



**Fourteenth Report to the State of Maryland  
Under Transportation Article, § 25-113  
2017 Race Based Traffic Stop Data Analysis**

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# Introduction

In 2001, the Maryland Transportation Article, § 25-113 (TR, § 25-113) required the collection of data on every law eligible traffic stop in Maryland in an effort to provide information on the pervasiveness of racial profiling.<sup>1</sup> Pursuant to TR, § 25-113, the Maryland Police and Correctional Training Commission, in consultation with the Maryland Statistical Analysis Center (The Center), developed four guiding documents that consisted of (1) a model recording and reporting format; (2) a model policy for law enforcement agencies to address race/ethnicity-based traffic stops; (3) guidelines for law enforcement agencies to manage, counsel, and train officers who collect traffic stop data; and (4) a model log for law enforcement agencies to record traffic stop data.<sup>2</sup>

TR, § 25-113 also mandates state funding for the collection and analysis of data; however, no funds have been received by law enforcement agencies or the The Center for the reporting of traffic stop records. Regardless, and since 2002, law enforcement agencies within the State of Maryland have complied with TR, § 25-113. Prior reports are accessible to the public and may be viewed at the website below:

<http://goccp.maryland.gov/reports-publications/law-enforcement-reports/traffic-stop-data/>.

In 2011, the Governor's Office of Crime Control & Prevention awarded grant funds to the Maryland State Police to create a modification to the E-TIX (Electronic Traffic Information Exchange) interface to include a data entry system for law enforcement agencies to submit traffic stop records electronically. Through the use of free DeltaPlus software, law enforcement agencies submit data on individual traffic stops which are stored by the Maryland State Police, which maintains a repository on all traffic stop data in the state. Law enforcement agencies have been submitting data through Delta+ since 2013.

In 2015, Senate Bill 413, *Vehicle Laws - Race-Based Traffic Stops, Policy and Reporting Requirements*, required The Center to continue to collect and analyze traffic stop data to provide information on the pervasiveness of racial profiling. Pursuant to this legislation, The Center is required to submit a report to the Governor and General Assembly by September 1st each year.

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<sup>1</sup> Racial profiling refers to the practice of constructing a set of characteristics or behaviors based on race and using that set of characteristics to decide whether an individual might be guilty of some crime.

<sup>2</sup> Previously known as the Maryland Justice Analysis Center, the Maryland Statistical Analysis Center resided within the University of Maryland until 2006. Pursuant to Executive Order 01.01.2007.05, the Maryland Statistical Analysis Center transferred within the Governor's Office of Crime Control & Prevention in 2007.

## Methodology

The *2017 Race Based Traffic Stop Data Analysis* report presents aggregate data on all law eligible traffic stops, within the State of Maryland, that law enforcement agencies reported to The Center for the 2017 calendar year (January 1, 2017 through December 31, 2017). The original data was submitted in Microsoft Excel and subsequently merged, standardized, and analyzed using a widely accepted software package and used by researchers and social scientists.

The analysis of this report includes traffic stop data from 126 law enforcement agencies (n = 852,799 traffic stops). A full list of the law enforcement agencies that submitted traffic stop data can be found in the [Appendix: Agency Breakdown of Traffic Stops](#). The units of analysis for this report consist of all law eligible traffic stops that occurred in a Maryland jurisdiction between January 1, 2017 and December 31, 2017. To that end, *law eligible traffic stops* are defined as all stops made by law enforcement agencies that have the authority to issue traffic violations. TR, § 25-113 excludes traffic stops that result from checkpoints or roadblocks, stops of multiple vehicles after an accident or emergency, the use of radar, laser, vascar technology, and license plate readers. Such stops are excluded because officer discretion is unlikely to play a role and therefore any differences observed between races and minority populations would not be the result of systematic differences in treatment due to race/ethnicity.

## Required Data Elements

Pursuant to Senate Bill 413 (2015), law enforcement agencies are required to report the following data elements:

Data Information	Units of Measure
Gender of driver	Male, Female
Race of driver	Asian, Black, Hispanic, Other, White <sup>3</sup>
Driver date of birth	Date of birth
Agency that made the stop	Agency name
Time of day the stop occurred	0000 - 0800, 0800 - 1600, 1600 - 2400
Length of stop (in minutes)	0 - 5, 5 - 15, 15 - 30, 30 minutes or longer
Vehicle registration	In state, out of state
Driver county of residence	County
Reason for the stop	Traffic article
Type of search (if one was conducted)	Person, property, both person and property
Reason for the search (if one was conducted)	Consensual, incident to arrest, exigent circumstances, probable cause, K-9, other
Outcome of search (if one was conducted) (what was seized?)	Contraband, property, both contraband and property, nothing seized
Outcome of the traffic stop	Warning, Safety Equipment Repair Order (SERO), citation, arrest <sup>4</sup>
Arrest reason (if an arrest occurred)	Based on the search, based on the stop, other

<sup>3</sup> The demographic information of the driver in the traffic stop was determined using the officer's observations, and in some cases, supplemented with information from Maryland's Motor Vehicle Administration (MVA). The statute requires the use of the following: Asian, Black, White, Hispanic and Other; whereas, the MVA uses the following: Black or African American, White, Asian, Native Hawaiian or Other Pacific Islander, American Indian, and Other.

<sup>4</sup> The categories of this variable are mutually exclusive and were coded to reflect the most severe outcome of the traffic stop. Therefore, if the traffic stop resulted in both a citation and an arrest, only arrest was coded.

## Results

Between January 1, 2017 and December 31, 2017, law enforcement agencies reported **852,799** law eligible traffic stops. **Table 1. Race/Ethnicity of Driver in Traffic Stops** displays the overall breakdown of the race/ethnicity of drivers involved in traffic stops. Information on race/ethnicity was missing or could not be correctly classified in 7,528 traffic stops. As illustrated below, the majority of drivers who were stopped during a traffic stop were White (44.2%) or Black (40.1%). Also, 8.3% of all drivers stopped were Hispanic, and 2.7% were Asian. In comparison, the U.S. Census Bureau 2017 data estimates that Maryland’s population consisted of 50.9% non-Hispanic Whites, 30.8% Black or African Americans (alone), 6.7% Asians (alone), and 10.1% Hispanics. An additional 4.0% of the drivers stopped in Maryland were classified as “other” which consisted of American Indian and Alaskan Native, Native Hawaiian and Other Pacific Islander, or two or more races, which would be reported in the Motor Vehicle Administration (MVA) data as Other.<sup>5</sup>

