Data Needs to Track Racial Disparities in Vermont Criminal Justice System

Stephanie Seguino, University of Vermont
Nancy Brooks, Cornell University

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I. INTRODUCTION

National concerns about racial disparities have led to the widespread use of data collection as an important first step in being able to make evidence-based assessments of trends in racial disparities in the criminal justice system. Vermont joined this effort in 2014, when the Vermont legislature passed Statute 20 V.S.A. § 2366 in 2014 to require collection of traffic stop data by race. This memo, which outlines additional data needed to robustly investigate the role of race in criminal justice and policing has several parts. First, we detail revisions needed to the original statute to ensure more complete traffic stop data and oversight to ensure its quality and timely availability. Second, we outline two additional areas where legislation is required to ensure adequate data: 1) use of force, and 2) criminal justice data.¹

II. RECOMMENDATIONS FOR REVISION TO THE TRAFFIC RACE DATA COLLECTION STATUTE 20 V.S.A. § 2366

Traffic race data collection and analysis are important components of the effort to promote transparency and accountability to the community, and to build trust that ultimately enhances community safety. The data can serve as a management tool for law enforcement agencies, useful for better understanding policing practices and outcomes, and for identifying training needs.

The earliest mandate to require the collection of race data in traffic stops came from North Carolina in 2000. Since that time, numerous states have begun to collect and make public traffic stop data by race. The Vermont legislature passed the Race Data Collection Statute 20 V.S.A. § 2366 in 2014. The relevant portion of that statute, as related to traffic stop data, is:

(1) On or before September 1, 2014, every State, county, and municipal law enforcement agency shall collect roadside stop data consisting of the following:
   (A) the age, gender, and race of the driver;
   (B) the reason for the stop;
   (C) the type of search conducted, if any;
   (D) the evidence located, if any; and
   (E) the outcome of the stop, including whether:
      (i) a written warning was issued;
      (ii) a citation for a civil violation was issued;

¹ H.284 (“An act relating to data collection in the criminal justice system”) was introduced in the Vermont legislature in 2019 but was not acted on. This memo outlines areas of data collection articulated in that bill.
(iii) a citation or arrest for a misdemeanor or a felony occurred; or
(iv) no subsequent action was taken.

(2) Law enforcement agencies shall work with the Criminal Justice Training Council and a vendor chosen by the Council with the goals of collecting uniform data, adopting uniform storage methods and periods, and ensuring that data can be analyzed. Roadside stop data, as well as reports and analysis of roadside stop data, shall be public.

(3) On or before September 1, 2016 and annually thereafter, law enforcement agencies shall provide the data collected under this subsection to the vendor chosen by the Criminal Justice Training Council under subdivision (2) of this subsection or, in the event the vendor is unable to continue receiving data under this section, to the Council. Law enforcement agencies shall provide the data collected under this subsection in an electronic format specified by the receiving entity.

(4) The data provided pursuant to subdivision (3) of this subsection shall be posted electronically in a manner that is analyzable and accessible to the public on the receiving agency's website.

At this juncture, five years after passage of the legislation, it is useful to revisit and make recommendations for changes to the initial legislation based on what we have learned since 2014 as well as research conducted in other states on this topic. Below we outline several recommendations for changes to the legislation. These recommendations are based on the view that an important role of data collection and analysis is to build trust between the community and law enforcement. Greater trust can lead to better policing and public safety. Collection of additional data can help to answer questions the community has about policing practices, and may in some instances quell concerns about racial bias. It is thus in our collective interest to be able to answer such questions.

A. ADDITIONAL DATA TO PUBLICLY REPORT

Because data collection in Vermont to date has yielded data that is of varying degrees of completeness and quality, improvements are needed. As a result, the objectives of the original statute have not been attained in their entirety. We therefore propose amendments to the statute to require that additional categories of data be made publicly available. The changes we propose are not challenging to implement because most of the data is already collected by law enforcement. Also, the data we propose be made public is similar to the types of data collected by law enforcement agencies in other states.

