



To: Mayor Susan Narvaiz and the San Marcos City Council
Dan O'Leary, City Manager

From: Howard E. Williams, Chief of Police

Date: February 21, 2006

Subject: 2005 Racial Profiling Report

Senate Bill 1074 of the 77th Legislature established requirements in the Texas Code of Criminal Procedures for law enforcement agencies to collect and report data concerning racial profiling for traffic stops in which officers issued citations, searches conducted, and arrests made. The attached report fulfills the reporting requirement of Article 2.132 of the Code of Criminal Procedures.

Under Article 2.135, the San Marcos Police Department is exempt from the reporting requirement on traffic and pedestrian stops under Article 2.134 because, during the preceding calendar year, each law enforcement motor vehicle regularly used by officers employed by the Department to make traffic and pedestrian stops was equipped with video camera and transmitter-activated equipment, and each traffic and pedestrian stop made by an officer employed by the Department that was capable of being recorded by audio/video or audio equipment, as appropriate, was recorded using the equipment.

This report reflects the total number of traffic citations issued, searches performed, and arrests made that were related to those searches from January 1, 2005 to December 31, 2005. In our analysis, we used population data for the City of San Marcos from the 2000 census, the most recent census data available, and collision data from all reported collision in San Marcos in 2005.

Dr. Hassan Tajalli, a statistician and Assistant Professor of Political Science at Texas State University – San Marcos, reviewed and analyzed the data collected by the San Marcos Police Department. His analysis indicated that officers stopped ethnic minorities disproportionately less than they stopped the White population. However, officers searched Hispanics whom they had stopped disproportionately more than Black or White residents. The differences were small, but statistically significant.

For comparison, we computed enforcement ratios using three different methods: the census data ratio, the fair roads ratio, and the collision data ratio. The three enforcement ratios show little difference in enforcement rates between races or ethnic groups. Additionally, after reviewing audio and video tapes from patrol vehicles, supervisors have reported no evidence of racial profiling by any officer, and the Department received no citizen complaints in 2005 regarding racial profiling.



City of San Marcos, Texas 2005 Racial Profiling Report

Senate Bill 1074 of the 77th Legislature establishes requirements in the Texas Code of Criminal Procedures for law enforcement agencies to collect and report data concerning racial profiling for traffic stops in which officers issue citations, conduct searches, and make arrests. This report to the City Council fulfills the reporting requirement of Article 2.132 of the Code of Criminal Procedures.

The San Marcos Police Department defines racial profiling as “a law enforcement-initiated action based on an individual’s race, ethnicity, or national origin rather than on the individual’s behavior or on information identifying the individual as having engaged in criminal activity.”¹ This report reflects the total number of traffic citations San Marcos Police Department officers issued during 2005, the number of searches that officers made relating to those citations, the number of those searches that officers conducted with the drivers’ consent, and the number of arrests that officers made consequential to those searches.

The Department retained a statistician to perform an independent analysis, and we calculated three enforcement ratios based on different base populations. In the analysis of the data, we compared the citation and search data for 2005 to census data from 2000 for the City of San Marcos and to collision data from all reported collisions in San Marcos in 2005.

Independent Analysis

Dr. Hassan Tajalli, a statistician and Assistant Professor of Political Science at Texas State University – San Marcos, reviewed the data. Table 1, below, denotes citations San Marcos police officers issued in 2005, categorized by race/ethnicity of the person cited. This information comes from data officers collected on the citations and reported to the Municipal Court. We asked Dr. Tajalli to answer three questions for this report.

Question 1: Is there a statistically significant difference between the ethnic distribution of stops by the San Marcos Police Department and the ethnic distribution in the general population in San Marcos?

Response: Results indicate that there is no racial profiling by the SMPD in stopping minorities (African-Americans, Hispanics, and others). In fact, ethnic minorities were stopped disproportionately less than White population.

Question 2: Is the ethnic distribution of searches conducted by the San Marcos Police Department different from the ethnic distribution of stops that were conducted by the San Marcos Police Department?

