CT State Police Traffic Stop Data Audit 2014-21

Report Findings

About the CTRP3 Advisory Board

- Created by the General Assembly in 2012

- 26 members representing law enforcement, state agencies, and community stakeholder groups

- As of June 2023, the board has met 64 times (at least every other month)
  - Subcommittees have collectively met 150+ times

History of Connecticut's Racial Profiling Law

- **1999**: Connecticut enacts The Alvin W. Penn Racial Profiling Prohibition Act (Public Act 99-198)

- **2012**: Connecticut makes major reforms to the law

- **2013**: Requires all 107 police agencies to begin electronically collecting and reporting traffic stop data.

- **2015**: First study was published

- **2016-Present**: 8 statewide studies published annually.

Report Authors and Contributors

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Brief Timeline of Events

- August 2022:
  - Hearst Connecticut Media published an article, *"4 Troopers fabricate hundreds of tickets to gain favor, perks. They avoided serious consequences."*
  - Chairman William R. Dyson contacts CSP Colonel Stavros Mellekas

- September 2022:
  - Project staff reviews IA reports and conducts own review of 4 troopers identified by CSP.
  - Met with CSP and NexGen to understand the records system
  - Reviewed internal agency-wide audit CSP conducted in 2018.

- October 2022:
  - Expanded review to all Troopers assigned to Troop E in 2018

- November 2022:
  - CTRP3 project staff voted to conduct a comprehensive audit of all Troopers and Constables

- December 2022 to June 2023:
  - CTRP3 Staff and Northeastern University conduct a comprehensive audit of all CSP infraction records between 2014 and 2021.

Brief Background

- CSP is divided into 11 troop barracks and three districts.
- 54 towns utilize the resident trooper program.
- 34 towns have constables operating under the supervision of a resident state trooper.

Connecticut State Police Facilities

State of Connecticut
Department of Emergency Services
and Public Protection
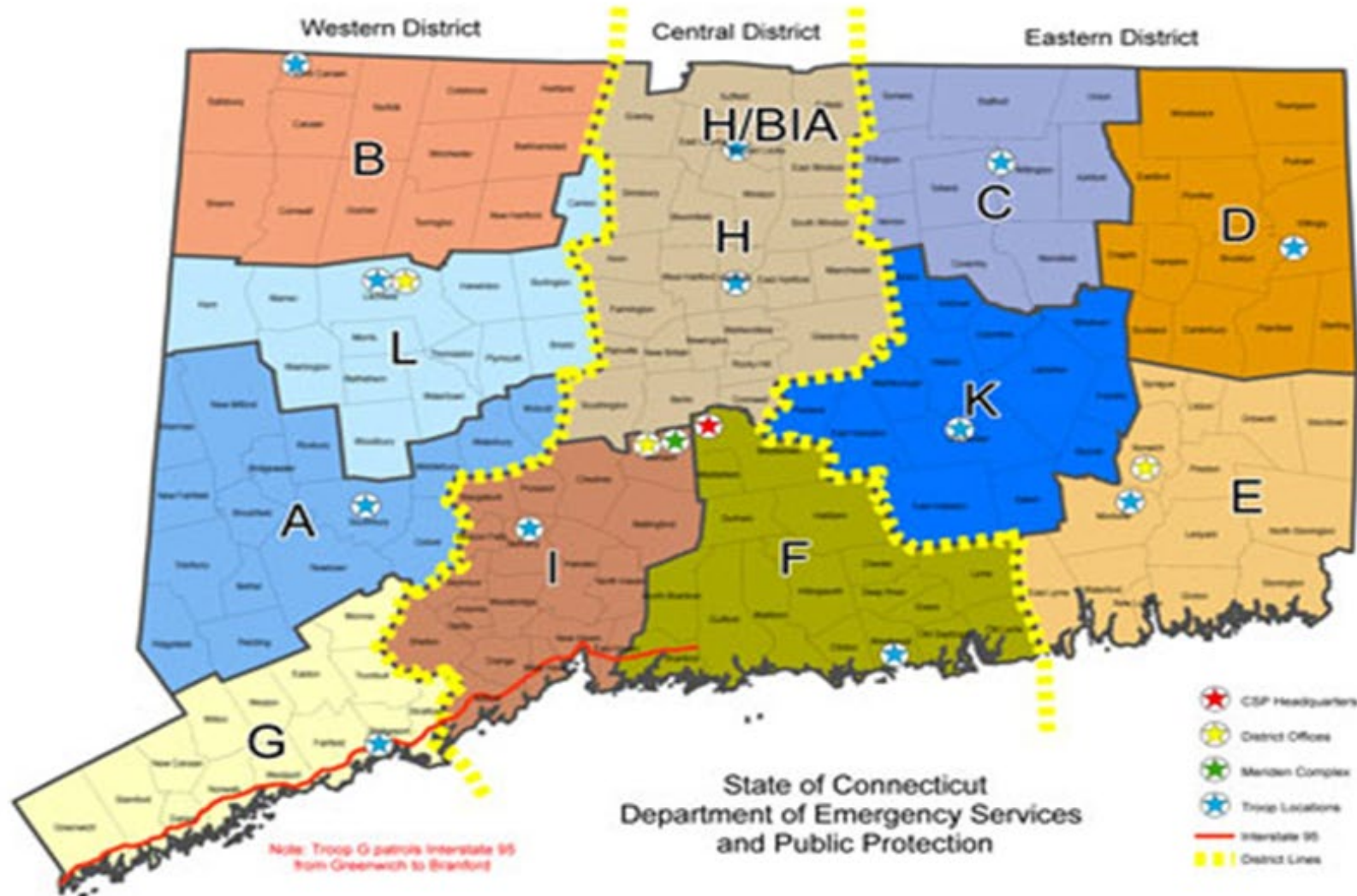
CT State Police Traffic Stop Stat Form- 2000

State of Connecticut
Department of Public Safety
Motor Vehicle Stop Statistics
(circle applicable letters)

DATE:_____TIME:____TROOP/UNIT:__

TOWN:_____BADGE #____

INCIDENT #_____

GENDER: RACE:
M MALE   **W** WHITE
F FEMALE   **B** BLACK
U UNKNOWN   **I** AMERICAN INDIAN/ ALASKAN NATIVE

ETHNICITY: **A** ASIAN/ PACIFIC ISLANDS
H HISPANIC   **U** UNKNOWN
N NON-HISPANIC
U UNKNOWN   AGE:_____

STOP NATURE:
I CRIMINAL INVESTIGATION
V MOTOR VEHICLE VIOLATION
E EQUIPMENT VIOLATION

DISPOSITION:
U UAR
M MOTOR VEHICLE SUMMONS
I INFRACTION TICKET
V VERBAL WARNING
W WRITTEN WARNING   _____
N NO ACTION   STATUTE NUMBER *(IF ANY)*
VEHICLE SEARCHED
Y YES
N NO

DPS-14-C (NEW 01/00)

State of Connecticut
Department of Public Safety
Motor Vehicle Stop Statistics
(circle applicable letters)

DATE:_____TIME:____TROOP/UNIT:__

TOWN:_____BADGE #____

INCIDENT #_____

GENDER: RACE:
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W WRITTEN WARNING   _____
N NO ACTION   STATUTE NUMBER *(IF ANY)*
VEHICLE SEARCHED
Y YES
N NO

DPS-14-C (NEW 01/00)

Brief Background cont.

- Racial Profiling System
  - Officers are required to report at least 18 data points for each traffic stop.
  - Troopers and Constables report records through their RMS system. The system is usually available through the computer terminal in the police cruiser.
- Citation System
  - All infractions are processed by the Centralized Infractions Bureau (CIB).
  - Infractions can be submitted both electronically and on paper.
    - The majority of infractions issued by CSP were done electronically.