We recommend the statute be amended to require the following data be made available:

1. **Stop date, day, and time.** This data is collected with every stop, so the change requested is to require this data be made publicly available. Many agencies already provide this, but some do not. It is necessary for identifying duplicates in the data. The “duplicate” problem is discussed in 2) below in more detail, in reference to incident numbers which are also needed for this same reason.
2. **Incident numbers.** The initial legislation did not request that law enforcement supply the public with incident numbers—the unique numbers associated with a stop. Although some agencies report this data voluntarily, others do not. Incident numbers are necessary for data analysis to address the “duplicate” problem. This arises because each traffic stop can have more than one police action (or what is termed “outcome of a stop”). For example, an officer may issue a warning and 2 tickets. Incident numbers are useful for identifying duplicate lines of data, without which the number of stops could be overestimated and distort results. Some agencies that reported incident numbers in their 2016 data are no longer providing that information voluntarily. They point out (rightly) that the 2014 legislation does not require it. As a result, in the 2017 data posted on the CRG website, 37% of all agencies do not provide incident numbers. The statute should be amended to require that incident number associated with each stop be provided. Additionally, the details of each incident should be reported and Section 1.E of the statute should be amended to say “outcomes” rather than outcome, since more than one outcome (or police action) is possible.

3. **Date of birth.** This data is already collected by law enforcement and many agencies supply this in their reports, but some do not—instead just providing the age of the driver. Date of birth is also useful in identifying “duplicate” records in the data.

4. **Year of vehicle.** This data is already collected but not yet required to be made publicly available. Year of vehicle is helpful in identifying whether socioeconomic status of drivers influences officer decisions on whom to stop and search. Concerns have been raised by some citizens about “poverty profiling”—the targeting of older vehicles that may be indicative of the socioeconomic status of the driver. It is not clear that police are engaged in poverty profiling; data on year of vehicle would allow an analysis of this question.

5. **Race of driver.** Some agencies still use the category “unknown” to classify perceived race of driver. This option should be eliminated. Further, data are not uniformly coded. Currently, 45 different race codes appear in the data submitted by law enforcement. The data was not uniformly code prior to being posted to the CRG website. The lack of uniformity makes it unnecessarily time consuming to analyze the data. Although the statute tasks the Criminal Justice Training Council (CJTC) with the job of ensuring uniform data, this arrangement for managing data and working with law enforcement to create consistency has not been successful. Ideally, a revision to the legislation would designate a state entity such as the AG’s office to oversee data management to assure consistency and timely submission of data, not only for race but other indicators as well.

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2 To clarify what we mean by this, some agencies report incident numbers but only the most severe outcome of the stop. For example, a driver may receive a warning for one infraction, a ticket for another, and may be arrested. The agency, however, may only report the arrest as the most severe outcome, thereby omitting the other outcomes of the stop. All outcomes of the stop should be reported, however, not just the most severe outcome.

3 This is done by writing computer code that uses incident number, date of birth, gender, and race of driver to identify duplicates.

4 For example, for Native Americans we have found the following 8 ways of coding: 4 - Native American, I, I=Nat. Amer. (Alask. Nat), N, Nat. American, Nat. Amer, Native Am/Alaska Nat - I, Native American.
6. State of vehicle registration. With data on state of vehicle registration, analysts would be able to evaluate whether arrest, search, and hit rates (the percentage of searches that yield contraband) differ between in- and out-of-state drivers. This data appears to already be collected by law enforcement but specific legislation is needed to require that these data to be provided to the public.