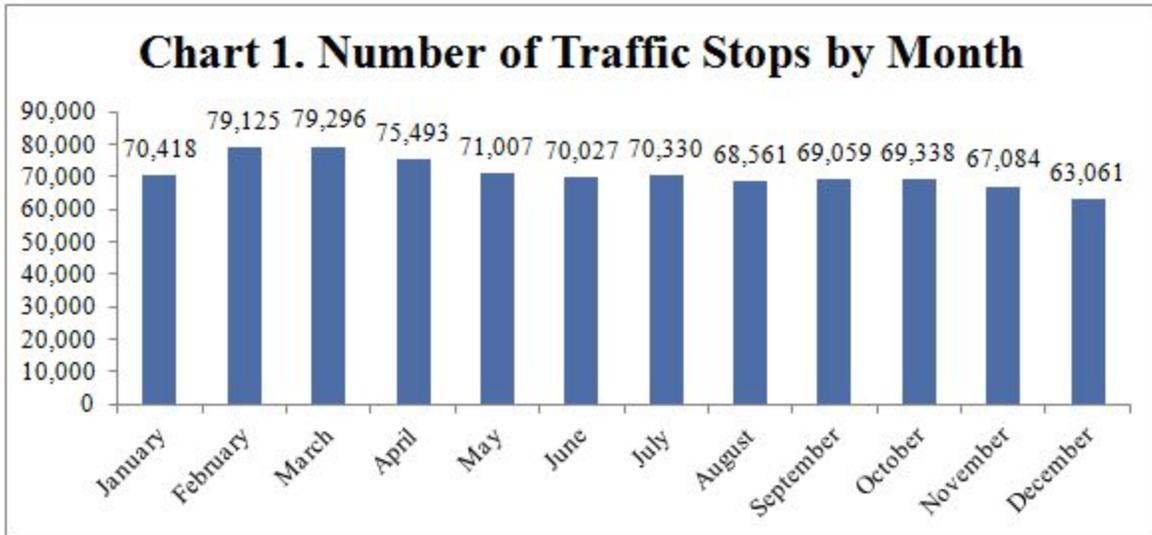
Table 1. Race/Ethnicity of Driver in Traffic Stops		
	Frequency	Percent
Asian	22,654	2.7%
Black	341,737	40.1%
Hispanic	70,391	8.3%
Other	33,886	4.0%
White	376,603	44.2%
Missing/Unknown	7,528	0.9%
<b>Total</b>	<b>852,799</b>	<b>100.0%</b>

**Table 2. Gender of Driver in Traffic Stops** displays the breakdown of the gender for all drivers involved in traffic stops. Male drivers (62.9%) were stopped more frequently than female drivers (35.7%). Unknown/missing gender data was found in 12,092 traffic stops (1.4%).

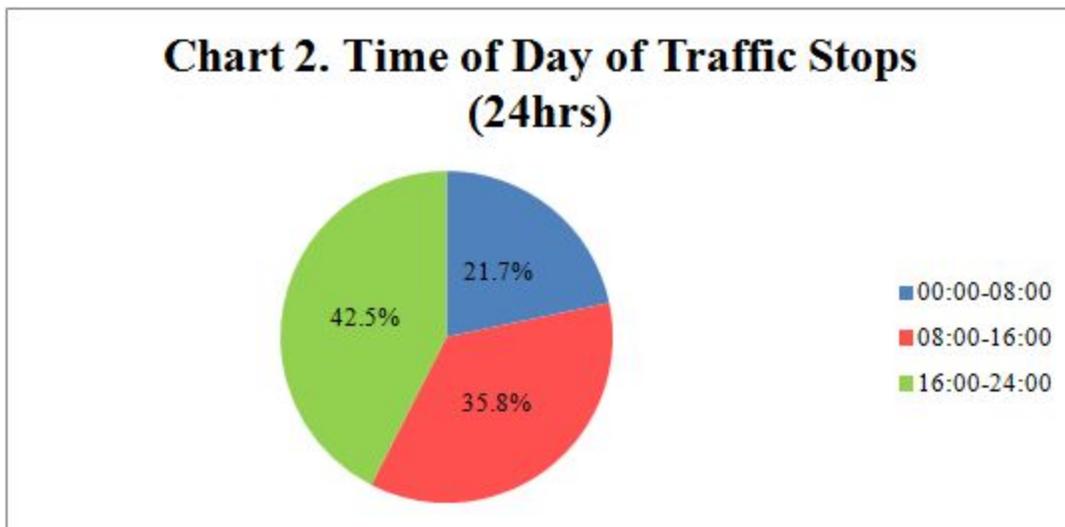
Table 2. Gender of Driver in Traffic Stops		
	Frequency	Percent
Female	304,461	35.7%
Male	536,246	62.9%
Unknown/Missing	12,092	1.4%
<b>Total</b>	<b>852,799</b>	<b>100.0%</b>

<sup>5</sup> Population data is taken from U.S. Census Bureau, Population Estimates Program (PEP). The numbers are predicted from the 2010 Census of Population, and updated as of July 1, 2018. They can be accessed at <https://www.census.gov/quickfacts/fact/table/md/PST045217>.

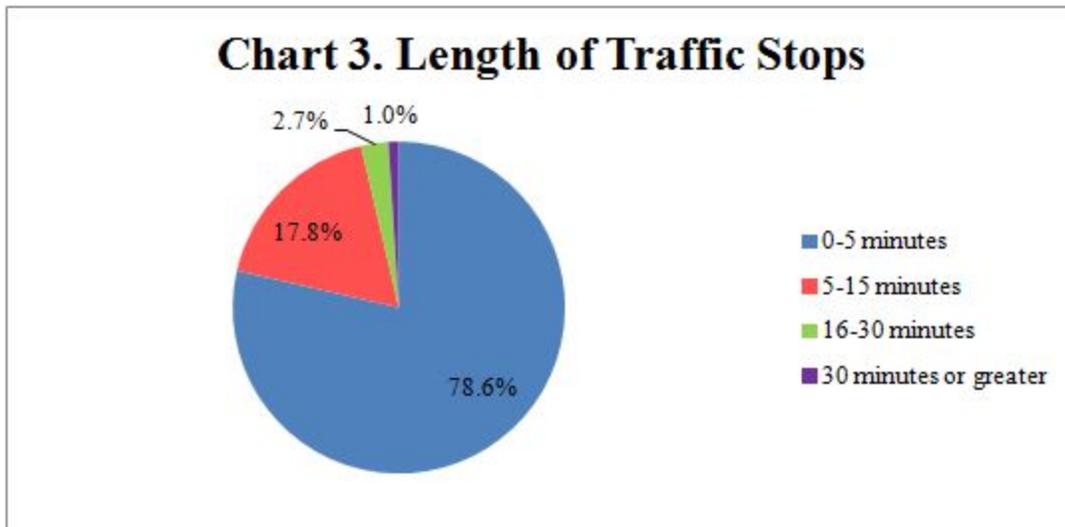
**Chart 1. Number of Traffic Stops by Month** illustrates that the highest number of stops occurred in March (79,296, 9.2%), whereas, the fewest number of stops occurred in December (63,061, 7.3%).



