



2011 Bias-Free Policing Report

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INTRODUCTION

The 2011 Annual report on Rockford Police Department Traffic Stops summarizes data from 10,925 traffic stops. Data collection dates were from January 1, 2011, to December 31, 2011. In 2004, Illinois began collecting and assessing traffic stop data. This year is the eighth year data has been collected and analyzed.

In accordance to Illinois State Law, since January 1, 2004 (originally scheduled to end in 2007 but has been extended), whenever a State or Local law enforcement officer stops a vehicle for an alleged violation of the Illinois Vehicle Code, he or she shall record at least the following:

1. The name, address, gender, and the officer's subjective determination of the race of the person stopped; the person's race shall be selected from the following list: Caucasian, African-American, Hispanic, Native American/Alaskan native, or Asian/Pacific Islander.
2. The alleged traffic violation that led to the stop of the motorist.
3. The make and year of the vehicle stopped.
4. The date and time of stop.
5. The location of the traffic stop.
6. Whether or not a search contemporaneous to the stop was conducted of the vehicle, driver, passenger, or passengers; and if so, whether it was with consent or by other means.
7. The name and badge number of the issuing officer.

DEPARTMENT POLICY

The policy of the Rockford Police Department is to respect the civil rights of all persons and to prohibit and prevent any form of discrimination by members of the Department when any action taken on behalf of or by any member of this Department is motivated by race, color, ethnicity, age, gender, national origin, religion, economic status, cultural group, sexual orientation, or any other identifiable group. Specifically, members of the Rockford Police Department will not engage in any activities that are discriminatory or indicative of a practice of biased-based/racial profiling.