Audit Approach

- Primarily focused on infractions reported to the RP and CIB systems.
  - Goal was to match records between the RP system and the Judicial CIB system, which is independent of CSP records management system and the RP system.
- Two audits were conducted and compared for accuracy
  - Researchers at Northeastern University
  - IMRP at UConn
- The report outlines each audit methodology and the process for cleaning data.

Audit Approach

- The audit allowed for common errors to be submitted by CSP personnel.
  - A matched record could have a combination of 12 errors across variables and still be matched.
- At a minimum, all we require was that the trooper ID match in both databases and the date of the infraction be within two days of each other.
  - Robustness checks allowed the ID number to be different as long as there was a match to the ticket book.
  - Additional robustness check allowed for warning in the RP database to match infractions in the CIB database.

Audit Approach

- Accommodations were made for infractions issued as a result of a traffic crash or for a violation that was clearly not the nexus for a traffic stop.

- An additional check was conducted through a simpler descriptive analysis.

Audit Definitions

- **Overreported records:** records found in the RP system and not the Judicial system.
    - This is an indication that the record could be false.
- **Underreported records:** records found in the Judicial system and not the RP system.
    - This is an indication that the record may not have been reported, as required by the Alvin W. Penn Law.

Statement on the Scope of the Audit

"What we are not able to determine is the intention or motivation for submitting these (false or inaccurate) records, nor were we attempting to do so in this audit. For our purposes, whether records were intentionally falsified, resulted from carelessness, or human error is not part of the scope of this audit. All false records, i.e., those that do not accurately reflect real events, affect our ability to analyze the data equally." –Page 54

Trooper Audit Findings (Overreported Records)

- 1,301 Troopers evaluated
- 804,063 infraction records submitted to the racial profiling system
  - 699,005 electronic infractions matched
  - 22,674 non-electronic infractions were a complete match
  - 23,831 had one error
  - 32,587 had multiple errors
    - 17,908 had multiple errors
    - 14,679 matched when criteria were loosened in robustness checks
  - 25,966 unmatched records

Trooper Audit Findings (Overreported Records)

- The range of overreported RP records is between 25,966 (low bound) and 58,553 (high bound)
  - High likelihood that at least 25,966 infraction records are false, but the number could be greater.
- Overreported records were found every year between 2014 and 2021.
- The issue varied between Troops
  - Troops C, F, and K had the largest number of overreported records reported

Overreported RP Records by Year
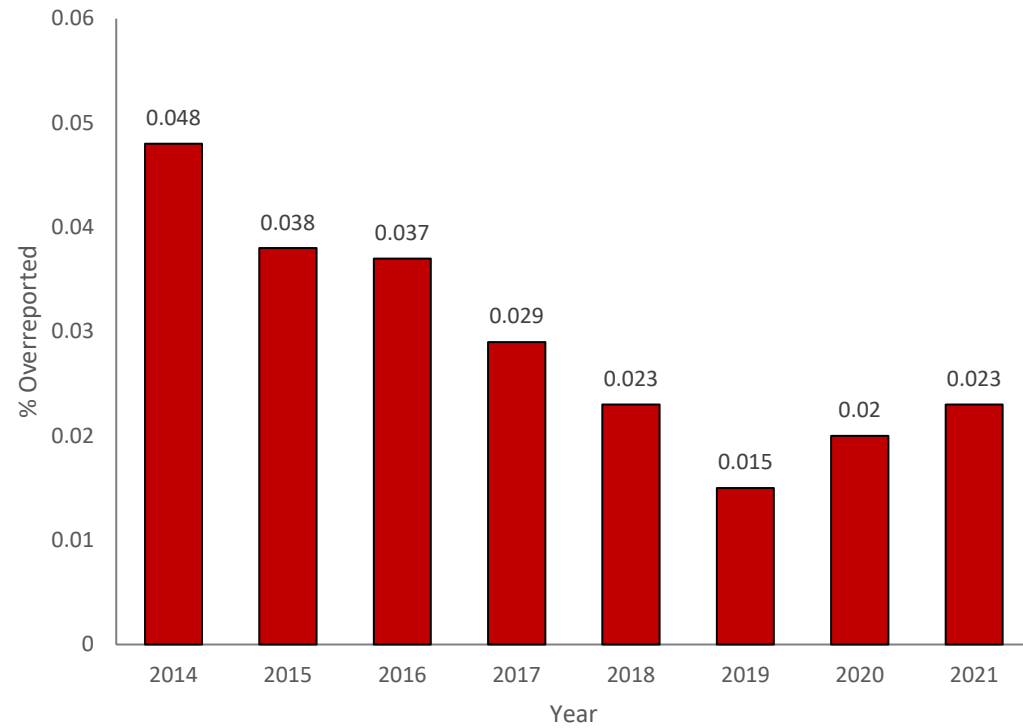
Overreported RP Records by Troop
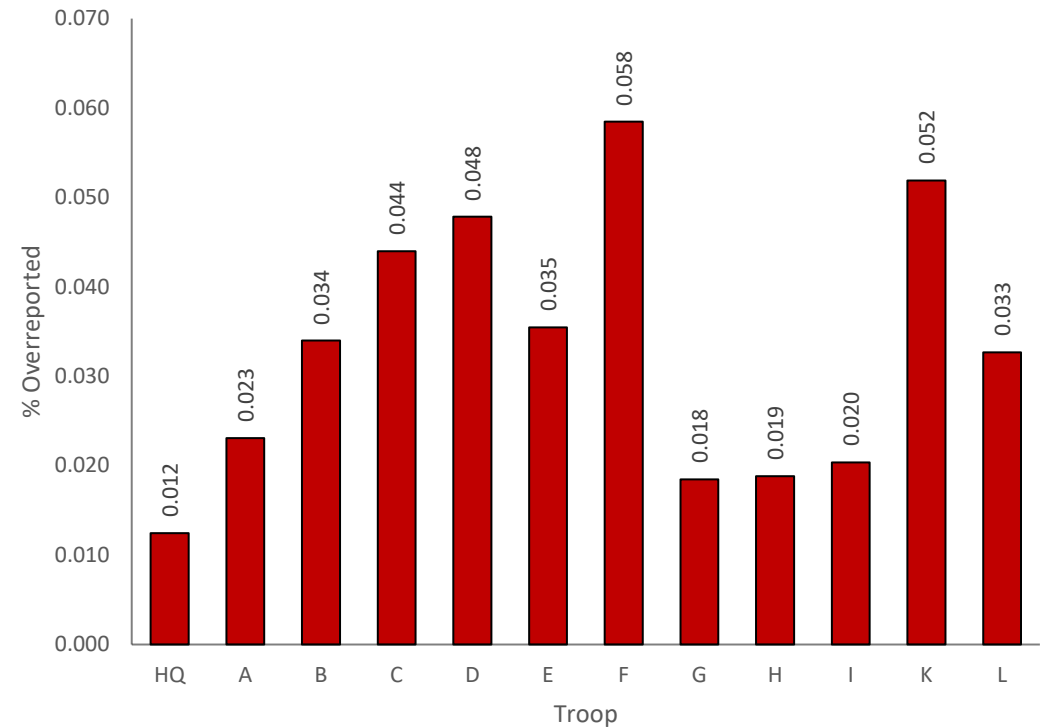
Identifying Troopers with Overreported Records

- How do we decide what should be considered statistically significant?
  - We decided to use 2021 as a counterfactual for identifying natural human error.
    - We assume that 2021 more accurately reflects measurement error and accidental data entry problems.
  - 2021 mean was 1.1 records and the standard deviation was 3.9 records.
  - Identification was determined to be more than two standard deviations from the mean (i.e. more than 8 overreported records).
    - Two SD from mean is commonly used to identify statistical significance. In statistics, 68% of the values lie within one SD, 95% two SD, and 99.7% three SD.

