact: "where the factfinder and the gatekeeper are the same, the court does not err in admitting evidence subject to the ability later to exclude it or disregard it if it turns out not to meet the standard of reliability established by Rule 702." *Larosa v. Pecora*, No. 1:07cv78, 2009 WL 3460101, at \*3 (N.D.W. Va. Mar. 2, 2009) (quoting *In re Salem*, 465 F.3d 767, 777 (7th Cir. 2006)). The Court also has "wide discretion" to determine "[w]hether an expert will assist the factfinder . . . 'particularly when the court sits as the trier of fact, for [it] is then in the best position to know whether expert testimony would help [it] understand the case.'" *Sun*

1. Relevance

“Relevant evidence, of course, is evidence that helps ‘the trier of fact to understand the evidence or to determine a fact in issue.’” *Nease v. Ford Motor Co.*, 848 F.3d 219, 229 (4th Cir. 2017) (quoting *Daubert*, 509 U.S. 579, 591 (1993)). The first step to determine relevance is to under what is “in issue.” *See id.* On this, the parties differ, leading them to different conclusions about the relevance of any particular evidence.

The government views this case under the principles governing selective prosecution cases—cases where the state chooses to prosecute defendants of one race, but not to take cases to court involving people of another race. In selective prosecution cases, the party challenging prosecution must meet a very heavy burden to show that people who committed the same behavior face different legal consequences in court—some get prosecuted, and others go scot-free. A litigant asserting a selective prosecution claim must demonstrate nearly identical underlying criminal behavior of comparators, and he must show that discriminatory intent led to different treatment. *United States v. Armstrong*, 517 U.S. 456, 465, 458 (1996).

Here, Moore contends something different: that the police selectively stop Black drivers. Although stops do not necessarily lead to prosecutions,<sup>2</sup> they are nevertheless extraordinarily intrusive actions that make “most everyone . . . nervous.” *See United States v. Palmer*, 820 F.3d 640, 652 n.7 (4th Cir. 2016). Most people driving down the road see themselves in a private cocoon, alone with their thoughts, their plans, their music, their audio books. Whatever comfort a driver and her passenger may feel in their car vanishes when the police approach. A sense of

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*Yung Lee v. Clarendon*, 453 F. App’x 270, 278 (4th Cir. 2011) (quoting *Mercado v. Austin Police Dep’t*, 754 F.2d 1266, 1269 (5th Cir. 1985)) (second and third alterations in original).

<sup>2</sup> Indeed, the evidence in this case shows that most traffic stops do not result in charges that go to traffic court.

discomfort of seeing blue lights behind one's car only begins the intrusion. The police approach the car and typically look through it to see what the driver has with him or her. They demand identification, and then check the person's record. They ask questions: "Where are you going? Where are you coming from? Do you have anything illegal in your car?" *E.g., Rodriguez v. United States*, 575 U.S. 348, 352 (2015); *United States v. Bowman*, 884 F.3d 200, 214 (4th Cir. 2018); *United States v. Ramirez-Solis*, 518 F. Supp. 3d 896, 902–03 (W.D. Va. 2021); *United States v. Williams*, 321 F. Supp. 594, 604 (D.S.C. 2018).

The Fourth Circuit has cited *Armstrong* in selective enforcement cases. But it has yet to squarely address whether a defendant asserting that a police officer stopped him due to his race must identify comparator drivers who were not stopped to successfully assert a selective enforcement claim. The Fourth Circuit has, however, suggested that requiring evidence of similarly situated individuals in this context would create an impossible standard: "[a]s for the statistics' failure to identify individuals who were not stopped, such data is not recorded by the county—and, indeed, would likely be impossible to track. How could something that was not done possibly be tracked?" *Johnson v. Holmes*, 782 F. App'x 269, 270 (4th Cir. 2019). The Court doubts that the Fourth Circuit intends to require defendants, such as Moore, to put forth evidence that it has explicitly deemed impossible to collect: evidence of white individuals that RPD officers could have—but chose not to—stop. *See id.* Thus, the Court will not require Moore to provide evidence of similarly situated individuals to prove his selective enforcement claim. Rather, to establish selective enforcement, Moore must prove, by a preponderance of the evidence, that RPD's stopping process has a discriminatory effect and was motivated by a discriminatory purpose. In doing so, Moore can use statistics to establish his claim. These issues define the evidentiary limits for determining the relevance of expert testimony.

## 2. Reliability

To prove reliability, the proponent must show that the expert bases their testimony “on scientific, technical, or other specialized knowledge and not on belief or speculation,” and any of the expert’s “inferences must be derived using scientific or other valid methods.” *Belville v. Ford Motor Co.*, 919 F.3d 224, 232–33 (4th Cir. 2019) (quoting *Oglesby v. Gen. Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999)).

*Daubert* provides four non-exhaustive guideposts for the Court to consider in its reliability analysis: (1) whether the theory or technique “can be (and has been) tested”; (2) “whether the theory or technique has been subjected to peer review and publication”; (3) whether the technique’s “known or potential rate of error” affects its usefulness; and (4) whether the community has widely accepted the theory or technique. *Nease*, 848 F.3d at 229 (quoting *Daubert*, 509 U.S. at 593–94). “[A] trial court has ‘broad latitude’ to determine whether these factors are ‘reasonable measures of reliability in a particular case.’” *Id.*

### ***B. Dr. Eli Coston***

Dr. Coston, an assistant professor at Virginia Commonwealth University, “ha[s] specialty research areas in statistics and methodology, race and gender, as well as the criminal legal system.” (Hr’g Tr. 18:9–11, July 18, 2022). Dr. Coston reviewed data that RPD provided to Moore. Coston assessed racial disparities in RPD’s traffic stops and concluded that “[t]hroughout almost every step of a traffic stop, from the likelihood that a driver is pulled over, to the actions taken during the stop, to the eventual outcome of that stop, Black drivers are at a significant disadvantage compared to White drivers.” (ECF No. 66-1, at 11.)