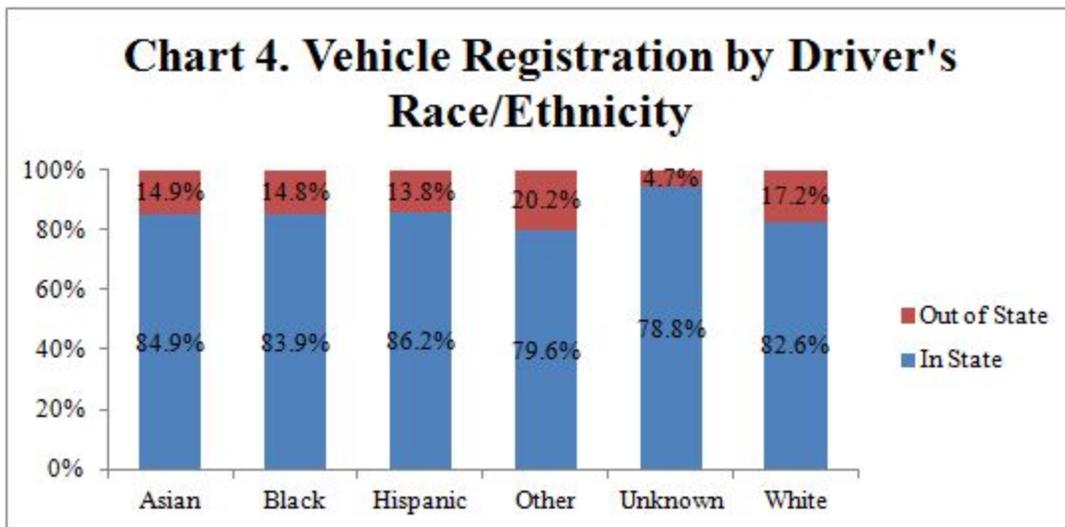
The data in **Chart 2. Time of Day of Traffic Stops (24hrs)** displays statistics on the time that each traffic stop occurred. The most common time interval of traffic stops occurred between the hours of 4:00 p.m. and 12:00 a.m. (42.5%), followed by 8:00 a.m. and 4:00 p.m. (35.8%), and 12:00 a.m. and 8:00 a.m. (21.7%).



As illustrated in **Chart 3. Length of Traffic Stops**, the majority of traffic stops (78.6%) lasted between zero and five minutes, and over 96% of stops lasted 15 minutes or less. A total of 1% of stops lasted more than 30 minutes.



The registration of the vehicles stopped (i.e., in-state or out-of-state), stratified by the race/ethnicity of the driver is displayed in **Chart 4. Vehicle Registration by Driver's Race/Ethnicity**. There was little variation by race/ethnicity as roughly 83% of all drivers had in-state registration at the time of the stop. There was also little variance by gender for the percent of drivers registered in-state at the time of the stop (82.0% for males, 85.5% for females).



As illustrated on the following pages, **Table 3. Primary Initial Reason for Stop by Driver’s Race/Ethnicity and Gender (Males)** and **Table 4. Primary Initial Reason for Stop by Driver’s Race/Ethnicity and Gender (Females)** display the initial reason for the traffic stop provided by the officer and stratified by the driver’s race/ethnicity, for males and females respectively. The data is broken by the total number of stops and the percent of all stops. The totals do not equal all traffic stops due to missing gender data in 12,092 cases.<sup>6</sup> Overall, patterns were similar across race/ethnicity and gender with comparable frequencies for the primary initial stop reason with a few exceptions. Males of all races/ethnicities were stopped most frequently for traffic stop violations characterized as “other” ranging from 17.0% for Asian males to 23.4% for Black males.<sup>7</sup> Black males were stopped more frequently for registration violations (15.0%) than the other races/ethnicities. Asian males were stopped more frequently for signs, signals, and marking offenses (14.7%). Black males and White males were equally the most likely to be stopped for an equipment violation (21.9% of all stops respectively).

Similar trends were also found with female drivers who were stopped most frequently for “other” traffic violations which ranged from 15.4% for Asian females to 24.3% for Black females. Black females were the most likely to be stopped for registration violations (15.3%). Asian females were stopped more frequently for signs, signals, and marking offenses (15.9%), and along with all other races, were stopped the most frequently for moving violations (11.3% and 12.3%). Black females and White females were the most likely to be stopped for an equipment violation (21.1% and 20.1% of all stops respectively).

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<sup>6</sup> Traffic stop titles in this analysis include the following:

- Title 13: Registration
- Title 16: Drivers License
- Title 21.11: Miscellaneous rules
- Title 21.13: Operation of motorcycles
- Title 21.14: Operation of vehicles on certain toll facilities
- Title 21.2: Traffic signs, signals, and markings
- Title 21.3: Driving on right side of roadway, overtaking and passing
- Title 21.4: Right of way
- Title 21.5: Pedestrians rights and rules
- Title 21.6: Turning and starting, signals and stopping
- Title 21.7: Special stops required
- Title 21.8: Speed restrictions
- Title 21.9: Reckless, negligent or impaired driving; fleeing or eluding police
- Title 22: Equipment of vehicles
- Title 24: Size, weight, and load
- Code 99: All other stops

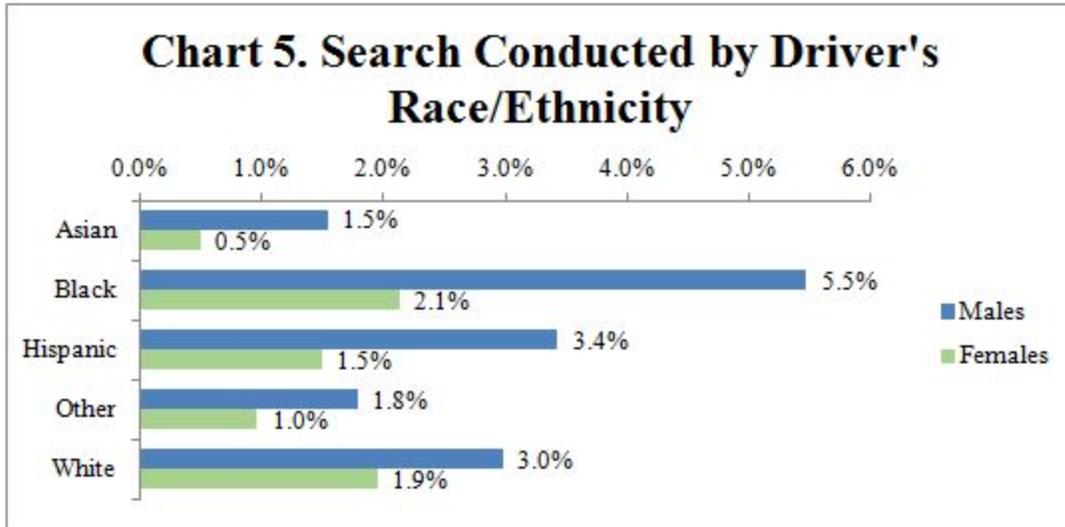
<sup>7</sup> “All other stops” consists of various violations including, but not limited to: anti-theft laws, security, vehicle rentals, accident reports and vehicle inspections.

