

Rochester Homicide Statistics for 2019

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Introduction

This report examines homicide data collected in 2019 in the City of Rochester, New York, and it compares homicide data from 24 cities over time.¹ To account for population differences among the various cities in this sample, we calculated the rate of homicides per 100,000 residents. This report identifies possible trends by examining homicide over multiple years based on information gathered from local news outlets and police department websites. The data presented in this report were not collected from the Uniform Crime Report and other official sources because those sources are not updated for more than six months into the following year. Therefore, we can anticipate that there will be small discrepancies in homicide counts when official data are released. This paper is updated and released annually to reflect yearly data.

This report also examines fluctuations in Rochester's homicide rate over the last 10 years. We also highlight the differences in homicide rates from 2018 and 2019 for 24 cities throughout the U.S. The comparisons made in this paper are fundamental for identifying changes or trends in homicide rates over time. Cross-city comparisons may expose similarities and differences that could help us understand violence across communities.

Results

Rochester

In 2019 Rochester, NY had 32 reported homicides. This is three more homicides than 2018, but less than Rochester's yearly average of 34 homicides over the past decade. It is important to note that yearly fluctuations are a common feature of violence in most American cities, including Rochester. An example of this for the City of Rochester can be found in Figure 1, which reveals that over the last ten years, Rochester's annual homicide count ranged between

¹ The 24 cities chosen were based on availability of data.

27 and 43 homicides. In this period of ten years, these counts changed by at least five homicides in a single year seven times.

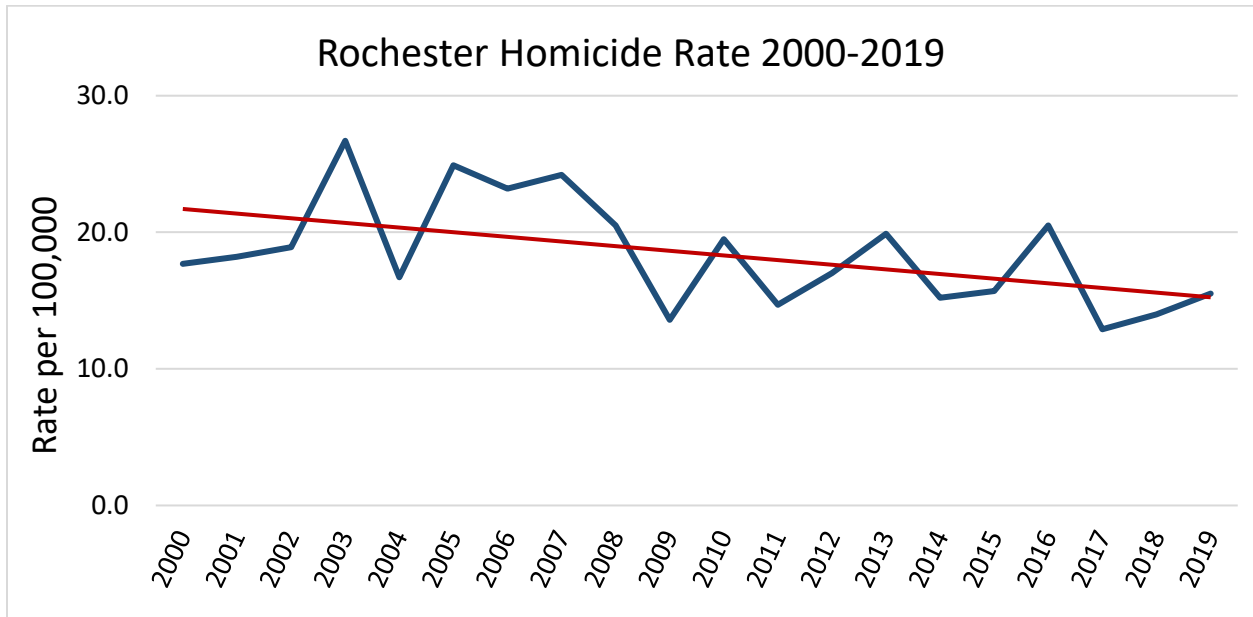
Figure 1.



