

***NINTH REPORT TO THE STATE OF MARYLAND UNDER TR 25-113***

Maryland Statistical Analysis Center,  
Governor's Office of Crime Control & Prevention

August 28, 2012

## INTRODUCTION

In 2001, the Maryland General Assembly passed TR 25-113. The statute, which requires data collection on every law eligible traffic stop in Maryland, aims to provide information about the pervasiveness of racial profiling.<sup>1</sup> Specifically, TR 25-113 required the Maryland Police and Correctional Training Commission (PCTC), in consultation with the Maryland Justice Analysis Center,<sup>2</sup> to develop four guiding documents, to include:

1. A model recording and reporting format (*please see Appendix A for more information*);
2. A model policy for law enforcement agencies to address race/ethnicity-based traffic stops (*please see Appendix B for more information*);
3. Guidelines for law enforcement agencies to manage, counsel, and train officers who collect traffic stop data (*please see Appendix C for more information*); and
4. A model log for law enforcement agencies to record traffic stop data.

It should be noted, although TR 25-113 mandates State funding for data collection and analysis neither law enforcement agencies nor MJAC received funding for traffic stop data reporting.

## METHODOLOGY

The 2011 report presents aggregate data on all law eligible stops in Maryland that law enforcement agencies reported to the Maryland Statistical Analysis Center (MSAC) for half of the 2011 calendar year (July 1, 2011 through December 31, 2011). Departments submitted their data for the reference period to MSAC at the Governor's Office of Crime Control and Prevention (GOCCP). The original data was submitted in Microsoft Excel or Microsoft Access and subsequently merged, standardized, and analyzed using SPSS version 20.0 to formulate this report; SPSS version 20.0 is a system package widely accepted and used by researchers and social scientists.

For the current reporting period, 127 agencies were eligible to report, and 117 departments are included in the current analysis (n = 544,812 traffic stops); the majority of agencies that were not included in the analyses reported to GOCCP but had no measureable data during this time period. The units of analysis for this report consist of all law eligible traffic stops that occurred under Maryland jurisdiction between July 1, 2011 and December 31, 2011. To that end, *law eligible traffic stops* are defined as all stops made by law enforcement agencies that are eligible 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,

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<sup>1</sup> By definition, 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> The Maryland Justice Analysis Center at University of the Maryland hosted the Maryland Statistical Analysis Center through 2006. Then in 2007, the Governor's Office of Crime Control and Prevention incorporated this center under Executive Order 01.01.2007.05.

and 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.

The relevant information from departments included:

- Demographic information on the driver
- Vehicle registration information
- Reason for the stop
- Reason for the search, if one was conducted
- Type of search
- Outcome of the search
- Overall outcome of the traffic stop

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) at the time of the traffic stop. This information included gender, age, and race/ethnicity. For the purposes of this report, race/ethnicity was coded into 5 categories including Caucasian, African American, Asian, Hispanic, and Other. *Caucasian* refers to individuals that were reported by officers and/or the MVA as White, Arab, Caucasian, and Asiatic Islander. The *Other* category is comprised of multiple race/ethnicities that cannot be disaggregated due to the categorical disparities between MVA ethnic data and law enforcement ethnic data under TR 25-113.<sup>3</sup> To this end, the results of this report refer to the statute's guidelines for reporting race/ethnicity and race/ethnicities reported for traffic stops that do not correspond to one of the five categories were coded as *Other*.

Registration information was measured as a dichotomous variable reflecting whether or not the vehicle was registered within the state. The initial reason for the traffic stop was provided and classified according to the Annotated Code of Maryland Transportation Article. Search information includes the reason for the search, the type of search, and the disposition of the search if applicable. Reasons for the search include consensual, incident to arrest, exigent circumstances, probable cause, K-9 Alert, and other. The *Other* category reflects all searches conducted by law enforcement officers that were not classified into one of the other five categories. The types of searches conducted include searches of the person, searches of the vehicle and/or its contents, or both. Search disposition was collapsed into the following categories: property, contraband, both, or nothing. Finally, the outcome of the traffic stop was measured using four possible categories including warning (i.e., both verbal and written), citation, Safety Equipment Repair Order (SERO), and arrest. The categories of this variable are mutually

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<sup>3</sup> The statute requires the use of the following categories: Asian, Black, White, Hispanic and Other. However, the MVA utilizes the following categories: Black or African American, White, Asian, Native Hawaiian or Other Pacific Islander, American Indian, and Other.