Table 3. Primary Initial Reason for Stop by Driver's Race/Ethnicity and Gender (Males)

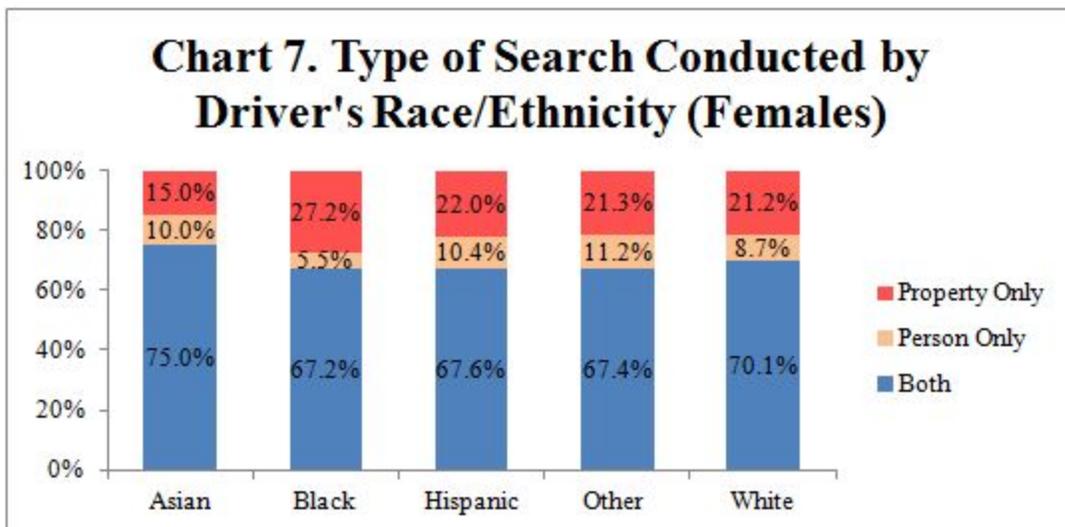
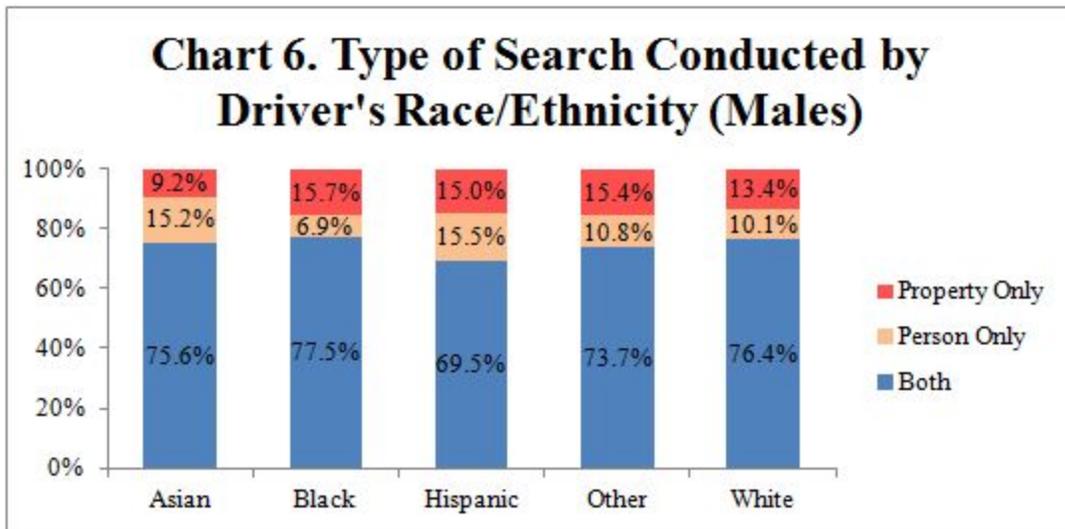
Stop Reason	Asian	Black	Hispanic	Other	White	Unknown /Missing	Total
Registration	1,592 11.1%	31,696 15.0%	5,763 10.8%	2,755 11.5%	28,009 12.2%	7 0.5%	<b>69,822</b> <b>13.06%</b>
Driver's License	135 0.9%	5,295 2.5%	1,488 2.8%	268 1.1%	3,053 1.3%	7 0.5%	<b>10,246</b> <b>1.92%</b>
Miscellaneous Rules	1,104 7.7%	12,254 5.8%	4,412 8.3%	2,154 9.0%	21,889 9.5%	5 0.3%	<b>41,818</b> <b>7.8%</b>
Operation of Motorcycle	6 0.0%	161 0.1%	23 0.0%	13 0.0%	281 0.1%	0 0.0%	<b>484</b> <b>0.1%</b>
Tolls	17 0.1%	386 0.2%	109 0.2%	70 0.3%	467 0.2%	1 0.1%	<b>1,050</b> <b>0.2%</b>
Signs, Signals, and Markings	2,109 14.7%	19,896 9.4%	6,969 13.1%	3,163 13.2%	23,095 10.0%	19 1.3%	<b>55,251</b> <b>10.3%</b>
Right side of roadway	813 5.7%	10,094 4.8%	2,950 5.6%	1,438 6.0%	12,260 5.3%	9 0.6%	<b>27,564</b> <b>5.2%</b>
Right of way	576 4.0%	4,177 2.0%	1,497 2.8%	842 3.5%	5,833 2.5%	4 0.3%	<b>12,929</b> <b>2.4%</b>
Pedestrians rights and rules	91 0.6%	567 0.3%	239 0.5%	97 0.4%	1,025 0.5%	0 0.0%	<b>2,019</b> <b>0.4%</b>
Turning, Signals, and Stopping	126 0.9%	1,795 0.9%	587 1.1%	159 0.7%	1,863 0.8%	1 0.1%	<b>4,531</b> <b>0.9%</b>
Special Stops	1,041 7.3%	7,320 3.5%	2,455 4.6%	1,038 4.3%	12,049 5.2%	4 0.3%	<b>23,907</b> <b>4.5%</b>
Speed Restrictions	1,886 13.2%	19,825 9.4%	5,078 9.6%	3,138 13.1%	25,498 11.1%	19 1.3%	<b>55,444</b> <b>10.4%</b>
Reckless or Impaired Driving; Fleeing or Eluding Police	118 0.8%	1,891 0.9%	775 1.5%	197 0.8%	3,076 1.3%	1 0.1%	<b>6,058</b> <b>1.1%</b>
Equipment	2,270 15.8%	46,354 21.9%	9,695 18.2%	4,287 17.9%	50,297 21.2%	402 27.2%	<b>11,305</b> <b>21.2%</b>
Size, Weight, and Load	13 0.1%	308 0.2%	165 0.3%	50 0.2%	410 0.2%	0 0.0%	<b>946</b> <b>0.2%</b>
All Other Violations	2,432 17.0%	49,563 23.4%	10,945 20.6%	4,272 17.8%	41,012 17.8%	998 67.6%	<b>109,222</b> <b>20.4%</b>
<b>Total Percent</b>	<b>14,329</b> <b>100.0%</b>	<b>211,582</b> <b>100.0%</b>	<b>53,150</b> <b>100.0%</b>	<b>23,941</b> <b>100.0%</b>	<b>230,117</b> <b>100.0%</b>	<b>1,477</b> <b>100.0%</b>	<b>534,596</b> <b>100.0%</b>