Coston testified that RPD data revealed that, in Richmond, Black drivers were “5.13 times more likely to be stopped” than white drivers. (Hr’g Tr. 56, July 18, 2022.) Of stopped drivers,

77 percent of the drivers were Black, and 14.6 percent were white. (Hr’g Tr. 57:11–12, July 18, 2022.) Dr. Coston conducted a chi-square analysis of the RPD data and determined that there was a “statistically significant relationship” between a stopped driver’s race and whether that driver was ultimately arrested. (Hr’g Tr. 58:4–5, July 18, 2022.) Then, Dr. Coston explained that “[w]hen we talk about statistical significance we are saying that the relationship that exists in our sample also exists in a larger population.” (Hr’g Tr. 67:2–4, July 18, 2022.) In other words, a statistically significant relationship is reliable to extrapolate from and make conclusions about the broader population.

After the Court asked whether “there was a strong substantive relationship between race and being stopped,” Dr. Coston explained that “there exists a large disparity here. With this particular type of data, though, just the frequency and percents we can’t determine statistical significance.” (Hr’g Tr. 62:2–5, July 18, 2022.) Dr. Coston clarified that, to determine the statistical significance of the relationship between a driver’s race and the rate at which they were stopped, “we would have to know also what the population of drivers who were not stopped was.” (Hr’g Tr. 62:11–13, July 18, 2022.)

The government moves to exclude Coston’s testimony because Coston relied on flawed data, committed statistical errors in their analysis, employed an unreliable benchmark, and used a statistical technique that cannot show causation. Having reviewed Coston’s report and the data on which Coston relies, the Court finds the expert testimony reliable and thus admissible.

### *1. The Data*

The government first argues that Dr. Coston relied on flawed data gathered under the Virginia Community Policing Act (“VCPA”). The VCPA—signed in April 2020—prohibits law enforcement officers from taking actions based solely on an individual’s “real or perceived race.”

2020 Va. Acts ch. 1165 (Apr. 11, 2020) (codified at Va. Code § 52-30.1).

During the relevant time period—July 1, 2020, through December 6, 2020—the VCPA required officers to collect the following information during traffic stops:

- (i) the race, ethnicity, age, and gender of the person stopped;
- (ii) the reason for the stop;
- (iii) the location of the stop;
- (iv) whether a warning, written citation, or summons was issued or whether any person was arrested;
- (v) if a warning, written citation, or summons was issued or an arrest was made, the warning provided, violation charged, or crime charged; and
- (vi) whether the vehicle or any person was searched.

*Id.* (codified at Va. Code § 52-30.2, -30.4).<sup>3</sup> The VCPA also established a publicly available Community Policing Reporting Database to aggregate the collected data and required the Virginia Department of Criminal Justice Services (“DCJS”) to periodically review and report on the data to the Governor, General Assembly, and Attorney General. Va. Code § 9.1-192(B) (then-codified at Va. Code § 9.1-191, also codified at *id.* §§ 15.2-1609.10, 15.2-1722.1, 52-30.3).

Some local agencies faced challenges implementing the VCPA’s mandate to record data. (*See, e.g.*, Hr’g Tr. 263:4–266:6, July 19, 2022.) Many police departments’ initial submissions contained technical errors, missing information, or duplicate<sup>4</sup> entries. (*See id.* at 270:22–271:16.) RPD managed to avoid many of the data collection challenges smaller state agencies faced, thus

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<sup>3</sup> Amendments to the law, effective July 1, 2021, expanded both the scope of the activities to which this data collection applies and the type of information officers must collect. 2020 Va. Acts, Spec. Sess. I, ch. 37 (Oct. 8, 2020). The 2021 amendments also require officers to submit the data they collect to “the Department of State Police for inclusion in the Community Policing Reporting Database.” *Id.*

<sup>4</sup> The Virginia State Police Data Analysis & Reporting Team (“DART”) asked officers to record only the most egregious offense with which they charged an individual and to submit the entire traffic stop record as one entry. But in some cases, officers who cited one individual for multiple offenses would nevertheless submit an entry for each cited offense. This resulted in multiple entries for the same traffic stop. (Hr’g Tr. 271:11–16, July 19, 2022.)

mitigating the potential for error in the data set and making the data useful. For example, each RPD vehicle had a Computer Aided Dispatch System,<sup>5</sup> and the Virginia State Police Data Analysis & Reporting Team (“DART”) manager had previously established direct contact with an RPD representative regarding data collection prior to the implementation of the VCPA. (*Id.* at 278:6–11, 13–18.) Further, when RPD submitted files that contained invalid records, RPD “quickly fixed” any quality control issues. (*Id.* at 270:5–7.)<sup>6</sup>

Dr. Coston is an expert in the field of statistics.<sup>7</sup> Coston is fully capable to use RPD’s data to form a trustworthy and reliable opinion. Thus, despite the inherently imperfect nature of any data collection system that relies on individual input, the RPD data on which Coston relied passes muster under *Daubert*.<sup>8</sup> Clearly, this evidence helps “the trier of fact to understand the evidence or to determine [the] fact in issue” in this case. *See Nease*, 848 F.3d at 229 (quoting *Daubert*, 509

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<sup>5</sup> This system allows officers to electronically input data during a traffic stop. (*Id.* at 278:1–5.)