Due to variations in the City of Rochester’s population over time, an examination of homicide rates is required. Homicide rates make it possible to compare crime levels while still taking city population into consideration. For the purposes of this report, U.S. Census population estimates were used to calculate the rate of homicide per 100,000 residents.

Figure 2 illustrates Rochester’s homicide rate from 2000-2019. When compared to 2018, Rochester’s homicide rate increased from 13.5 to 15.5 per 100,000 residents in 2019, a 15% increase. Despite this, as seen in the red trend-line in Figure 2 below, Rochester has seen a gradual decline in the homicide rate over the last 20 years. This decades-long downward trend is comparable to what national homicide rates experienced between 2000 and 2018.

Figure 2.



Comparing U.S Cities

Table 1 compares trends in homicide across 24 select cities.² The table shows both homicide levels and percent change in homicide, both counts and rates, from 2018 to 2019. The cities are ranked from highest to lowest by 2019 homicide rate. This table allows us to see differences in homicide rates from last year for each of the selected cities. There are three general conclusions that Table 1 supports: (1) homicide levels in US cities vary greatly, (2) nearly half of the cities in this sample have decreased in homicide levels from 2018 to 2019, and (3) Rochester's homicide rate increased slightly in the past year.

The top two cities with the largest increases in homicide were Dallas, Texas, and Lexington, Kentucky with a year-to-year rate increase of 37.1% and 31.1%, respectively. In 2018, both Dallas and Lexington experienced a decrease from the year prior. From 2017 to 2018, Lexington, Kentucky witnessed a 22.1% decrease and Dallas, Texas witnessed a 10% decrease.

² Data for these cities were identified from publically available sources, including data provided by police agencies or local news reports. These sources can be found in the reference section and are hyperlinked within Table 1.

These increases should be interpreted with caution considering that, as discussed previously, yearly fluctuations in homicide rates are common even when the overall trend is downward. The cities with the largest decreases from 2018 to 2019 were Newark, New Jersey and Boston, Massachusetts with a year-to-year rate decrease of 33.1% and 31.0%.³ The homicide rate for these two cities have appeared to fluctuate but overall have declined gradually since 2016 (Sweadner, 2016).

Rochester, New York had a 14.8% increase in homicide rate from 2018 to 2019. Compared to the 24 cities in our sample, Rochester ranks 14th in homicide rate. Although Rochester's population is one-sixth of Dallas, Texas, the homicide rates are identical for 2019. Of the major metropolitan areas in the state of New York included in this sample, Rochester ranked second. Both New York City and Syracuse had lower homicides rates than Rochester in 2019. Only Buffalo had a higher homicide rate, 18.3 per 100,000. Albany, New York was not included in this sample due to lack of reported homicide data for 2019.

These numbers are somewhat encouraging considering that Rochester's 2016 homicide rate was moderately high (see Figure 1). In fact, as Sweadner (2016) stated in a previous homicide report, Rochester's 2016 homicide rate was higher than some larger cities that have often been viewed as more violent, such as Los Angeles, California, and was very similar to that of Chicago, Illinois. Since this spike in 2016, Rochester's homicide rate has gradually declined. Despite this decline however, Rochester's homicide rate remains approximately three times the national average.

³ The most recent news article available reported 51 homicides in Newark, New Jersey on December 19, 2019. In other words, 12 days of 2019 were not accounted for. There has been no updated information as of January 17, 2020, so any additional homicide that took place in that time frame are not accounted for here.