Identifying Troopers with Overreported Records

- Based on identification criteria:
  - 311 troopers or 24% of troopers were identified in any year of the audit.
    - 277 observations involved a trooper with more than 20 unmatched records in a given year (more than 5 SD above the mean).
    - 123 observations involved more than 40 unmatched records in a given year (more than 10 SD above the mean).
  - The three largest single-year discrepancies were from two troopers:
    - One recorded 570 and 498 unmatched records in a single year
    - One recorded 408 unmatched records in a single year
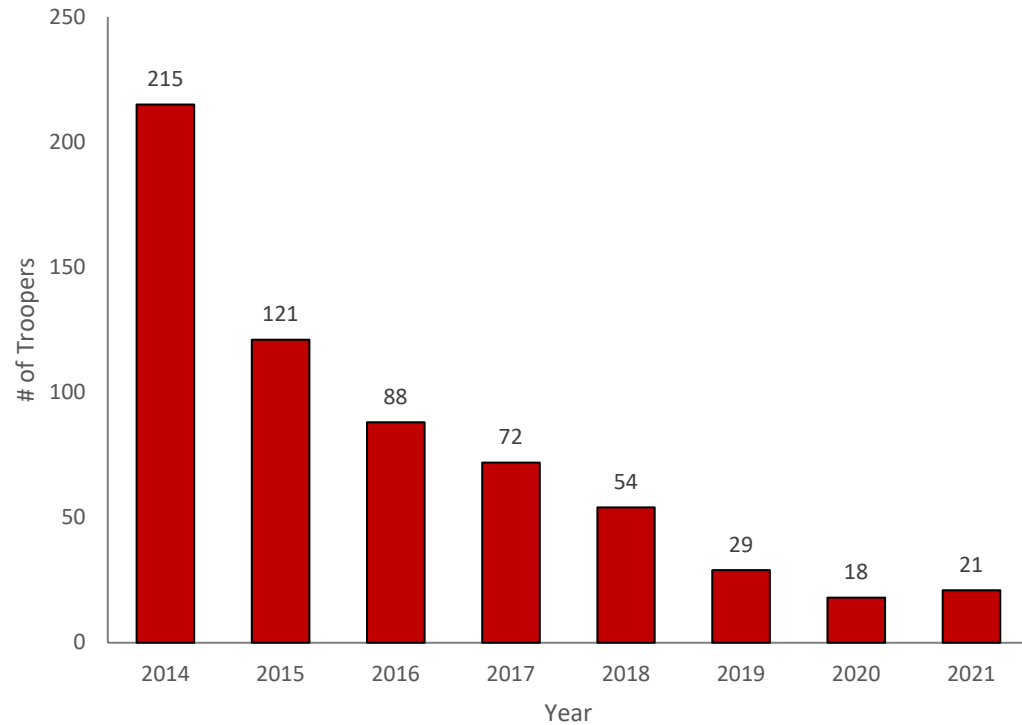
Number of Troopers Identified by Year

Number of Years a Trooper was Identified
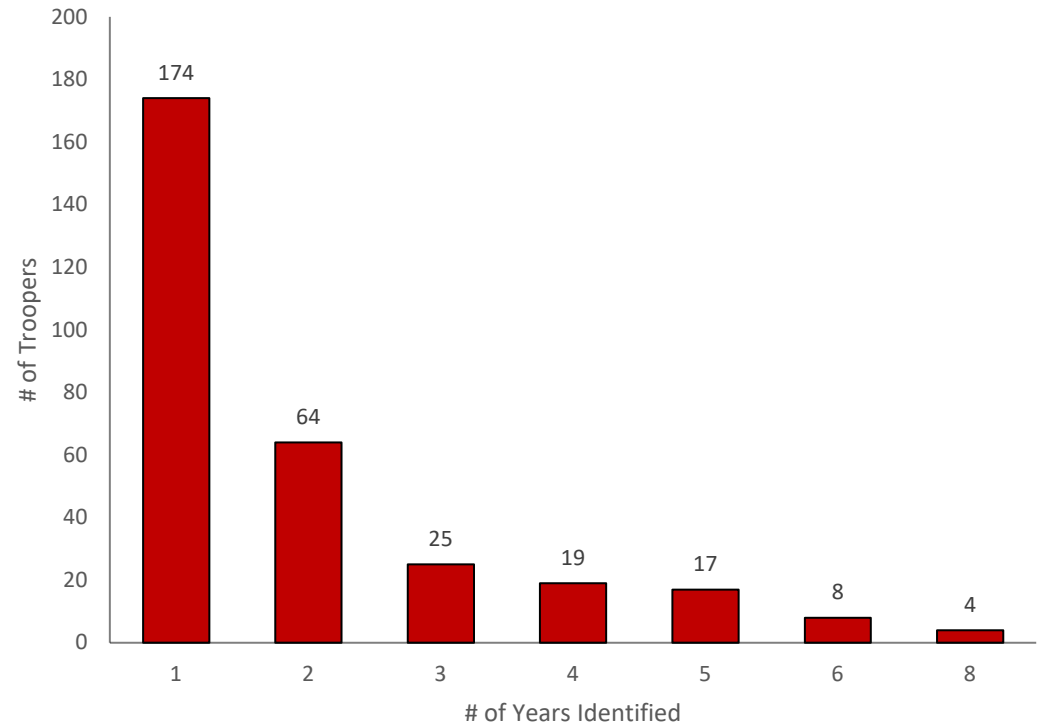
Tightening the Identification Criteria

- The report also evaluates troopers based on the number of unmatched records and the percentage of their overall activity.
  - More than 8 unmatched records and 20% of reported infractions
- Based on combined criteria:
  - 130 Troopers (10%) are identified in a given year