Response: Results indicate that there is a significant difference between the ethnic distribution of searches and stops that were conducted by SMPD. Hispanics who were stopped by the SMPD were disproportionately more subject to searches than Blacks or White residents. In the absence of racial profiling we would have expected to see about 81 Hispanic being

¹ San Marcos Police Department Policies and Procedures Manual, General Order 203.III.D.

searched but the actual searches by the SMPD is 104. This difference, while not very large, is statistically significant.

Question 3: Is the ethnic distribution of arrests performed disproportionately different from the ethnic distribution of the traffic citations data?

Response: Since the total number of arrests among various ethnic groups is very small (7), we cannot reliably draw any statistical conclusion from the available data.

Table 1. Total Citations, Searches, and Arrests

Race/Ethnicity	Citations	Searches	Consent to Search	Total Charges
White	4360	132	85	2
Male	2732	110	67	1
Female	1628	22	18	1
Hispanic	2318	104	63	3
Male	1579	90	55	2
Female	739	14	8	1
African-American	321	11	6	2
Male	218	9	6	1
Female	103	2	0	1
Asian-American	26	1	1	0
Male	20	1	1	0
Female	6	0	0	0
American Indian	1	0	0	0
Male	1	0	0	0
Female	0	0	0	0

Enforcement Ratios

Every year, cities across Texas struggle to define the service population that forms the basis for racial profiling reporting, and San Marcos is no different. Census data simply does not account for students residing in San Marcos, for employees or workers who commute to town each day, for visitors and tourists, and for the uncounted thousands of people who simply drive through town every day on IH-35 and the rest of the state highway system.

Consequently, better to describe citation data, we calculated three enforcement ratios. These ratios use different base populations that either are in use or are favored by other cities or by interested citizen



groups. These three enforcement ratios are the census data ratio, the fair roads ratio, and the collision data ratio.

The census data calculation is a ratio of the percentage of citations that San Marcos police officers write to different race/ethnic groups compared to the percentage each race/ethnic group represents in the 2000 census. Table 3 contains the census data calculations.

The fair roads calculation is a ratio of the percentage of citations San Marcos police officers write to different race/ethnic groups compared to the percentage of households by race/ethnic group that have vehicles available to drive, according to 2000 census data. Table 4 contains the fair roads calculations.

The collision data calculation is a ratio of the percentage of citations San Marcos police officers write to different race/ethnic groups compared to the percentage that race/ethnic group represents of drivers in all the collisions reported to the San Marcos Police Department in 2005. Table 5 contains the collision data calculations.

Table 2 summarizes the results of the three enforcement ratios. As the table shows, there are no significant differences between the enforcement ratios, although the ratios change depending on the method selected.

Table 2. Enforcement Ratios

Race/Ethnicity	Census Data Ratio	Fair Roads Ratio	Collision Data Ratio
White	1.10	0.95	0.98
Hispanic	0.89	1.10	1.04
African-American	0.84	1.23	1.07
Asian-American	0.37	0.37	0.44

Census Data Ratio

Table 3 defines the citations to census data ratio, comparing the percentage of citations issued to each racial/ethnic group to the percentage that each group represents in the 2000 census. A ratio of 1.00 means that officers cite a racial/ethnic group proportionally to that group’s percentage of the population. A ratio greater than 1.00 means that officers are citing a group more often than that group’s percentage of the population, and a ratio less than 1.00 means that officers are citing a group less often than that group’s percentage of the population.

From the census data, it appears that in 2005 officers cited whites at a rate slightly higher than their percentage of the population (1.10). Hispanics and African-Americans received fewer citations than their percentages of the population (0.89 and 0.84, respectively). Asian-Americans received far fewer citations than their percentage of the population (0.30), but, because the number of Asian-Americans cited and the number in the population are so small, this variation was not significant.



Table 3. Citations to Census Ratio

Race/Ethnicity	2000 Census Data	% in the Census	Citations	% of Citations	Census Data Ratio
White	19,165	56.17%	4,360	62.06%	1.10
Hispanic	12,676	37.15%	2,318	33.00%	0.89
African-American	1,860	5.45%	321	4.57%	0.84
Asian-American	418	1.23%	26	0.37%	0.30
Total	34,119		7,025		

Comparing citations to census data has only one advantage – the data is stable, meaning we can compare results from year to year because the census data does not change. Unfortunately, the census method has several shortcomings.