Table 1. United States City Homicide Number, Rate and Percent Change for 2018-2019

City	2018 Homicides	2018 Population Estimate	2018 Homicide Rate	2019 Homicides	Current Population Estimate	2019 Homicide Rate	% Change (Number)	% Change (Rate)
1. St. Louis, MO	187	308,626	60.6	194	302,838	64.1	3.7%	5.8%
2. Detroit, MI	261	673,104	38.8	271	672,662	40.3	3.8%	3.9%
3. New Orleans, LA	146	393,292	37.1	119	391,006	30.4	-18.5%	-18.1%
4. Richmond, VA	56	227,032	24.7	59	228,783	25.8	5.4%	4.5%
5. Washington, DC	160	693,972	23.1	166	702,455	23.6	3.8%	2.2%
6. Atlanta, GA	88	486,290	18.1	95	498,044	19.1	8.0%	5.5%
7. Hartford, CT	21	123,400	17	23	122,587	18.8	9.5%	10.6%
8. Buffalo, NY	57	258,612	22	47 ⁴	256,304	18.3	-17.5%	-16.8%
9. Newark, NJ	77	285,154	27	51	282,090	18.1	-33.8%	-33.0%
10. Chicago, IL	561	2,716,000	20.7	491	2,705,994	18.1	-12.5%	-12.6%
11. Indianapolis, IN	159	872,680	18.2	154	867,125	17.8	-3.1%	-2.2%
12. Oakland, CA	75	425,195	17.6	75	429,082	17.5	0.0%	-0.6%
13. Compton, CA	23	97,612	23.6	16	96,617	16.6	-30.4%	-29.7%
14. Rochester, NY	28	208,046	13.5	32	206,284	15.5	14.3%	14.8%
15. Dallas, TX	152	1,341,000	11.3	209	1,345,047	15.5	37.5%	37.2%
16. Greensboro, NC	35	290,222	12.1	43	294,722	14.6	22.9%	20.7%
17. Syracuse, NY	23	143,396	16	19	142,749	13.3	-17.4%	-16.9%
18. Pittsburgh, PA	52	302,407	17.2	37	301,048	12.3	-28.8%	-28.5%
19. Lexington, KY	22	321,959	6.8	29	323,780	9.0	31.8%	32.4%
20. Denver, CO	67	704,621	9.5	57	716,492	8.0	-14.9%	-15.8%
21. Los Angeles, CA	256	4,000,000	6.4	227	3,990,456	5.7	-11.3%	-10.9%
22. Boston, MA	56	685,094	8.2	38	694,583	5.5	-32.1%	-32.9%
United States	16,214	327,167,434	5.0	N/A	N/A	N/A	N/A	N/A
23. Omaha, NE	21	466,893	4.5	23	468,262	4.9	9.5%	8.9%
24. New York City, NY	289	8,623,000	3.4	311	8,398,748	3.7	7.6%	8.8%

Comparing US Homicide Rates among Cities with Similar Populations

In our sample of US cities, we have compared homicide rates among cities of similar population sizes. We have compared Rochester, New York with cities that have a population below 250,000 in Figure 3. As seen in Figure 3, Rochester had the second lowest homicide rate

⁴ This information was provided by Erie County Crime Analysis Center.

of 15.5 homicides per 100,000 residents. This is a change from the previous year, where Rochester had the lowest homicide rate of 13.5 per 100,000 residents for 2017-2018. It is also important to note that Syracuse, New York had a homicide rate of 16 in 2018 but had a moderate decrease in 2019, making it the city with the lowest homicide rate in this group.

Due to Syracuse's decline in homicide rate, Rochester now has the second lowest homicide rate of cities with a similar population from our sample. Hartford, CT, Compton, CA, Rochester, NY, and Syracuse, NY all range between a 13.0 and 19.0 homicides per 100,000 residents. However, Richmond, VA has a relatively high homicide rate compared to the rest of the cities. Although Richmond's homicide rate has increased in 2019, Richmond has had the highest homicide rate for cities in the sample with a population under 250,000 since 2016 (Klofas et al., 2017; Panico et al., 2018; Ruggero et al., 2019).

Figure 3.

