

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

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

August 24, 2009

## **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> Since 2002, Maryland law enforcement agencies have collected and reported traffic stop data according to the legislation.

Specifically, TR 25-113 required the Maryland Police Training Commission (PCTC), in consultation with the Maryland Justice Analysis Center (MJAC)<sup>2</sup>, to develop four guiding documents. The documents include: 1) a model recording and reporting format; 2) a model policy for law enforcement agencies to address 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 to record traffic stop data. Appendix A contains the model recording and reporting format. In addition, Appendix B contains the PCTC-approved model policy. Appendix C contains the guidelines for management, counseling, and training. However, the guidelines acknowledge multiple methods of data collection and reporting; therefore, agencies adapted different versions of the guidelines. 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 2009 report presents aggregate data on all law eligible stops in Maryland that law enforcement agencies reported to Maryland Statistical Analysis Center (MSAC) for the 2008 calendar year. Departments submitted their data for the reference period to the MSAC at the Governor's Office of Crime Control and Prevention. The original data was submitted in Microsoft Excel or Microsoft Access and subsequently merged, standardized, and analyzed using SPSS version 16.0, a system package widely

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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> MJAC refers to the Maryland Justice Analysis Center at University of Maryland, which hosted the Maryland Statistical Analysis Center through 2006.

accepted and used by researchers and social scientists. For the current reporting period, 121 agencies were eligible to report, and 105 departments are included in the current analysis (n=745,108 traffic stops).<sup>3</sup>

The units of analysis for this report are all law eligible traffic stops that occurred under Maryland jurisdiction for the calendar year of 2008. To that end, *law eligible traffic stops* are defined as all stops made by law enforcement agencies that are eligible to issue traffic violations. However, TR 25-113 excludes traffic stops that result from checkpoints or roadblocks, stops of multiple vehicles after an accident or emergency, and the use of radar, laser, or vascar technology. Such stops are excluded because officer discretion is unlikely to play a role and therefore any differences observed between Caucasians and non-Caucasians would not be the result of systematic differences in treatment due to ethnicity.

The relevant information from departments included demographic, registration, initial reason for traffic stop, search, and the outcome of the traffic stop. The demographic information of the driver in the traffic stop included gender, age, and ethnicity and 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. For the purposes of this report, 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 ethnicities that cannot be disaggregated due to the categorical disparities between MVA ethnic data and law enforcement ethnic data under TR 25-113.<sup>4</sup> To this end, the results of this report refer to the statute's guidelines for reporting ethnicity and 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

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<sup>3</sup> The majority of agencies that were not included in the analyses reported to GOCCP but had no measurable data for 2008.

<sup>4</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.

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 (both verbal and written), citation, Safety Equipment Repair Order (SERO), and arrest. 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**

Maryland police departments and sheriffs' offices reported 745,108 law eligible traffic stops for the calendar year 2008. Table 1 displays the overall breakdown of the ethnicity of drivers involved in traffic stops. Information on ethnicity was missing in 1,981 cases, and ethnicity could not be correctly classified in 13,704 traffic stops. As shown, the majority of drivers were Caucasian (55.8%). The largest minority represented were African Americans who were the subjects of approximately 35 percent of all traffic stops (n = 261,193).

**Table 1. Ethnicity of Driver in Traffic Stops**

	Frequency	Percent	Cumulative Percent
Valid			
African American	261193	35.1	35.1
Asian	14767	2.0	37.1
Hispanic	37561	5.0	42.1
Other	13704	1.8	43.9
White	415902	55.8	99.7
Unknown/Missing (U/M)	1981	0.2	100.0
<b>Total</b>	<b>745108</b>	<b>100.0</b>	