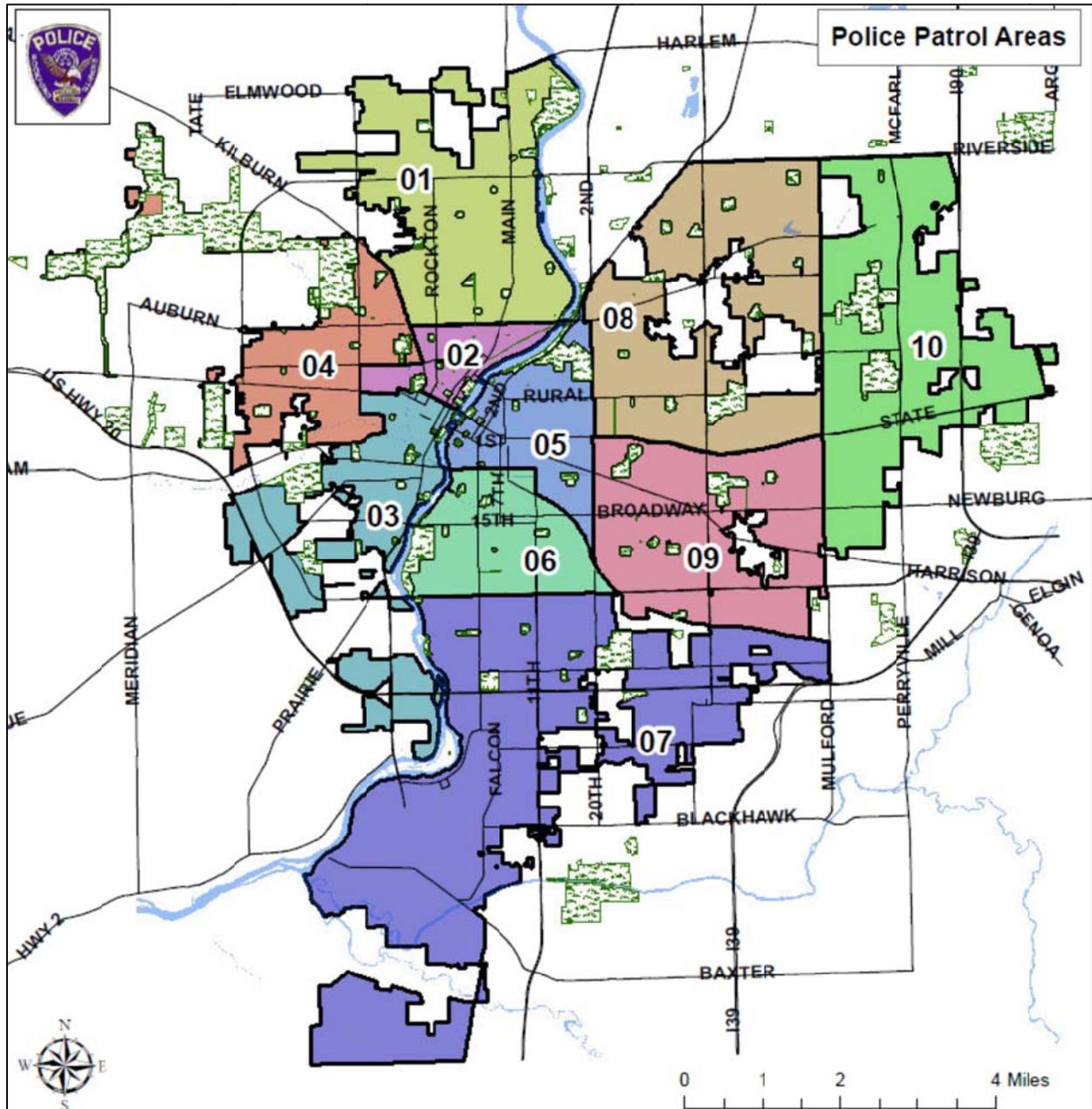
BENCHMARK

The Illinois Department of Transportation is responsible for collecting the data from police agencies and Northwestern University's Center for Public Safety is assisting in analysis of the data. The Rockford Police Department examined the data for the department by analyzing the stops, outcome of stop, and searches of Caucasian and Minority drivers. Northwestern will also examine the same data for all Police Departments in the State of Illinois. Northwestern University's Center for Public Safety has developed a benchmark for police agencies statewide based on the 2000 census. An "adjusted benchmark" was established for each city and county police agency. The benchmark population demographic consists of individuals 15 years or older who are eligible to drive. The adjusted census benchmark for Rockford driving population is:

72.9% Caucasian and 25.9% Minority drivers

This benchmark indicates that 72.9% of the Rockford eligible driving population (15 years and older) is Caucasian, while 25.9% is Minority.





BEAT ANALYSIS

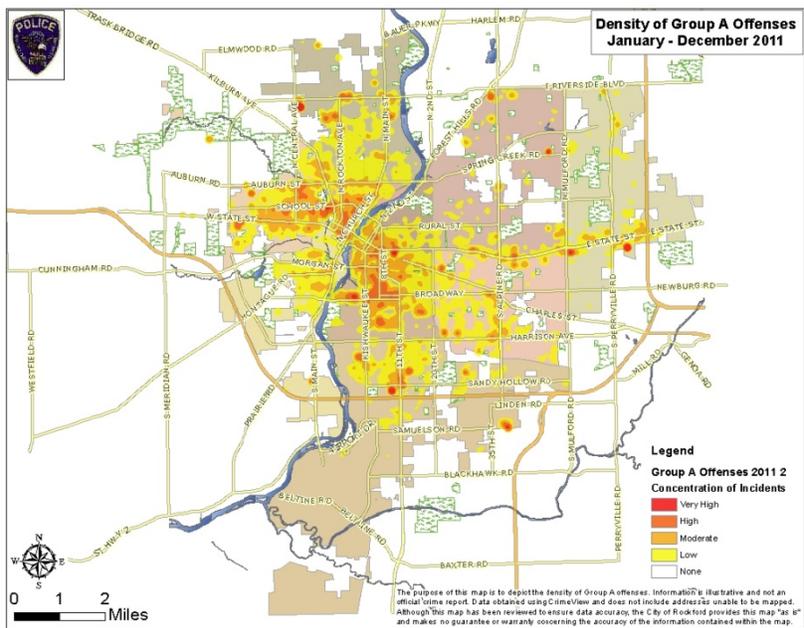
It is necessary to examine the demographic makeup of the city of Rockford. At first glance, it appears that there is significant disparity in the amount of traffic stops involving Minority drivers versus Caucasian drivers. A disparity score of “1” would indicate a perfect ratio of number of traffic stops, to the percent of Minority drivers in the population. The disparity index for



Minority drivers in Rockford for 2011 is 1.53. This would indicate that a Minority driver has a .53 greater likelihood of being stopped by the Rockford Police Department.