<sup>6</sup> RPD’s delay in submitting some of the VCPA data does not affect the Court’s analysis of whether the final, corrected data proves sufficient under *Daubert*.

<sup>7</sup> The government does not challenge Dr. Coston’s expertise in the field of statistics.

<sup>8</sup> The government raises—and the Court firmly rejects—two other arguments regarding the data quality in this case. The government first argues that the collected race data is unreliable because the officers had to either ask the individual for their race or “guess” it without any guidance or training on racial identification. (ECF No. 70, at 6.) But the government presents no evidence that law enforcement officers cannot distinguish between Black and white individuals, and, regardless of their ability to do so, RPD police officers’ *perception* of an individual’s race remains markedly relevant to a selective enforcement analysis. The Court has practiced law for many years, both as a judge and as a trial attorney; police officers simply do not have a problem identifying the race of people they meet.

Second, the government asserts that during the initial data collection under the VCPA, RPD expended many of its resources responding to the pandemic and to racial justice protests. (ECF No. 70, at 7.) Though the Court does not doubt that RPD did so, the government has not shown how these challenges affected the quality of the data RPD ultimately submitted.



U.S. at 591).

## 2. Statistical Errors

The government also argues that Dr. Coston improperly relied on duplicate data and records that omitted certain data points. Specifically, of the 2,582 analyzed traffic stops, the government identifies “321 instances of exact duplicates in [Dr.] Coston’s data set” and 346 stops that did not include at least one data point (for example, age, gender, or whether a search or arrest occurred). (ECF No. 70, at 12.) After receiving the government’s analysis of the alleged duplicate entries, Coston removed the alleged duplicates and conducted the analysis again. Because Coston’s conclusions remained the same after removing the duplications,<sup>9</sup> the initial reliance on these duplicates did not render the analysis unreliable. The Court also finds immaterial the fact that some of the entries did not include one or more data point unrelated to race. Moore brings a selective enforcement claim based on *race*: it is that data point—not whether the driver was male, female, eighteen years old, or sixty years old—that affects the Court’s analysis in this case. The Court, therefore, concludes that the alleged statistical issues did not undermine the reliability of Dr. Coston’s conclusions.

## 3. Benchmark

Dr. Coston used census data, often referred to as “benchmark data,” in analyzing the facts in this case.<sup>10</sup> Use of census information in racial profiling cases is widely accepted and often

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<sup>9</sup> This finding does not surprise the Court, given that 76.8% of the alleged duplicate entries identified the driver as Black and 14.5% of the entries identified the driver as white. These statistics mirror Dr. Coston’s finding that 77% of traffic stops in Richmond from July through December 2020 involved Black drivers and 14% of traffic stops in Richmond from the same time period involved white drivers.

<sup>10</sup> Dr. Coston used this benchmark only for certain aspects of the analysis. (*Cf.* ECF No. 66 1, at 5, 10; Hr’g Tr. 126:20–23, July 18, 2022 (Dr. Coston “did [not] use the benchmarking for the statistical analyses”).)

cited in published works and thus satisfies *Daubert's* requirements. Census data, the government contends, does not accurately represent the racial composition of drivers in each area: first, the data includes “many people . . . who are not even licensed to drive”; second, the demographics of the individuals who drive in a particular region do not necessarily reflect the demographics of the individuals who live in that region. (ECF No. 70, at 2; *see also* ECF No. 70-1 (Dr. Michael Smith’s rebuttal report).) Rather than relying on census data, the government argues that Dr. Coston should have used more reliable benchmarks such as direct observation, a “veil of darkness” analysis,<sup>11</sup> or data from traffic accidents.

DCJS refers to this as the “benchmark problem,” (*see* ECF No. 72-1, at 68), but the government’s suggestion does not solve it. “No one has yet found an accurate way to” determine “the number of drivers in each racial . . . group who are actually driving on the road and subject to being stopped.” (*Id.*) Few studies use the first method the government suggests—direct observation—because it requires significant investments of both time and money. (Hr’g Tr. 96:7–9, July 18, 2022; Hr’g Tr. 233:18–234:7, July 19, 2022.) And Dr. Coston could not use the second method—a “veil of darkness” analysis—because RPD failed to provide data that would have allowed Dr. Coston to do so. Finally, “there is no Richmond-specific traffic crash benchmark data available.” (ECF No. 72, at 12.)