- As census data ages, it may not reflect current population figures.
- Census data includes everyone living in San Marcos, not just people of driving age.
- Census data counts only those people living in San Marcos, not people attending Texas State University, but whose permanent residence is elsewhere, commuters, visitors, shoppers, or those who simply are driving through town. However, all of those people are subject to being stopped and cited, thus affecting the enforcement ratio.

Fair Roads Ratio

Table 4 defines the fair roads ratio, a comparison of the percentages of citations issued by race/ethnicity compared to the percentages of households with vehicles. The fair roads ratio is an attempt to filter census data to exclude from the computations those people who do not have cars. A ratio of 1.00 means that officers cite a racial/ethnic group proportionally to that group’s percentage of households with vehicles available to drive. A ratio greater than 1.00 means that officers are citing a group more often than that group’s percentage of households with vehicles available to them, and a ratio less than 1.00 means that officers are citing a group less often than that group’s percentage of households with vehicles available to them.

From the fair roads data, it appears that in 2005 officers cited whites at a rate slightly lower than their percentage of households with access to vehicles (0.95). Hispanics receive citations at a rate slightly higher than their percentage of households with vehicles (1.10). African-Americans received citations at a rate slightly higher than Hispanics (1.23). Asian-Americans received far fewer citations than their percentage of households with vehicles (0.37). However, because the numbers of Asian-Americans cited and the number of households are so small, that variation is not significant.



Table 4. Fair Roads Ratio

Race/Ethnicity	Households with Cars	% in the Census	Citations	% of Citations	Fair Roads Standard
White	7,465	65.32%	4,360	62.06%	0.95
Hispanic	3,426	29.98%	2,318	33.00%	1.10
African-American	424	3.71%	321	4.57%	1.23
Asian-American	113	0.99%	26	0.37%	0.37
Total	11,428		7,025		

The fair roads ratio has some advantages over the census data, because it attempts to count only the population that has access to a vehicle, but it is also subject to criticism.

- The percentages of households with vehicles comes from the 2000 census data, and, as the data ages, it may not reflect current population figures.
- The fair roads ratio does not account for the number of vehicles per household, the number of drivers per vehicle, the number of drivers per household, or the number of miles or hours per day that someone drives the vehicle.
- The fair roads ratio includes only people living in San Marcos, not those attending Texas State University whose permanent residence is elsewhere, commuting to work each day, visiting, or simply driving through town, yet all of those groups are subject to being stopped and cited, thus affecting racial profiling statistics.
- The ratio requires a comparison of dissimilar things: percentages of people cited to percentages of households. A more effective measure would be the percentage of households receiving citations.

Collision Data Ratio

Table 5 defines the citations to collision data ratio, comparing the percentage of citations issued to each racial/ethnic group to the percentage that each group represents in the 2005 collision data. A ratio of 1.00 means that officers cite a racial/ethnic group proportionally to that group’s representation in the collision data. A ratio greater than 1.00 means that officers are citing a group more often than that group’s representation in the collision data, and a ratio less than 1.00 means that officers are citing a group less often than that group’s representation in the collision data.

From the collision data ratio, it appears that officers are citing whites at a rate slightly lower than their percentage of involvements in collisions (0.98). Hispanics receive citations at a rate higher than their percentage of involvements in collisions (1.04). African-Americans received citations at a rate slightly higher than whites did, but less than Hispanics (1.07). Asian-Americans received far fewer citations than their percentage of involvements in collisions (0.44). However, because the numbers of Asian-Americans cited and the number involved in collisions are so small, that variation is not significant.



Table 5. Citations to Collision Data Ratio

Race/Ethnicity	Collisions	% of Collisions	Citations	% of Citations	Ratio of Citations to Collisions
White	1,650	63.17%	4,360	62.06%	0.98
Hispanic	828	31.70%	2,318	33.00%	1.04
African-American	112	4.29%	321	4.57%	1.07
Asian-American	22	0.84%	26	0.37%	0.44
Total	2,612		7,025		

The collision data ratio has several advantages.