To understand the relationship between the percent population of drivers in Rockford and the percent stopped by the Department, we must examine different variables that contribute to the disparity index. Each of our Patrol Zones is referred to as “Beats.” Each Beat has unique characteristics. There is a noted difference in beat demographics, police allocation of resources, and geographic operators such as main road veins and population concentration.

One variable that contributes to police allocation of resources is the crime rate. With higher crime rates in specific areas, there were more concentrated police officers in those designated areas. In 2011 Patrol Beats Four and Six had the highest total criminal offense crime rate. (See Appendix 1) Total criminal offenses include the FBI’s National Incident-Based Reporting System (NIBRS) Group A and Group B Offenses. Group A offenses are the primary 46 offenses under 22 offense categories according to NIBRS. This includes offenses such as homicide, arson, assault, burglary, and drug/narcotic offenses. Group B offenses are the secondary 11 offense categories under NIBRS such as driving under the influence, disorderly conduct, and non-violent family offenses. There will be more police presence in these Beats, and subsequently a greater likelihood of being stopped.



Additional M3 Officers (Support Services officers who Map, Manage, & Measure High Crime Areas) concentrate efforts in these areas for crime reduction. Also, as of October of 2005 through present, Rockford’s first Weed & Seed area is located in sub beats 43 & 50. These two sub beats are contained by Beats 2 and 4. Rockford’s second Weed & Seed area is located in sub beats 160-164, & 175. These sub beats are contained by Beat 6. Starting in 2007 to present, there has been an

Alternative Drug Program (ADP) and a Seasonal Crime Initiative (SCI) started in Beats 2, 4, 5, & 6. More police presence in the area is due to a higher crime rate, housing concentration, citizen involvement, and police service.

An analysis recognizing the differences in the Beats would show the Minority drivers stopped and the estimated Minority population in the Beat of the stop becoming more proportional. In the beats with more enforcement, the disparity index is more proportional to the population.



Breaking down traffic stops by patrol beat provides insight into the geographic factors involved in each area in addition to the city as a whole. (See Appendix 2)

Another geographic variable, which may contribute to the disparity in numbers, would be the main geographic roads that connect Rockford's west side of the river to the east side of the river. Beat Eight had the greatest disparity in numbers. Beat 8 is also an area that contains Riverside Blvd., Spring Creek, & East State Street. Other Beats contain these streets as well, but Beat 8 contains areas where there is high connectivity from West to East Side as well as a large area of County Jurisdiction within the Patrol Area. From the North, N 2nd St connects Loves Park to Beat 8 by way of Spring Creek. Riverside Blvd. in Beat 8 is between Alpine Rd. and Mulford Rd. where a large portion of the city's medical services are located. Beat 8 also contains the north side of East State St. from near downtown to Mulford Rd. This is where many strip malls, restaurants, and large shopping areas are located. To get to these places from the west side of the river, one is more likely to travel these roads. These streets may indicate why the disparity is the highest here. Only an estimated 16% of 2011 traffic stops conducted in Beat 8 were actually residents of this area.

*Resident determined by driver's address based on addresses that mapped.

*Beat 8 determined by Beat Location of Stop listed in data.

Traffic Stop Data 2011

Table 1 - Rockford Traffic Stops

	2010		2011		% Change
Total Rockford Stops		9,378		10,925	16.50%

	Caucasian Drivers			Minority Drivers		
	2010	2011	% Change	2010	2011	% Change
Stops Per Group	5,423	6,582	21.37%	3,955	4,343	9.81%
Percent of Stops	57.83%	60.25%	2.42%	42.17%	39.75%	-2.42%
Estimated Driving Population	72.90%	72.90%	0.00%	25.91%	25.91%	0.00%
Disparity Index	0.79	0.83	0.03	1.63	1.53	-0.09

**note: numbers rounded to 2 decimal places account for % differences.

**note that % change of a percent is not uniform; % increase/decrease noted by % difference, not % change.

**Disparity Index is not a % change, but a difference.

Table 2 - Reason For Stop

	Caucasian Drivers					Minority Drivers				
	2010	% of Total	2011	% of Total	% Change	2010	% of Total	2011	% of Total	% Change
Number of Stops	5,423	100.00%	6,582	100.00%	21.37%	3,955	100.00%	4,343	100.00%	9.81%
Moving Violations	3,836	70.74%	4,467	67.87%	16.45%	2,500	63.21%	2,592	59.68%	3.68%
Equipment	554	10.22%	893	13.57%	61.19%	617	15.60%	812	18.70%	31.60%
License/Registration	1,033	19.05%	1,222	18.57%	18.30%	838	21.19%	939	21.62%	12.05%