Moreover, although census data does not provide a flawless comparison, Moore has

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<sup>11</sup> The “veil of darkness” analysis compares the number of minority drivers stopped during daylight hours to those stopped during nighttime hours. “Theoretically, if more minority drivers are stopped during daylight hours when police can more easily ascertain their race, then this provides evidence of possible racial bias, particularly if there are no differences in the rates at which white drivers are stopped during the day compared to at night.” (ECF No. 70-1 (Dr. Smith’s rebuttal report), at 2.)

demonstrated that researchers in the racial profiling field rely on census data as a benchmark.<sup>12</sup> (ECF No. 72, at 12 (citing the DCJS 2021 report (relying on age-adjusted census data); Dr. Smith’s 2001 report; a 2009 report on racial profiling in Houston, Texas; and a 2015 report on racial profiling in New York City).); *see Nease*, 848 F.3d at 229 (quoting *Daubert*, 509 U.S. at 593–94) (explaining that one “guidepost[] in assessing expert testimony is whether “the community has widely accepted the theory or technique.”). In light of its use in this field (including by the government’s expert), the Court finds Dr. Coston’s use of this benchmark reliable.

#### 4. Statistical Methods

Dr. Coston used a chi-square analysis<sup>13</sup> to determine whether a relationship existed between a driver’s race and the primary result of the stop and then, after doing so, used Kendall’s Tau and Cramer’s V to determine the strength of that relationship.<sup>14</sup> The government’s expert, Dr. Smith, critiques this analysis, arguing that it “can only tell . . . that two variables are related to one another; it cannot be used to conclude that one variable has any causal effect on the other.” (ECF No. 70-1, at 5.)

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<sup>12</sup> The DCJS 2021 report, which also relied on census data (in that case, adjusted for age), “yielded the same results as Dr. Coston’s analysis.” (*Id.* at 13; *see also* ECF No. 66-1, at 11; ECF No. 72-1, at 8 (“[S]tatewide, Black and Hispanic drivers in Virginia were disproportionately stopped by law enforcement when compared to other drivers between July 1, 2020, and March 31, 2021.”).)

<sup>13</sup> The chi-square analysis indicates whether “there is a significant relationship between the variables.” (ECF No. 66-1, at 5.) A chi-square analysis is appropriate where, as here, “the data contain[] high levels of multicollinearity (indicating interrelationships among the independent variables).” (*Id.* at 4.)

<sup>14</sup> “[T]he Cramer’s V or Kendall’s Tau indicates how strong [an] association is (with larger numbers in terms of absolute value indicating a stronger association).” (ECF No. 66-1, at 5.)

But Dr. Coston uses these analyses for that exact permitted purpose: that is, to determine the relationship between two variables. Dr. Coston does not purport to determine whether race *caused* a particular stop (and, in fact, a regression analysis would not have reached causation either).<sup>15</sup> (Hr’g Tr. 134:25–135:1, 12–19, July 18, 2022; Hr’g Tr. 65:23–66:3, July 19, 2022 (Dr. Smith’s conclusion that a researcher cannot “conclude that there is racial discrimination in an individual stop based on aggregate analysis”); ECF No. 70-1, at 7).)<sup>16</sup> Because Dr. Coston performed the chi-square test, Kendall’s Tau, and Cramer’s V in accordance with generally accepted research standards, these methods are acceptable under *Daubert*. See *Nease*, 848 F.3d at 229 (holding a court has wide discretion in assessing whether certain guideposts—including whether the research community has accepted the technique—make an expert’s testimony reliable). Based on the foregoing, the Court finds Dr. Coston’s testimony reliable and will deny the government’s motion to exclude it.

### *C. Dr. Marvin Chiles*

Dr. Chiles, an assistant professor of history at Old Dominion University, offers testimony that no one can refute: he explains Richmond’s history of segregation and bigotry. Dr. Chiles specializes in “[r]ace [and] politics in the 20th century . . . specifically in Richmond.” Hr’g Tr.

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<sup>15</sup> In its statutorily mandated 2021 report, DCJS noted that data limitations hindered “the ability of DCJS staff to conduct any complex statistical analysis of the data, or to draw any firm conclusions about the existence and prevalence of the practice of bias-based profiling in a given agency or jurisdiction.” (ECF No. 72-1, at 4–5.) In relying on the RPD data from July through December 2020, Dr. Coston similarly concludes that they “cannot say whether a specific traffic stop was the result of racial bias or racial profiling.” (ECF No. 66-1, at 12.)

<sup>16</sup> Coston also explains that one could not use the data RPD provided to perform a regression analysis because, based on that data, that analysis would have failed to comply with the rules and assumptions underlying that test. In other words, inappropriately using the RPD data in a regression analysis would yield unreliable results. (Hr’g Tr. 44:17–45:17, 46:16–47:1, July 18, 2022.)

10:1–2, Oct. 28, 2022.) He said that “the tide of history” caused Black and white Richmonders to move to the neighborhoods in which they live: “[it] is not by happenstance that [B]lacks and whites live segregated in Richmond.” (Hr’g Tr. 56:11–57:11, Oct. 28, 2022.)

To show that community members presently feel the effects of “Richmond’s overtly racist past,” Dr. Chiles discussed the historical process of “forc[ing] or coaxi[ng]” Black and white individuals into the neighborhoods they reside in today. (ECF No. 107, at 8; Hr’g Tr. 57:8–11, Oct. 28, 2022.) Dr. Chiles explained that the city’s transit system in the early twentieth century “reinforce[d]” the idea that “although slavery is no longer [in Richmond], segregation will be here to replace it.” (Hr’g Tr. 19:1–3, Oct. 28, 2022.) He also discussed the ramifications of the 1911 law that “officially segregated residential areas in the City of Richmond,” explaining that although the *Buchanan v. Warley* Court explicitly outlawed racially based zoning laws in 1917, Richmond continued to encourage residential segregation throughout the twentieth century. (*Id.* at 20:9–24:19.) Chiles testified that Richmond’s City Council sought to “remove [B]lack people from the core of the City,” and Black families moved east, while white families moved to the west and suburbs. (*Id.* at 24:7–19, 25:15–21.) This movement occurred, in part, due to “block busting,” selective advertising, redlining, and development of Richmond’s downtown. (*Id.* at 25:19–33:7.)