Number of Troopers Identified by Year (Combined Criteria)
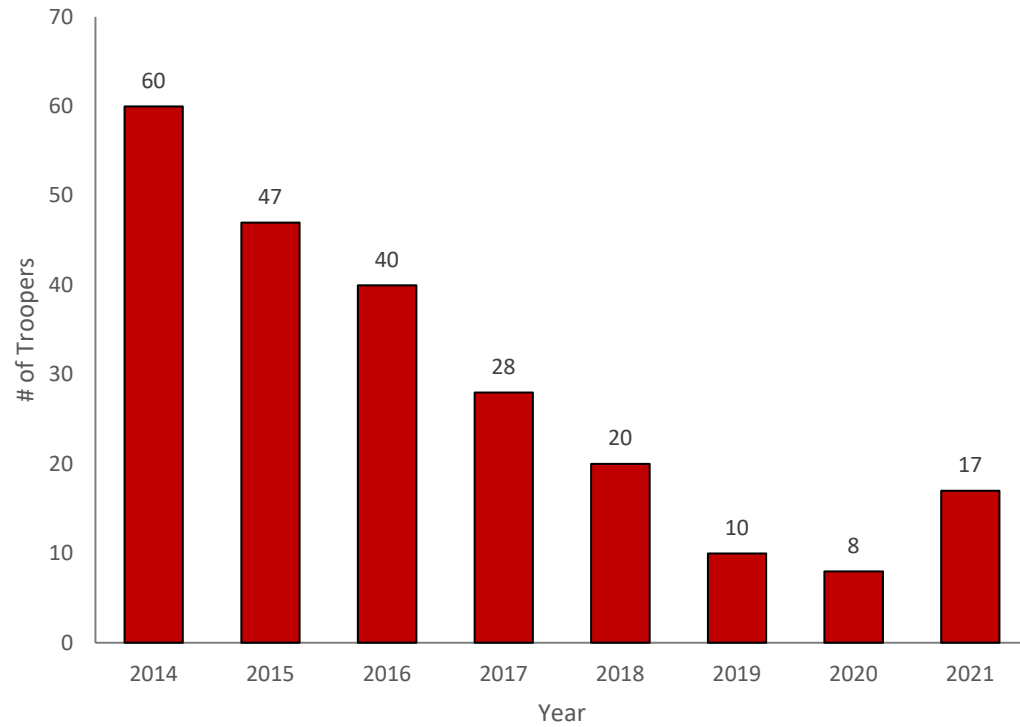
# Number of Years a Trooper was Identified (Combined Criteria)
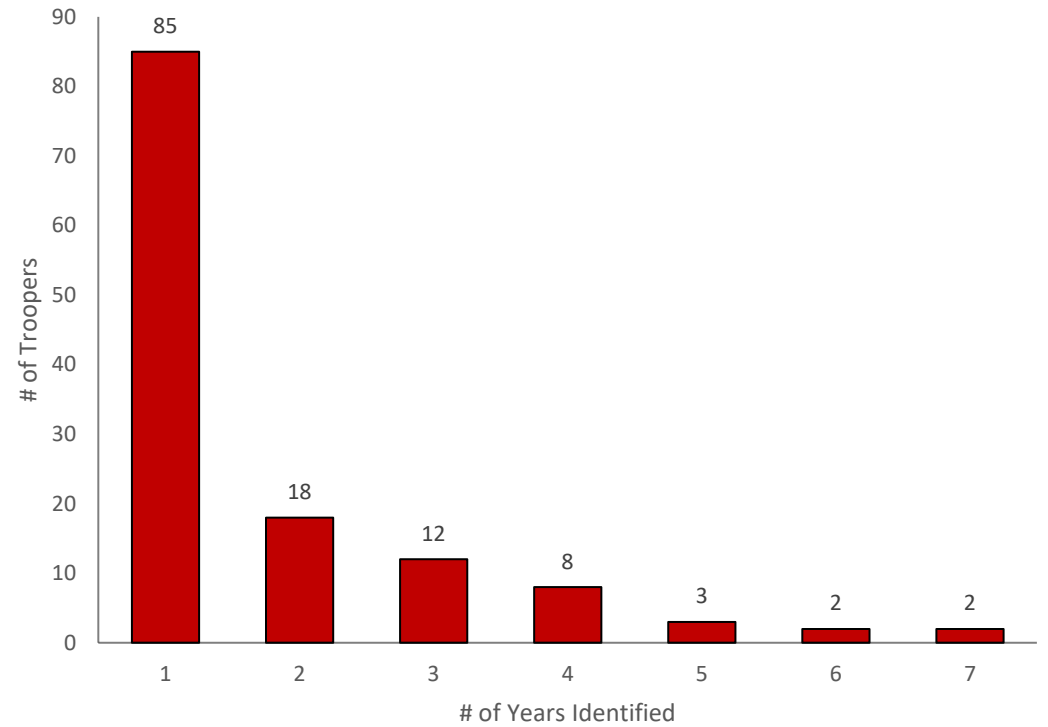
Trooper Audit Findings (Underreported Records)

- 1,301 Troopers Evaluated

- 946,056 infraction records submitted to the CIB
  - Infractions can be issued for a variety of reasons: traffic violation, traffic crash, etc.
  - Troopers inaccurately coded some traffic stops as "Commercial" which did not prompt the completion of a racial profiling record.
  - After accounting for infractions that could be issued for non-traffic stop-related activity and the inaccurate coding of stops as "commercial" we were left with 16,298 underreported records between 2015 and 2021.
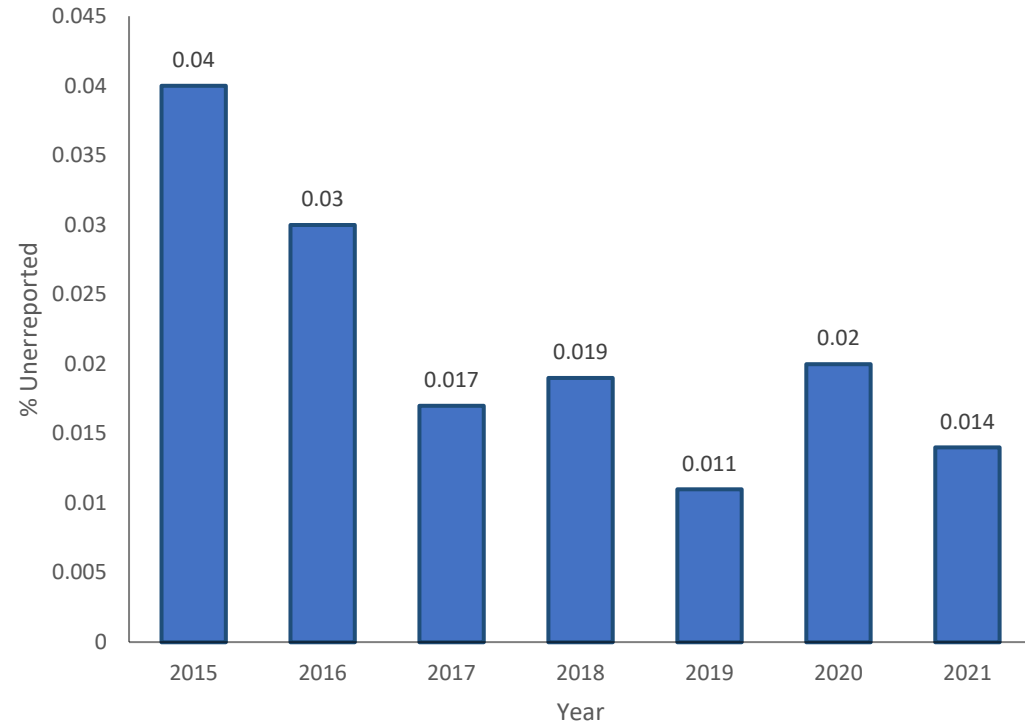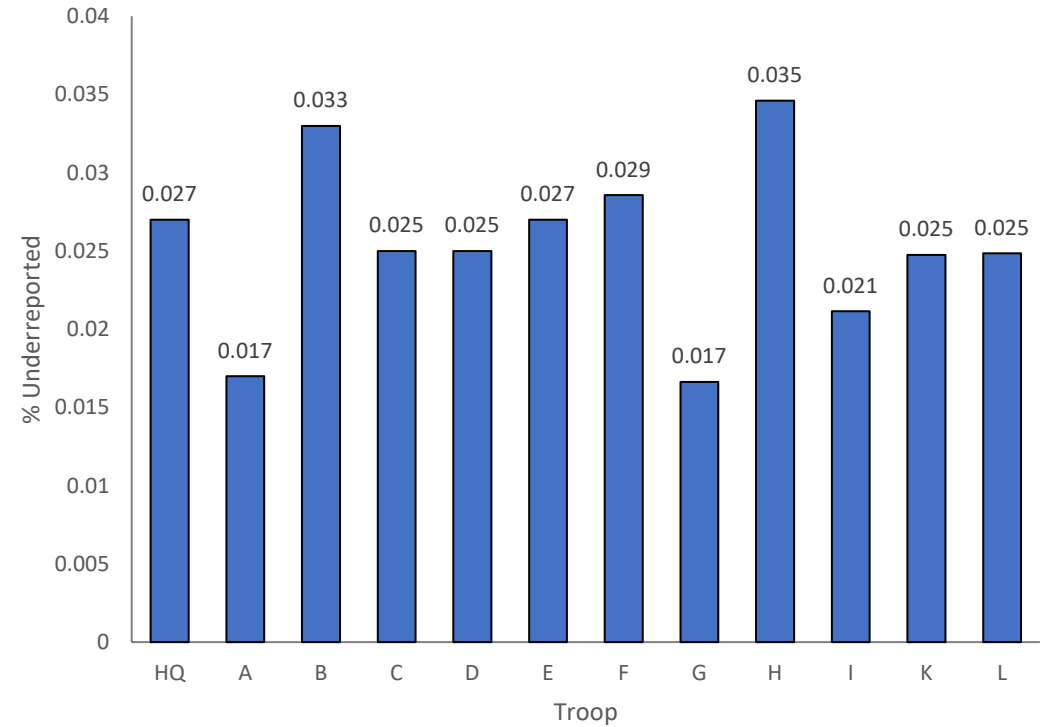
Identifying Troopers with Underreported Records

- Followed the same method as previously outlined:
  - 2021 mean was 0.69 records and the standard deviation was 1.9 records.
  - Identification was determined to be more than two standard deviations from the mean (i.e. more than 4 underreported records).