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. If an arrest occurred, the reason for the arrest was to be recorded (based on the search, based on the stop, or other).

## RESULTS

Between July 1, 2011 and December 31, 2011, Maryland police departments and sheriffs' offices reported 544,812 law eligible traffic stops. Table 1 displays the overall breakdown of the race/ethnicity of drivers involved in traffic stops. Information on race/ethnicity was missing in 5,683 cases, and race/ethnicity could not be correctly classified in 8,322 traffic stops. As shown, the majority of drivers were Caucasian (52.8%). The largest minority represented were African Americans who were the subjects of 36.5% of all traffic stops (n = 199,055).

<b>Table 1. Race/ethnicity of Driver in Traffic Stops</b>			
	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Asian	10495	1.9%	1.9%
African American	199055	36.5%	38.4%
Hispanic	33631	6.2%	44.6%
Other	8322	1.5%	46.1%
White	287626	52.8%	98.9%
Unknown/Missing	5683	1.0%	100.0%
<b>Total</b>	<b>544812</b>	<b>100.0%</b>	

Table 2 displays the breakdown of the gender of the drivers involved in traffic stops. Male drivers (66.9%) were stopped more frequently than female drivers (32.5%). Unknown/missing gender data was found in 3,312 traffic stops (0.6%).

<b>Table 2. Gender of Driver in Traffic Stops</b>			
	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Males	364561	66.9%	66.9%
Females	176939	32.5%	99.4%
Unknown/Missing	3312	0.6%	100.0%
<b>Total</b>	<b>544812</b>	<b>100.0%</b>	

Tables 3 and 4 display the initial reason given by the officer for the traffic stop stratified by the driver's race/ethnicity, for males and females respectively; totals do not equal the total number of traffic stops due to missing gender data in 3,312 cases and missing stop reason data in 1,799 cases. Overall, the patterns are fairly similar across race/ethnicity and gender with the same sets of traffic codes ranking high in frequency as the primary initial reason for a stop. Caucasian, Hispanic and Other non-Caucasian males were stopped most frequently for a violation of Title 22 (21.9%, 17.6%, and 17.2% respectively). African American males were stopped most frequently for a violation of Title 13 (17.8%), compared to Caucasian males (16.4%), Asian males (14.5%), Hispanic males, (13.9%), and Other non-Caucasian males (12.2%). Asian males were the most likely to be stopped for a moving violation (18.6%) compared to Caucasians (14.1%), Hispanics (11.9%), Other non-Caucasians (11.2%), and African Americans (9.8%). Males of every race/ethnicity were least likely to be stopped for a violation of Title 21 Subtitle 13 and Title 21 Subtitle 14 which comprised less than 0.1% of stops for each race/ethnicity. Of all of the race/ethnicities, Both Caucasian females (19.3%) and other non-Caucasian female groups (17.7% to 20.0%), excluding Asians (14.1%) and African Americans (17.4%), were stopped most frequently for a violation of Title 22. African American females were stopped most frequently for a violation of Title 13 (20.9%) while Asian females were stopped most frequently for a moving violation (19.6%). Other moving violation percentages of females include Caucasians (16.4%), Hispanics (14.3%), Other non-Caucasians (12.4%), and African Americans (11.1%). All females were least likely to be stopped for a violation of Title 21 Subtitle 13 and Title 21 Subtitle 14 (less than 0.1% for each race/ethnicity).<sup>4</sup>

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<sup>4</sup> Title 13: Registration  
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 21.6: Turning and starting, signals and stopping  
Title 21.7: Special stops required  
Title 21.8: Speed restrictions  
Title 21.9: Reckless, negligent or driving, fleeing, and eluding  
Title 22: Equipment of vehicles  
Title 24: Size, weight, and load