Turning to police activity, in 1977, Richmond’s City Council and “a non-profit business coalition” sought to “attract industry back” to Richmond. (*Id.* at 46:21–47:16.) Members of this joint endeavor surveyed “various neighborhoods” in Richmond to determine how to do so. (*Id.* at 47:18–48:6.) Because the surveys’ responses indicated that “crime [was Richmond’s] biggest issue,” Richmond “began creating task force[s] . . . designed to target high crime areas, *or what*

*they [thought] were high crime areas.*<sup>17</sup> (*Id.* at 48:1–10, 21–22 (emphasis added).) This program prompted RPD to “focus[] exclusively on [B]lack neighborhoods.” (*Id.* at 49:5–7.) Dr. Chiles clarified that, in the late twentieth century, Black neighborhoods experienced “more crime” because individuals in those neighborhoods “ha[d] been segregated, confined, [and] given . . . an inferior education that doesn’t allow them to compete in a traditional economy like everyone else . . . . [W]hen you have that happening for generations . . . crime is going to be the natural result, especially disproportionate to the rest of the City.” (*Id.* at 53:6–14, 19–23.) He explained that, as a result, RPD began “sitting [at housing projects], waiting, watching” for crime.” (*Id.* at 66:17–20.)

#### *1. Relevance of Dr. Chiles’s Testimony*

Essentially, the government says that all the bad things Richmond did are ancient history, and that they have nothing to do with traffic enforcement in 2020. Thus, it says that Dr. Chiles’s testimony fails the relevance part of the *Daubert* test.

Moore counters that “the fact that the first, second, and fourth police precincts line up almost exactly with the [B]lack neighborhoods in Richmond, while the third police precinct lines up almost exactly with the white neighborhoods in Richmond is relevant to Mr. Moore’s equal protection challenge.” (ECF No. 86, at 1.) After RPD told Moore that it had no records “that would assist the Court in more directly understanding the relationship between the racial segregation of Richmond’s neighborhoods and the location of the police precincts,” Moore contacted Dr. Chiles. (*Id.* at 3–4.)

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<sup>17</sup> At the hearing, the Court asked Chiles “how [the City] identified African-American areas as high crime areas.” (*Id.* at 50:19–20.) Chiles responded that he could not confirm that the City had data—outside of the survey responses that detailed public opinion—that helped it determine which neighborhoods were high-crime neighborhoods. (*Id.* at 50:19–52:21.)

At the October 28, 2022, hearing, Dr. Chiles discussed Richmond’s history of racial segregation in its residential neighborhoods before reviewing RPD’s history of policing Black individuals. First, Dr. Chiles detailed Richmond’s racial segregation in the nineteenth and twentieth centuries. He then detailed the history of RPD’s “[m]ilitarization” in Black neighborhoods. (Hr’g Tr. 48:22–50:11, October 28, 2022.)

The Court agrees with Moore’s contention that RPD’s failure to keep records “makes Dr. Chiles’s circumstantial evidence much more probative than it otherwise might be.” (See ECF No. 107, at 5 n.1.) Dr. Chiles’s testimony regarding the history of racialized policing in Richmond is important to Moore’s defense because RPD did not maintain the documents that would have “present[ed] direct evidence” of racial discrimination in establishing Richmond’s police precincts. (See ECF No. 86, at 4–5); see also *Vill. of Arlington Heights v. Metro. Hous. Dev. Corp.*, 429 U.S. 252, 267 (1977). In *Arlington*, the Court said that “[t]he historical background of the decision is one evidentiary source, particularly if it reveals a series of official actions taken for invidious purposes.” 429 U.S. at 267. Accordingly, Dr. Chiles’s testimony is relevant and necessary to assess Moore’s selective enforcement claim.

## 2. Supportability of Dr. Chiles’s Testimony

The government also asserts that Rule 702 restricts Dr. Chiles’s testimony “because his sources do not match his rhetoric.” (ECF No. 103, at 4.) In this respect, the government says that one of Dr. Chiles’s findings cites an irrelevant source that does not support this assertion. (*Id.* at 6.) Dr. Chiles, however, explained his citation error. (Hr’g Tr. 98:23–100:5, 103:20–104:18, October 28, 2022.) Moreover, when the government confronted Dr. Chiles with this error, he provided additional source material to support his claim. The government provides no reason to disbelieve or reject Dr. Chiles’s citation error in light of this explanation. Accordingly, the

irrelevant source does not call into doubt Dr. Chiles's conclusions.

In addition, the government argues that Dr. Chiles "wrongly ascribes all police enforcement to racism," and he fails to consider "another far more plausible explanation . . . that criminal activity is unfortunately disproportionately concentrated in Richmond's minority neighborhoods." (ECF No. 103, at 4, 6.) To support its contention, the government provides a map showing "the locations of Richmond city murders," noting that "89% of the murders in Richmond since January 1, 2018[,] occurred in precincts 1, 2, and 4." (*Id.* at 7–8.) Interestingly, however, the government did not call a witness from RPD to explain that the department has a legitimate strategy of stopping Black drivers. Nor does the government produce evidence that stopping Black drivers cuts into the murder rate, or the rate of any other felony. And nothing explains the fact that even in predominantly white neighborhoods, RPD stops Black drivers at roughly the same disproportionate rate.

