

Comparison of Cities' Homicide Rates over Time: 2015 Data

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COMPARISON OF CITIES' HOMICIDE RATES OVER TIME

The goals of this paper are to provide the most recent annual murder figures for Rochester, New York, to examine trends in those numbers, and to provide comparisons with other cities. Early each year we provide an updated version of this paper.

There were 32 reported homicides in Rochester in 2015, yielding a rate of 19.5 homicides per 100,000 people who live in the city. This rate has not fluctuated much since 2000. It is apparent from this data that Rochester continues to have a significant violence problem when compared to many other cities.

Methodology and Background

The twenty-one cities in our sample were selected to reflect a diversity of diversify locations and population sizes. The analysis relies on the U.S. Census's yearly population estimates, and FBI Uniform Crime Reporting (UCR) data on the number of murders in each city from 2000 to 2014. Because annual UCR data is not published until the fall of the following year, 2015 homicide numbers are obtained from local sources such as newspapers and state or city publications.¹ Finally, to account for differences in population size across cities, we compare homicide rates using the number of homicides per 100,000 residents of a city.

Results

Data show that U.S. homicide rates have been steadily dropping since the early 1990's, from 9.5 homicides per 100,000 people in 1993 to 4.5 homicides per 100,000 in 2014 (Siegel, 2011). We only examine cities in this paper, so the homicide rates are generally higher than the national average, as homicide is more common in cities. Table 1 displays the number of homicides and the homicide rates in 2015 for each city in our sample as well as each city's average homicide rate from 2000 to 2014.

¹ Homicide rates for 2015 were sometimes calculated based on the 2014 population estimate due to an unavailability of 2015 population data for certain cities.

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Table 1: 2015 Homicide Number and Rates Compared to 2000-2014 Average for Sample Cities

City	2015 Homicide Rate	Number of 2015 Homicides	2000-2014 Average Homicide Count	Percent Change from Average
Detroit, MI	45.0	295	362.3	-18.6%
New Orleans, LA	42.7	164	200.8	-18.3%
Newark, NJ	40.0	81	87.7	-7.7%
St. Louis, MO	38.0	188	128.4	46.4%
Oakland, CA	22.0	93	102.1	-8.9%
Pittsburgh, PA	19.6	60	52.7	13.9%
Rochester, NY	19.5	41	40.9	0.2%
Richmond, VA	18.4	40	58.9	-32.0%
Washington, DC	18.1	119	172.7	-31.1%
Chicago, IL	17.9	488	505.3	-3.4%
Atlanta, GA	15.6	71	109.1	-34.9%
Buffalo, NY	15.5	40	52.5	-23.8%
Syracuse, NY	14.5	21	17.5	20.2%
Cleveland, OH	14.0	97	79.9	21.5%
Dallas, TX	9.3	119	184.0	-35.3%
Los Angeles, CA	7.2	283	419.0	-32.5%
Boston, MA	6.1	40	58.6	-31.8%
Colorado Springs, CO	5.8	26	19.3	34.5%
Anchorage, AK	5.3	16	14.3	11.6%
Albany, NY	5.1	5	7	-28.6%
New York, NY	4.1	351	522.6	-32.8%

When we compare Rochester's homicide rate to that of other upstate New York cities over the last fifteen years (Figure 1), we see that Rochester and Buffalo have consistently higher homicide rates than the other upstate cities. While some people may believe that Buffalo has more homicide than Rochester, when we look at the rates per capita, it is evident that these cities rates are on very close to each other each year.

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Figure 1: Homicide Rates in Upstate New York Cities, 2000-2015