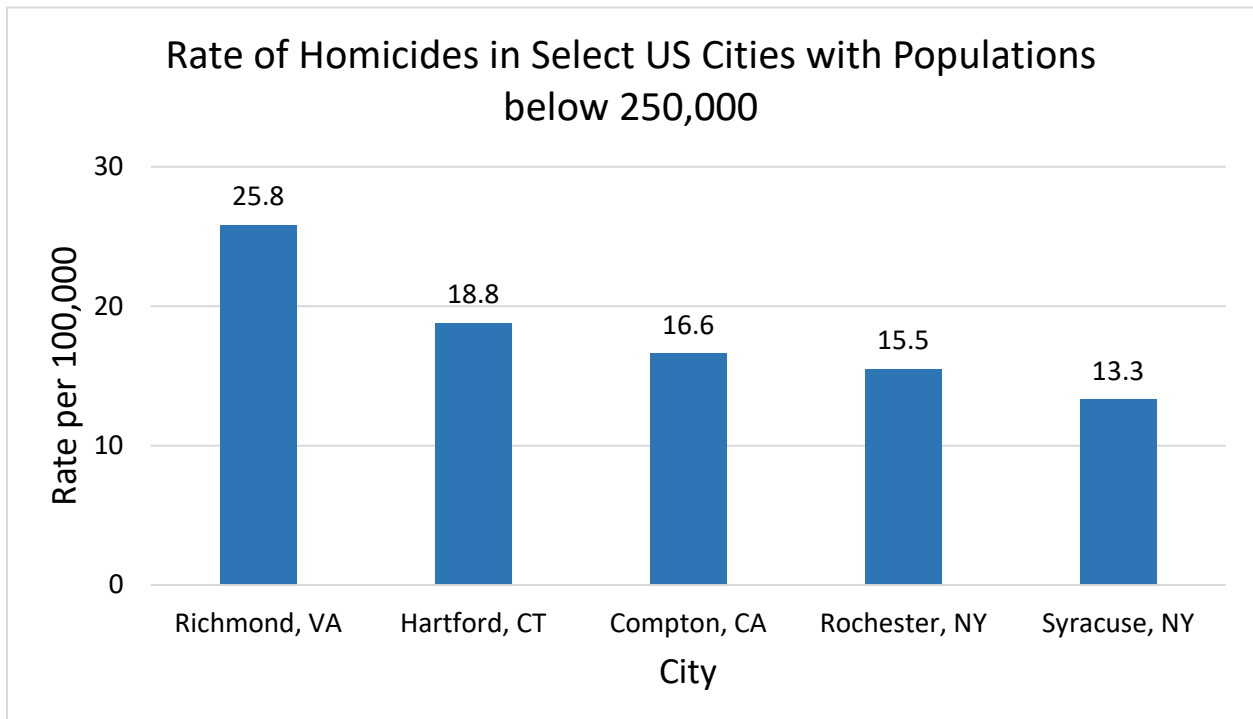


Figure 4 is a comparison of seven cities with populations between 250,000-400,000. As seen in this chart, St. Louis, Missouri stands out with this highest homicide rate in 2019. Since 2016, St. Louis, Missouri has had the highest homicide rate for all 24 cities evaluated in this report. There is substantial variation in homicide levels for cities examined in Figure 4. St. Louis reported a homicide rate double that of New Orleans, Louisiana. The homicide rate in St. Louis was also approximately seven times higher than Lexington, Kentucky, despite having about 20,000 fewer residents than Lexington.

Figure 4.