Tables 2 and 3 display the initial reason given by the officer for the traffic stop stratified by the driver's ethnicity, for males and females respectively.<sup>5</sup> Overall, the patterns are fairly similar across ethnicity and gender with the same sets of traffic codes ranking high in frequency as the primary initial reason for a stop. Both Caucasian males (26.2%) and non-Caucasian males (18.0% to 18.5%), excluding African Americans, were stopped most frequently for a violation of Title 22. African American males were most likely to be stopped for a violation of Title 13 (22.5%) followed by a violation of Title 22 (21.4%). Males of every ethnicity were least likely to be stopped for a violation of Title 21 Subtitle 14 which comprised less than 0.1% of stops for each ethnicity. Non-Caucasian females, excluding Asian females, were stopped most frequently for a violation of Title 13 (16.5% to 23.7%) while Caucasian females were stopped most frequently for a violation of Title 22 (22.5%). Asian females were stopped most frequently for a violation of Title 21.8 (18.0%). The percentages of Caucasian females stopped for violations under Title 13 (17.7%) and Title 21 Subtitle 8 (14.8%) was not that dissimilar from their non-Caucasian counterparts. All females were least likely to be stopped for a violation of Title 21 Subtitle 13 (less than 0.1% for each ethnicity).

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<sup>5</sup> Note: Totals do not equal the total number of traffic stops due to missing gender data in 930 cases.

**Table 2. Primary Initial Reason for Stop by Driver's Race/Ethnicity and Gender (Males)**

Primary Initial Reason for Stop (Title, Subtitle) <sup>6</sup>		Race					
		African American	Asian	Hispanic	Other	White	U/M
13	Count	38521	1472	5202	1574	46642	104
	Pct	22.5%	14.7%	16.8%	14.2%	16.8%	10.8%
21.11	Count	1358	49	397	59	3480	13
	Pct	.8%	.5%	1.3%	.5%	1.3%	1.3%
21.13	Count	56	4	17	8	423	0
	Pct	.0%	.0%	.1%	.1%	.2%	.0%
21.14	Count	37	0	7	1	53	0
	Pct	.0%	.0%	.0%	.0%	.0%	.0%
21.2	Count	13005	1280	3211	1094	21242	106
	Pct	7.6%	12.8%	10.4%	9.9%	7.6%	11.0%
21.3	Count	7969	478	1764	610	14085	46
	Pct	4.7%	4.8%	5.7%	5.5%	5.1%	4.8%
21.4	Count	985	85	238	79	1974	4
	Pct	.6%	.9%	.8%	.7%	.7%	.4%
21.6	Count	965	61	184	55	1409	12
	Pct	.6%	.6%	.6%	.5%	.5%	1.2%
21.7	Count	6972	640	1499	393	13759	59
	Pct	4.1%	6.4%	4.9%	3.5%	5.0%	6.1%
21.8	Count	20082	1605	2929	1457	34643	116
	Pct	11.7%	16.1%	9.5%	13.1%	12.5%	12.0%
21.9	Count	1729	132	474	131	3903	9
	Pct	1.0%	1.3%	1.5%	1.2%	1.4%	.9%
22	Count	36642	1803	5579	2055	72790	184
	Pct	21.4%	18.0%	18.1%	18.5%	26.2%	19.1%
24	Count	164	52	52	11	397	1
	Pct	.1%	.2%	.2%	.1%	.1%	.1%
Other	Count	42744	2353	9254	3532	61895	289
	Pct	25.0%	23.5%	30.0%	31.9%	22.3%	30.0%
Missing	Count	424	28	77	29	1063	21
	Pct	.2%	.3%	.2%	.3%	.4%	2.2%
Total Stops	Count	171653	9999	30884	11088	277758	964
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

<sup>6</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 on 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 (Females)**