Identifying Troopers with Underreported Records

- Based on identification criteria:
  - 542 troopers or 42% of troopers were identified in any year of the audit.
    - 106 observations involved more than 25 unmatched records in a given year (more than 13 SD above the mean).
  - The three largest single-year discrepancies were from three troopers:
    - One recorded 161 unmatched records in a single year
    - One recorded 122 unmatched records in a single year
    - One recorded 112 unmatched records in a single year
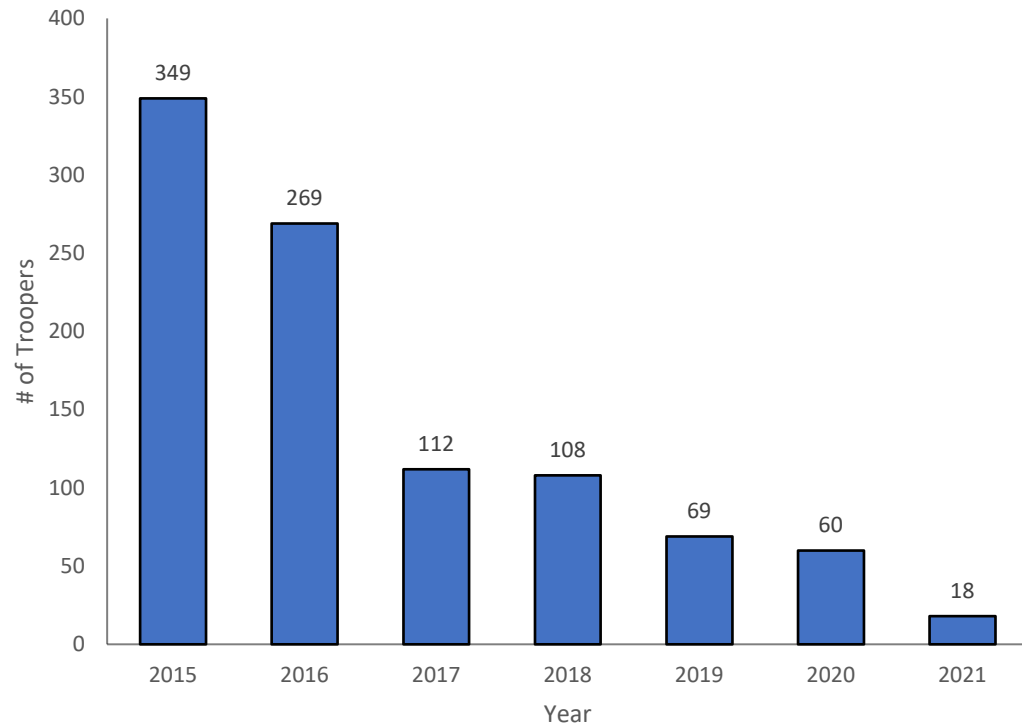
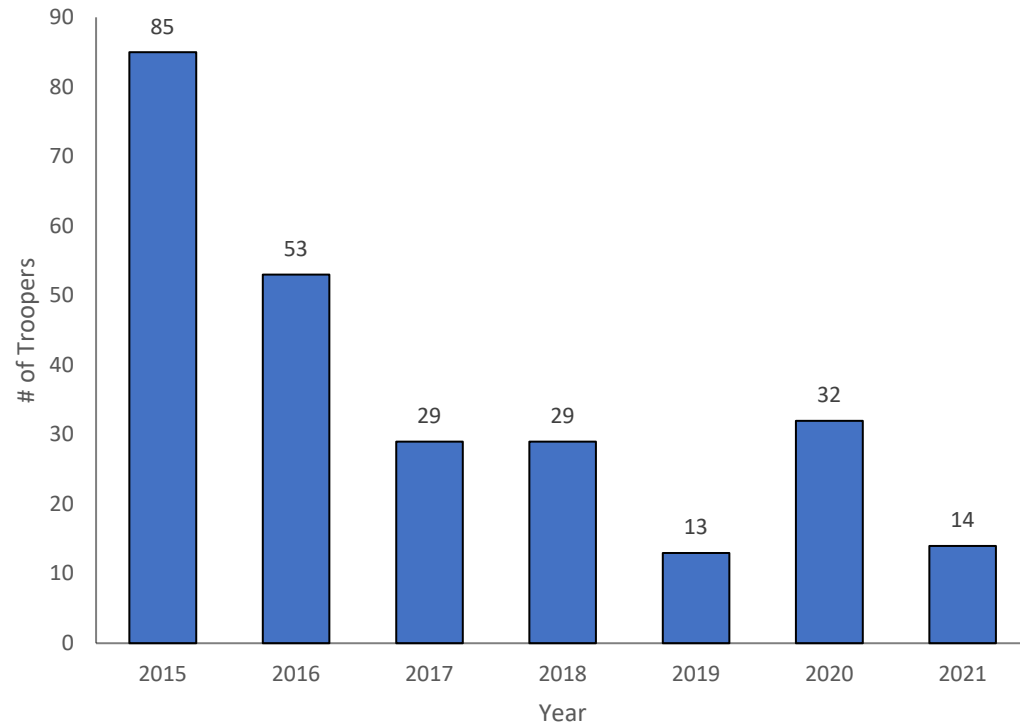**Number of Troopers Identified by Year**

**Number of Years a Trooper was Identified**
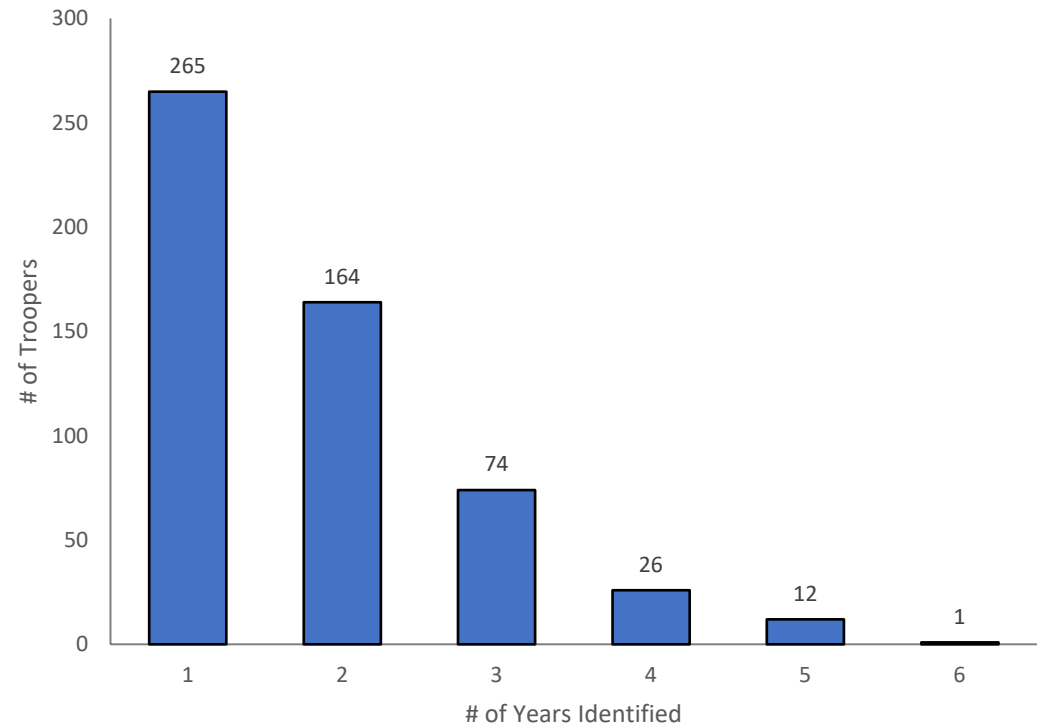
Tightening the Identification Criteria

