

Decreasing Violent Gun Crimes in New York City: A Result of Vigorous Law Enforcement Efforts, Other Variables, or Both?

Steven F. Roth, New York State Division of Criminal Justice Services
4 Tower Place, Albany, New York 12203

For the last several years, reported violent crime has been decreasing across the United States. New York City has been notable concerning this trend. Since 1991, while the number of violent crimes reported within the City has decreased significantly, violent crimes involving firearms, especially handguns, have decreased by an even greater percentage. But why? Some point to the New York City Police Department's "Gun Strategy," implemented to decrease the proliferation of guns and gun-related crimes. Since the Strategy's initiation, reports of shooting incidents and shooting victims have dramatically decreased. However, the Gun Strategy was not introduced until March 1994, and the decreases in gun-related violent crimes in NYC began decreasing following 1991, decreasing to a greater extent during 1994 and thereafter. Thus, looking at the statistics alone, it is unclear whether, and to what extent, the efforts of the NYPD can be attributed to decreasing violent firearm offenses in recent years.

Decreasing Violent Crime in New York City

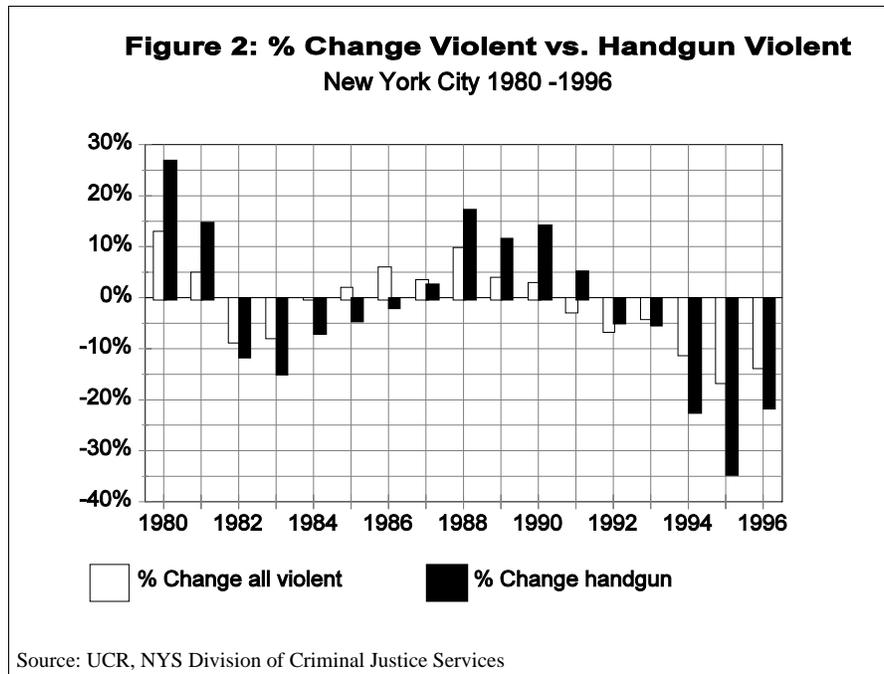
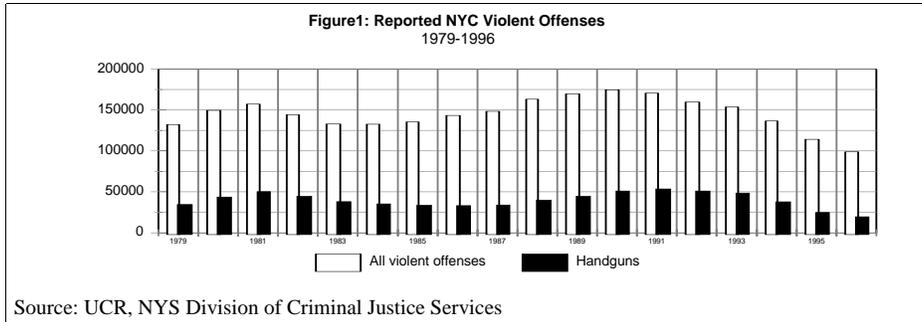
Decreasing Numbers of Reported Crimes