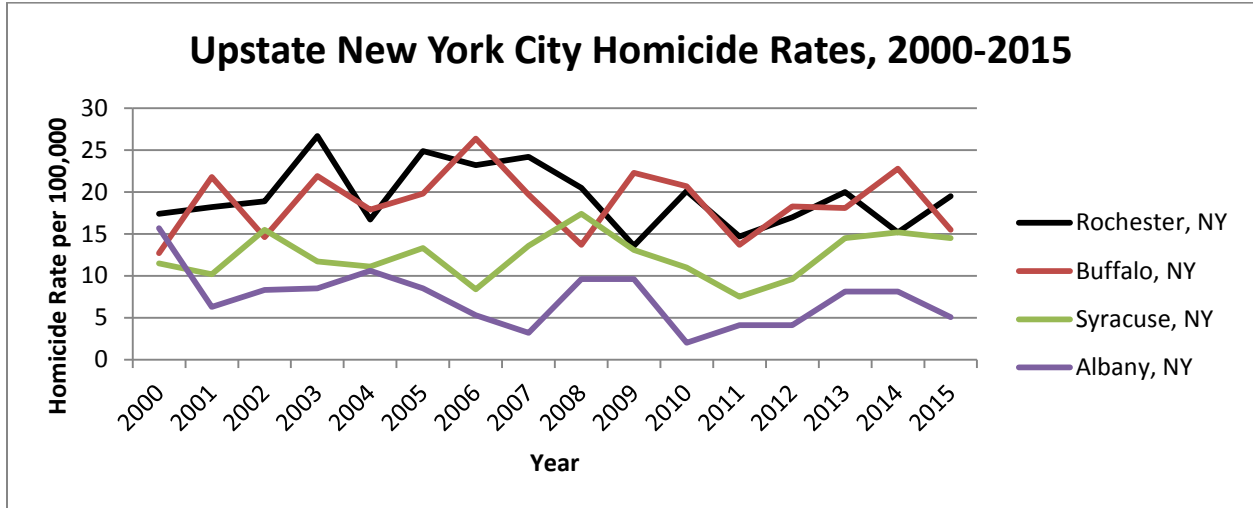
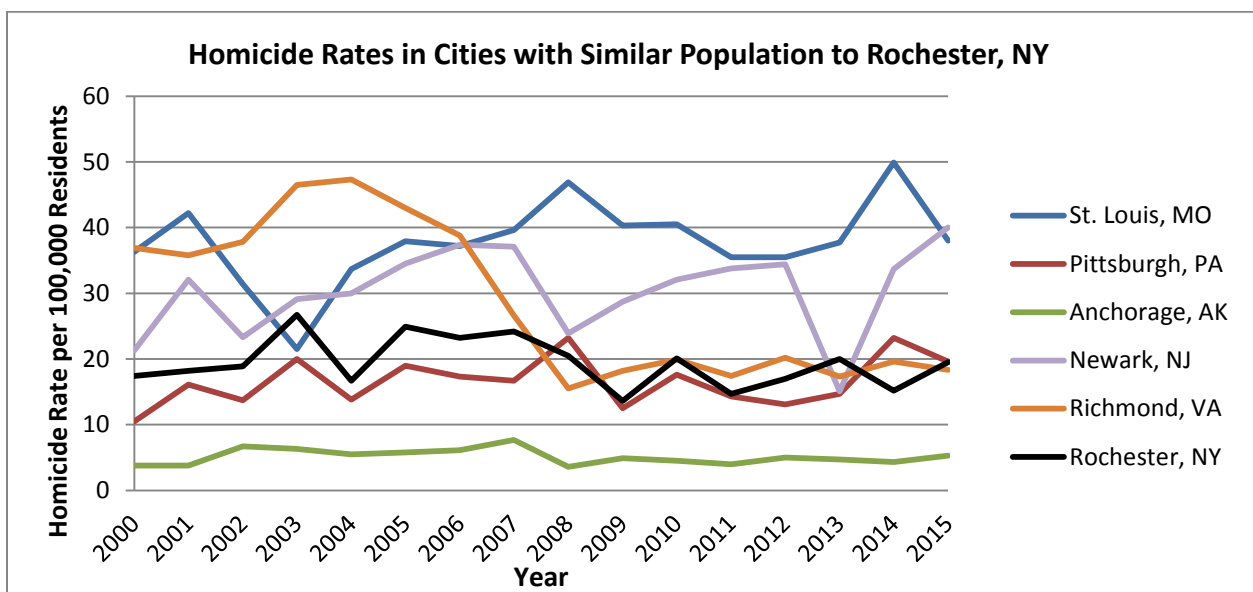


Figure 2 shows Rochester's homicide rate compared to cities with similar population sizes around the country. As perhaps would be expected, St. Louis and Newark have historically high homicide rates, and Anchorage, AK's rate is quite low (close to the national average). Richmond, VA has seen significant reductions in its homicide rate over the past fifteen years. It is clear, though, that even cities of similar size vary drastically in their homicide rates.