Primary Initial Reason for Stop (Title. Subtitle)		Race					
		African American	Asian	Hispanic	Other	White	U/M
13	Count	21197	752	1096	462	24384	43
	Pct	23.7%	15.8%	16.5%	17.9%	17.7%	9.9%
21.11	Count	373	13	39	7	813	4
	Pct	.4%	.3%	.6%	.3%	.6%	.9%
21.13	Count	6	0	0	0	24	0
	Pct	.0%	.0%	.0%	.0%	.0%	.0%
21.14	Count	18	1	2	0	33	0
	Pct	.0%	.0%	.0%	.0%	.0%	.0%
21.2	Count	7607	691	857	335	11636	40
	Pct	8.5%	14.5%	12.9%	12.9%	8.4%	9.2%
21.3	Count	3927	237	356	153	7174	24
	Pct	4.4%	5.0%	5.4%	5.9%	5.2%	5.5%
21.4	Count	556	41	59	20	1105	6
	Pct	.6%	.9%	.9%	.8%	.8%	1.4%
21.6	Count	438	24	29	12	678	2
	Pct	.5%	.5%	.4%	.5%	.5%	.5%
21.7	Count	4593	420	469	166	9230	34
	Pct	5.1%	8.8%	7.1%	6.4%	6.7%	7.8%
21.8	Count	11830	856	670	399	20383	61
	Pct	13.2%	18.0%	10.1%	15.4%	14.8%	14.0%
21.9	Count	516	33	46	18	1451	3
	Pct	.6%	.7%	.7%	.7%	1.1%	.7%
22	Count	16385	678	1071	423	31112	80
	Pct	18.3%	14.2%	16.1%	16.3%	22.5%	18.4%
24	Count	42	2	2	0	53	3
	Pct	.0%	.0%	.0%	.0%	.0%	.7%
Other	Count	21712	1003	1927	578	29221	127
	Pct	24.3%	21.1%	29.0%	22.3%	21.2%	29.2%
Missing	Count	200	12	20	15	706	8
	Pct	.2%	.3%	.3%	.6%	.5%	1.8%
Total Stops	Count	89400	4763	6643	2588	138003	435
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The registration of the vehicle being driven (in-state or out-of-state) by the ethnicity of the driver is displayed in Tables 4 and 5, for males and females respectively.<sup>7</sup> The majority of both male and female drivers of all ethnicities were driving a vehicle with an in-state registration at the time of their stop.

<sup>7</sup> Note: Totals do not equal total traffic stops due to missing gender (930) and registration (1,841) data.

**Table 4. Vehicle Registration by Driver’s Ethnicity (Males)**

Vehicle Registration		Race					
		African American	Asian	Hispanic	Other	White	U/M
In State	Count	149318	8531	26023	7931	230311	837
	Pct	87.3%	85.5%	84.6%	71.7%	83.1%	87.6%
Out of State	Count	21766	1452	4726	3136	46999	119
	Pct	12.7%	14.5%	15.4%	28.3%	16.9%	12.4%
Total Stops	Count	171084	9983	30749	11067	277310	956
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 5. Vehicle Registration by Driver’s Ethnicity (Females)**

Vehicle Registration		Race					
		African American	Asian	Hispanic	Other	White	U/M
In State	Count	81436	4339	5982	2283	122726	370
	Pct	91.3%	91.2%	90.4%	88.2%	89.0%	85.5%
Out of State	Count	7765	421	634	304	15126	63
	Pct	8.7%	8.8%	9.6%	11.8%	11.0%	14.5%
Total Stops	Count	89201	4760	6616	2587	137852	433
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 6 through Table 10 concern the searches of both persons and property that occurred during the traffic stop. Tables 6 and 7 display the types of searches conducted (person or property) with regards to the ethnicity of the driver and disaggregated by gender. There were a large number of stops for which no search occurred or the type of search was unknown (n= 707,165). Of those with a reported valid search type, the majority of searches for both males and females of all ethnicities were a combination of both person and property. However, the percentage of person/property searches for Hispanic males (6.3%) was 2.5% higher than Caucasian males (3.8%). In addition, the percentage of personal/property searches for African American males (5.4%) was 1.6% higher than Caucasian males (3.8%). Little difference is observed for females where the cases of personal/property searches range between 1.0% (Asians) and 2.1% (Caucasians).



**Table 6. Search Conducted and Type of Search by Driver's Race/Ethnicity and Gender (Males)**

Search Type		Race					
		African American	Asian	Hispanic	Other	White	U/M
Person	Count	879	26	336	28	1288	5
	Pct	.5%	.3%	1.1%	.3%	.5%	.5%
Property	Count	2709	30	511	64	2075	7
	Pct	1.6%	.3%	1.7%	.6%	.7%	.7%
Both	Count	9277	230	1958	310	10548	30
	Pct	5.4%	2.3%	6.3%	2.8%	3.8%	3.1%
Total Searches With Type Reported	Count	12865	286	2805	402	13911	42
	Pct	7.5%	2.9%	9.1%	3.6%	5.0%	4.4%
No Search/Unknown/Missing	Count	158788	9713	28079	10686	263847	922
	Pct	92.5%	97.1%	90.9%	96.4%	95.0%	95.6%
Total Stops	Count	171653	9999	30884	11088	277758	964
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 7. Search Conducted and Type of Search by Driver's Race/Ethnicity and Gender (Females)**

