Local Criminal Justice Data: Part I in a Series
Police Staff and Population
Working Paper 2018-10

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Introduction:

There are many questions of interest concerning the local criminal justice system. Conversations on various topics, however, are often stymied by the lack of available data on the criminal justice system. Specific information on the criminal justice system is often unknown to members of the community but is essential for active engagement in a democracy. This paper works to provide part of this essential data to members of the community in an effective and simple manner. This paper is the first in a series on the topic of local criminal justice system data. The purpose of this working paper series is to effectively and clearly provide essential criminal justice data to members of the community.

This paper is focused on police department size relative to population across Monroe County. Department size is often a talking point; with community members and law enforcement often suggesting that a larger police department would more effectively reduce crime. Some larger towns in the local community have their own police departments but the size of the department is often hidden or unknown. It is essential for members of the community to have the ability to obtain information regarding how many police officers oversee their respective jurisdiction that one resides within.

Research Question:

This paper attempts to answer the question, "What is the rate of sworn police officers to jurisdiction population in each police department in Monroe County?"

Methodology:

Monroe County is the area of focus for this data. Across the County, there are ten police departments and one sheriff's office. Public perception may be that organizations as important as police departments would provide information regarding police presence on their website. However, this was often not the case in Monroe County. Four departments provided this information on their department website in a clear manner, which was used for this paper. Two departments' websites contained the information in an ambiguous way. Four departments' websites did not present this information and one department did not have the information up to date. For these departments, the department was contacted directly to determine the number of sworn officers. The population of each of the ten towns/villages in Monroe County with a police department was collected using the Federal Bureau of Information's Uniform Crime Report for 2017. The population for Monroe County as a whole was collected using the census population estimate for 2017. The population for Monroe County Sheriff's Office was calculated by summing the population for Monroe County towns/villages that do not have their own police department. The rate of sworn officers to corresponding town/village populations was then calculated per 1,000 inhabitants.
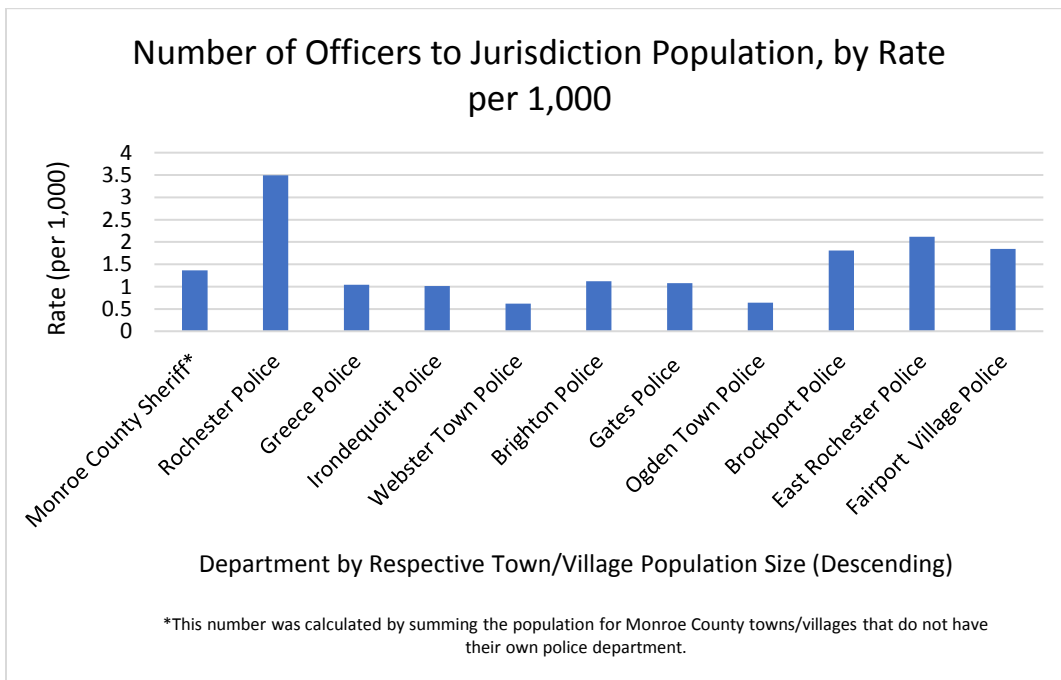
Data:

Table 1: Number of Sworn Officers and Population of Towns/Villages in Monroe County

Total population of Monroe County: 747,642

Department	Number of Sworn Officers	Population
Monroe County Sheriff	330	241365*
Rochester Police	728	208591
Greece Police	100	96219
Irondequoit Police	51	50393
Webster Town Police	28	45096
Brighton Police	41	36596
Gates Police	31	28723
Ogden Town Police	13	20321
Brockport Police	15	8310
East Rochester Police	14	6613
Fairport Village Police	10	5415

*This number was calculated by summing the population for Monroe County towns/villages that do not have their own police department.