**note that % Change is the change in number of violations, not change in % of total stops

Table 3 - Stop Outcome Comparison

	Caucasian Drivers			Minority Drivers		
	2010	2011	% Change	2010	2011	% Change
Citation	3940	4378	11.12%	2769	2777	0.29%
percent	72.65%	66.51%	-8.14%	70.01%	63.94%	-8.07%
Verbal Warning	1483	2204	48.62%	1186	1566	32.04%
percent	27.35%	33.49%	6.14%	29.99%	36.06%	6.07%
Total	5423	6582	21.37%	3955	4343	9.81%

**note that % change of a percent is not uniform; % increase/decrease noted by % difference, not % change.

**note that due to rounding, some totals may not represent 100%

Table 4 - Consent Search Data

	2010			2011			% Change
Total Consent Searches	183			212			15.85%
Total Stops	9,378			10,925			16.50%
Percent of Stops	1.95%			1.94%			-0.01%
	Caucasian Drivers			Minority Drivers			
	2010	2011	% Change	2010	2011	% Change	
Total Stops	5423	6,582	21.37%	3955	4,343	9.81%	
# of Consent Searches	67	90	34.33%	116	122	5.17%	
percent	1.24%	1.37%	0.13%	2.93%	2.81%	-0.12%	

**note that % change of a percent is not uniform; % increase/decrease noted by % difference, not % change.

	2010		2011		Change
Likelihood of Minority Drivers to Consent to Search	2.37	(2.93/1.24)	2.05	(2.81/1.37)	-0.32

**Due to rounding, numbers calculated may vary.



Table 5 – Total Rockford Stops - 2004 - 2011

Total Rockford Stops	2004	2005	2006	2007	2008	2009	2010	2011
		11,985	12,516	11,646	10,135	10,068	11,478	9,378

	Caucasian Drivers								Minority Drivers							
	2004	2005	2006	2007	2008	2009	2010	2011	2004	2005	2006	2007	2008	2009	2010	2011
Stops Per Group	7,294	7,373	6,367	5,672	6,059	6,953	5,423	6,582	4,691	5,143	5,279	4,463	4,009	4,525	3,955	4,343
Percent of Stops	60.86%	58.91%	54.67%	55.96%	60.18%	60.58%	57.83%	60.25%	39.10%	41.09%	45.33%	44.04%	39.82%	39.42%	42.17%	39.75%
Estimated Driving Population	72.90%	72.90%	72.90%	72.90%	72.90%	72.90%	72.90%	72.90%	25.91%	25.91%	25.91%	25.91%	25.91%	25.91%	25.91%	25.91%
Disparity Index	0.83	0.81	0.75	0.77	0.83	0.83	0.79	0.83	1.51	1.59	1.75	1.70	1.54	1.52	1.63	1.53

Table 6 – Estimated Driving Population by Beat

Beat	Caucasian Population		Minority Population		Total Population	
	Number	Percent	Number	Percent	Number	Percent
1	13,633	80.8%	3,235	19.2%	16,868	100.0%
2	5,476	48.7%	5,764	51.3%	11,240	100.0%
3	1,053	17.4%	4,994	82.5%	6,047	99.9%
4	1,538	29.9%	3,610	70.1%	5,148	100.0%
5	9,109	76.7%	2,764	23.2%	11,873	99.9%
6	4,661	63.6%	2,664	36.4%	7,325	100.0%
7	7,244	79.9%	1,818	20.2%	9,062	100.1%
8	18,020	89.5%	2,115	10.5%	20,135	100.0%
9	16,741	83.0%	3,420	17.0%	20,161	100.0%
10	7,269	86.7%	1,116	13.3%	8,385	100.0%