Search Type		Race					
		African American	Asian	Hispanic	Other	White	U/M
Person	Count	202	14	19	6	339	1
	Pct	.2%	.3%	.3%	.2%	.2%	.2%
Property	Count	746	10	49	12	798	0
	Pct	.8%	.2%	.7%	.5%	.6%	.0%
Both	Count	1456	47	113	48	2835	7
	Pct	1.6%	1.0%	1.7%	1.9%	2.1%	1.6%
Total Searches With Type Reported	Count	2404	71	181	66	3972	8
	Pct	2.7%	1.5%	2.7%	2.6%	2.9%	1.8%
No Search/Unknown/Missing	Count	86996	4692	6462	2522	134031	427
	Pct	97.3%	98.5%	97.3%	97.4%	97.1%	98.2%
Total Stops	Count	89400	4763	6643	2588	138003	435
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Tables 8 and 9 display the reason provided by the officer for the search of the driver's person or property.

As shown, the majority of the searches were classified as incident to arrest for both genders and all ethnicities

except African Americans. A smaller percentage of male African Americans (42.9%) than Caucasians (59.3%) were searched as incident to arrest. The pattern was reversed for other non-Caucasian groups, with higher percentages of male Asians (72.9%), Hispanics (66.0%), and other non-Caucasian ethnicities (62.3%) searched as incident to arrest. The percentages of females searched as incident to arrest was lower for African Americans (46.6%) and Hispanics (59.2%) than Caucasians (64.2%), but higher for Asians (84.1%) and other non-Caucasian ethnicities (73.0%). Exigent circumstances were reported least often for each demographic (0.0% to 3.1%) except for Hispanic females, who were searched least often due to a K-9 alert. Searches of both male and female non-Caucasians were more likely to be for reasons categorized as *Other* than were searches of Caucasians. For males, 3.9% of Caucasians compared to 5.3% of Asians, 7.2% of other non-Caucasian ethnicities, 9.2% of Hispanics, and 10.4% of African Americans were searched for reasons categorized as *Other*. For females, 4.3% of Caucasians, compared to 4.8% of other non-Caucasian ethnicities, 8.7% of Asians, 13.8% of Hispanics, and 19.3% of African Americans were searched for reasons categorized as *Other*.

**Table 8. Reason for Search by Driver’s Ethnicity (Males)**

Reason for Search		Race					
		African American	Asian	Hispanic	Other	White	U/M
Consensual	Count	3543	35	427	77	3187	7
	Pct	28.3%	12.3%	15.5%	19.2%	23.1%	17.5%
Incident to Arrest	Count	5371	207	1817	250	8183	27
	Pct	42.9%	72.9%	66.0%	62.3%	59.3%	67.5%
Exigent Circumstances	Count	296	2	62	4	115	2
	Pct	2.4%	.7%	2.3%	1.0%	.8%	5.0%
Probable Cause	Count	1297	15	115	18	1025	2
	Pct	10.4%	5.3%	4.2%	4.5%	7.4%	5.0%
K-9 Alert	Count	701	10	78	23	744	2
	Pct	5.6%	3.5%	2.8%	5.7%	5.4%	5.0%
Other	Count	1302	15	254	29	541	0
	Pct	10.4%	5.3%	9.2%	7.2%	3.9%	.0%
Total Searches With Reason Reported	Count	12510	284	2753	401	13795	40
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 9. Reason for Search by Driver's Ethnicity (Females)**