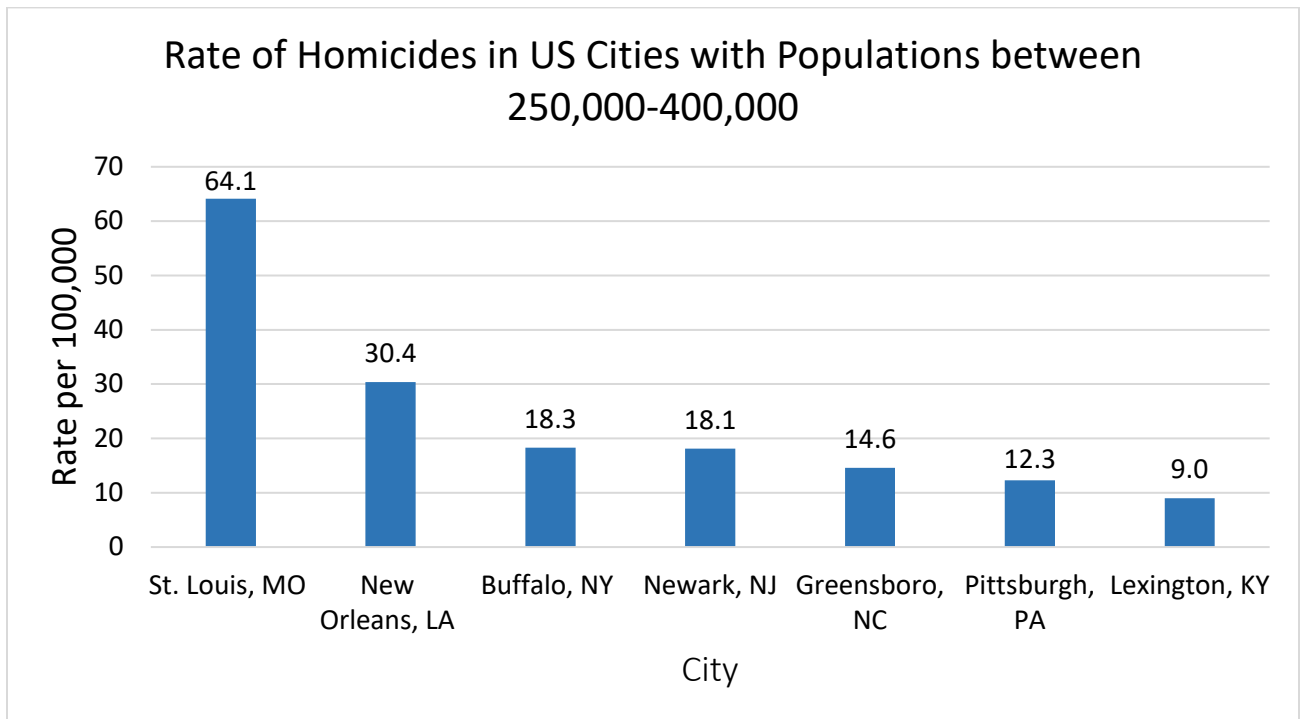
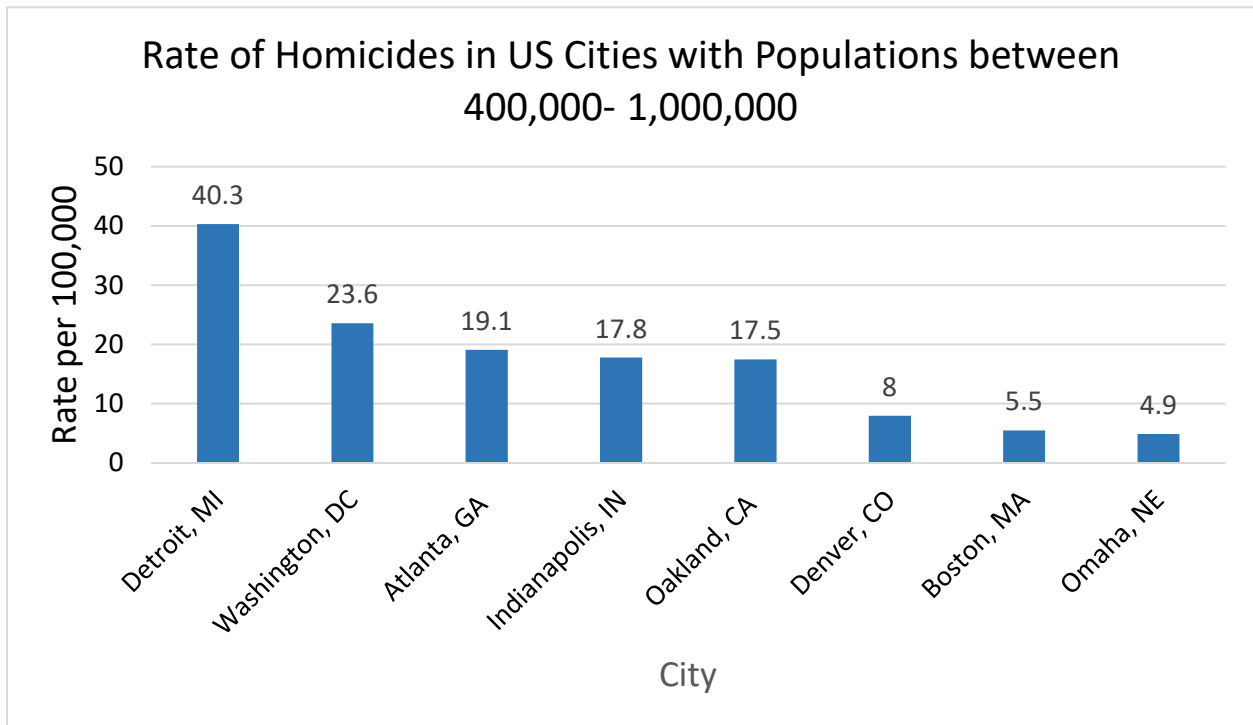