**note that all estimated population data from 2000 census; Beat population estimates based on Census Tracts.



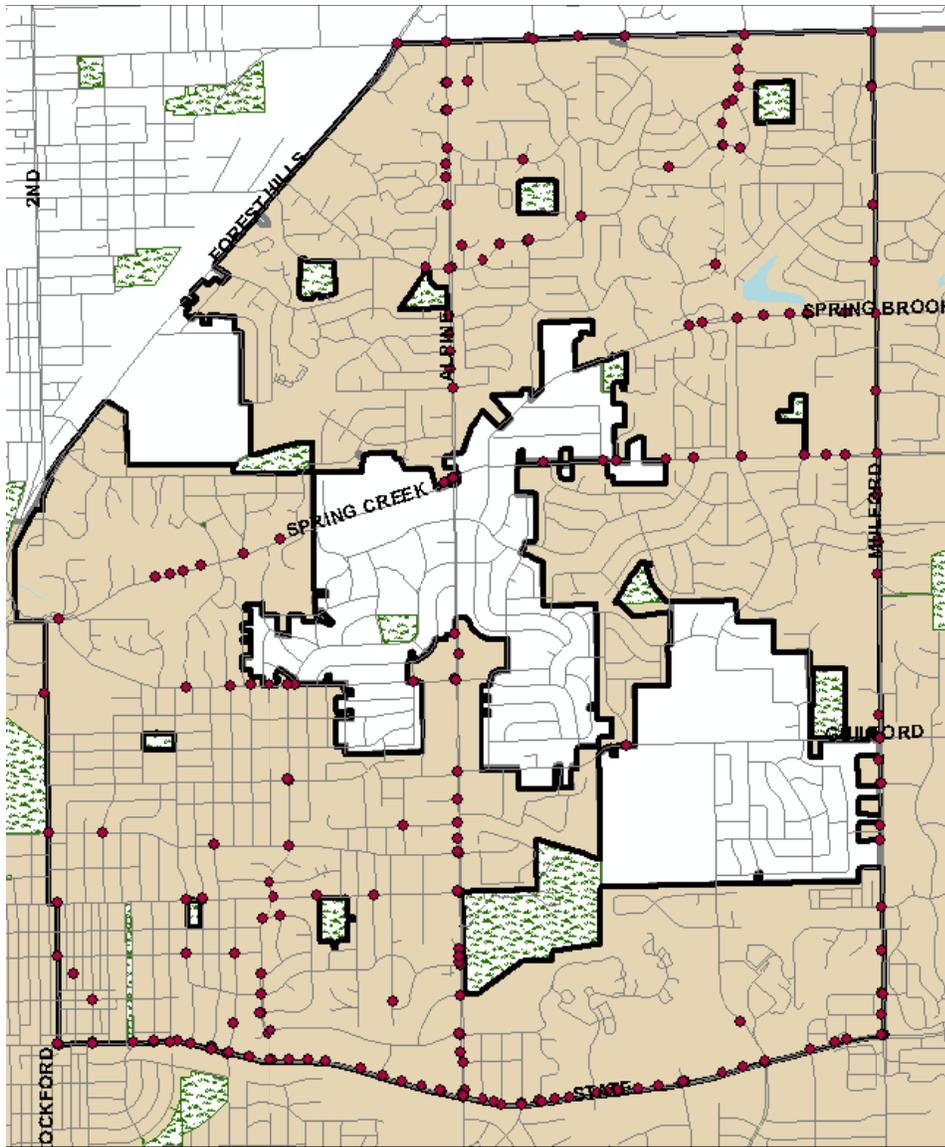
TRAFFIC STOP DATA

Table 1 is a general representation of the City of Rockford's Traffic Stop Data. This table is a compilation of all traffic stops recorded in the entire city to show the proportion of the driving population in relation to the drivers stopped. An index of 1.00 would be equal representation. A score lower than 1.00 would be under representation of the specified population. A score greater than 1.00 would indicate overrepresentation of the specified population.

In Rockford, there were 4,343 stops of Minority drivers, which is 39.75% of all recorded Traffic Stops. Minorities account for an estimated 25.91% of the city of Rockford's population. The ratio for Rockford Minority drivers is 1.53.