Chiles detailed the overtly racist past of Richmond that prompted RPD's enhanced focus on certain minority neighborhoods in Richmond. RPD's focus on Black neighborhoods occurred shortly after it purportedly "decentralized all of its patrol functions and instituted a Neighborhood Precinct Plan" in which three of four RPD precincts "correspond to the nearly entirely [B]lack neighborhoods in Richmond." (*Compare id.* at 47:21–49:19, with ECF No. 66, at 6.) Accordingly, the Court finds that Dr. Chiles's testimony corroborates Moore's contention that "[RPD] is pulling over [B]lack drivers five times more often than white drivers because those drivers are [B]lack." (ECF No. 107, at 10.)<sup>18</sup>

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<sup>18</sup> The government asserts that Moore "ignores Dr. Coston's admission . . . that adjusting the date range for traffic stops to include more than just the first five months of flawed data collection significantly reduces the raw statistical disparity." (ECF No. 108, at 4 n.2.) At the October 28, 2022, hearing, the Court rejected the government's assertion, explaining that the data



Dr. Chiles’s testimony forms part of the mosaic of a background leading to disproportionate traffic stops of Black drivers. The Court, therefore, admits his testimony.

## **II. MOTION TO DISMISS THE INDICTMENT**

The Court will next turn to Moore’s motion to dismiss the indictment against him under the Fourteenth Amendment. Moore asks the Court to dismiss the indictment because RPD selectively enforces traffic laws against Black people, and the practice of selective stops led to his charges.

The Equal Protection Clause of the Fourteenth Amendment “prohibits selective enforcement of the law based on considerations such as race.” *Whren v. United States*, 517 U.S. 806, 813 (1996). To establish an Equal Protection violation, a claimant must show that the action he challenges (1) had a discriminatory effect and (2) was motivated by discriminatory intent. *Vill. of Arlington Heights*, 429 U.S. at 264–66.

As discussed above, to put the Court’s analysis in the proper context, it must first return to the critical distinction between selective prosecution claims and the selective enforcement claim that Moore alleges here: in a claim of selective stops, a defendant need not name similarly situated drivers who committed traffic violations but were not stopped. In contrast, to successfully assert a selective prosecution claim, a defendant must provide “clear evidence” of the “different treatment of similarly situated persons.” *Armstrong*, 517 U.S. at 465, 470.

Moore argues that the Fourth Circuit has yet to “h[o]ld after pointed consideration that a challenger must prove selective *enforcement* by ‘clear evidence.’” (ECF No. 73, at 2 (citing *United States v. Mason*, 774 F.3d 824 (4th Cir. 2014)) (emphasis added).) The Fourth Circuit has

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from the “first full year” reveals a significant disparity between the percentage of Black and white individuals that the police pulled over. (Hr’g Tr. 120:19–121:10, Oct. 28, 2022.)

discussed *Armstrong*'s requirement that defendants point to similarly situated individuals who were not prosecuted when reviewing a selective enforcement claim. *See United States v. Suarez*, 321 F. App'x 302 (4th Cir. 2009). But Moore asserts that the Fourth Circuit's "passing reference" to *Armstrong* in that case does not bind this Court in its analysis of his selective enforcement claim. (ECF No. 66, at 5 n.3.)

The Court agrees with Moore. As noted above, the Fourth Circuit has discussed *Armstrong* in selective enforcement cases, but it has not squarely held that a Black driver pulled over due to his race must specifically identify similarly situated white drivers who were not stopped to prevail on his selective enforcement claim. In fact, the Fourth Circuit has suggested that to adopt the government's position would create an impossible standard: no one could show drivers who committed traffic violations but were *not* stopped. *See Johnson*, 782 F. App'x at 270.

Shortly after the Supreme Court decided *Armstrong*, the Fourth Circuit reviewed a selective enforcement case. *See United States v. Bullock*, 94 F.3d 896 (4th Cir. 1996). In *Bullock*, the Fourth Circuit cited the *Armstrong* standard for selective prosecution claims, but it did not discuss the differences between selective prosecution and selective enforcement claims, nor did it explicitly adopt *Armstrong* for selective enforcement cases. *See id.* at 899. And in subsequent selective enforcement cases, the Fourth Circuit cited *Bullock* and discussed the *Armstrong* standard without articulating the steps district courts in this circuit should take in analyzing selective enforcement claims. *E.g., Mason*, 774 F.3d at 829 (4th Cir. 2014) (citing *Bullock*, 94 F.3d at 899); *United States v. Hare*, 820 F.3d 93, 99 (4th Cir. 2016) (citing *Bullock*, 94 F.3d at 900)).