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

<b>Stop Reason</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
13	1040	23174	3809	742	30984	211	46925
Percent	14.5%	17.8%	13.9%	12.2%	16.4%	6.6%	16.5%
21.11	48	1179	325	78	2391	28	4049
Percent	0.7%	0.9%	1.2%	1.3%	1.3%	0.9%	1.1%
21.13	0	64	10	0	171	0	245
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
21.14	3	68	13	2	101	2	189
Percent	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
21.2	766	8095	2117	572	13272	194	25016
Percent	10.7%	6.2%	7.7%	9.4%	7.0%	6.1%	6.9%
21.3	430	5197	1379	318	8954	87	16365
Percent	6.0%	4.0%	5.0%	5.2%	4.7%	2.7%	4.5%
21.4	130	1213	348	117	3077	34	4919
Percent	1.8%	0.9%	1.3%	1.9%	1.6%	1.1%	1.4%
21.6	28	619	106	36	834	13	1636
Percent	0.4%	0.5%	0.4%	0.6%	0.4%	0.4%	0.5%
21.7	386	4013	855	192	7541	122	13109
Percent	5.4%	3.1%	3.1%	3.2%	4.0%	3.8%	3.6%
21.8	1335	12733	3263	678	26738	271	45018
Percent	18.6%	9.8%	11.9%	11.2%	14.1%	8.5%	12.4%
21.9	147	1894	769	95	4449	49	7403
Percent	2.0%	1.5%	2.8%	1.6%	2.4%	1.5%	2.0%
22	1137	22918	4821	1045	41491	302	71714
Percent	15.8%	17.6%	17.6%	17.2%	21.9%	9.4%	19.7%
24	21	569	234	4	894	3	1725
Percent	0.3%	0.4%	0.9%	0.1%	0.5%	0.1%	0.5%
Other	1714	48800	9283	2197	48182	1889	112065
Percent	23.9%	37.4%	34.0%	36.2%	25.5%	58.9%	30.8%
<b>Total</b>	<b>7185</b>	<b>130536</b>	<b>27332</b>	<b>6076</b>	<b>189079</b>	<b>3205</b>	<b>363413</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 4. Primary Initial Reason for Stop by Driver's Race/ethnicity and Gender (Females)**

<b>Stop Reason</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
13	487	14031	956	277	17069	88	32908
Percent	15.0%	20.9%	15.5%	16.8%	17.6%	7.1%	18.7%
21.11	32	517	60	25	970	5	1609
Percent	1.0%	0.8%	1.0%	1.5%	1.0%	0.4%	0.9%
21.13	1	4	0	0	12	0	17
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
21.14	3	36	1	7	40	0	87
Percent	0.1%	0.1%	0.0%	0.4%	0.0%	0.0%	0.0%
21.2	421	4416	615	206	7478	88	13224
Percent	12.9%	6.6%	10.0%	12.5%	7.7%	7.1%	7.5%
21.3	195	2425	288	78	4650	29	7665
Percent	6.0%	3.6%	4.7%	4.7%	4.8%	2.3%	4.3%
21.4	76	816	117	36	2104	16	3165
Percent	2.3%	1.2%	1.9%	2.2%	2.2%	1.3%	1.8%
21.6	15	310	20	6	490	3	844
Percent	0.5%	0.5%	0.3%	0.4%	0.5%	0.2%	0.5%
21.7	295	2613	367	76	5006	57	8414
Percent	9.1%	3.9%	5.9%	4.6%	5.2%	4.6%	4.8%
21.8	638	7437	883	205	15927	116	25206
Percent	19.6%	11.1%	14.3%	12.4%	16.4%	9.3%	14.3%
21.9	39	574	84	15	1821	12	2545
Percent	1.2%	0.9%	1.4%	0.9%	1.9%	1.0%	1.4%
22	460	11695	1095	331	18725	99	32405
Percent	14.1%	17.4%	17.7%	20.0%	19.3%	7.9%	18.4%
24	3	36	5	0	63	2	110
Percent	0.1%	0.1%	0.1%	0.0%	0.1%	0.2%	0.1%
Other	591	22170	1688	389	22533	733	48104
Percent	18.2%	33.1%	27.3%	23.6%	23.3%	58.7%	27.3%
<b>Total</b>	<b>3256</b>	<b>67080</b>	<b>6180</b>	<b>1651</b>	<b>96888</b>	<b>1248</b>	<b>176303</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>