7. Officer-level data. Officer-level data would allow both law enforcement leaders and researchers to understand whether racial disparities by agency are due to a small number of individual officers who are outliers, or whether disparities are a generalized phenomenon within agencies. This data is already collected in Vermont, but the 2014 legislation did not require officer-level data (anonymized) to be included in data shared with the public (although several agencies voluntarily provided such data). Other states, including North Carolina, require such data to be reported to the public.5

8. Duration of traffic stop. One way that racial disparities may emerge in a traffic stop is the length of time a driver is detained. Data on start and stop times would be helpful in determining whether race plays a role in duration of a stop.6 Law enforcement agencies in Vermont already report the start time of the stop. The only additional information needed then would be the end time of the stop.

9. Type of contraband found. A critical indicator to identify bias in traffic stops is “hit rates”—the percentage of searches that yield contraband. Studies in many parts of the country show that while the search rate of black and Hispanic drivers is higher than that for white drivers, blacks and Hispanics have a lower probability of being found with contraband. There is thus considered to be oversearching of minority drivers, possibly due to a lower threshold of evidence. The severity of contraband (the type and quantity) that can be found during a search differs widely, however, and this should be part of the analysis of hit rate disparities. Contraband can range from cigarettes possessed by a teenager to stolen goods to small quantities of illegal substances, or criminal quantities of illegal drugs. Other states require reporting of detailed information on the type of contraband found. Here in Vermont, the Vermont State Police (VSP) provided detailed data on contraband found in 2016 vehicle searches. The categories of contraband identified were: cigarettes, cash/counterfeit money, alcohol, drug paraphernalia, opioids, marijuana, LSD, mushrooms, and cocaine. (The VSP did not report on weapons as contraband, but this should be included as a contraband category). In addition, the data indicated whether contraband resulted in civil or criminal charges. The VSP’s categories could be adopted by other agencies in Vermont. To make these data useful for analysis, legislation on how to categorize data is necessary so that there is consistency in reporting contraband types.

10. Passenger data in cases of a search. Concerns have been raised about the lack of data that differentiates between searches of drivers and their vehicles vs. searches of passengers. Other states do record passenger age, race and gender data in the case of

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5 See, for example, Baumgartner, et al (2018), Chapter 6. Illinois requires arrest data by officer to be made publicly available.

6 Illinois, for example, reports on average duration of stops by race. [Link to Illinois report](http://www.ilga.gov/reports/ReportsSubmitted/65RSGAEmail100RSGAAttach2017%20ITSS%20Executive%20Summary.pdf)
a search, and there is thus precedent for this information to be collected. Data on passenger searches can contribute to a more accurate understanding of racial disparities. For example, officers may stop vehicles with white drivers and black passengers. If the passenger is searched, this is recorded as a search of a white driver rather than a black passenger—thus inflating the white search rate, and underestimating the black search rate.\footnote{An example of traffic report forms in North Carolina that include passenger search data can be found at: \url{https://fbaum.unc.edu/TrafficStops/SBI-122-form.pdf}}

11. **Violation.** A few Vermont agencies report information on the specific violation encountered in a stop (even though this indicator is not currently required by the current statute). We recommend the statute be amended to require that the type of violation be reported. To make this category more manageable, the violations can be subsumed under a limited number of categories: 1) license/registration, 2) speeding, 3) seat belt violations, 4) stop sign/light, 5) equipment, 6) DUI, 7) moving violation, and 8) truck violations.

12. **Location of the stop.** Information on the location of the stop can be used to understand policing patterns and their relationship to any potential racial disparities.

### B. Data Quality

There are four major inadequacies problems with data collected in response to the current statute: 1) missing data, 2) quality and consistency of data, 3) failure to submit data, and 4) failure to record a stop. We outline those problems here and recommend a new approach to managing and reporting data that shifts responsibility to the state, e.g., the Attorney General’s office.

- **Missing data.** There is a significant amount of missing data reported by law enforcement agencies (Seguino and 2017, 2018).\footnote{For example, race was missing in over 17% of Addison County Sheriff incident reports for 2016. In Manchester, 15% of incident reports failed to report reason for stop. These are examples, but many agencies have high rates of missing data.} Some agencies, for example, have high percentages of missing data on race of driver—but the problem of missing data extends to a number of other indicators as well.