Reason for Search		Race					
		African American	Asian	Hispanic	Other	White	U/M
Consensual	Count	423	2	25	8	735	1
	Pct	18.3%	2.9%	14.4%	12.7%	18.7%	12.5%
Incident to Arrest	Count	1076	58	103	46	2528	7
	Pct	46.6%	84.1%	59.2%	73.0%	64.2%	87.5%
Exigent Circumstances	Count	71	0	6	0	16	0
	Pct	3.1%	.0%	3.4%	.0%	.4%	.0%
Probable Cause	Count	216	1	12	2	246	0
	Pct	9.4%	1.4%	6.9%	3.2%	6.2%	.0%
K-9 Alert	Count	78	2	4	4	244	0
	Pct	3.4%	2.9%	2.3%	6.3%	6.2%	.0%
Other	Count	445	6	24	3	170	0
	Pct	19.3%	8.7%	13.8%	4.8%	4.3%	.0%
Total Searches With Reason Reported	Count	2309	69	174	63	3939	0
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	.0%

Table 10 displays the search disposition stratified by ethnicity and collapsed across gender. The majority of all searches resulted in nothing being confiscated, with Asians (89.8%) and Hispanics (86.5%) most likely to have nothing confiscated and least likely to have contraband. However, non-Caucasians, including Asians and Hispanics, were more than twice as likely as Caucasians to have property confiscated. Of searches in which the driver was Caucasian, 2.1% resulted in property being confiscated compared to 4.3% of searches involving Asian drivers, 5.6% of searches involving Hispanic drivers, 5.7% of searches involving African American drivers, and 5.8% of searches involving drivers of other non-Caucasian ethnicities.

**Table 10. Type of Search by Search Disposition and Driver's Ethnicity**

Search Type	Search Disposition		Race					
			African American	Asian	Hispanic	Other	White	U/M
Person	Contraband	Count	107	0	11	1	119	2
		Pct	.9%	.0%	.6%	.3%	.6%	1.0%
	Property	Count	21	1	4	0	13	0
		Pct	.2%	.3%	.2%	.0%	.1%	.0%
Person	Contraband & Property	Count	5	1	0	0	6	0
		Pct	.0%	.3%	.0%	.0%	.0%	.0%
	Nothing	Count	501	28	188	21	869	7
		Pct	4.2%	7.5%	10.0%	6.1%	4.5%	4.7%
Property	Contraband	Count	164	0	16	10	291	0
		Pct	1.4%	.0%	.8%	2.9%	1.5%	.0%
	Property	Count	323	5	47	7	87	4
		Pct	2.7%	1.3%	2.5%	2.0%	.5%	2.7%
Property	Contraband & Property	Count	50	0	5	0	28	0
		Pct	.4%	.0%	.3%	.0%	.1%	.0%
	Nothing	Count	1150	15	224	19	1067	1
		Pct	9.7%	4.0%	11.9%	5.5%	5.5%	.7%
Both	Contraband	Count	978	13	71	17	1857	2
		Pct	8.2%	3.5%	3.8%	4.9%	9.7%	1.0%
	Property	Count	294	10	48	12	296	2
		Pct	2.5%	2.7%	2.5%	3.5%	1.5%	1.0%
Both	Contraband & Property	Count	714	6	41	11	753	1
		Pct	6.0%	1.6%	2.2%	3.2%	3.9%	.7%
	Nothing	Count	4047	156	897	158	5047	34
		Pct	34.0%	41.9%	47.6%	45.8%	26.2%	22.8%
Unknown/Missing	Contraband	Count	113	1	6	0	87	0
		Pct	.9%	.3%	.3%	.0%	.4%	.0%
	Property	Count	39	0	6	1	16	1
		Pct	.3%	.0%	.3%	.3%	.1%	.7%
Unknown/Missing	Contraband & Property	Count	3	1	0	0	6	0
		Pct	.0%	.3%	.0%	.0%	.0%	.0%
	Nothing	Count	3406	135	321	88	8696	95
		Pct	28.6%	36.3%	17.0%	25.5%	45.2%	65.5%
All Search Types With Disposition Reported	Contraband	Count	1362	14	104	28	2354	4
		Pct	11.4%	3.8%	5.5%	12.3%	12.2%	2.7%
	Property	Count	677	16	105	20	412	7
		Pct	5.7%	4.3%	5.6%	5.8%	2.1%	4.7%
All Search Types With Disposition Reported	Contraband & Property	Count	772	8	46	11	793	1
		Pct	6.5%	2.2%	2.4%	3.2%	4.1%	.6%
	Nothing	Count	9104	334	1630	286	15679	137
		Pct	76.4%	89.8%	86.5%	82.9%	81.5%	91.9%
Total Searches With Type and Disposition Reported	Count	11915	372	1885	345	19238	149	
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Tables 11 and 12 pertain to the outcome of the traffic stop. The most frequent outcome of traffic stops for Asian and Caucasian males was a warning (40.7% and 46.2%, respectively), while males of Hispanic, African American, and other ethnicities most frequently received a citation (39.1%, 39.8%, and 46.9%, respectively). Hispanic males were more than twice as likely to be arrested (8.0%) as Caucasian males (3.6%). Among females, the majority of stops of Caucasians (51.6%) resulted in a warning, compared to 32.5% to 44.6% of stops of non-Caucasians. Hispanic females were slightly more likely to receive a citation (35.6%) than a warning (32.5%). Females of other ethnicities were more likely to receive a warning than a citation, although the likelihood of receiving a citation was slightly higher for non-Caucasian females than for Caucasian females. The proportion of females who were arrested is similar across ethnicities, ranging from 1.6% to 2.6% for non-Caucasian females, compared to 2.3% for Caucasian females.