The registration of the vehicle being driven (i.e., in-state or out-of-state) by the race/ethnicity of the driver is displayed in Tables 5 and 6, for males and females respectively. The totals do not equal the sum of all traffic stops due to missing gender (n = 3,312) and registration information (n = 1,152). The majority of both male and female drivers of all race/ethnicities were driving a vehicle with an in-state registration at the time of their stop (80.2% and 87.3%, respectively).

**Table 5. Vehicle Registration by Driver’s Race/ethnicity (Males)**

<b>Registration</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
In-State	4523	108978	20933	4110	149956	2851	292305
Percent	76.1%	83.4%	76.5%	67.3%	78.9%	88.6%	80.2%
Out-of-State	1705	21294	6331	1971	39796	356	71453
Percent	23.7%	16.3%	23.4%	32.3%	21.0%	11.1%	19.6%
Unknown/Missing	16	443	113	28	192	11	803
Percent	0.2%	0.3%	0.4%	0.5%	0.1%	0.3%	0.2%
<b>Total</b>	<b>5693</b>	<b>111124</b>	<b>21330</b>	<b>5096</b>	<b>156274</b>	<b>3213</b>	<b>302730</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 6. Vehicle Registration by Driver’s Race/ethnicity (Females)**

<b>Registration</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
In-State	2815	59649	5289	1414	84104	1134	154405
Percent	86.3%	88.8%	85.4%	85.5%	86.4%	90.4%	87.3%
Out-of-State	442	7388	880	239	13197	115	22261
Percent	13.6%	11.0%	14.2%	14.5%	13.6%	9.2%	12.6%
Unknown/Missing	3	163	21	0	81	5	273
Percent	0.1%	0.2%	0.3%	0.0%	0.1%	0.4%	0.2%
<b>Total</b>	<b>2906</b>	<b>60371</b>	<b>5080</b>	<b>1538</b>	<b>82282</b>	<b>1254</b>	<b>153431</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>

Tables 7 and 8 display the breakdown of the total number of searches conducted by the race/ethnicity of the driver by males and females respectively. A total of 13,597 searches with a valid search type were conducted, which represents only 2.5% of all traffic stops. Totals do not equal the sum of all traffic stops due to missing gender data in 28 searches. Males were almost twice as likely to be searched as females (3.0% compared to 1.6%). Males and females were searched at relatively similar rates across race/ethnicity (2.1% - 3.4% for males, 0.9% - 1.7% for females).

**Table 7. Search conducted by Race/ethnicity (Males)**

<b>Search Conducted</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Yes	148	4435	913	153	5033	50	10732
Percent	2.1%	3.4%	3.3%	2.5%	2.6%	1.6%	3.0%
No/incomplete data	7050	126280	26464	5956	184911	3168	353829
Percent	97.9%	96.6%	96.7%	97.5%	97.4%	98.4%	97.0%
<b>Total</b>	<b>7198</b>	<b>130715</b>	<b>27377</b>	<b>6109</b>	<b>189944</b>	<b>3218</b>	<b>364561</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. Search conducted by Race/ethnicity (Females)**