Table 2: Rate of Sworn Officers to Town/Village Population

Number of Officers to Jurisdiction Population, by Rate per 1,000

Department by Respective Town/Village Population Size (Descending)

*This number was calculated by summing the population for Monroe County towns/villages that do not have their own police department.

Discussion:

The data presented in Table 1 shows the number of sworn officers in each department and the population of the corresponding town/village of that department. The number of sworn officers in the Sheriff's Office includes only those sworn officers that are assigned to the police bureau. Excluding the Sheriff's Office, it is evident that as population decreases the number of sworn officers in that town/village police department also decreases showing a direct relationship. The Sheriff's Office is an exception to this relationship which may be due to external factors such as the range of duties that the Sheriff's Office is responsible for. These duties may cause the budget as well as crime rates to determine the number of officers assigned specifically to the police bureau. One of the main duties of the Sheriff's Office that is unlike that of other police agencies is to manage the county jail which encompasses much of their staff.

The data presented in Table 2 showing the *rate* of sworn officers to civilians per jurisdiction population is organized by descending population size which allows a visual for how the rate changes as population decreases. In general, it appears that those towns/villages with less than 100,000 inhabitants but greater than 10,000 inhabitants have the smallest rate of officers to civilians while those with greater than 100,000 and less than 10,000 have the largest rates of officers to civilians. The largest population with a police department is the City of Rochester with about 3.5 officers per 1,000 inhabitants. The three smallest areas in terms of population, Brockport, East Rochester, and Fairport Village, have approximately 2 officers per 1,000 inhabitants. The Monroe County Sheriff's Office, without the overlap of other departments' jurisdiction population, has a rate of 1.4 officers per 1,000 inhabitants. It is interesting that the Sheriff's Office has a smaller rate than many of the smaller towns/villages because its population is so large. Greece, Irondequoit, Brighton, and Gates all have approximately 1 officer per every 1,000 inhabitants although their populations vary in size. Webster, with a population of 45,096, and Ogden, with a population of 20,321, have 0.6 officers per every 1,000 inhabitants, which is the smallest rate in Monroe County.

Limitations:

One limitation of this data is the lack of consideration for geographic size. Larger departments may be necessary when the geographic area is large. Another limitation is that this data is not mutually exclusive. The Sheriff's Department responds to calls across all of Monroe County, not just outside of jurisdictions with their own department. Furthermore, there is not an established county wide methodology for providing community members with departmental information such as the number of sworn officers in a particular department. This may influence the accuracy of the data. Criminal justice data tend to fluctuate overtime and the failure of some departments to update data in a timely manner may skew some of the comparisons made in this paper.

Conclusion:

The following conclusions can be drawn from the data presented.

First, the rate of sworn officers to civilian population in those areas with a police department range from less than one officer per 1,000 inhabitants to almost four officers per 1,000 inhabitants. This range is typically tied to population in a bimodal distribution: the highest and the lowest populations in Monroe County have the most officers.

The nationwide rate is 2.4 sworn officers per 1,000 inhabitants (Uniform Crime Report, 2016). There are approximately 3.5 sworn officers per 1,000 inhabitants for the Rochester Police Department which is higher than the nationwide rate. In some of the medium sized towns, the average rate is 1 officer per every 1,000 inhabitants which is lower than the nationwide rate.

In comparing Rochester to cities with a similar population size, like Buffalo and Syracuse, (which have a rate of 2.7 and 2.9 officers per 1,000 inhabitants respectively), Rochester has a higher rate of officers per civilian population. This is important because the number of officers a city has can shape the way the agency approaches crime and the effectiveness of the department. A higher rate of officers to civilian population could lead to increased efficiency in community-policing relationships and increase proactiveness to crime. If a ratio of officer to civilians is lower; presumably services for those civilians will be better. However, increasing proactiveness to crime too much could have the opposite effect. Therefore, a balanced approach to the ratio of police to civilians and policing strategy should occur.

The bimodal distribution of officers-to-civilians can be explained by reviewing the Uniform Crime Report (UCR) for Police Employee Data for 2016. The UCR found that the highest rate of sworn officers per 1,000 inhabitants was 3.7 officers. This occurred in small cities with fewer than 10,000 residents and is consistent with the towns we examined, which also had a high rate of approximately 2 officers and fewer than 10,000 inhabitants. These include Brockport, East Rochester, and Fairport. The towns with midrange populations (Greece, Irondequoit, Webster Brighton, Gates, and Ogden) had lower rates of officers. As noted earlier, the highest population (Rochester) had the highest rate of officers.

Finally, the departments vary in the type of and detail of data they provide to community members. This data is not provided in a clear manner and takes time to discover through contacting departments directly. One future suggestion is for each department to provide essential criminal justice data to the community, which may assist engagement in a democratic society and increase the transparency of police departments.