One factor that contributes to the disparity is geographic location of stops. Beats 4 & 6 not only have the highest crime rate and police concentration, but also have more balanced disparity index along with Beat 2. The ratio of the percent of Minorities stopped to the percent population becomes more stable in those beats. Considering departmental resources and Minority population by beat, Minority drivers are stopped more proportionally in beats 2, 4, & 6, where more resources are located, than when looking at the city as a whole. The city's overall demographics do not reflect demographics of the reporting beats. It is imperative to look at the Beats individually by their defining characteristics, rather than making a generalization based on the city as a whole. (Appendix 2)

Another geographic variable mentioned previously is the main geographic roads that connect Rockford's west side of the river to the east side of the river. Beat 8 had the greatest disparity in numbers of 2.31. (Appendix 2). Beat 8 is also the area that contains Riverside Blvd., Spring Creek, & East State Street where there is high connectivity from West to East Side. Even Rural Street is used to commute to and from downtown and the East side of Rockford. Many traveling from the West Side to the East Side for work, schools, doctor appointments, community college, and shopping would most likely use these roads. Spring Creek has a flow of traffic that stops at every northwest main road on the East side of Rockford. East State and Riverside are the roads with chain restaurants, & commercial business, as well as access to I-90.



Using the Environmental Systems Research Institute (ESRI) mapping software, it can be seen that most of the Beat 8 stops conducted were on one of the main veins of travel. Alpine Road connects the North side of Rockford and even neighboring towns such as Loves Park to the East State Street Shopping district. The demographics for Beat 8 shows a minority population of 10.5% (Table 6). It is clear that there may be other contributing factors to these stops that may influence the driving population. The 2000 Census estimates may not be an accurate representation of

Beat 8. It is clear that outside residents take advantage of the easy travel within these beats. In 2011, it can be seen that a majority of drivers stopped in Beat 8 were not residents of 8. In fact, approximately 23% were not listed as City of Rockford residents. With the amount of travel, it would not be currently possible to note the number of Caucasians or Minorities that drive in this area on any given day with the given parameters of the study. It should be noted that the population estimates are based on 2000 census data. Population demographics change over time. Population will also shift based on the season as well. Christmas shopping and school seasons will change the amount of people on the road and in the shopping districts.

Map showing the driver address of those stopped in Rockford Patrol Areas 8 & 9:

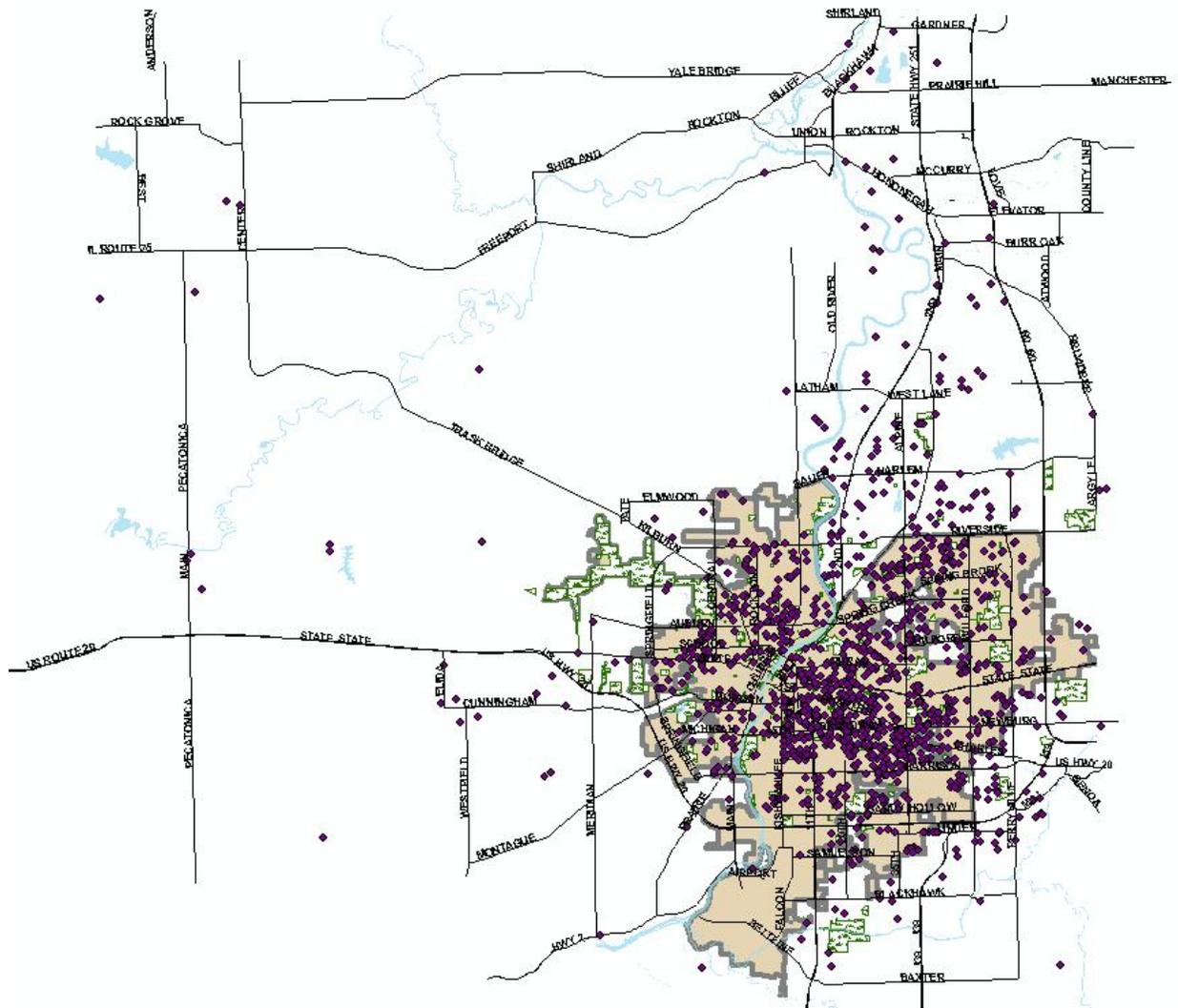


Table 2, “Reason for Stop” shows some numeric difference between Caucasians and Minorities. Table 3 “Outcome of Stop” shows little numeric difference between Caucasian and Minority drivers. The Rockford Police Department gives more written citations than verbal warnings across both groups. The percent of written citations given to both Caucasians and Minorities are very similar. There is no evidence in the numbers that would indicate disparity in the rate Caucasians are given citations compared to Minorities.

Another concern in the State’s analysis of traffic stops is the rate that Minority drivers may consent to a search of their vehicle. In 2011, Rockford made 212 consent searches. Out of all traffic stops per racial group, 1.37% of Caucasians consent to a search and 2.81% of Minorities consent to a search. The disparity ratio of Minorities is 2.05 meaning consent searches are performed more often during minority stops.



CONCLUSION

Although some disparity in numbers is present, the analysis is complex. In 2011, we recorded 1,547 more drivers than 2010; a 16.50% increase.

Data in 2011 indicated a decrease in the disparity of Minority stops in Rockford by .10. There is a concern in analyzing the specific beats within the City of Rockford to ensure accuracy in the reflection of the population. One factor may be that Beat Six has a higher percent Minority driving population and Beat Four has a significantly higher Minority driving population. Beginning in 2006 through present, Beats Four and Six were locations where special enforcement details were implemented. This may include saturation in geographical areas such as Weed & Seed, the Alternative Drug Program (ADP), and the Seasonal Crime Initiative. This also may increase police presence in neighborhoods. With this enforcement continuing through 2011, this may have had an effect on the Minority drivers stopped.

Another concern for 2011 is the distance it is from the 2000 U.S. Census. Cities and demographics change over the years. There has been increased development in the City of Rockford as well as neighboring communities. With growth comes change, and it should be noted that the population provided from the U.S. Census is data from 2000. New population data from the 2010 U.S. Census will be used when available.

We will continue to monitor and assess the driver stops based on the benchmark issued from Northwestern University. With access to continuous data analysis in 2012, the Rockford Police Department will further track the data as it comes in.

Additional effort will be made to analyze individual officer traffic stops. This is a fairly complex undertaking by the Department. Research on the best ways to analyze individual traffic data continues. There are many factors that contribute to an individual's work in traffic stops. Some of the mitigating factors could be beat location, demographics, population, crime rate, Weed & Seed Official Enforcement Zones, tactical operations, officer assignment, and individual productivity.

The Department will continue its annual cultural diversity training and periodic review of the department's policy of bias-free policing. Awareness of culture, difference, and personal accountability will be key factors in having a Department dedicated to the community it serves, and enhancing community relationships.