- **Quality and consistency of data.** The quality of the data submitted, and consistency with which categories are used varies widely across law enforcement agencies. The Vermont State Police identified quality of data as an area for training several years ago, and embarked on a project to train each barracks on data collection to ensure that troopers understand and use the same definition for each category of data. For example, some troopers may have categorized the reason for a stop as investigatory while other troopers might have categorized a stop under the same conditions as due to vehicle equipment. A state-wide law enforcement training, similar VSP’s effort, to ensure that all agencies across the state understand and categorize stops and stop outcomes in a consistent manner (and use uniform codes) would improve the quality of the data and promote community trust. The original statute requires that the CJTC work to ensure agencies adopt a uniform coding and storage method for data. However, data continue to be reported using different methods of coding, and different systems for reporting data making it unnecessarily
time-consuming to prepare the data in order to analyze it. A more robust mechanism, and perhaps a different agency, is required to ensure a consistent method for coding and system for reporting data. This could dramatically improve the usefulness of this data collection effort.

c. **Failure to report and make data publicly available in a timely manner.** Currently, in Vermont, oversight of submission of traffic stop data and review of its quality are inadequate. Many agencies did not make traffic stop data available by September 2016 as required by the legislation. Moreover, to date, 4 agencies have not yet reported their 2016, and 6 agencies have not yet reported data for 2017. Among those who have reported their data, several agencies only report traffic stop data for 4 or 5 months. For 2018, data is not available for any agencies other than Vermont State Police and Burlington Police Department on the CRG website. The delay in access to data undermines the goals of data collection and analysis: to ensure law enforcement agencies have data to use as an administrative tool to internally monitor police practices, and to provide the public with data to ensure accountability and transparency. In some states, law enforcement is required to submit data monthly or twice a year to state agencies (such as the attorney general’s office). In North Carolina, law enforcement agencies that fail to provide data in a timely manner face sanctions. Mechanisms are needed to ensure timely reporting of data and quality of that data. This issue, which is linked to problems with public access to the data, will be discussed in greater detail below, with some suggestions on how to approach this from an organizational standpoint.

d. **Failure to record a stop.** In theory, officers should record every stop so that we have a full accounting of all traffic stops. However, some citizens report that they have been stopped over the last several years, but have not received a warning or citation. In these cases, it is likely no action was taken. The statute includes *no action taken* as one of the choices for recording the outcome of a stop, but not all agencies report this possible outcome. It is important that there be some consistency in data reporting, and that all agencies use the outcomes of a stop as identified in the statute and that it be made mandatory that every stop be recorded and reported.

### C. IMPROVED ACCESS TO DATA AND DATA REPORTS

**Timely data submission and posting of data.** Changes to the legislation are required to ensure timely reporting and access to the data. Traffic stop data are not now available on a timely basis. In part, this is due to delays in posting of the data at the Crime Research Group (CRG) website. It is not clear what the cause of the delay is (it could be linked to agency delays in reporting data, for example). Data for 2017 was only recently made available on CRG’s website (with data still missing for several agencies and a number of agencies reporting only a few months of data). Nine months into 2019, 2018 data is not yet available (VSP and Burlington Police Department have, however, posted data to their own websites). The data for these agencies can be accessed from their websites but are not posted on the CRG website). These delays in reporting and analyzing data diminish the ability of agencies to use the data as a management tool, and fail to provide community members with timely access to the data in a way that can both improve trust and also hold law enforcement accountable.
The statute as currently written requires law enforcement to submit their data to the CRG annually. Some states require that law enforcement agencies report traffic stop data monthly, while others require data semi-annual submission of data. We recommend that data be submitted more frequently than currently (discussed in more detail below).