**Table 11. Traffic Stop Outcome by Driver's Ethnicity (Males)**

Traffic Stop Outcome		Race					
		African American	Asian	Hispanic	Other	White	U/M
Warning	Count	66145	4068	8794	4035	128337	469
	Pct	38.5%	40.7%	28.5%	36.4%	46.2%	48.7%
Citation	Count	68237	3718	12063	5201	102868	255
	Pct	39.8%	37.2%	39.1%	46.9%	37.0%	26.5%
SERO	Count	24563	1429	5368	1275	31274	175
	Pct	14.3%	14.3%	17.4%	11.5%	11.3%	18.2%
Arrest	Count	7616	252	2476	305	9934	29
	Pct	4.4%	2.5%	8.0%	2.8%	3.6%	3.0%
Unknown/ Missing	Count	5002	532	2183	272	5345	36
	Pct	2.9%	5.3%	7.1%	2.5%	1.9%	3.7%
Total	Count	171653	9999	30884	11088	277758	964
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 12. Traffic Stop Outcome by Driver’s Ethnicity (Females)**

Traffic Stop Outcome		Race					
		African American	Asian	Hispanic	Other	White	U/M
Warning	Count	36264	2124	2159	1125	71208	231
	Pct	40.6%	44.6%	32.5%	43.5%	51.6%	53.1%
Citation	Count	32650	1607	2367	893	41383	105
	Pct	36.5%	33.7%	35.6%	34.5%	30.0%	24.1%
SERO	Count	16233	686	1333	408	19275	85
	Pct	18.2%	14.4%	20.1%	15.8%	14.0%	19.5%
Arrest	Count	1678	77	172	57	3157	9
	Pct	1.9%	1.6%	2.6%	2.2%	2.3%	2.1%
Unknown/ Missing	Count	2575	269	612	105	2980	5
	Pct	2.9%	5.6%	9.2%	4.1%	2.2%	1.1%
Total	Count	89400	4763	6643	2588	138003	435
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Restricting the analysis to only cases in which the traffic stop resulted in arrest, Tables 13 and 14 display the reason given by the officer for the arrest by the driver’s ethnicity. The majority of the arrests for all ethnic groups were based on the stop, ranging from 64.7% for African American males to 75.4% for other non-Caucasian males compared to 71.9% for Caucasian males. For females the range was 64.8% for African American females to 78.9% for other non-Caucasian females compared to 73.8% for Caucasian females. Twice as many African American and Caucasian males were arrested based on the search compared to Asian and Hispanic males. For both males and females, the proportion of arrests for which the reasons were unknown or missing was somewhat higher for Hispanics, African Americans, and Asians than for Caucasians. For Hispanics in particular, the reason for arrest was unknown or missing for 9.9% of males and 13.4% of females, compared to unknown or missing reasons for 3.7% of Caucasian males and 5.2% of Caucasian females.