Starting in 1991, and more dramatically following 1993, reported violent crime -- including homicide -- has been decreasing in New York City, following a steady increase since 1985. Between 1991 and 1996 (the latest year available for determining violent crimes involving firearms), while the number of reported violent crimes (murder, rape, robbery and aggravated assault) has decreased from 170,496 to 98,733 (- 42.1%), violent crimes involving firearms, especially handguns, has decreased by an even greater extent, from 53,621 to 19,495 (- 63.6%). Figure 1 shows that the decrease in violent offenses involving *handguns*, as compared with the decrease in violent offenses overall, has been even more dramatic after 1993 -- percentage change in reported *violent crimes* ('94: -11.1%, '95: -16.4%, '96: -13.5%), versus percentage change in reported *violent crimes involving handguns* ('94: -22.2%, '95: -34.4%, '96: -21.2%). In addition, it could be argued that the annual *increases* in overall violent crimes during the late 1980s ('88: +9.8%, '89: +4.0% and '90: +3.0%) were being driven by the larger increases in violent crimes involving *handguns* ('88: +17.3%, '89: +11.6%, and '90: +14.2%).

Extent of Year-to-Year Decreases

The *percentage decrease* from the prior year in the number of violent crimes *involving handguns*, as compared with violent crimes overall, has been even more dramatic after 1993. The annual percentage change in reported *violent crimes overall* were as follows -- 1994: - 1.1%,

1995: - 16.4%, and 1996: - 3.5%. This compares to the percentage annual change in reported *violent crimes involving handguns* -- 1994: - 22.2%, 1995: - 34.4%, and 1996: - 21.2%. The annual percentage decreases in these two categories of reported crimes are shown in Figure 2.



New York City Police Department Gun Strategy

Many have attributed the New York City Police Department's "Police Strategy No.1: Getting Guns off the Streets of New York" (hereafter "Gun Strategy"), initiated in March 1994, as the "cause" of the decrease in violent firearm crimes, as well as decreases in arrests for illegal possession of a loaded handgun (which is also classified as a Violent Felony Offense, but not included in the aforementioned "violent crimes"). In most basic terms, the Gun Strategy has involved targeting and expanding investigative and patrol services, revising and expanding training, obtaining and deploying technologically advanced equipment, and securing public support to reduce crimes involving firearms.

Targeting and expanding investigative resources involves efforts to: 1) identify and pursue all accomplices involved in the commission of violent crimes; 2) identify and pursue gun traffickers inside and outside New York whenever a gun is used in the City; 3) utilize detectives in the precincts to strengthen all gun arrests made by uniformed and plainclothes police officers; and 4) assign case responsibility at the precinct level to encourage results-oriented police and investigative work. Refocusing patrol resources concerns targeting and expanding the Street Crime Unit of the Patrol Services Bureau to attack specific areas of high gun violence. Training revision and expansion was developed to teach detectives case development of gun investigations, apprehension of illegal firearm traffickers, confidential-informant registration, search warrant procedures, and to teach police officers to better recognize the signs of weapons possession and to make stronger cases against people they arrest. Technologically advanced equipment is obtained and deployed to match guns used in more than one outstanding crime, and to trace firearms to illegal sellers throughout the country. Public support is secured to identify and help locate those who possess, use or sell illegal guns in their neighborhoods.¹

Particular means by which illegal guns are seized include a "radio run" -- usually turned in by a citizen as "a man with a gun." Another method is a search warrant (more common for narcotics than firearms in buy and bust operations lasting months to garner evidence for a search warrant) when illegal guns are discovered in the search for illegal drugs. Other means by which the police seize illegal firearms are calls to crimes in progress in which a perpetrator is fleeing a crime scene with a gun. Another effective means by which the police have seized guns is apprehending subway turn-style jumpers who are caught with illicit firearms. When an arrest is made, the officer has the constitutional right to search the arrestee for the weapons in order to ensure the officer's person protection, a process by which illegal guns are sometimes found and seized.²

On a limited basis, a "model block" program has been conducted where barriers are placed at each end of streets in high crime areas -- with police stopping people based on reasonable

¹*Police Strategy No. 1: Getting Guns off the Streets of New York*, New York City Police Department, (March 7, 1994), pp. 8-9.