Data accessibility is also a problem. The current legislation requires law enforcement agencies to provide their data to members of the public as well as the CRG. But a number of agencies contacted since 2017 have rejected public requests for their data, arguing it has been provided to the CRG and hence they are not under any obligation to fulfill a public records request for their data. The legislative mandate to require agencies to supply traffic stop data to the public should therefore be clarified to ensure that law enforcement understands its obligations to make data publicly available. This legislation should be written so as ensure access to the coded data in an easily usable form (e.g., Excel) from both each law enforcement agency and the state.

**Data reports.** Currently, the legislation only requires collection of data, but does not specify what data reports should be produced from the data. Most law enforcement agencies lack the resources to analyze the data themselves, and thus cannot use the data as a management tool. The AG’s offices in a number of other states regularly produce reports of summary results of the data in a consistent format.

We propose changes to the frequency and format of law enforcement agency submission of data and data reports, as well as to the state’s posting of data and data reports as follows:

- We recommend the state take over handling of the data, and produce an annual data report by agency and for the entire state. In addition, we propose the state set up a website portal where data can be uploaded monthly and queried. (See North Carolina example).
- We propose that agencies submit their data to the state monthly or semi-annually and that the state generate a *prescribed* data report (that is, a data report that follows a standard format, similar to VSP’s but with some revisions) to be posted within one month of receipt. The public should have access to the uniformly coded data for its own analysis, in addition to any analysis the state may wish to conduct.
- In the event of continuation of the use of an external vendor to manage traffic stop data, the vendor at a minimum should ensure the data posted is uniformly coded, and that any report produced is based on an analysis of a range of agreed upon statistics (again, reports similar to VSP’s, but with some revision). It would be useful to provide details in the legislation as to the statistics and format of the report that are required. Further, if the state continues to use an external vendor, revised legislation should include some type of regular evaluation of the vendor’s performance, and define a transparent process for identifying a vendor, in the event of a change.

To reiterate, legislation should require that raw data is coded in a standardized way and is posted on a state-sponsored website that includes prescribed summary reports of the data. The state should have the responsibility for producing summary reports of these data, rather than outsourcing this task. Several states do this already, with the raw data and data reports
posted on attorney general or department of transportation websites. Examples include Missouri, Rhode Island, and Connecticut. In addition, North Carolina maintains a website that allows any user to create simple reports on stops and searches for any reporting agency. Baumgartner, et al (2018: 50) note, the state office that manages traffic stop data is “a model of transparency and open data.” Vermont should aspire to a similar level of access to and quality of data.

In Vermont, the Vermont State Police (VSP) and Burlington Police Department (BPD) have been exemplary in their transparency with data access and provision of clear and timely summary reports on their data. However, this is lacking in most other Vermont law enforcement agencies. Part of this may be due to the fact that both VSP and BPD are larger agencies with the resources to manage and analyze data that smaller agencies do not have. Legislation that shifts responsibility to the state (e.g., the attorney general’s office) for posting the data in a timely manner and creating summary reports would be important, given the lack of resources or expertise of smaller law enforcement agencies. It would also provide a means to hold agencies accountable for submitting data in a timely manner, and ensure consistency and quality of the data (non-government entities do not have an enforcement mechanism).

### III. USE OF FORCE DATA

Use of force data is also important in helping to identify racial disparities in policing. In January 2019, the FBI launched the National Use of Force Data Collection as a voluntary program to gather data on law enforcement use of force. The International Association of Chiefs of Police has indicated support for this effort, encouraging all agencies to participate. A large number of agencies across the country already make such data available.

The Burlington Police Department already collects use of force data and issued a report in 2016 (although no reports have been issued since then). Although the BPD does not

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11 VSP raw data and summary data reports can be found at: [https://vsp.vermont.gov/communityaffairs/trafficstops](https://vsp.vermont.gov/communityaffairs/trafficstops). Burlington’s data can be found at: [https://www.burlingtonvt.gov/Police/Data/OpenData](https://www.burlingtonvt.gov/Police/Data/OpenData). Its reports can be found at: [https://www.burlingtonvt.gov/Police/Data/Reports](https://www.burlingtonvt.gov/Police/Data/Reports). Burlington’s report formats are not consistent from year to year, however, making analysis and evaluation of trends difficult. A uniform format should be established for any mandated reports.