<b>Search Conducted</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Yes	47	1040	103	15	1619	13	2837
Percent	1.4%	1.5%	1.7%	0.9%	1.7%	1.0%	1.6%
No/incomplete data	3212	66160	6087	1638	95763	1241	174102
Percent	98.6%	98.5%	98.3%	99.1%	98.3%	99.0%	98.4%
<b>Total</b>	<b>3260</b>	<b>67200</b>	<b>6190</b>	<b>1653</b>	<b>97382</b>	<b>1254</b>	<b>176939</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 9 and 10 display the types of searches conducted (i.e., person or property) with regards to the race/ethnicity of the driver and disaggregated by gender. There was missing gender data in 28 searches. The majority of searches for both males and females of all race/ethnicities were a combination of both person and property (51.6 – 61.6% for males and 33.3% - 61.5% for females). African American males were less likely than the other races to have just their person searched (19.5%) compared to Hispanics (25.6%), Asians (29.7%), Caucasians (29.7%), and Other Non-Caucasian males (35.3%). On the contrary, African American males were more likely than the other races to have just their property searched (19.5%) compared to Caucasians (12.2%), Hispanics (12.8%), Other Non-Caucasians (13.1%), and Asians (16.9%).

**Table 9. Type of Search Conducted by Driver's Race/ethnicity and Gender (Males)**

Search Type	Asian	African American	Hispanic	Other	White	Unknown/ Missing	Total
Person	44	863	234	54	1496	15	2706
Percent	29.7%	19.5%	25.6%	35.3%	29.7%	30.0%	25.2%
Property	25	866	117	20	614	8	1650
Percent	16.9%	19.5%	12.8%	13.1%	12.2%	16.0%	15.4%
Both	79	2706	562	79	2923	27	6376
Percent	53.4%	61.0%	61.6%	51.6%	58.1%	54.0%	59.4%
<b>Total Searches</b>	<b>148</b>	<b>4435</b>	<b>913</b>	<b>153</b>	<b>5033</b>	<b>50</b>	<b>10732</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 10. Type of Search Conducted by Driver's Race/ethnicity and Gender (Females)**

Search Type	Asian	African American	Hispanic	Other	White	Unknown/ Missing	Total
Person	11	245	22	6	391	3	678
Percent	23.4%	23.6%	21.4%	40.0%	24.2%	23.1%	23.9%
Property	10	316	26	4	307	2	665
Percent	21.3%	30.4%	25.2%	26.7%	19.0%	15.4%	23.4%
Both	26	479	55	5	921	8	1494
Percent	55.3%	46.1%	53.4%	33.3%	56.9%	61.5%	52.7%
<b>Total Searches</b>	<b>47</b>	<b>1040</b>	<b>103</b>	<b>15</b>	<b>1619</b>	<b>13</b>	<b>2837</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>

Tables 11 and 12 display the reason provided by the officer for the search of the driver's person or property. Over 2/3 of all searches were conducted due to the driver's consent or incident to arrest. The most frequent search reason was incident to arrest for both males and females of all race/ethnicities except for African American males who were searched more often due to giving consent. Exigent circumstances were reported least often for each demographic (0.0% to 0.7%). African Americans males were more likely to be searched due to probable cause (18.4%) than Hispanics (11.4%), Caucasians (12.2%), Asians (12.5%), and Other Non-Caucasians (14.7%). African American males and females alike were more likely than other race/ethnicities to have a search reason categorized as "Other".

**Table 11. Reason for Search by Driver's Race/ethnicity (Males)**

<b>Reason for Search</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Consensual Percent	54 36.5%	1432 32.3%	309 33.8%	43 28.1%	1651 32.8%	6 12.0%	3495 32.6%
Exigent Circumstances Percent	0 0.0%	22 0.5%	1 0.1%	1 0.7%	15 0.3%	0 0.0%	39 0.4%
Incident to Arrest Percent	58 39.2%	1204 27.1%	374 41.0%	64 41.8%	1922 38.2%	14 28.0%	2623 37.6%
K-9 Alert Percent	3 4.2%	149 4.8%	8 1.3%	6 7.3%	241 7.8%	1 3.9%	408 5.8%
Other Percent	1 1.4%	421 13.5%	52 8.9%	10 12.2%	157 5.1%	3 11.5%	644 9.2%
Probable Cause Percent	9 12.5%	567 18.4%	67 11.4%	12 14.7%	378 12.2%	3 11.5%	1036 14.8%
Missing/Unknown Percent	2 1.4%	249 5.6%	20 2.2%	1 0.7%	135 2.7%	23 46.0%	430 4.0%
<b>Total Searches Percent</b>	<b>148 100.0%</b>	<b>4435 100.0%</b>	<b>513 100.0%</b>	<b>153 100.0%</b>	<b>5033 100.0%</b>	<b>50 100.0%</b>	<b>10732 100.0%</b>