Figure 2: Rochester's Homicide Rates Compared to Cities with Similar Population Sizes



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Figure 3 shows Rochester's homicide rate compared to larger cities. It may surprise some that Rochester's homicide rate is much higher than that of Dallas, Boston, Los Angeles, and New York, and it has been for some time. Also, despite the reputation Chicago has in the media for serious problems with homicide, Rochester's rates have consistently been very similar to that of Chicago. While Washington, D.C. had historically high rates of homicide, it has decreased in recent years. Most would probably not be surprised to find that Detroit's homicide rates have remained very high in the past fifteen years.

The 2001 peak in New York, NY is due to the terrorist attacks on September 11, 2001. The approximate number of homicides in 2001 without including this incident is 495, or 6.2 homicides per 100,000, which is similar to other years shown for New York City.

Figure 3: Rochester's Homicide Rates Compared to Large U.S. Cities

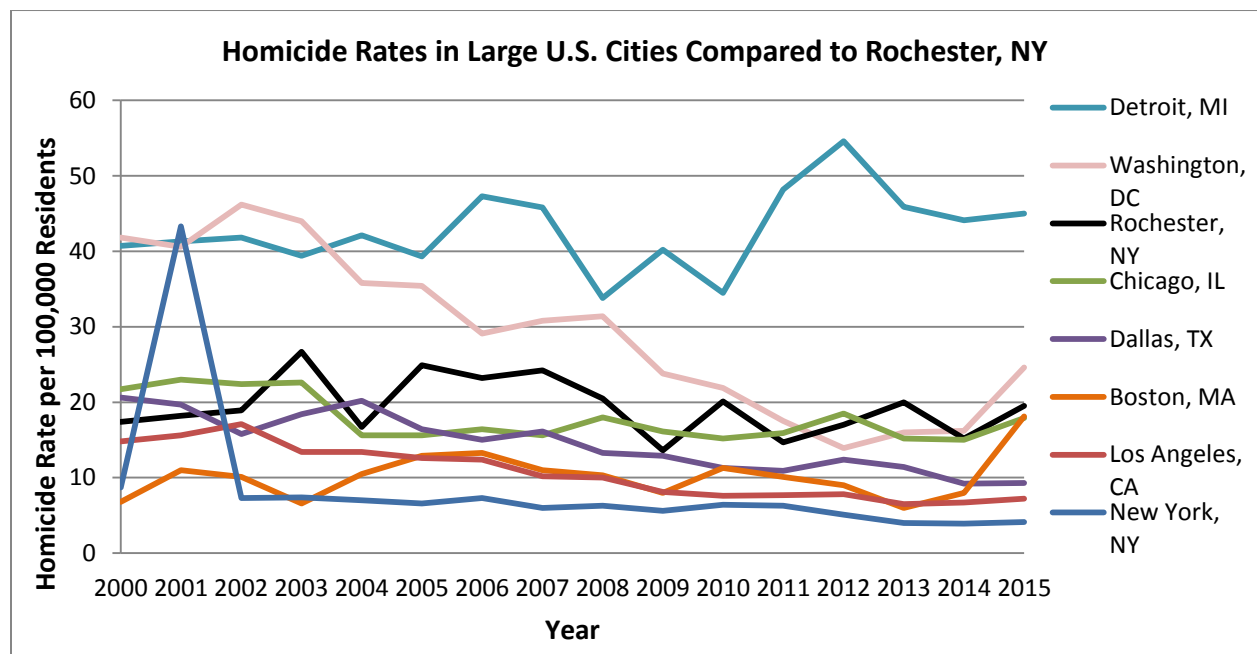


Table 2 shows the percent change in homicide rates for each of our sample cities between 2000 and 2015. (A range of three years for the start and end dates was used to decrease the influence of any one year, if that year had an unusually high or low homicide rate.)

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Table 2: Percent Change in Homicide Rates for Sample U.S. Cities, 2000-2015

City	2000-2002 Avg.	2013-2015 Avg.	Percent Change
New York, NY	19.8	4.0	-79.7%
Washington, DC	42.9	16.1	-62.4%
Los Angeles, CA	15.8	6.8	-57.1%
Richmond, VA	36.8	18.4	-50.0%
Atlanta, GA	33.5	17.6	-47.3%
Dallas, TX	18.7	10.0	-46.7%
Albany, NY	10.1	7.1	-29.7%
Chicago, IL	22.4	16.0	-28.3%
Seattle, WA	5.1	4.4	-14.9%
New Orleans, LA	46.8	41.2	-12.0%
Oakland, CA	23.4	21.3	-8.9%
Rochester, NY	18.2	18.2	0.4%
Detroit, MI	41.3	45.0	9.0%
St. Louis, MO	36.6	41.9	14.3%
Buffalo, NY	16.4	18.8	14.9%
Boston, MA	9.3	10.7	15.1%
Newark, NJ	25.6	29.6	15.8%
Colorado Springs, CO	4.8	5.6	17.4%
Cleveland, OH	13.8	16.3	18.1%
Syracuse, NY	12.4	14.7	18.8%
Pittsburgh, PA	13.4	19.2	42.7%
Anchorage, AK	4.8	7.6	58.9%