Figure 5 shows homicide rates for cities with populations between 400,000 and 1,000,000. Like Figure 4, these cities have substantial variations in homicide levels. Detroit, Michigan stands out with the highest homicide rate in Figure 5, and has the second highest homicide rate in all 24 cities. The homicide rate in Detroit, Michigan is 40.3 per 100,000

residents, making it roughly ten times higher than that of Omaha, Nebraska. Omaha, Nebraska is the only city in the chart below that has a homicide rate lower than the national average.

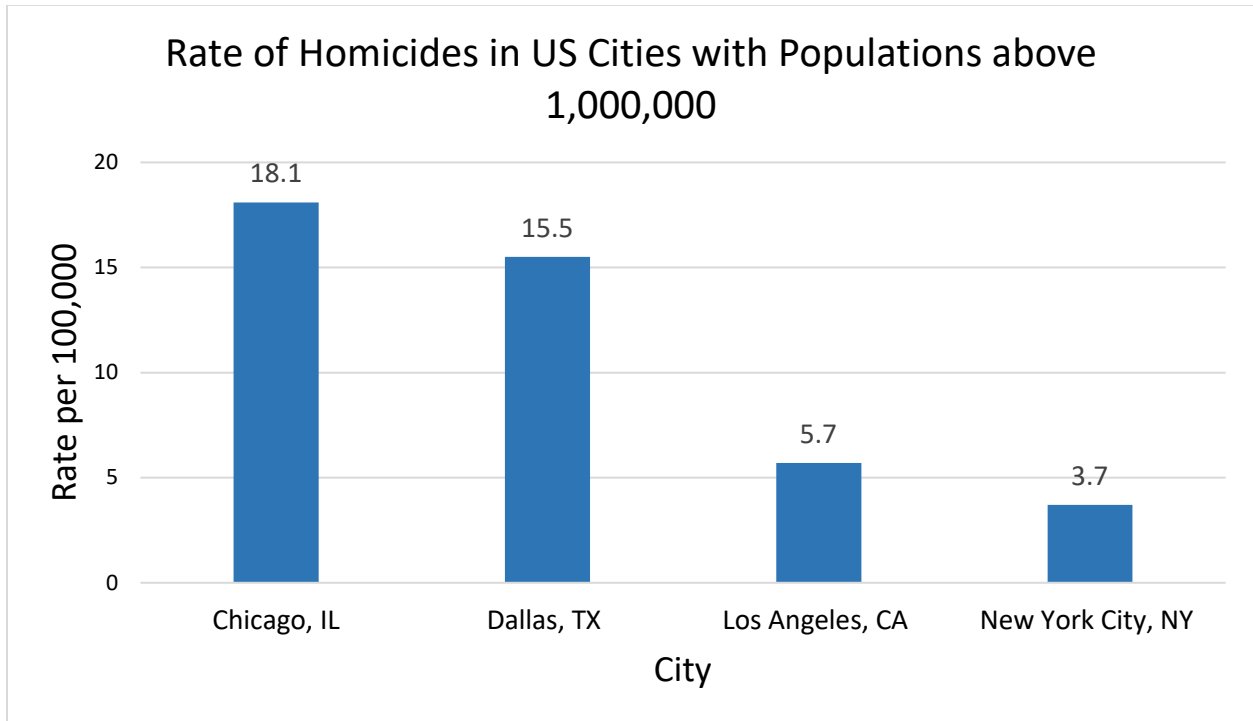
However, Boston, Massachusetts had a 32.9% decrease in homicide rate in the past year, making it very close to the national homicide rate.