- The report also evaluates troopers based on the number of unmatched records and the percentage of their overall activity.
  - More than 4 unmatched records and 13% of reported infractions
- Based on combined criteria:
  - 192 Troopers (15%) are identified in a given year

# Number of Troopers Identified by Year (Combined Criteria)

# Number of Years a Trooper was Identified (Combined Criteria)
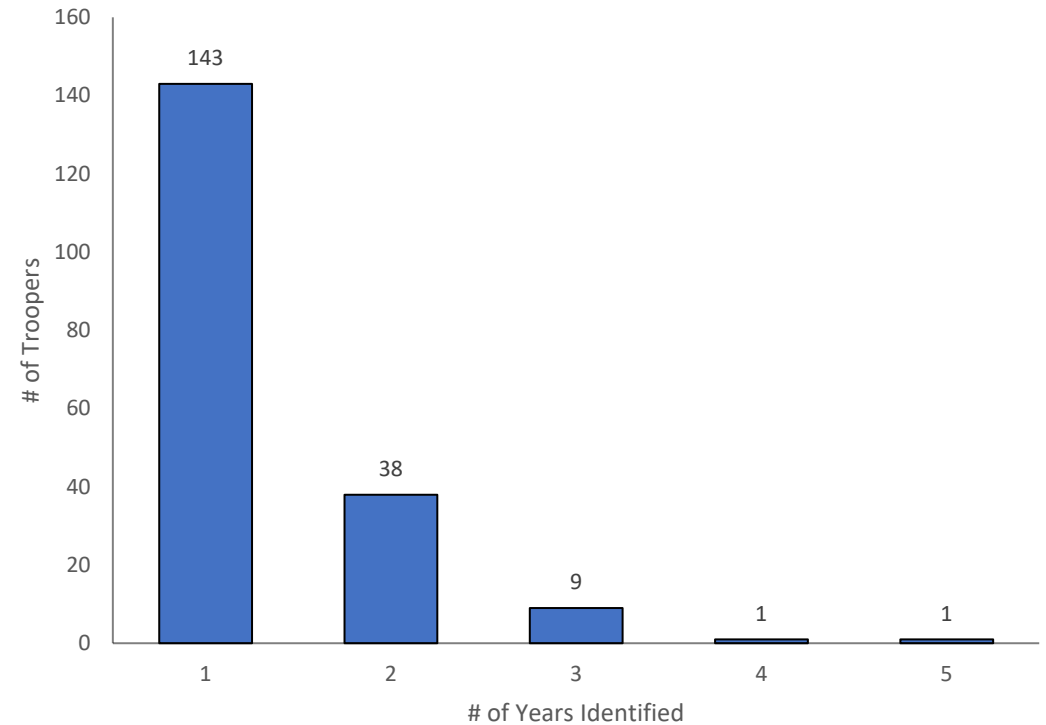
Constable Audit Findings (Overreported Records)

- 373 Constables evaluated
- 38,528 infraction records submitted to the racial profiling system
  - 7,427 unmatched records
- Overreported records were found every year between 2014 and 2021.
- The issue varied between Constable towns
  - Constable towns within Troops A, E, and F had the largest number of overreported records reported.
 - Montville (Troop E) had the largest number of overreported infractions
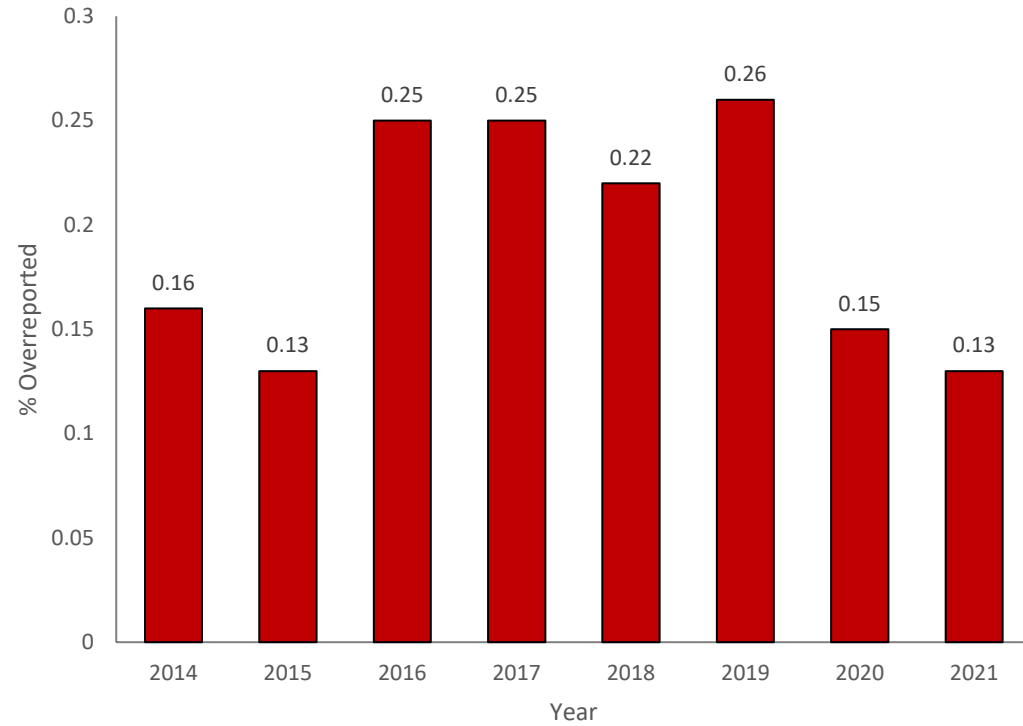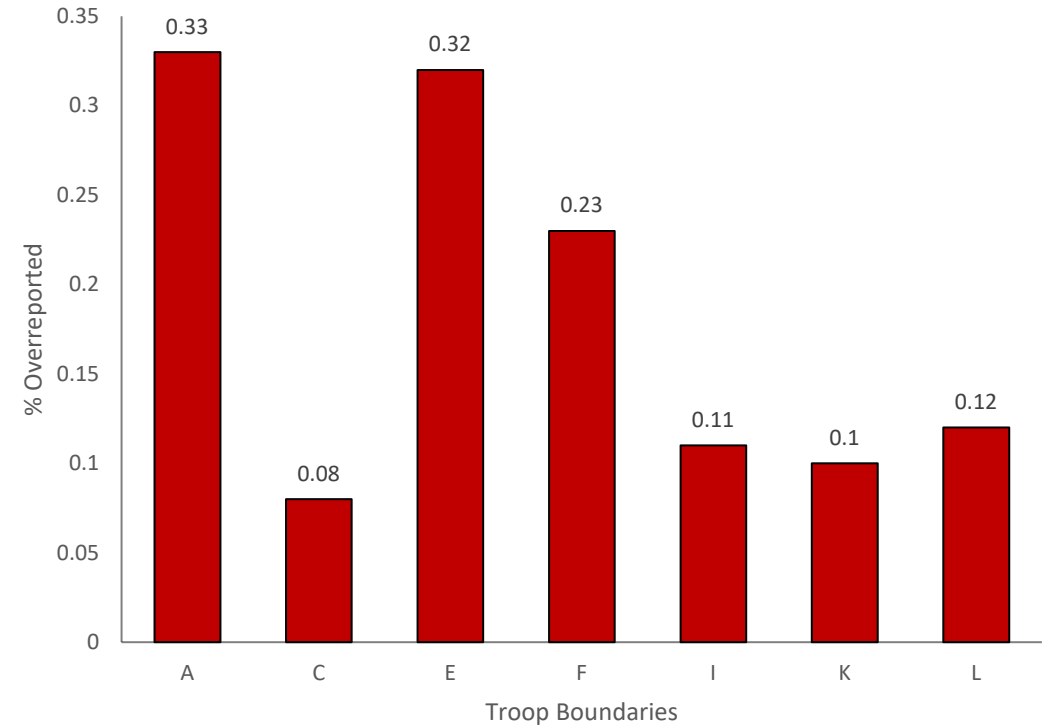
Identifying Constables with Overreported Records

- Followed the same method as previously outlined:
  - 2021 mean was 2.21 records and the standard deviation was 5.85 records.
  - Identification was determined to be more than two standard deviations from the mean (i.e. more than 11 overreported records).
- Based on identification criteria:
  - 76 constables or 20% of constables were identified in any year of the audit.
    - The majority involved more than 18 unmatched records (3 SD from the mean).
    - 22 constables had more than 71 unmatched records in a given year (more than 12 SD from the mean).