Despite there being major reductions in homicide rates in cities across the country, including New York²; Washington, D.C.; Los Angeles; and Chicago, Rochester, NY has essentially remained constant in its homicide rate. Rochester's neighboring cities of Syracuse, NY and Buffalo, NY have seen more significant increases during this time than Rochester has.

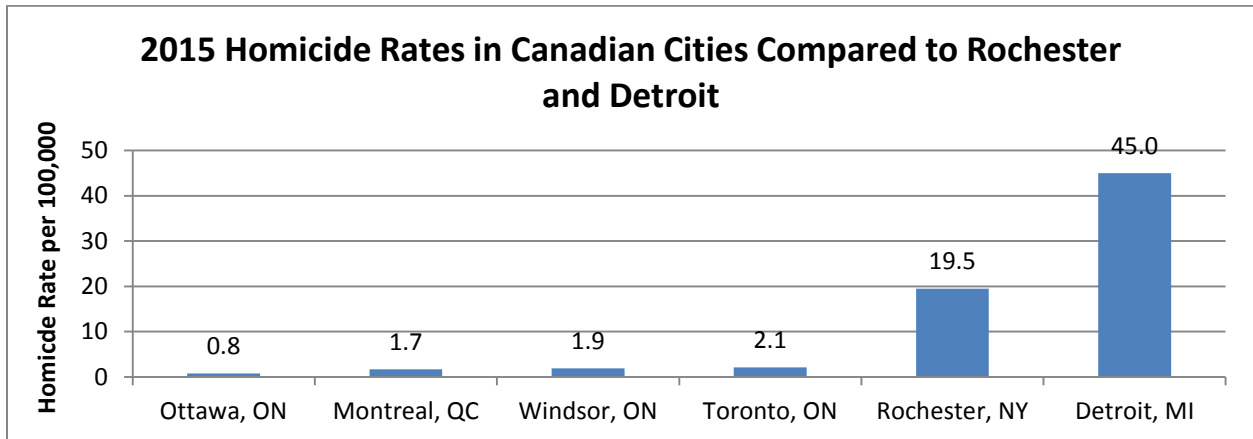
The U.S. in general has much higher homicide rates than many other countries such as Canada, the U.K., Australia, and Ireland. Since Rochester is geographically very close to several major Canadian cities, Figure 4 shows how Rochester's 2015 homicide rate compares to that of several Canadian cities. Toronto, for example, is not very far from Rochester, but Rochester's

² The percent change in New York City is strongly influenced by terrorist attacks on September 11, 2001, in which the deaths were counted as homicides. If you exclude the deaths from 9/11, the average homicide rate for 2000-2002 is actually 8, meaning that the percent change without these deaths is about -50%.

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homicide rate is nine times higher. Even more remarkably, Detroit is a ten-minute drive away from Windsor, Ontario over the Detroit River, yet the residents of Detroit are 24 times more likely to be a victim of homicide than the resident of Windsor. Note that Rochester and Windsor both have populations of about 200,000 people.

Figure 4: 2015 Homicide Rates in Canadian Cities Compared to Rochester and Detroit



Conclusion

An explanation for why some cities have seen reductions in homicides and some have seen increases is beyond the scope of this paper. Nonetheless, from the data presented here, we see that Rochester's homicide rate has been consistently higher than some major cities such as New York City and Los Angeles and on par if not slightly higher than Chicago. It may also be surprising that Rochester's homicide rate has remained relatively constant in the past sixteen years. Many cities have achieved significant reductions in homicide rates between 2000 and 2015, while others, including Syracuse and Buffalo, have seen increases in homicide rates. These historically high homicide rates in Rochester and elsewhere in upstate New York must be fully acknowledged if progress is to be made in reducing the number of homicides in our community.

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