**Table 13. Reason for Arrest by Driver's Ethnicity and Gender (Males)**

Reason for Arrest		Race					
		African American	Asian	Hispanic	Other	White	U/M
Based on Search	Count	843	13	62	23	1089	1
	Pct	11.1%	5.2%	2.5%	7.5%	11.0%	3.4%
Based on Stop	Count	4930	182	1771	230	7139	21
	Pct	64.7%	72.2%	71.5%	75.4%	71.9%	72.4%
Other	Count	1392	43	399	41	1335	5
	Pct	18.3%	17.1%	16.1%	13.4%	13.4%	17.2%
Unknown/ Missing	Count	451	14	244	11	371	2
	Pct	5.9%	5.6%	9.9%	3.6%	3.7%	6.9%
Total Arrests	Count	7616	252	2476	305	9934	29
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**Table 14. Reason for Arrest by Driver's Ethnicity and Gender (Females)**

Reason for Arrest		Race					
		African American	Asian	Hispanic	Other	White	U/M
Based on Search	Count	93	3	3	1	274	0
	Pct	5.5%	3.9%	1.7%	1.8%	8.7%	.0%
Based on Stop	Count	1088	53	124	45	2329	5
	Pct	64.8%	68.8%	72.1%	78.9%	73.8%	55.6%
Other	Count	334	16	22	10	391	1
	Pct	19.9%	20.8%	12.8%	17.5%	12.4%	11.1%
Unknown/ Missing	Count	163	5	23	1	163	3
	Pct	9.7%	6.5%	13.4%	1.8%	5.2%	33.3%
Total Arrests	Count	1678	77	172	57	3157	9
	Pct	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

**DISCUSSION AND RECOMMENDATIONS**

The descriptive statistics suggest that traffic stops and the characteristics of traffic stops are fairly consistent with regards to ethnicity. Across ethnicities and gender, both males and females were most likely to be stopped for a violation of Title 22 or Title 13, except for Asian females who were stopped most often for a violation of Title 21.8. Among males, both Hispanic and African American males were slightly more likely to have their person/property searched than Caucasian males. Searches of both male and female non-Caucasians were more likely to be categorized as *Other* than were searches of

Caucasians. The majority of each group stopped had nothing confiscated regardless of their ethnicity; however, Caucasians, both male and female, were less likely to have property confiscated than non-Caucasians. Once stopped, Caucasian and Asian males received a warning most often, while African American and Hispanic males most frequently received a citation. Hispanic males were twice as likely to be arrested as Caucasian males. Females, across ethnicities, were most likely to be given a warning. Arrest rates of females also were similar across ethnicities. Additionally, for both males and females, an *Unknown/Missing* arrest reason was reported more often for non-Caucasians than Caucasians.

While each of these observations has been revealed from the data, conclusions regarding the relationship between ethnicity and traffic stops should be cautiously interpreted and carefully utilized. First, with regards to the ethnicities reported, the lack of correspondence between the ethnicities required by the statute and those ethnicities reported by the MVA results in some ethnicities being collapsed and therefore not represented in this analysis.<sup>8</sup> To rectify this limitation, the adoption of MVA categories would allow for the full analysis of ethnicities reported and would eliminate the possibility of bias as a result of the differences in data sources.

The major limitation of the current study pertains to the possibility of omitted variables that may account for any differences observed between ethnicities. The purpose of this report is to discover whether drivers who exhibit similar behaviors, but are of different 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 ethnicity, any differences observed may be the result of these driving patterns and not systematic differences between ethnicities. Considering that it is unknown whether traveling behaviors and patterns differ by ethnicity, no statistical conclusions can be drawn regarding whether there is differential treatment.

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<sup>8</sup> The statute requires the use of the following categories: Asian, Black, White, Hispanic and Other. The MVA uses Black or African American, White, Asian, Native Hawaiian or Other Pacific Islander, American Indian, and Other.



This report has provided descriptive statistics regarding the demographic information associated with traffic stops in Maryland for the calendar year of 2008. No definitive conclusions can be drawn from this report regarding the effect of 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 Governor's Office of Crime Control and Prevention is committed to strengthening communication with law enforcement agencies to facilitate the collection of available data and reporting.<sup>9</sup>

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<sup>9</sup> GOCCP incorporated MSAC in 2007, according to Executive Order 01.01.2007.05.