But in *Johnson v. Holmes*, the Fourth Circuit did address the evidentiary burden in a selective enforcement case. In *Johnson*, plaintiffs brought a § 1983 Equal Protection action, asserting that a police officer had selectively enforced traffic laws against them. 782 F. App'x at

270–71. Like Moore, the plaintiffs supplied statistical evidence to support their contention that the police unlawfully considered their race in choosing to stop them. The *Johnson* court explained that “[t]he ultimate question presented in this case is exactly what . . . statistics must show in order to meet the similarly situated requirement,” and it opined that the county had not recorded data of drivers “who were not stopped” because this data “would likely be *impossible* to track.” *Id.* at 279. The Fourth Circuit reversed the district court’s decision to exclude the statistical evidence because it could not “conclude on the current record that no legitimate enforcement factors [were] identifiable on the face of the statistics.” *Id.* at 282. Thus, though Fourth Circuit precedent remains unclear about the precise standard that Moore must satisfy when asserting his selective enforcement claim, it has not foreclosed the possibility of using statistical evidence to satisfy Moore’s burden.

Like the plaintiff in *Johnson*, Moore has no way of showing that RPD officers observed white drivers who committed similar offenses and then chose not to stop them. *See id.* Thus, although *Armstrong* concluded that “[t]he similarly situated requirement does not make selective-prosecution claims impossible to prove,” *see* 517 U.S. at 464, imposing that requirement *does* create an insurmountable burden for Moore and other Black drivers who assert selective enforcement claims. *See Chavez v. Ill. State Police*, 251 F.3d 612, 638–39 (7th Cir. 2001) (“In a civil racial profiling case . . . the similarly situated requirement might be impossible to prove. In a meritorious selective prosecution claim, a criminal defendant would be able to name others arrested for the same offense who were not prosecuted by the arresting law enforcement agency; conversely, plaintiffs who allege that they were stopped due to racial profiling would not, barring some type of test operation, be able to provide the names of other similarly situated motorists who were not stopped.”).

The Court also looks to other courts' decisions dealing with selective enforcement claims. For example, the U.S. Court of Appeals for the Seventh Circuit explicitly grappled with the impossibility of rigidly applying *Armstrong* to selective enforcement claims. The Seventh Circuit held that claimants asserting selective enforcement must prove (1) discriminatory intent and (2) discriminatory effect only by a preponderance of the evidence. *Conley v. United States*, 5 F.4th 781, 791–92 (7th Cir. 2021). To prove discriminatory effect, claimants need not identify similarly situated individuals of a different race who were not targeted or “satisfy *Armstrong*'s burden to identify comparators to prove discriminatory effect on the merits.” *Id.* at 792. Instead, the Seventh Circuit concluded that “statistics can be a ‘useful tool’ that can establish discriminatory effect and provide powerful evidence of discriminatory intent if race can be isolated from other confounding variables.” *Id.* at 796–97.

The Court finds *Conley* persuasive. Thus, to show that RPD selectively enforced traffic laws against him due to his race, Moore must prove, by a preponderance of the evidence, that RPD's “enforcement process ‘had a discriminatory effect and that it was motivated by a discriminatory purpose.’” *See Cent. Radio Co. v. City of Norfolk*, 811 F.3d 625, 634–635 (4th Cir. 2016) (quoting *Wayte v. United States*, 470 U.S. 598, 608 (1985)). And in light of the Fourth Circuit's decision in *Johnson*, the Court considers the testimony of both Dr. Coston and Dr. Chiles together as evidence of the discriminatory effect and discriminatory intent of RPD's stops to analyze Moore's challenge.

#### *A. Discriminatory Effect*

Statistical evidence can show discriminatory effect. *See, e.g., Yick Wo v. Hopkins*, 118 U.S. 356, 374 (1886). The statistics provided in this case make abundantly clear the disparate impact of traffic stops on Black drivers in Richmond. From July 2020 through December 2020,

“Black drivers were 5.13 times more likely to be stopped” than white drivers. (ECF No. 66-1, at 5.) Once RPD officers stopped those Black drivers, they were far more likely to search Black drivers and their cars than they were to search white drivers. And, once stopped, “Black drivers were 12.67 times more likely than White drivers to be arrested as a result of the stop.” (*Id.* at 6.) Black drivers felt the discriminatory effect of RPD’s traffic enforcement throughout Richmond: regardless of whether Black drivers moved through a predominantly Black or a predominantly white neighborhood, they were more likely to be pulled over than a white driver. Dr. Coston determined that these relationships exist after analyzing six months of data beginning in July 2020. (*See* ECF No. 72, at 7 (citing ECF No. 66-6, at 11) (explaining that police officers arrested a disproportionate percentage of Black drivers).) Moreover, Dr. Chiles’s testimony regarding Richmond’s history of racialized policing informs the Court’s understanding of why three of Richmond’s four police precincts overlay the City’s predominately Black communities.

Dr. Coston’s analysis and Dr. Chiles’s supplemental testimony clearly evince disparities in the effects of RPD’s policing practices; the experts’ testimony establishes that RPD’s actions cause a discriminatory effect. Moore thus succeeds in satisfying this element of his selective enforcement claim.