**Table 12. Reason for Search by Driver's Race/ethnicity (Females)**

<b>Reason for Search</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Consensual Percent	13 27.7%	244 23.5%	31 30.1%	2 13.3%	496 30.6%	2 15.4%	788 27.8%
Exigent Circumstances Percent	0 0.0%	2 0.2%	0 0.0%	0 0.0%	6 0.4%	0 0.0%	8 0.3%
Incident to Arrest Percent	18 38.3%	374 36.0%	47 45.6%	8 53.3%	652 40.3%	2 15.4%	1101 38.8%
K-9 Alert Percent	2 4.3%	36 3.5%	5 4.9%	0 0.0%	125 7.7%	1 7.7%	169 6.0%
Other Percent	6 12.8%	206 19.8%	10 9.7%	4 26.7%	139 8.6%	1 7.7%	366 12.9%
Probable Cause Percent	5 10.6%	112 10.8%	9 8.7%	0 0.0%	174 10.7%	0 0.0%	300 10.6%
Missing/Unknown Percent	3 6.4%	66 6.3%	1 1/0%	1 6.7%	27 1.7%	7 53.8%	105 3.7%
<b>Total Searches Percent</b>	<b>47 100.0%</b>	<b>1040 100.0%</b>	<b>103 100.0%</b>	<b>15 100.0%</b>	<b>1619 100.0%</b>	<b>13 100.0%</b>	<b>2837 100.0%</b>

Tables 13 and 14 display the search disposition stratified by race/ethnicity and collapsed across gender.

A search disposition was reported in 8,967 traffic stops (only 65.9% of all searches). The majority of searches for both males and females resulted in nothing being confiscated (70.6% and 73.2% respectively.) Search dispositions were fairly consistent among the different race/ethnicities. Hispanic males were least likely to have something confiscated (19.1%) followed by Asians (26.7%), African Americans (28.2%), Other Non-Caucasians (31.0%), and Caucasians (32.4%). This same trend was not evident with females as Asians were the least likely to have something confiscated (12.9%) followed by Other Non-Caucasians (20.0%), African Americans (23.2%), Caucasians (28.9%), and Hispanic females (30.1%).

**Table 13. Search Disposition by Driver's Race/ethnicity (Males)**

<b>Search Disposition</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/Missing</b>	<b>Total</b>
Contraband	14	344	62	12	571	0	1003
Percent	13.3%	12.5%	9.8%	20.7%	16.8%	0.0%	14.4%
Property	4	141	38	3	250	3	439
Percent	3.8%	5.1%	6.0%	5.2%	7.4%	11.1%	6.3%
Contraband & Property	10	289	21	3	280	0	2623
Percent	9.5%	10.5%	3.3%	5.2%	8.2%	0.0%	37.6%
Nothing	77	1970	511	40	2296	24	4918
Percent	73.3%	71.8%	80.9%	69.0%	67.6%	88.9%	70.6%
<b>Total Searches with Disposition Reported</b>	<b>105</b>	<b>2744</b>	<b>632</b>	<b>58</b>	<b>3397</b>	<b>27</b>	<b>6963</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>
Total Searches with Disposition not Reported	43	1691	281	95	1636	23	3769
	29.1%	38.1%	30.8%	62.1%	35.2%	46.0%	35.1%