- The collision data ratio includes only those people who were driving and were thus subject to being stopped and cited.
- The collision data ratio includes drivers who live in San Marcos, but it also includes those who are attending Texas State University, who are commuting to work each day, who are visiting, or who are simply driving through town.
- The data on collisions refreshes each year so it more accurately reflects current demographics of those driving in San Marcos.

The collision data ratio has some problems, however.

- The analysis is based on the assumption that collisions are randomly distributed throughout racial/ethnic groups.
- The collision data may be skewed toward younger drivers because younger drivers tend to have more collisions, although younger drivers also tend to constitute a larger percentage of drivers cited for violations.

Other Measures

San Marcos Police Department policies require supervisors once each quarter to review for signs of racial profiling the video tapes from each officer's vehicle. The supervisors reported that they saw no indications of racial profiling on the tapes that they reviewed for 2005, and the Department received no citizen complaints regarding racial profiling.



Table 6. Three-Year Enforcement Ratio Comparison

<i>Race/Ethnicity</i>	Census Data Ratios			Fair Roads Standard Ratios			Collision Data Ratios		
	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>
White	1.13	1.05	1.10	0.98	0.91	0.95	0.94	0.94	0.98
Hispanic	0.84	0.95	0.89	1.04	1.17	1.10	1.19	1.12	1.04
African American	0.85	0.94	0.84	1.25	1.38	1.23	1.11	1.03	1.07
Asian American	0.26	0.48	0.37	0.33	0.59	0.37	0.25	1.02	0.44



Dr. Hassan Tajalli's Report

2005 Data					
	# of stops	Search Conducted	Consent to Search	Probable Cause	Number of Arrests
Hispanic	2318	104	63	0	3
White	4360	132	85	0	2
Black	321	11	6	0	2
Other	27	1	1	0	0
Total	7026	248	155	0	7

San Marcos Pop. Based on 2000 Censes					
	Hispanic	White	Black	Other	Total
N	12676	19165	1860	1032	34733
%	0.364955518	0.55178073	0.05355138	0.029712	100%

	Hispanic	White	Black	Other	Total
Observed F	2318	4360	321	27	7026
Null Hypo.*	0.364955518	0.55178073	0.05355138	0.029712	
Expected F	2564.177469	3876.81139	376.251982	208.7592	
Chi Square	23.63461468	60.22249	8.11366224	158.2512	250.222

* Based on the proportion of racial groups in 2000 censes for San Marcos

Question: Is there a statistically significant difference between the ethnic distribution of 'stops' by SMPD and the ethnic distribution in the general population in San Marcos?
Answer: Results indicate that there is no racial profiling by the SMPD in stopping minorities (African Americans, Hispanics, and others). In fact, ethnic minorities were stopped disproportionately less than White population. chi square(3, n=7026)=250.22

Search Conducted

	Hispanic	White	Black	Total*
Observed F	104	132	11	247
Null Hypo.**	0.33119017	0.62294614	0.04586369	
Expected F	81.803972	153.867695	11.3283326	247
Chi Square	6.022490683	3.1078395	0.00951617	9.139846 Significant

* There is not enough information to include 'Other' minorities into the computations.

** Based on the proportion of stops among Hispanics., White and African Americans

	# of Stops			
	Hispanic	White	Black	
	2318	4360	321	6999
	0.33119017	0.622946135	0.04586369	1

Question: Is the ethnic distribution of '*searches*' conducted by the SMPD different than the ethnic distribution of '*stops*' that were conducted by SMPD?

Answer: Results indicate that there is a significant difference between the ethnic distribution of '*searches*' and '*stops*' that were conducted by SMPD. Hispanics who were '*stopped*' by the SMPD were disproportionately more subject to '*searches*' than Blacks or White residents. In the absence of racial profiling we would have expected to see about 81 Hispanic being searched but the actual searches by the SMPD is 104. This difference, while not very large, is statistically significant. $\chi^2(2, n=247) = 9.14$

Since the total number of arrests among various ethnic groups is very small (7), we cannot reliably draw any statistical conclusion from the available data.