Figure 5.



Lastly, Figure 6 examines homicide rates of cities with populations above 1,000,000. As we can see in Figure 6, Chicago, Illinois has the highest homicide rate among these cities with a rate of 18.1 homicides per 100,000 residents. Conversely, New York City, the largest in the nation, has the lowest homicide rate in our sample. It is also worthy to note that New York City has the second highest total number of homicides reported (311), making it appear as if New York City is extremely dangerous. However, when taking into account that over 8 million people reside in New York City, the overall general risk for New York City residents is much lower than in any other city in our sample.

Figure 6.



Conclusion

The objective of this paper was to analyze homicide rates and yearly changes across the United States, with an in depth focus on Rochester, New York. We found that cities across the nation have substantial variations in homicide levels, with rates as high as 64.1 per 100,000 residents in St. Louis and as low as 3.7 per 100,000 residents in New York City. Although variations across cities are present, it is unclear why these differences exist. Further research is crucial in identifying possible explanations for this phenomenon.

We also found that homicide levels in nearly half (46%) of the cities in our sample have decreased from 2018 to 2019. It is important to recognize that yearly fluctuations in homicide levels are a common feature of violence in America. Thus, while homicide levels in over half of the cities in this sample have increased, change in year-to-year homicide rates are not enough to identify trends. Despite public perception, homicide rates have been overall declining since the

1990s (Siegel, 2011). Future research should examine the five and ten year trends in homicide rates in these cities.

From 2018 to 2019, Rochester's homicide rate increased slightly. Although this increase may be alarming, Rochester's overall homicide rate has been continuously declining and is parallel to national homicide trends experienced between 2000 and 2018. When compared to other cities, Rochester's homicide rate is within the 40th percentile for lowest homicide rates. However, Rochester's homicide rate is still about three times the national average.

The Center for Public Safety Initiatives has conducted this study for the last few years. When the Federal Bureau of Investigations releases updated data on 2019 homicides, we plan on returning to this report to compare the accuracy of our calculations against theirs. We hope this report serves as a valuable tool for local agency leaders and policy makers in their attempts to evaluate current strategies to decrease violence in our city.

Sources

- 2019 Omaha homicides. (2020). Retrieved from https://www.omaha.com/news/crime/omaha-homicides/collection_b468e7c2-733f-5bdd-9fe6-a768551c1cfe.html
- Atlanta Police Department. (n.d.). Retrieved from <https://www.atlantapd.org/Home/Components/News/News/56/17>
- Chicago Police Department Compstat. (n.d.). Retrieved from https://home.chicagopolice.org/wp-content/uploads/2019/12/1_PDFsam_CompStat-Public-2019-Week-52.pdf
- Citywide Crime Statistics. (n.d.). Retrieved from <https://www1.nyc.gov/site/nypd/stats/crime-statistics/citywide-crime-stats.page>
- Dempsey, C., & Green, R. (2020). By the numbers: Hartford's homicide rate in 2019 was below average as city reports reduction in crime. Retrieved from <https://www.courant.com/breaking-news/hc-br-hartford-2019-homicides-20200106-lr7rf76aave6zbazwxpdcqs42y-story.html>
- Denver Homicides. (2018). Retrieved from <https://www.denverpost.com/denver-homicides/>
- District Crime Data at a Glance. (n.d.). Retrieved from <https://mpdc.dc.gov/page/district-crime-data-glance>
- FBI Crime Data Explorer. (n.d.). Retrieved from <https://crime-data-explorer.fr.cloud.gov/>
- Greensboro, NC. (n.d.). Retrieved from <https://www.greensboro-nc.gov/departments/police/crime-data/weekly-crime-data>
- Guza, M. (2020). Pittsburgh homicides hit lowest in 20 years. Retrieved from <https://triblive.com/local/pittsburgh-alleggheny/pittsburgh-homicides-hit-lowest-in-20-years/>
- Homicides and other violent crimes down in Boston in 2019. (2020, January 1). Retrieved from https://www.thesunchronicle.com/news/state/homicides-and-other-violent-crimes-down-in-boston-in/article_e1dd4236-7360-5848-8f74-2e235a38b50b.html
- Hunter, G. (2020). Detroit to end 2019 with uptick in homicides amid violent crime drop. Retrieved from <https://www.detroitnews.com/story/news/local/detroit-city/2019/12/26/detroit-end-2019-uptick-homicides-amid-violent-crime-drop/2749406001/>
- Hutchinson , B. (2020). Man killed on New Year's Eve chasing thieves who stole laptop in Northern California coffee shop. Retrieved from <https://abcnews.go.com/US/man-killed-years-eve-chasing-thieves-stole-laptop/story?id=68018349>

