

# Shooting Case Clearance in Rochester, NY

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## **Introduction**

On average, there are nearly 13,000 firearm homicides within the United States every year (everytownresearch.org). Evidence suggests that the number of shootings which result in a non-lethal injury is exponentially higher. Arrest rates for shooting incidents tend to be low as well; in Chicago, five percent of aggravated assault shootings that occurred in 2016 resulted in an arrest (The Economist Group Limited, 2017) and in Boston from 2014 to September 20, 2016, 15 percent of homicide shootings and less than four percent of aggravated assault shootings resulted in an arrest (Bernstein, 2017). In general, information on gun violence tends to be difficult to find, as the FBI does not disaggregate incidents based on the type of weapon used or the manner in which a case is cleared. This presents a serious obstacle to addressing gun violence, as it not only prevents the public from being able to understand the extent to which shootings affect a community, but it also places the responsibility for confronting the issue entirely upon the shoulders of law enforcement agencies. Recently, the Rochester Police Department launched its Open Data Portal to be available to the public, which includes case level information that can be used to identify shooting incidents as well as whether they resulted in an arrest. The objective of this paper is to explore clearance rates for shooting cases in Rochester, NY. Toward that end, we will examine conceptual differences between types of clearance, the number of local fatal and non-fatal shooting incidents over the past seven years based on publically available data, as well the proportion of these incidents that resulted in an arrest.

## **Clearance**

Clearance, as defined by the FBI, comes in three main forms: arrest, exceptional clearance, and administrative clearance. Clearance by arrest is the focus of this paper. This type of clearance is fairly intuitive, as it involves the arrest and charging of a suspect in relation to an

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incident. Exceptional clearance involves a suspect being known to the police, but being unable to be arrested due to some factor outside of the control of law enforcement, such as the suspect being deceased or prosecution being unwilling to move forward with the case. Finally, administrative clearance is largely left to the discretion of police as an alternative means of considering an investigation to be closed. Importantly, cases cleared by arrest and exceptional clearance are considered to be cleared by the FBI, while those which are cleared administratively are not. This lack of distinction can be problematic due to the inherent differences between cases being closed through the arrest of a suspect and cases being closed due to prosecutors being unwilling to move forward with a case.

### **Shootings**

There are many types of crime which may involve the use of a firearm, however two are of particular note due to the physical harm they do to citizens: aggravated assaults involving an injury (non-fatal shootings) and homicides (fatal shootings). Incidents fitting this criteria are interesting in that they are very similar to each other, with a victim being shot, and the only distinction being the level of harm done to the victim, which may be due to aim, quality and speed of medical treatment, all-around luck, or other factors. Unfortunately, most official statistics do not allow for distinctions between type of weapon used or seriousness of aggravated assault. This makes it difficult to examine shootings in particular despite growing national interest in finding methods of reducing gun violence.

### **RPD Open Data Portal**

In 2017, the Rochester Police Department made a range of incident-level crime data available to the public through its Open Data Portal (<http://data-rpdny.opendata.arcgis.com/>). It

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features information for FBI Crime Index Part One crimes, including homicide, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson (rape is notably absent, likely in order to protect victim privacy). This information is updated within 2-4 days' time and includes incidents going back to the beginning of 2011. This type of public data platform is a great step towards transparency that is fairly unusual among police departments and can be a great resource for members of the community who are interested in learning about crime in the area. Based on the data, researchers were able to identify the number of fatal and non-fatal shooting incidents in the City of Rochester based on whether a case was a homicide or aggravated assault, involved the use of a firearm, was completed rather than attempted, and was considered a criminal incident.

### **Rochester Shooting Incidents**

For a list of the number of non-fatal and fatal shootings recorded on the Open Data Portal for 2011-2017, see Figure 1. Of the seven complete years recorded within the data, there were a total of 144 fatal shootings, averaging at about 21 per year. To add further context, there were 246 homicides recorded within this period; this means that 58.54 percent of homicides in the city of Rochester involved the use of a firearm. In addition, there were 941 non-fatal shootings recorded, with an average of 134 per year. This leaves an average of 155 total shootings per year.

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*Figure 1: Number of Fatal and Non-Fatal Shooting Incidents from 2011-2017 in the City of Rochester*

<b>Year</b>	<b>Fatal Shootings</b>	<b>Non-Fatal Shootings</b>	<b>Total Shootings</b>
<b>2011</b>	13	107	120
<b>2012</b>	24	159	183
<b>2013</b>	27	145	172
<b>2014</b>	22	129	151
<b>2015</b>	22	142	164
<b>2016</b>	21	129	150
<b>2017</b>	15	130	145
<b>Total</b>	144	941	1085

For the percentage of these cases each year that were cleared by arrest, see Figure 2.

Over the past seven years, RPD has made an arrest in 50.69 percent of all fatal shooting cases and 20.51 percent of all non-fatal shooting cases. To put this in perspective, this means that one out of every two fatal shooting incidents resulted in an arrest and one out of every five non-fatal shooting incidents resulted in an arrest. It is important to note that they are similar to those of many other cities within the country. It is interesting to observe that non-fatal shooting arrest rates remained fairly steady over the seven year period, with minor variation from year to year. Arrest rates for fatal shooting incidents seemed to vary substantially more, though this may be due to the relatively low number of fatal incidents, meaning that random chance may have had more influence here. In general, however, the proportion of cases that resulted in an arrest appear to have no significant relationship with fluctuations in the number of incidents from year to year, meaning that the changes in arrest rates are likely tied to other factors.

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*Figure 2: Percent of Fatal and Non-Fatal Shooting Incidents Cleared by Arrest in the City of Rochester*

<b>Year</b>	<b>Fatal Shootings</b>	<b>Non-Fatal Shootings</b>
<b>2011</b>	38.46%	21.50%
<b>2012</b>	37.50%	21.38%
<b>2013</b>	59.26%	22.07%
<b>2014</b>	68.18%	24.03%
<b>2015</b>	59.09%	19.01%
<b>2016</b>	33.33%	20.93%
<b>2017</b>	53.33%	14.62%
<b>Total</b>	50.69%	20.51%

### **Conclusion**

Information on shooting incidents, including whether a case resulted in an arrest or not, is often unavailable to the general population, making it difficult to approach these topics in a public forum. This makes the Open Data Portal a laudable move towards transparency by RPD. It includes specific details about how cases were cleared, type of weapon used, and level of violence that is not easily obtained from the FBI's Uniform Crime Report. This may allow members of the public to more easily assess local problems with firearm violence, as well as other types of crime, within the City of Rochester and develop community-based goals and strategies for addressing them.

The results reveal that only half of gun homicides and 20 percent of gun assaults that occur in the City of Rochester result in arrest. This leads to questions about what should be done to increase clearance rates. Two preliminary suggestions are provided here. First, steps should be taken to improve relations between community members and police. This may increase the likelihood that community members will provide information about gun violence. Second,

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provide more resources to investigation of non-fatal shooting incidents. Evidence suggests that jurisdictions that provide more resources for the investigation of violent incidents have higher clearance rates.

This problem itself is not unique to the City of Rochester, and RPD's arrest rates for shooting incidents are not substantially different from many other cities across the country. What now separates Rochester, NY from much of the nation in respect to this problem is the willingness of its police department to share this information and the resulting opportunity for the larger community to understand the magnitude of the issue and work to address it. We hope that this increase in transparency will lead to greater efforts to improve the administration of justice in the City of Rochester. Doing so may improve quality of life and public safety for City residents.

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