### ***B. Discriminatory Purpose***

Moore must also prove that such effect was, “at least in part,” motivated by a discriminatory purpose. *Cent. Radio Co.*, 811 F.3d at 635. Here, Moore has presented no evidence of the four officers’ invidious or bad faith.<sup>19</sup> But “inferences . . . drawn from valid relevant statistical evidence of disparate impact or other circumstantial evidence” may help show

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<sup>19</sup> RPD officers pulled Moore over for having suspicious temporary tags after stopping two other individuals the same night whose cars had the same exact temporary tag number.

discriminatory purpose. *United States v. Avery*, 137 F.3d 343, 355 (6th Cir. 1997); *see also Vill. of Arlington Heights*, 429 U.S. at 266 (examining discriminatory purpose “demands a sensitive inquiry into such circumstantial and direct evidence of intent as may be available”). The Fourth Circuit has “recognized several factors as probative in determining discriminatory intent.” *Cent. Radio Co.*, 811 F.3d at 635. These include:

- (1) evidence of a “consistent pattern” of actions by the decisionmaking body disparately impacting members of a particular class of persons;
- (2) historical background of the decision, which may take into account any history of discrimination by the decisionmaking body or the jurisdiction it represents;
- (3) the specific sequence of events leading up to the particular decision being challenged, including any significant departures from normal procedures; and
- (4) contemporary statements by decisionmakers on the record or in minutes of their meetings.

*Id.* (quoting *Sylvia Dev. Corp. v. Calvert County*, 48 F.3d 810, 819 (4th Cir. 1995)). The Court finds that, through Dr. Coston’s and Dr. Chiles’s testimony, Moore successfully presents evidence of the first two factors: (1) “evidence of a ‘consistent pattern’ of actions” by RPD that “disparately impact[s]” Black drivers in Richmond; and (2) the “history of discrimination” by RPD and in Richmond itself. *See id.*

Moore’s statistics evince that RPD police officers stop Black drivers at a rate that far exceeds the rate at which they stop white drivers.<sup>20</sup> This correlation, on its own, does not prove causation.<sup>21</sup> “But that does not mean evidence of a correlation is *per se* irrelevant.” *Johnson v. Holmes*, No. 3:16cv16, 2022 WL 3599850, at \*4 (W.D. Va. Aug. 23, 2022) (citing *Etherton v.*

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<sup>20</sup> (ECF No. 72-1, at 8) (“Black and Hispanic drivers in Virginia were disproportionately stopped by law enforcement when compared to other drivers between July 1, 2020, and March 31, 2021”).

<sup>21</sup> “Correlation is not causation.” *Norfolk & W. Ry. Co. v. Ayers*, 538 U.S. 135, 173 (2003) (Kennedy, J., concurring); *In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. & Prod. Liab. Litig.*, 174 F. Supp. 3d 911, 934 (D.S.C. 2016) (collecting cases explaining “that an association is insufficient to prove causation”).

*Owners Ins. Co.*, 829 F.3d 1209, 1220 (10th Cir. 2016)).

In analyzing the statistics in this case, Dr. Coston never asserted that race caused a particular stop. Instead, Dr. Coston determined the relationship between a driver's race and the primary result of a traffic stop. As discussed, the government "highlight[ed] any inconsistencies on cross-examination," but the Court nonetheless finds Dr. Coston's testimony reliable. *See supra* Part III.B; *Johnson*, 2022 WL 3599850, at \*4 ("In [*Valencia*], the Fifth Circuit held that the district court did not abuse its discretion in admitting expert testimony about correlations . . . . 'Whether a particular opinion is relevant and reliable thus does not simply turn on whether the expert asserts a casual or correlative relationship, but is closely tied to the law and facts at issue in a given case.'" (quoting *Valencia*, 600 F.3d at 42)).

To further support his claim, Moore cites to Richmond's racially segregated and discriminatory history. He reviews the Confederate foundations of RPD before discussing Richmond's racialized zoning, redlining. And he discusses the establishment of three RPD precincts that overlap Black neighborhoods in Richmond and a fourth RPD "precinct [that] aligns exactly with the boundaries of the white section of Richmond." (ECF No. 66, at 6, 12.) He also asserts that studies have shown that RPD officers have "stop[ped] far more [B]lack drivers than white drivers for traffic offenses" "[f]or at least twenty years." (*Id.*) Moore also argues that "Virginia would not have enacted the Community Policing Act but for a valid concern regarding racial profiling in Virginia." (ECF No. 72, at 7.) And, at the October 28, 2022, hearing, Dr. Chiles testified that the historical segregation of the City of Richmond is the product of "the tide of history." (Hr'g Tr. 56:11–57:11, Oct. 28, 2022.)

The absence of certain evidence is telling. The government did produce evidence that serious crimes occur in predominantly Black neighborhoods. But no one from RPD testified that

it had a strategy to quell major crime by stopping Black motorists. No one testified that modern criminology demonstrates that picking on motorists somehow makes cities safer. And, most significantly, no one explained why Black motorists are disproportionately stopped in white areas of Richmond, where the crime rate is lower.

The data showing that RPD stops Black drivers five times as often as it stops white drivers, coupled with the evidence of Richmond's history of discrimination, reveals that RPD's discriminatory purpose contributed to its officers' decision to stop Moore. Moore therefore succeeds in meeting his burden of showing discriminatory purpose.

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As noted above, in 2020, the Commonwealth of Virginia began to require police to keep track of the race of people stopped. This data was essential to this case. It shows a disgraceful disparity in enforcement of traffic laws, with Black drivers getting the short end of the stick. Richmond is not the only locality with this problem; the state wide statistics show a remarkable record of picking on Black drivers. And subsequent reports by the Commonwealth show that the trend continues. One would think that Virginia's citizens would cry out in protest over this situation, but they don't.

Moore, however, did raise this issue. He has successfully shown both the discriminatory effect and discriminatory purpose elements required for his selective enforcement claim. The Court will therefore grant his motion to dismiss the indictment.