The long-term goals of this study are to fully understand and investigate how the Traffic Stop Data relates to the operational mission of the Department. In 2006, the Rockford Police Department implemented a NetRMS computer-based Records Management system to gather the most recent and accurate data for the department. Now with multiple years of data, comparative information is available. We are also recognized as an official National Incident-Based Reporting System (NIBRS) agency reporting statistics to aid in more qualitatively functional data for crime analysis. Capturing better data with improved methods of analysis will help in the



future with Traffic Stop Reporting. Moving forward, the Department expects to learn much from the data, interdepartmental discussion and its relationship with the community. Racial profiling is a very complex issue from a community and Departmental standpoint. In the years to come, the Rockford Police Department will continue to be diligent about research, analysis, and accountability of the Department.



Appendix 1

2011 Offenses by Beat						
Beat	Group A Offenses		Group B Offenses		Total Criminal Offenses	
	Number	Rate	Number	Rate	Number	Rate
1	2,344	108.2	1,295	59.8	3,639	167.9
2	1,728	112.6	1,534	99.9	3,262	212.5
3	1,377	164.7	1,308	156.4	2,685	321.1
4	2,380	319.9	1,958	263.2	4,338	583.1
5	1,943	126.7	1,615	105.3	3,558	232.1
6	2,608	259.9	2,346	233.8	4,954	493.7
7	2,102	178.8	1,062	90.3	3,164	269.1
8	1,303	53.0	849	34.5	2,152	87.5
9	1,844	73.3	1,165	46.3	3,009	119.6
10	1,234	118.3	671	64.4	1,905	182.7

Appendix 2

Beat	Caucasian								Minorities								Total Stops by Beat			
	2010				2011				2010				2011				2010		2011	
	# Stopped	% Stopped	% Pop	Disparity	# Stopped	% Stopped	% Pop	Disparity	# Stopped	% Stopped	% Pop	Disparity	# Stopped	% Stopped	% Pop	Disparity	# Stopped	% Stopped	# Stopped	% Stopped
1	872	69.1%	80.8%	0.86	1142	66.2%	80.8%	0.82	390	30.90%	19.2%	1.61	584	33.84%	19.2%	1.76	1262	13.5%	1726	15.8%
2	680	43.5%	48.7%	0.89	715	48.6%	48.7%	1.00	882	56.5%	51.3%	1.10	755	51.4%	51.3%	1.00	1562	16.7%	1470	13.5%
3	217	43.8%	17.4%	2.52	383	44.7%	17.4%	2.57	278	56.2%	82.5%	0.68	473	55.3%	82.5%	0.67	495	5.3%	856	7.8%
4	344	33.7%	29.9%	1.13	390	39.2%	29.9%	1.31	677	66.3%	70.1%	0.95	606	60.8%	70.1%	0.87	1021	10.9%	996	9.1%
5	739	61.1%	76.7%	0.80	1184	67.0%	76.7%	0.87	470	38.9%	23.2%	1.68	584	33.0%	23.2%	1.42	1209	12.9%	1768	16.2%
6	567	54.2%	63.6%	0.85	649	53.9%	63.6%	0.85	480	45.8%	36.4%	1.26	554	46.1%	36.4%	1.27	1047	11.2%	1203	11.0%
7	303	69.2%	79.9%	0.87	350	64.0%	79.9%	0.80	135	30.8%	20.2%	1.53	197	36.0%	20.2%	1.78	438	4.7%	547	5.0%
8	530	70.8%	89.5%	0.79	538	75.8%	89.5%	0.85	219	29.2%	10.5%	2.78	172	24.2%	10.5%	2.31	749	8.0%	710	6.5%
9	543	65.5%	83.0%	0.79	555	71.6%	83.0%	0.86	286	34.5%	17.0%	2.03	220	28.4%	17.0%	1.67	829	8.8%	775	7.1%
10	628	82.0%	86.7%	0.95	676	77.3%	86.7%	0.89	138	18.0%	13.3%	1.35	198	22.7%	13.3%	1.70	766	8.2%	874	8.0%
City	5423	57.8%	72.9%	0.79	6582	60.2%	72.9%	0.83	3955	42.2%	25.9%	1.63	4343	39.8%	25.9%	1.53	9378	100.0%	10925	100.0%