**Table 14. Search Disposition by Driver's Race/ethnicity (Females)**

<b>Search Disposition</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/Missing</b>	<b>Total</b>
Contraband	3	67	11	0	168	0	249
Percent	9.7%	10.0%	15.1%	0.0%	13.9%	0.0%	12.5%
Property	1	52	9	1	83	2	148
Percent	3.2%	7.7%	12.3%	20.0%	6.9%	28.6%	7.4%
Contraband & Property	0	37	2	0	97	1	137
Percent	0.0%	5.5%	2.7%	0.0%	8.0%	14.3%	6.9%
Nothing	27	517	51	4	857	4	1460
Percent	87.1%	76.8%	69.9%	80.0%	71.1%	57.1%	73.2%
<b>Total Searches with Disposition Reported</b>	<b>31</b>	<b>673</b>	<b>73</b>	<b>5</b>	<b>1205</b>	<b>7</b>	<b>1994</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>
Total Searches with Disposition not Reported	16	367	30	10	414	6	843
	34.0%	35.3%	29.1%	66.7%	25.6%	46.2%	29.7%

Tables 15 and 16 pertain to the outcome of the traffic stop. Totals do not equal the sum of all traffic stops due to missing gender data in 3,312 cases. Males are slightly more likely to receive a citation than females (37.3% compared to 30.8%) and less likely to receive a warning than females (53.3% compared to 58.6%.) For males, the most frequent outcome of traffic stops for Caucasians (56.4%), Asians (53.4%), African Americans (50.9%), and Other Non-Caucasians (44.9%) was a warning, while Hispanics most frequently received a citation (45.2%). Hispanic males were also the most likely to be arrested during a traffic stop (1.5%). Among females, the majority of stops of all race/ethnicities were a warning ranging from 49.8% for Hispanic females to 62.0% for Caucasian females.

**Table 15. Traffic Stop Outcome by Driver’s Race/ethnicity (Males)**

<b>Traffic Stop Outcome</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Arrest	63	1472	418	43	1996	17	4009
Percent	0.9%	1.1%	1.5%	0.7%	1.1%	0.5%	1.1%
Citation	2702	49221	12383	2658	68505	666	136135
Percent	37.5%	37.7%	45.2%	43.5%	36.1%	20.7%	37.3%
SERO	552	10269	2573	653	11291	162	25500
Percent	7.7%	7.9%	9.4%	10.7%	5.9%	5.0%	7.0%
Warning	3846	66535	11876	2743	107167	2068	194235
Percent	53.4%	50.9%	43.4%	44.9%	56.4%	64.3%	53.3%
Unknown/Missing	35	3218	127	12	985	305	4682
Percent	0.5%	2.5%	0.5%	0.2%	0.5%	9.5%	1.3%
<b>Total</b>	<b>7198</b>	<b>130715</b>	<b>27377</b>	<b>6109</b>	<b>189944</b>	<b>3218</b>	<b>364561</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 16. Traffic Stop Outcome by Driver’s Race/ethnicity (Females)**

<b>Traffic Stop Outcome</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Arrest	17	395	55	9	685	6	1167
Percent	0.5%	0.6%	0.9%	0.5%	0.7%	0.5%	0.7%
Citation	1121	21761	2321	535	28430	259	54427
Percent	34.4%	32.4%	37.5%	32.4%	29.2%	20.7%	30.8%
SERO	274	6905	704	183	7231	80	15377
Percent	8.4%	10.3%	11.4%	11.1%	7.4%	6.4%	8.7%
Warning	1836	36681	3082	923	60421	795	103738
Percent	56.3%	54.6%	49.8%	55.8%	62.0%	63.4%	58.6%
Unknown/ Missing	12	1458	28	3	615	114	2230
Percent	0.4%	2.2%	0.5%	0.2%	0.6%	9.1%	1.3%
<b>Total</b>	<b>3260</b>	<b>67200</b>	<b>6190</b>	<b>1653</b>	<b>97382</b>	<b>1254</b>	<b>176939</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>

Restricting the analysis to only cases in which the traffic stop resulted in an arrest, Tables 17 and 18 display the reason given by the officer for the arrest by the driver’s race/ethnicity and gender. An arrest reason was reported in 4,830 of the 5,180 arrests made (93.2%). The most common arrest reason for all ethnic groups for both males and females were based on the stop, ranging from 52.4% for African American males to 67.4% for Other Non-Caucasian males and 47.1% for Asian females to 77.8% for Other Non-Caucasian females. Asian males and females were both more likely to be arrested based on the search than the other race/ethnicities. African American and Hispanic males were more likely to be arrested for a reason classified as “other” (22.2% and 21.8% respectively) compared to Other Non-Caucasians (16.3%), Caucasians (14.3%), and Asians (14.3%).