Number of Constables Identified by Year
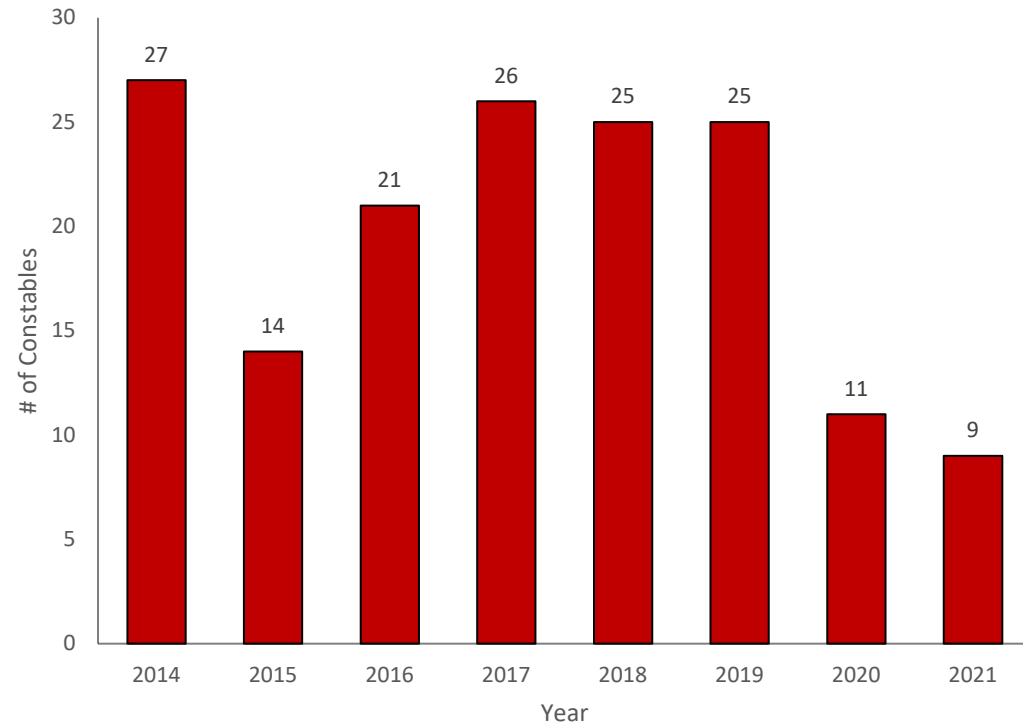
Number of Years a Constables was Identified
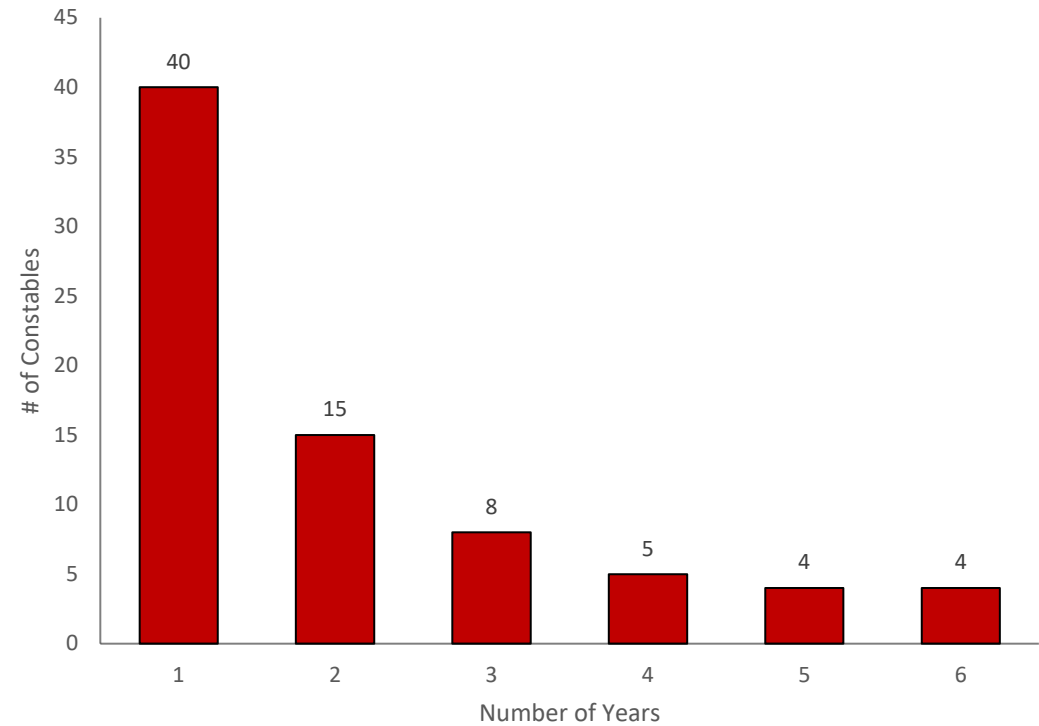
Tightening the Identification Criteria

- The report also evaluates constables based on the number of unmatched records and the percentage of their overall activity.
  - More than 11 unmatched records and 36.7% of reported infractions
- Based on combined criteria:
  - 63 Constables (17%) are identified in a given year