Table 4. Primary Initial Reason for Stop by Driver's Race/Ethnicity and Gender (Females)							
Stop Reason	Asian	Black	Hispanic	Other	White	Unknown /Missing	Total
Registration	853 10.4%	18,979 15.3%	1,691 10.0%	1,112 11.8%	17,004 11.8%	4 0.6%	<b>39,643</b> <b>13.1%</b>
Driver's License	56 0.7%	2,215 1.8%	365 2.2%	106 1.1%	1,747 1.2%	3 0.5%	<b>4,492</b> <b>1.5%</b>
Miscellaneous Rules	756 9.2%	9,064 7.3%	1,679 10.0%	1,100 11.7%	17,672 12.3%	1 0.2%	<b>30,272</b> <b>10.0%</b>
Operation of Motorcycle	0 0.0%	13 0.0%	3 0.0%	0 0.0%	30 0.0%	0 0.0%	<b>46</b> <b>0.0%</b>
Tolls	14 0.2%	168 0.1%	14 0.1%	12 0.1%	149 0.1%	0 0.0%	<b>357</b> <b>0.1%</b>
Signs, Signals, and Markings	1,308 15.9%	11,160 9.0%	2,440 14.5%	1,146 12.2%	13,952 9.7%	4 0.6%	<b>30,010</b> <b>10.0%</b>
Right side of roadway	503 6.1%	5,478 4.4%	870 5.2%	515 5.5%	6,752 4.7%	2 0.3%	<b>14,120</b> <b>4.7%</b>
Right of way	382 4.7%	2,897 2.3%	626 3.7%	396 4.2%	4,205 2.9%	0 0.0%	<b>8,506</b> <b>2.8%</b>
Pedestrians rights and rules	57 0.7%	322 0.3%	111 0.7%	62 0.7%	556 0.4%	0 0.0%	<b>1,108</b> <b>0.4%</b>
Turning, Signals, and Stopping	68 0.8%	869 0.7%	151 0.9%	63 0.7%	1,044 0.7%	0 0.0%	<b>2,195</b> <b>0.7%</b>
Special Stops	700 8.5%	4,975 4.0%	1,137 6.7%	534 5.7%	9,060 6.3%	0 0.0%	<b>16,406</b> <b>5.4%</b>
Speed Restrictions	926 11.3%	11,141 9.0%	1,512 9.0%	1,161 12.3%	15,190 10.5%	7 1.1%	<b>29,937</b> <b>10.0%</b>
Reckless or Impaired Driving; Fleeing or Eluding Police	57 0.7%	634 0.5%	120 0.7%	55 0.6%	1,250 0.9%	1 0.2%	<b>2,117</b> <b>0.7%</b>
Equipment	1,258 15.3%	26,199 21.1%	2,932 17.4%	1,536 16.3%	29,077 20.2%	211 34.0%	<b>61,213</b> <b>20.2%</b>
Size, Weight, and Load	5 0.1%	12 0.0%	7 0.0%	0 0.0%	27 0.0%	0 0.0%	<b>51</b> <b>0.0%</b>
All Other Violations	1,261 15.4%	30,161 24.3%	3,207 19.0%	1,634 17.3%	26,503 18.4%	388 62.5%	<b>63,154</b> <b>20.8%</b>
<b>Total</b>	<b>8,204</b>	<b>124,287</b>	<b>16,865</b>	<b>9,432</b>	<b>144,218</b>	<b>621</b>	<b>303,627</b>
<b>Percent</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Chart 5. Search Conducted by Driver's Race/Ethnicity** displays the breakdown of the total number of searches conducted which was stratified by the race/ethnicity of the driver, and stratified by gender. There were 24,928 conducted searches with a valid search type, representing 2.9% of all traffic stops. Males were twice as likely to be searched as females (3.6% compared to 1.8%). Black males (5.5%) were significantly more likely to be searched than any other race. Females were searched at relatively similar rates across race/ethnicity (0.5% - 2.1%).