**Table 17. Reason for Arrest by Driver’s Race/ethnicity and Gender (Males)**

<b>Arrest Reason</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Based on Search Percent	15 23.8%	282 19.2%	53 12.7%	7 16.3%	374 18.7%	0 0.0%	731 18.2%
Based on Stop Percent	38 60.3%	772 52.4%	243 58.1%	29 67.4%	1198 60.0%	13 76.5%	2293 57.2%
Other Percent	9 14.3%	327 22.2%	91 21.8%	7 16.3%	291 14.6%	3 17.6%	728 18.2%
Unknown/Missing Percent	1 1.6%	91 6.2%	31 7.4%	0 0.0%	133 6.7%	1 5.9%	257 6.4%
<b>Total Percent</b>	<b>63 100.0%</b>	<b>1472 100.0%</b>	<b>418 100.0%</b>	<b>43 100.0%</b>	<b>1996 100.0%</b>	<b>17 100.0%</b>	<b>4009 100.0%</b>

**Table 18. Reason for Arrest by Driver’s Race/ethnicity and Gender (Females)**

<b>Arrest Reason</b>	<b>Asian</b>	<b>African American</b>	<b>Hispanic</b>	<b>Other</b>	<b>White</b>	<b>Unknown/ Missing</b>	<b>Total</b>
Based on Search Percent	4 23.5%	37 9.4%	8 14.5%	0 0.0%	89 13.0%	0 0.0%	138 11.8%
Based on Stop Percent	8 47.1%	240 60.8%	27 49.1%	7 77.8%	431 62.9%	2 33.3%	715 61.3%
Other Percent	5 29.4%	103 26.1%	15 27.3%	1 11.1%	100 14.6%	1 16.7%	225 19.3%
Unknown/Missing Percent	0 0.0%	15 3.8%	5 9.1%	1 11.1%	65 9.5%	3 50.0%	89 7.6%
<b>Total Percent</b>	<b>19 100.0%</b>	<b>401 100.0%</b>	<b>57 100.0%</b>	<b>9 100.0%</b>	<b>728 100.0%</b>	<b>6 100.0%</b>	<b>1220 100.0%</b>

## DISCUSSION AND RECOMMENDATIONS

The descriptive statistics suggest that traffic stops and the characteristics of traffic stops are generally consistent with regards to race/ethnicity. Across race/ethnicities and gender, both males and females were most likely to be stopped for a violation of Title 22 excluding Asian males and females, and African American males. Both male and female drivers stopped primarily reside in the state of Maryland. Searches of drivers and his/her vehicle are not conducted very often by police officers during traffic stops (less than 3% of all stops). The two most common search reasons are that the driver gave consent or it was an incident to arrest. The search reason of both male and female non-Caucasians was more likely to be categorized as *Other* than was the search reason for Caucasians, with the exception of Asian males. The majority of each group stopped had nothing confiscated regardless of their race/ethnicity. Once stopped, drivers were most likely to receive either a written or verbal warning excluding Hispanic males who were more likely to receive a citation. Hispanic males are also the most likely to be arrested after a traffic stop has been conducted. The majority of all arrests that were made by law enforcement during traffic stops were based on the initial reason for the stop.

While each of these observations has been revealed from the data, conclusions regarding the relationships between race/ethnicity and traffic stops should be cautiously interpreted and carefully utilized. First, 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. However, the Maryland Statistical Analysis Center is committed to strengthening communication with law enforcement agencies to facilitate the collection of data and improve the traffic stop data reporting methodology moving forward.