²Interview with Joseph Lovelock, Deputy Inspector, Office of Management Analysis and Planning, New York City Police Department, (March 9, 1998).

suspicion and asking about their business, and to see identification. If a positive i.d. is not produced, the officer has the right to detain, arrest and search the person for the officer's protection -- which may produce an illegal firearm. Another specific example is if a schoolyard closes at certain time, people have no legitimate reason to be there after hours. Someone being present under these circumstances, by itself, is an acceptable reason for an officer to stop the individual and ask questions. In addition, the "bulge in the pocket," or reasonable suspicion of carrying a gun determined by examining walking style or other gestures (as developed by an NYPD detective with hundreds of illegal gun arrests) has produced numerous other illegal firearm confiscations.³

A vital aspect of the effort to get guns off the streets was the February 1997 expansion of the NYPD's Street Crime Unit by 300 officers, and its reorganization into citywide and borough units to combat violent street crime and firearm offenses.⁴ City areas are targeted based on pattern and trend analyses. A computerized repeat calls-for-service application allows identification and tracking of high volume crime locations that need increased enforcement. Precinct commanders, given more direct decision-making by the COMPSTAT Program, may also use MAPINFO crime mapping techniques to deploy resources most effectively as they see fit.⁵ Detectives debrief all prisoners charged with unlawful possession of a firearm in order to identify the weapon's source, and all firearms are subject to gun tracing through NYPD Ballistics in cooperation with the Federal Bureau of Alcohol, Tobacco and Firearms (ATF).

The NYPD continues its enhanced efforts to identify individuals who illegally possess firearms, to track the sources of illegal guns trafficked into the City with the assistance of ATF in Project Lead and contact with law enforcement officers across the country, and use advanced technology comparison systems in its Ballistics Unit to investigate firearms, bullets and bullet casings involved in crimes. In addition, the NYPD has participated with 16 major municipal police agencies across the country in the Federal Youth Crime Gun Interdiction Initiative, a pilot program developed by ATF to trace guns used by juveniles in the commission of crimes to the location and dealer from which they were purchased. The project is using ATF's National Tracing Center to produce information about the sources of weapons, aggregate and analyze trace data, and share information with state and local law enforcement officials. The objective is to curtail the supply of illegal firearms used by youths to commit crime, and to encourage arrests where appropriate.⁶ In addition, another factor possibly associated with decreasing homicides in

³*Ibid.*

⁴*The Mayor's Management Report, Preliminary Fiscal 1998, Vol. I, Agency Narratives, City of New York, p. 13.*

⁵*The Mayor's Management Report, Fiscal 1997, City of New York, p. 11.*

⁶*The Youth Crime Gun Interdiction Initiative: The Illegal Youth Firearms Markets in 17 Communities, Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms (July 1997).*

the City is the overall increase in NYPD full-time sworn personnel from 32,855 in 1990 to 37,090 in 1996.⁷

Hopefully, as a result of these and other criminal justice efforts, slightly over 2,000 people were shot in New York City in 1997, as opposed to over 5,000 people shot in the City in 1993. Based on firearm arrests, the strong appearance is that fewer people in New York City are carrying guns on their persons -- resulting in less opportunity to commit crimes with firearms, including those that are not pre-meditated.

New York City Mayor's Management Report

In March 1994, the NYPD introduced its Gun Strategy to reduce the proliferation of guns and gun-related crimes in the City. The NYC Mayor's Management Report: Preliminary Fiscal 1998 indicates that shooting *incidents* in NYC have declined 62.5%, from 5,269 in calendar 1993 to 1,977 in calendar 1997. The number of shooting *victims* also declined 61.4 % during this same time period, from 5,862 in calendar 1993 to 2,262 in calendar 1997. This trend continued during the first four months of Fiscal '98, with a 15.3% drop in shooting victims -- to 834 from 985 during the same period of Fiscal '97. Since implementation of the Gun Strategy, *arrests* for gun possession have declined by 43 %. From the first four months of Fiscal '97 to the same period of Fiscal '98, arrests with gun possession as the highest charge fell almost 18%, from 1,440 to 1,185.⁸ But what empirical research is there that might shed light on whether the NYPD's recent strategy to reduce gun crime has indeed done so?

Study on Declining Homicide in New York City: Association With Police Practices

Researchers Franklin Zimring, Jeffrey Fagan, and June Kim, in their draft report "Declining Homicide in New York City: A Tale of Two Trends" (which will appear in the Summer 1998 issue of *The Journal of Criminal Law and Criminology*), examined whether NYPD's Gun Strategy is associated with recent and dramatic declines in firearm homicides in the City. **With the authors' permission, the remainder of this paper uses graphs and statements as contained in the draft report.** As the authors state, "The recent decline in homicides in New York City is an exception to the usual pattern, the most celebrated example of crime-news-as-good-news in decades." The drop in homicides was both large and abrupt -- the homicide rate in the Nation's largest city fell 52 percent in five years. The authors further state, " If this drop can be plausibly tied to enforcement activities, it would be the most conspicuous success of city police deployment policies in the 20th century."