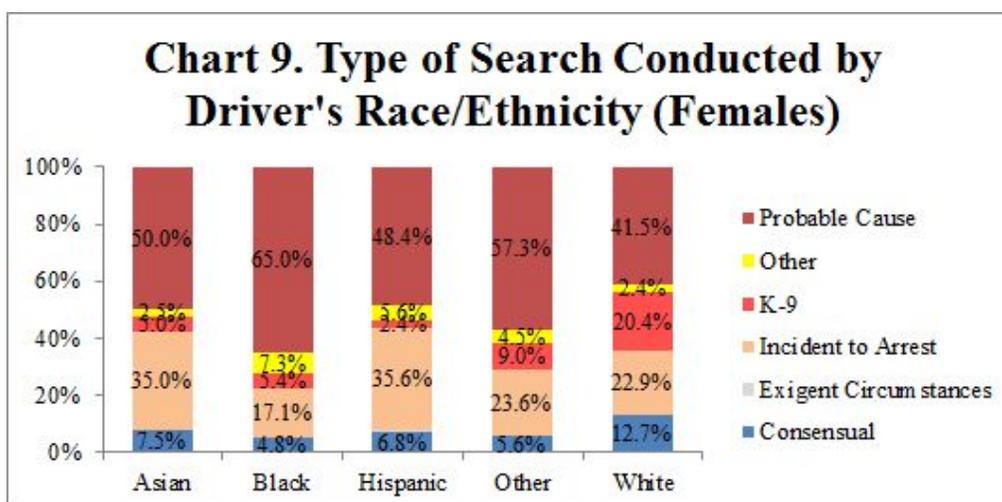
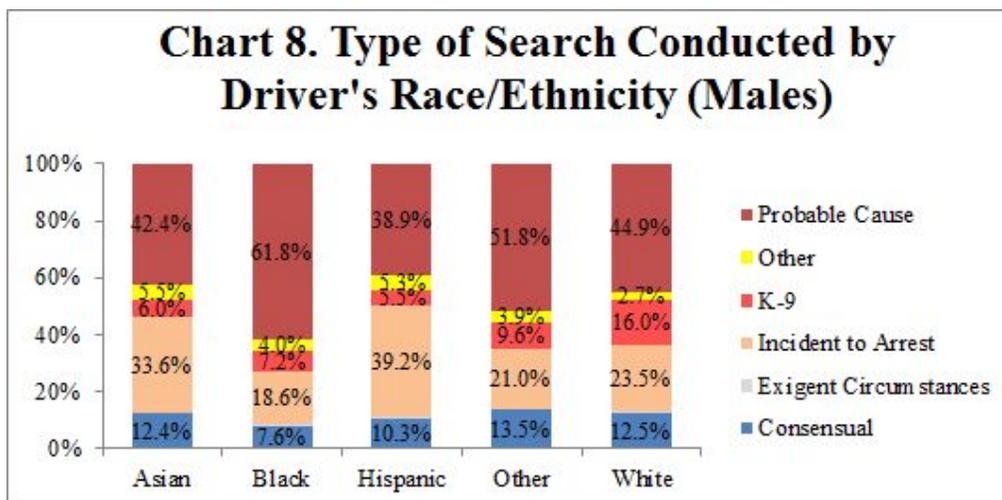


**Chart 6. Type of Search Conducted by Driver's Race/Ethnicity (Males)** and **Chart 7. Type of Search Conducted by Driver's Race/Ethnicity (Females)** display the types of searches conducted (i.e., person or property) with regards to the race/ethnicity of the driver and disaggregated by gender. Of the 24,928 searches conducted in 2017, the majority for males and females of all races/ethnicities, consisted of both person and property (69.5% - 77.5% for males and 67.2% - 75.0% for females). Asian males and Hispanic males were the most likely to have only their person searched (15.2% and 15.5% respectively). Asian males were less likely than other races/ethnicities to have just their property searched (9.2%). Black females were the least likely to have only their person searched (5.5%) and were the most likely to have only their property searched (27.2%).



**Chart 8. Type of Search Conducted by Driver's Race/Ethnicity (Males)** and **Chart 9. Type of Search Conducted by Driver's Race/Ethnicity (Females)** display the reason for the search of the driver's person or property, provided by the officer. Search incident to arrest (SIR), probable cause, driver's consent, and K-9 searches were the four most prevalent search reasons for males and females across all race/ethnicities. Black males and Other males were more likely to be searched due to probable cause (61.8% and 51.8%). Black males were the least likely to have a consensual search conducted (7.6%). Hispanic males and Asian males were the most likely to be searched incident to arrest (39.2% and 33.6%). White males were more likely to have a K-9 search conducted than all other races/ethnicities (16.0%).

The search reason trends varied slightly for females. Black females were the most likely to be searched due to probable cause (65.0%), and along with other non-white females, were the least likely to have a consensual search (4.8% and 5.6%, respectively). Hispanic females were the most likely to be searched incident to arrest (35.6%), followed by Asian females (35.0%). White females were the most likely to have a consensual search (12.7%) and a K-9 search (20.4%).



**Table 5. Search Disposition by Driver’s Race/Ethnicity (Males)** and **Table 6. Search Disposition by Driver’s Race/Ethnicity (Females)** display the search disposition stratified by race/ethnicity and collapsed across gender. The data is broken by the total number of searches and the percent of all searches. Of those searches where a search disposition was included, the majority of males and females had nothing confiscated (58.3% and 56.2%, respectively). Of those searches where a disposition was reported, Hispanic males (25.2%) were the least likely to have contraband seized, but the most likely to have property seized (9.6%). White males (37.8%) were the most likely to have contraband only seized.

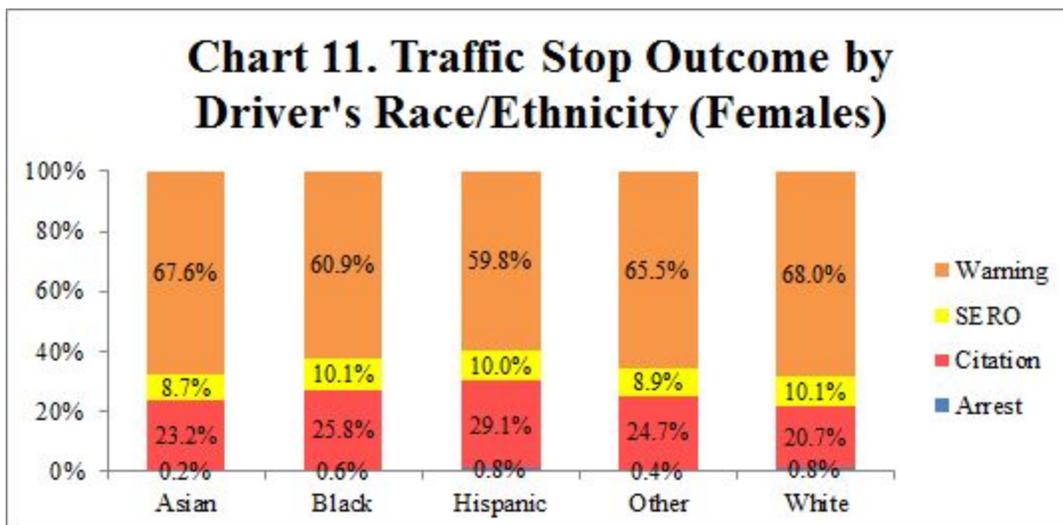
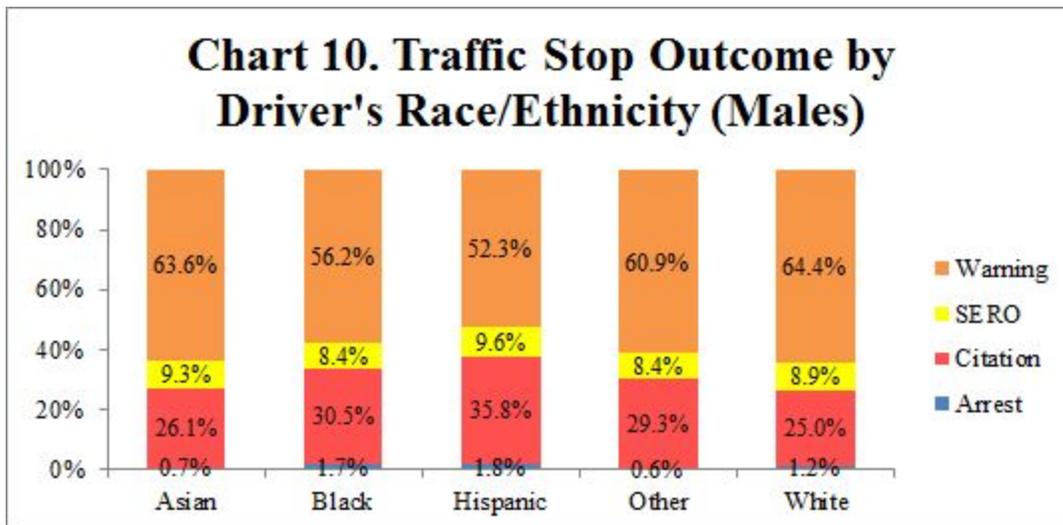
There was a somewhat similar trend experienced for females. In fact, Asian females were the least likely to have contraband seized (25.0%). White females and Other females were the most likely to have just contraband seized (39.0% and 40.5%). Asian females were the least likely to have contraband and property seized (4.3%).