- Indianapolis crime: List of all criminal homicides in 2019. (n.d.). Retrieved from <https://databases.usatodaynetwork.com/indystar/indianapolis-crime-homicide-list-2019>
- Klofas, J., Altheimer, I., & Sweadner, C. (2017). Rochester Homicide Statistics for 2016. *Center for Public Safety Initiatives*, 1–13.
- McCrorry, C. (2019). New Orleans sees lowest murder total in nearly 50 years for 2019. Retrieved from <https://www.wvltv.com/article/news/crime/number-of-murders-in-new-orleans-near-1971-low/289-cda316d5-2784-4bdc-8742-66ab4b096195>
- Murder. (2019). Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s.-2018/topic-pages/murder>
- Newark Police Report Decrease in Crime. (n.d.). Retrieved from <https://www.tapinto.net/towns/newark/sections/law-and-justice/articles/newark-police-report-decrease-in-crime>
- Open Homicide Cases: Richmond Police Department. (n.d.). Retrieved from <http://www.richmondgov.com/Police/MajorCrimes.aspx>
- Panico, J., Duda-Banwar, J., Klofas, J., & Altheimer, I. (2018). Rochester Homicide Statistics for 2017. *Center for Public Safety Initiatives*, 1–16.
- Rochester, NY Police Department Open Data Portal. (n.d.). Retrieved from <https://data-rpdny.opendata.arcgis.com/pages/homicide-victims>
- Ruggero, T., Hallowell, A., Altheimer, I., & Klofas, J. (2019). Rochester Homicide Statistics for 2018. *Center for Public Safety Initiatives*, 1–13.
- Siegel, L. (2011). Chapter 1: Crime and Criminology. *Criminology* (11th edition)
- SLMPD 2020 UCR Homicide Analysis. (2020). Retrieved from www.slmpd.org/images/Homicide_Stats_for_Website.pdf.
- Staff, W. K. Y. T. N. (n.d.). WKYT Interactive: 2019 Lexington homicides. Retrieved from <https://www.wkyt.com/content/news/WKYT-Interactive--2019-Lexington-homicides-504750721.html>
- Syracuse Police Department. (n.d.). Retrieved from <https://www.syracusepolice.org/listing.asp?orgId=320>
- The Homicide Report. (n.d.). Retrieved from <https://homicide.latimes.com/neighborhood/compton/year/2019>

The Homicide Report. (n.d.). Retrieved from https://homicide.latimes.com/neighborhood/lacity/officer_involved/false/year/2019

U.S. Census Bureau QuickFacts: United States. (n.d.). Retrieved from <https://www.census.gov/quickfacts/fact/table/US/PST045219>

Worth, D.-F., & Nbc. (2020). Early-Morning Stabbing is Dallas' 209th Homicide of 2019. Retrieved from <https://www.nbcdfw.com/news/local/early-morning-stabbing-is-dallas-209th-homicide-of-2019/2284392/>