

Per capita rate of fatal officer involved shootings for Madison Police Department versus NYPD.

The graph is normalized to Madison population size at each timepoint (and uses a six-year moving average for smoothing). There's been a statistically significant increase in fatal officer involved shootings from 1990 to present (as well as over the complete time series). The same strong increase is apparent regardless of which variable is used for normalization (e.g. normalizing the number of shootings by the number of MPD officers or by the number of incidents of violent crime shows the same pattern). I provide a graph of New York City Police Department fatal officer involved shootings for comparison. As you'll note, the rate of fatal shootings by NYPD is consistently going down (i.e. in the opposite direction from Madison). The increasing rate of fatal officer involved shootings in Madison is not a response to violent crime rate, which has been essentially flat from 1990 to present.

There is also a pattern of increasing fatality of MPD officer involved shootings over the last two decades. Possible reasons include:



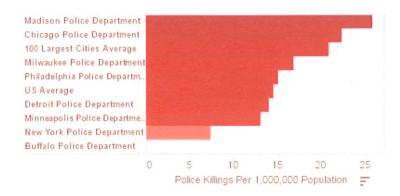
- 1. More shots fired per incident. I obtained data from MPD on number of shots fired in each incident from 1990 to present. Overall there's a statistically significant increase in number of rounds fired per incident over this time period.
- 2. Changes in ammunition (e.g. with current types of hollow point bullets doing more damage).
- 3. Greater proximity (thus hitting vital organs more often). E.g. In the initial years of the time series, MPD officers seemed only to be shooting active shooters, and based on news accounts often seemed to be at greater distance. Since 2003 no MPD officer involved shooting have involved an active shooter.

The nature of the circumstances of the shootings has also changed radically over time. From 1973 to 1992, MPD officers were only shooting active shooters (there were 6 such incidents). From 1992-2003 some (3 out of 9) were active shooters; from 2003 to present none of those being shot at by MPD officers were active shooters (13 incidents), though some held guns (while others held knives or were unarmed). I suspect it has become the norm to shoot in circumstances where MPD officers would not have resorted to deadly force early in the time series.

The racial breakdown of the people being shot at from 1970 to present: 19 White, 1 Asian, 2 Black, 6 Hispanic. I'll note that I used photos and names to determine race for most of the incidents – such a method isn't infallible, but I believe the overall breakdown should be pretty accurate. There's overrepresentation of Hispanic residents relative to proportion in the Madison population.

The proportion of people being shot who are in crisis has been steadily rising over time. That's the population that's really being killed now (a strong shift relative to earlier in the time series). All recent shootings (the last 7) were people in crisis (i.e. incapacitated by mental illness or chemically). 11 of the last 12 shootings (going back to 2004) were people in crisis. Those proportions appear to be far higher than in most other cities, presenting perhaps the most urgent need for reform in MPD training and practices regarding deadly force.

The rate of fatal officer involved shootings varies drastically across police departments. For example, a sample of a few cities, using data covering Jan, 2013 through Dec, 2016:



Madison: 25.73 Chicago: 22.26

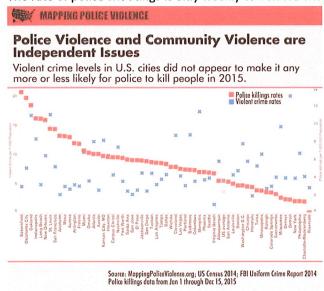
100 largest U.S. cities average: 20.79

Milwaukee 16.81 Philadelphia: 15.07 U.S. average: 14.54 Detroit: 14.01

Minneapolis: 13.07 New York City: 7.34

Buffalo: 0

The rate of police shootings is only weakly correlated with the rate of violent crime.



There are also huge differences across countries in the rate of fatal police shootings. Note that Finland, which has one of the lowest rates of fatal police shootings, has a high rate of per capita gun ownership, including a lot of handguns, and has one of the higher violent crime rates in the E.U (driven in part by high rates of alcohol use). Moreover, Finish police all carry guns. Yet they kill people at a rate 100 fold lower than U.S. police.

Fatal police shootings



There's been a great deal of research, starting with work by James Fyfe, that has shown that the variation in rates of officer involved shootings across U.S. cities is predominantly a consequence of differences in policies and training. Differences in administrative controls of officer discretion for firearm use account for the variation. This has been shown repeatedly in studies by Fyfe, Geller & Scott, Walker, Aveni, researchers with Campaign Zero, and many others. When the police department of a city dedicates itself to reducing the rate of officer involved shootings, it can do so, without decreasing officer safety, as NYPD and other cities have shown. Researchers have taken officers from different cities, put them into identical scenarios, and shown radical differences in the rates at which they shoot unarmed people. The answers to solve the problem are largely available – this is not a mystery. But in most cities, politicians lack the courage to act and police administrators simply seek to justify their current practices, pretending that little can be done, which as an empirical matter is demonstrably false. That failure to act is shameful.