Table 5. Search Disposition by Driver’s Race/Ethnicity (Males)							
Search Disposition	Asian	Black	Hispanic	Other	White	Unknown /Missing	Total
Contraband	78 35.9%	3,277 32.1%	452 25.2%	141 34.0%	2,551 37.8%	0 0.0%	<b>6,499</b> <b>33.5%</b>
Property	11 5.1%	670 6.6%	172 9.6%	20 4.8%	362 5.4%	0 0.0%	<b>1,235</b> <b>6.4%</b>
Contraband & Property	7 3.2%	756 7.4%	125 7.0%	27 6.5%	468 6.9%	0 0.0%	<b>1,383</b> <b>7.2%</b>
Nothing	121 55.8%	5,504 53.9%	1,045 58.3%	227 54.7%	3,373 49.9%	7 100.0%	<b>10,277</b> <b>53.0%</b>
<b>Total Percent</b>	<b>217</b> <b>100.0%</b>	<b>10,207</b> <b>100.0%</b>	<b>1,794</b> <b>100.0%</b>	<b>415</b> <b>100.0%</b>	<b>6,754</b> <b>100.0%</b>	<b>7</b> <b>100.0%</b>	<b>19,394</b> <b>100.0%</b>

Table 6. Search Disposition by Driver’s Race/Ethnicity (Females)							
Search Disposition	Asian	Black	Hispanic	Other	White	Unknown /Missing	Total
Contraband	10 25.0%	771 32.3%	64 25.6%	36 40.5%	1,081 39.0%	1 50.0%	<b>1,963</b> <b>35.47%</b>
Property	5 12.5%	174 7.3%	30 12.0%	1 1.1%	137 5.0%	0 0.0%	<b>347</b> <b>6.27%</b>
Contraband & Property	4 10.0%	130 5.5%	21 8.4%	2 2.3%	187 6.8%	0 0.0%	<b>344</b> <b>6.2%</b>
Nothing	21 52.5%	1,309 54.9%	135 54.0%	50 56.2%	1,365 49.3%	1 50.0%	<b>2,881</b> <b>52.1%</b>
<b>Total Percent</b>	<b>40</b> <b>100.0%</b>	<b>2,384</b> <b>100.0%</b>	<b>250</b> <b>100.0%</b>	<b>89</b> <b>100.0%</b>	<b>2,770</b> <b>100.0%</b>	<b>2</b> <b>100.0%</b>	<b>5,535</b> <b>100.0%</b>

**Chart 10. Traffic Stop Outcome by Driver's Race/Ethnicity (Males)** and **Chart 11. Traffic Stop Outcome by Driver's Race/Ethnicity (Females)** specify the outcome of each traffic stop by race/ethnicity disaggregated by gender. Missing data was apparent in the outcome of 26,469 traffic stops. Statistics indicate that males were slightly more likely to receive a citation than females (28.4% compared to 23.4%). Conversely, males were less likely to receive a warning than females (59.8% compared to 64.6%). Receiving a warning, written or verbal, was the most common outcome for males ranging from 52.3% for Hispanics to 64.4% for Whites. Conversely, Hispanic males were more likely to receive a citation (35.8%) than all other race/ethnicities. Also, the probability of an arrest ranged from 0.6% for Other males to 1.8% for Hispanic males.

Similarly, the most common outcome for females was a warning which ranged from 59.8% for Hispanic females to 68.0% for White females. Hispanic females were the most likely to receive a citation at 29.1%. The probability of an arrest was under 1% across all races/ethnicities.



Restricting the analysis to only those cases in which the traffic stop resulted in an arrest, **Table 7. Reason for Arrest by Driver’s Race/Ethnicity and Gender (Males)** and **Table 8. Reason for Arrest by Driver’s Race/Ethnicity and Gender (Females)** present the reason of the officer for the arrest delineated by the driver’s race/ethnicity and gender. The data is broken by the total number of arrests and the percent of all arrests with a stop reason. An arrest reason was missing in 38 cases.

The most common arrest reason for all ethnic groups for both males and females were based on the stop, ranging from 41.4% for Black males to 57.9% for Asian males, and 41.6% for Black females to 53.3% for Hispanic females. Black males and Black females were the least likely to be arrested based on the stop (41.4% and 41.6%). Hispanic females and Asian females were equally the least likely to be arrested based on the search (26.3%). Hispanic males were more likely to be arrested for an “other” reason (23.2%) and Other non-white females were more likely to be arrested for an “other” reason (29.7%).