Number of Constables Identified by Year (Combined Criteria)
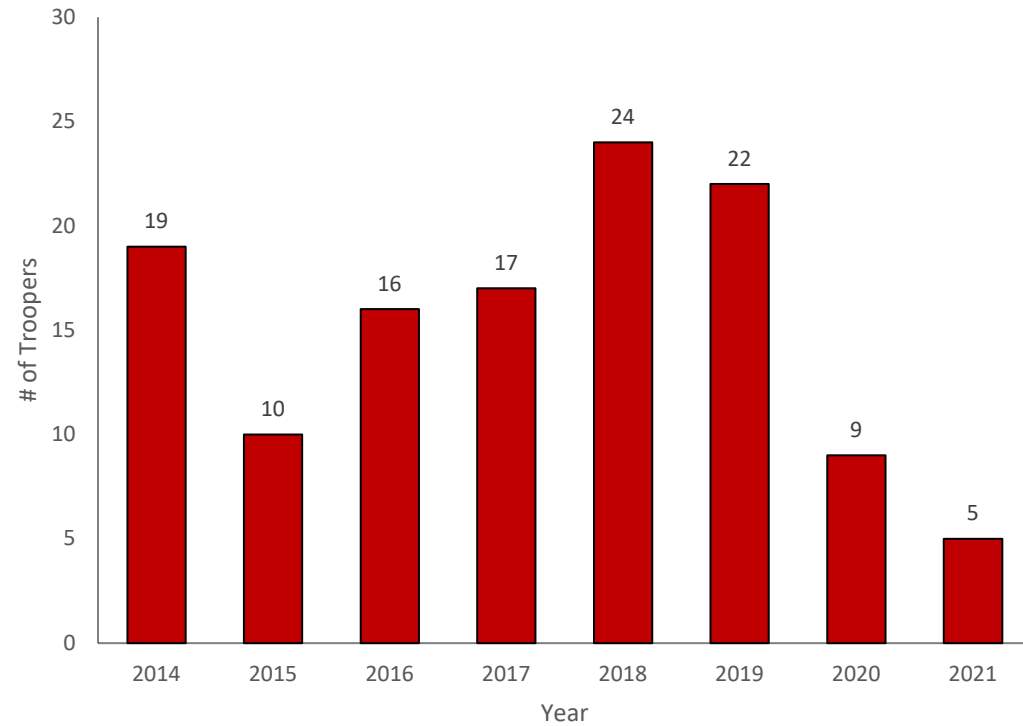
Number of Years a Constable was Identified (Combined Criteria)
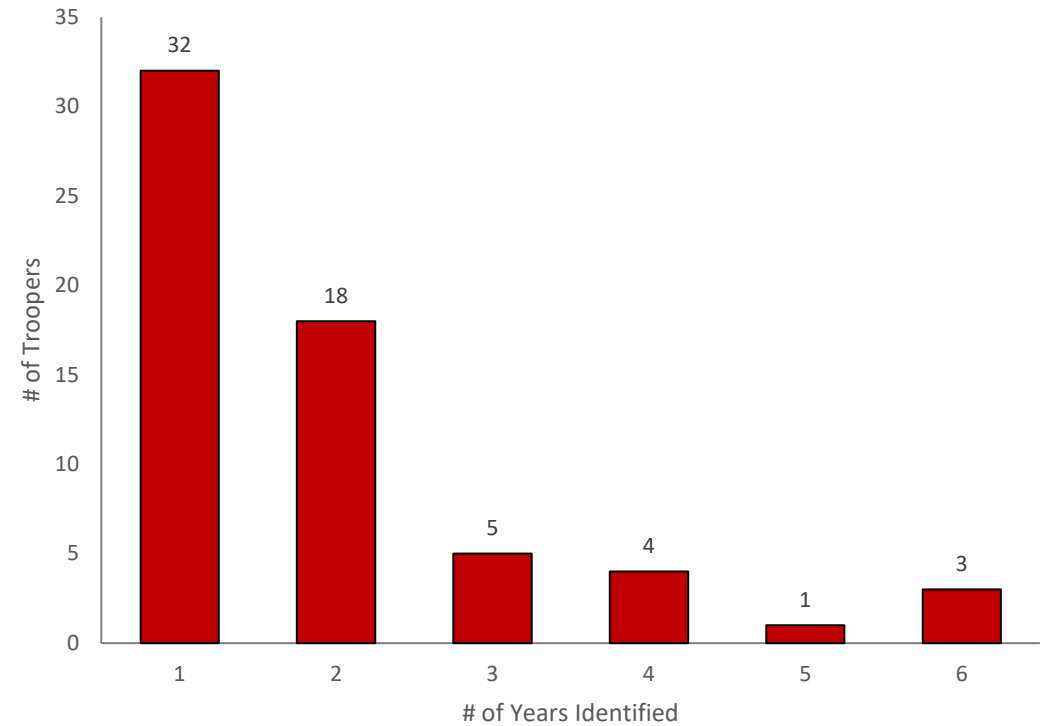
Constable Audit Findings (Underreported Records)

- 38,420 infraction records submitted to the CIB
  - 7,319 infractions were issued resulting from a traffic stop or crash
    - Could not determine which infractions resulted from a crash
  - At least some of these records likely should have been submitted to the racial profiling database.
    - We determined that approximately 3,093 infractions should have been reported to the RP system.
  - Due to challenges in assessing underreported records for constables, we do not attempt to evaluate this for each individual constable.

Impact on Racial Profiling Studies

- Overreported RP records were more likely to be reported as White non-Hispanic
  - 9.7 percentage points more likely to be White non-Hispanic
  - -4.4 percentage points less likely to be reported as Black non-Hispanic
  - -4.6 percentage points less likely to be reported as Hispanic
- Underreported records are less likely to be reported as White non-Hispanic
  - -6.7 percentage points less likely to be White non-Hispanic
  - -2.7 percentage points less likely to be reported as Black non-Hispanic
  - 1.4 percentage points more likely to be reported as Hispanic
  - 5.54 percentage points more likely to be reported as some other race

Trooper Discrepancies Impact on Racial Profiling Reports

• The analysis suggests that the demographics recorded in the unmatched and potentially false racial profiling records have most likely had a substantive and statistically significant impact on statistics and empirical tests related to the share of minority motorists stopped.

• Previous studies generally identified racial and ethnic disparities in CSP data. Based on the audit, we believe the disparity would have been greater if accurate data was reported.

Constable Discrepancies Impact on Racial Profiling Reports

- Unfortunately, a significant limitation of the audit of constables was being able to fully understand the impact that overreported and underreported records had on the overall analysis conducted of racial and ethnic disparities.

  - Historically, constables do not contribute more than 4.6% of all infractions reported under the umbrella of State Police. The low volume of traffic stops conducted by constables likely means that any discrepancies only had a small impact, if any, on our overall annual analysis.

Conclusions

1. The analysis identifies a significant number of unsubstantiated infraction records that were submitted to the racial profiling database by both troopers and constables during all years of the audit. Based on the analysis, we have a high level of confidence that false and inaccurate records were submitted to the racial profiling database.
   a. The most significant impact of false and inaccurate records occurred between 2014 and 2018. Although the number of unsubstantiated records has declined, the problem still persisted through 2021.
2. Some infractions reported to the Centralized Infractions Bureau appear to have met the criteria for submission to the racial profiling system but were not reported. This is a violation of the reporting requirements of the Alvin W. Penn Act.

Conclusions

3. The analysis found that the demographics recorded for records where there is a high level of confidence that the information is false or inaccurate had a substantive and statistically significant impact on our previously published analyses.
   a. Overreported records with evidence of false or inaccurate data were more likely to be reported as White drivers and less likely to be reported as Black or Hispanic drivers.
   b. Records that were underreported by troopers were more likely to be Hispanic or some other race and less likely to be White.

Conclusions

- The report suggests a historical pattern and practice among some troopers and constables of submitting infraction records that were likely false or inaccurate to the racial profiling system.

- The issue appears to have been more prominent in Troop F in the Central District and throughout all the troops in the Eastern District.

- There were 311 troopers and 76 constables with a statistically significant number of unsubstantiated records in at least one year of the audit. When using the more restrictive identification criteria that include both the number of unmatched records and the percentage of unmatched records there were 130 troopers and 63 constables identified in at least one year of the audit.

Recommendations

1. The serious nature of submitting false or misleading traffic stop records can have consequences beyond the Alvin W. Penn law. CSP should immediately reinforce to all current troopers and constables the consequences that exist under state law for those found to be submitting unsubstantiated or fictitious records intended to mislead either supervisors or the racial profiling data review system.

2. Timely supervisory review of records submitted by troopers is the key to assuring the continuing accuracy of traffic stop records. The expectations for troop commanders and supervisory staff must be reviewed regarding the importance of record accuracy for all those under their supervision. Supervisors must ensure that all personnel meet agency standards for the accurate reporting of information.

3. An independent record of all traffic stops communicated to dispatch should be retained in the dispatch log.

Recommendations

4. The CSP command staff should reevaluate how case numbers are issued.

5. Whenever troopers or constables enter a traffic stop into the system that results in an infraction, the infraction ticket number should also be part of the data entered in the NexGen records management system.

6. Provide clear guidance and training to troopers regarding the proper reporting of stops made involving a commercial vehicle.

7. The advisory board should consider having CTRP3 staff conduct an annual audit of CSP data for at least the next three calendar years.

Question Raised Since Report Release

1. Could the unmatched records be the result of additional errors?
   - Yes, however, the researchers' used extremely conservative matching criteria
     - Records could not match across all data fields, except date and badge number.
     - Robustness checks allowed for errors in date and badge number

Comparison to CSP IA Investigation Method

Trooper	False Infractions Records CSP Identified during IA Investigation	Unmatched Records using CTRP3 Method	Difference
Trooper 1	338	70	268
Trooper 2	94	70	24
Trooper 3	155	53	102

Questions?

- The full report will be posted at www.ctrp3.org at the conclusion of the meeting.