12 In North Carolina, legislation requires that law enforcement report its data to the state no more than 60 days after the close of a month. Failure to submit the required data can cause an agency to be ineligible for state grants.

13 The Police Data Initiative hosts a website with data from a number of cities. See, for example, data on Dallas use of force. [https://www.policedatainitiative.org/datasets/use-of-force/](https://www.policedatainitiative.org/datasets/use-of-force/)

14 The BPD use of force report can be found at: [https://www.burlingtonvt.gov/sites/default/files/UOF2.9.17_0.pdf](https://www.burlingtonvt.gov/sites/default/files/UOF2.9.17_0.pdf). The Vermont State Police produced a detailed report on officer-involved shootings (though this did not include race of subject):
provide access to raw data, this should be required of all law enforcement agencies, appropriately anonymized. We recommend the following data to be collected and made publish available:

1. Date, time, and location of incident
2. Officer justification for use of force
3. Age, sex, race, ethnicity of subject
4. Injury/Death of subject(s)
5. Type(s) of force used
6. Type of resistance
7. Impairment in the physical condition of subject (mental health/alcohol/drugs/unknown)
8. Years of service as a law enforcement officer (total tenure, number of years)
9. Officer injury information

IV. CRIMINAL JUSTICE SYSTEM DATA

Racial disparities have been identified throughout the criminal justice process, extending beyond interactions with law enforcement to the decision to arrest, charging, bail conditions, plea bargains, sentencing, parole, and probation. Last year, Vermont legislators proposed H.284, requiring the collection of such data in Vermont by state’s attorneys, the courts, and the Department of Corrections, and that the data be made publicly available on a regular basis. This data would help to identify who is in the system, why, and for how long. Much of the data requested in this bill is already being collected, but is currently inaccessible or in formats that make it difficult to analyze.

H.284 requires the following data be collected and reports to be issued from several entities (see the H.284 for more details) with data to include the age, race, gender of the subject.

A. Vermont Judiciary: Data on pre-trial release, sentencing, and court diversions.
B. Commissioner of Public Safety: Arrest data to legal basis for arrest, and results of searches pursuant to an arrest.
C. Department of State's Attorneys and Sheriffs. Data reports on charging and prosecutions, bail conditions, plea bargains, and alternatives to incarceration.
D. Department of Corrections: Data reports on the number and characteristics of the inmate population, to include data on offenses, length of median and longest sentences; solitary confinement, and screening for opioid use, mental health and developmental disabilities; and recidivism rates. Data should include information on where prisoners are housed (in or out of state, private or public prisons, by race, age, gender).

We recommend that the legislature advance this bill in the upcoming session.

https://vsp.vermont.gov/sites/vsp/files/documents/20190701%20OIS%20details.pdf. There is thus precedent in Vermont for collecting data on use of force, and making that data publicly available
V. CONCLUSION

Revisions to the original statue are needed to provide the mechanisms and oversight needed to ensure that traffic stop data are standardized, timely, and of high quality. Moreover, Vermont must go beyond collection of traffic stop data. This memo outlines additional data to be systematically collected on use of force and at various stages of the criminal justice system. The proposed revisions to the statute would help to provide a fuller picture of racial disparities in the criminal justice system.

We encourage readers to look at the websites of other states that serve as models of data collection and reporting. The examples of VSP and BPD are also instructive in identifying good practices in data collection and reporting. Finally, we suggest that the legislation be revised so that responsibility for ensuring access to high quality data and appropriate reporting not be outsourced, but rather, that it be conducted by a state agency (ideally, the AG’s office) with the tools to ensure compliance by law enforcement and additionally, can support under-resourced agencies to fulfill their obligations to report high quality data on a regular basis and to benefit from analysis of their data.

REFERENCES