Table 7. Reason for Arrest by Driver’s Race/Ethnicity and Gender (Males)							
Arrest Reason	Asian	Black	Hispanic	Other	White	Missing/Unknown	Total
Based on Search	23 22.6%	1,265 36.2%	185 19.4%	48 34.3%	975 34.8%	1 33.3%	<b>2,497</b> <b>33.3%</b>
Based on Stop	59 57.9%	1,447 41.4%	546 57.3%	74 52.9%	1,374 49.0%	0 0.0%	<b>3,500</b> <b>46.7%</b>
Other	20 19.6%	780 22.3%	221 23.2%	18 12.9%	454 16.2%	2 66.7%	<b>1,495</b> <b>20.0%</b>
<b>Total</b>	<b>102</b>	<b>3,492</b>	<b>952</b>	<b>140</b>	<b>2,803</b>	<b>3</b>	<b>7,492</b>
<b>Percent</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Table 8. Reason for Arrest by Driver’s Race/Ethnicity and Gender (Females)							
Arrest Reason	Asian	Black	Hispanic	Other	White	Missing/Unknown	Total
Based on Search	5 26.3%	239 33.6%	36 26.3%	14 37.8%	427 36.8%	1 100.0%	<b>722</b> <b>35.0%</b>
Based on Stop	10 52.6%	296 41.6%	73 53.3%	12 32.4%	533 46.0%	0 0.0%	<b>924</b> <b>44.8%</b>
Other	4 21.1%	176 24.8%	28 20.4%	11 29.7%	200 17.2%	0 0.0%	<b>419</b> <b>20.3%</b>
<b>Total</b>	<b>19</b>	<b>711</b>	<b>137</b>	<b>37</b>	<b>1,160</b>	<b>1</b>	<b>2,065</b>
<b>Percent</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

## **Discussion**

Conclusions regarding the relationships between race/ethnicity and traffic stops should be cautiously interpreted and carefully utilized. In fact, the race and ethnic categories required under TR, § 25-113 differ from the race and ethnic categories used by the MVA. These differences can create inconsistencies in the data. To overcome this limitation, the TR, § 25-113 and MVA definitions should be consistent.

The major limitation of the current study pertains to the possibility of omitted variables that may account for any differences observed between race/ethnicities. The purpose of this report is to discover whether drivers who exhibit similar behaviors, but are of different race/ethnicities, are stopped at different rates and whether the traffic stops result in different treatment and outcomes. However, the current method allows the possibility of error by neglecting confounding variables, such as driving behavior, the driver's violation history, and law enforcement deployment. If temporal and spatial traveling patterns differ by race/ethnicity, any differences observed may be the result of these driving patterns and not systematic differences between race/ethnicities. Considering that it is unknown whether traveling behavior and patterns differ by race/ethnicity, no statistical conclusions can be drawn regarding whether there is differential treatment.

No definitive conclusions can be drawn from this report regarding the effect of race/ethnicity on the frequency or characteristics associated with traffic stops due to data limitations beyond the scope of what reporting agencies could provide.

## Appendix: Agency Breakdown of Traffic Stops

Agency	Number of Stops	Agency	Number of Stops
Aberdeen Police Department	1,584	Coppin State University Police	60
Allegany County Sheriff's Office	793	Cottage City Police Department	217
Annapolis Police Department	3,030	Crisfield Police Department	29
Anne Arundel Community College Public Safety & Police	444	Crofton Police Department	104
Anne Arundel County Police Department	49,123	Cumberland City Police Department	1,668
Anne Arundel County Sheriff's Office	12	Delmar Police Department	466
Baltimore City Sheriff's Office	183	Denton Police Department	309
Baltimore County Police Department	69,235	Department of General Services	608
Baltimore Environmental Police	276	District Heights Police Department	320
Baltimore Police Department	62,689	Dorchester County Sheriff's Office	780
Bel Air Police Department	1,919	Easton Police Department	3,697
Berlin Police Department	457	Edmonston Police Department	580
Berwyn Heights Police Department	2	Elkton Police Department	1,736
Bladensburg Police Department	1,048	Federsburg Police Department	488
Boonsboro Police Department	900	Forest Heights Police Department	741
Bowie Police Department	3,335	Fort Detrick Police	437
Bowie State University Police	18	Fort Meade Police	342
Brentwood Police Department	292	Frederick County Sheriff's Office	25,019
Brunswick Police Department	918	Frederick Police Department	10,313
Calvert County Sheriff's Office	7,450	Frostburg City Police Department	548
Cambridge Police Department	3,707	Frostburg State University Police	289
Capitol Heights Police Department	215	Fruitland Police Department	4,525
Caroline County Sheriff's Office	1,916	Gaithersburg Police Department	5,465
Carroll County Sheriff's Office	4,719	Garrett County Sheriff's Office	477
Cecil County Sheriff's Office	5,783	Glenarden Police Department	312
Centreville Police Department	466	Greenbelt Police Department	2,731
Charles County Sheriff's Office	12,705	Greensboro Police Department	145
Chestertown Police Department	1,631	Hagerstown Police Department	2,376
Cheverly Police Department	2,072	Hampstead Police Department	573
Chevy Chase Village Police Department	537	Hancock Police Department	371
Colmar Manor Police Department	4	Harford County Sheriff's Office	10,933
Comptroller of Maryland	125	Havre de Grace Police Department	689

Agency	Number of Stops	Agency	Number of Stops
Howard County Police Department	22,341	Ridgely Police Department	204
Hurlock Police Department	534	Rising Sun Police Department	526
Hyattsville Police Department	2,693	Riverdale Park Police Department	1,596
Kent County Sheriff's Office	3,963	Rock Hall Police Department	104
La Plata Police Department	1,941	Rockville Police Department	5,276
Landover Police Department	384	Salisbury Police Department	3,504
Laurel Police Department	5,549	Salisbury University Police Department	100
Manchester Police Department	16	Seat Pleasant Police Department	1,671
Maryland Motor Vehicle Administration	25	Smithsburg Police Department	61
Maryland State Police	233,482	Snow Hill Police Department	165
Maryland Transit Administration	453	Somerset County Sheriff's Office	472
Maryland Transportation Authority Police	53,446	St. Mary's County Sheriff's Office	3,863
Maryland-National Capital Park Police Montgomery County	4,554	St. Michaels Police Department	509
Maryland-National Capital Park Police Prince George's County	2,547	Sykesville Police Department	1,271
Montgomery County Police Department	78,400	Takoma Park Police Department	2,531
Montgomery County Sheriff's Office	724	Talbot County Sheriff's Office	2,190
Morningside Police Department	725	Taneytown Police Department	767
Mount Rainier Police Department	462	Thurmont Police Department	1,008
Mt. Airy Police Department	149	Towson University Police	583
Natural Resources Police	4,757	Trappe Police Department	3
New Carrollton Police Department	763	University of Baltimore Police	181
Oakland Police Department	57	University of Maryland Baltimore County Police	464
Ocean City Police Department	9,112	University of Maryland Baltimore Police	742
Ocean Pines Police Department	1,173	University of Maryland Eastern Shore	77
Oxford Police Department	17	University of Maryland Police College Park	7,293
Perryville Police Department	606	University Park Police	301
Pocomoke City Police Department	1,001	Upper Marlboro Police Department	126
Prince George's County Police Department	48,402	Washington County Sheriff's Office	6,409
Prince George's County Sheriff's Office	123	Westminster Police Department	3,196
Princess Anne Police Department	1,026	Wicomico County Sheriff's Office	4,990
Queen Anne's County Sheriff's Office	3,338	Worcester County Sheriff's Office	4,917