In an effort to empirically assess whether the homicide decline between 1993 and 1996 is significantly associated with police practices, the researchers put the decline in a variety of

⁷*Crime and Justice Annual Report, 1990 - 1996*, New York State Division of Criminal Justice Services.

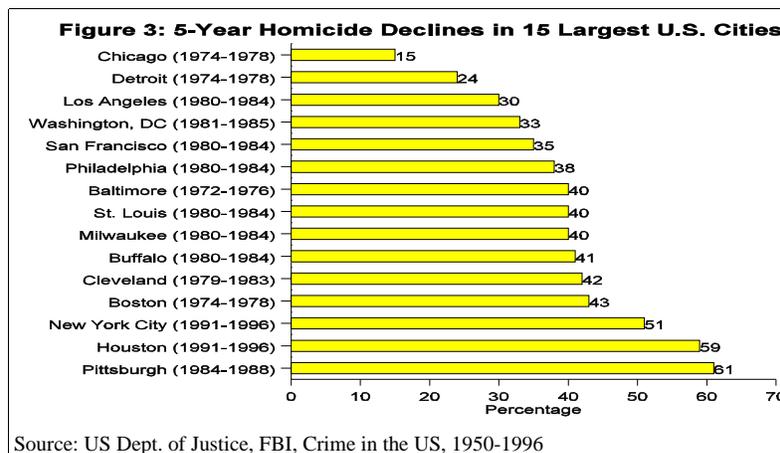
⁸*Mayor's Management Report, Preliminary Fiscal 1998*, City of New York, p. 13.

statistical contexts, comparing the drop to previous New York experience and to the experiences of other cities in the United States. They also examined changes in homicide patterns during the decline in search of clues about causes. They viewed available police and other data about the scope of the decline in crime and violence over the years when homicide dropped -- researching such questions as: "Did many crime categories fall, and by how much?" and "Was the decline concentrated in a few categories or spread evenly across the spectrum of felony crime?"

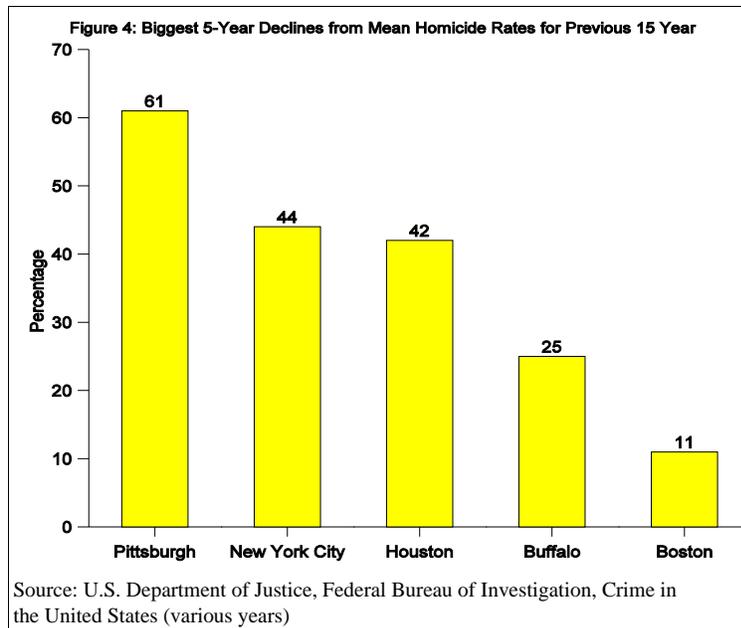
Size of the Homicide Decline

Magnitude of Homicide Decline

In its relative and absolute magnitude, the homicide drops after 1992 were by far the largest in the post-World War II history of NYC. The number of lives involved is even more impressive, with more than 1,100 fewer homicides in 1996 than in 1992. This reduction in homicide far exceeded the total number of homicides the City experienced each year in the 1950s and early 1960s.



New York City's homicide decline was also compared with homicide declines experienced in other major U.S. cities for five-year periods from 1950-1996. (See Figure 3.) The five-year records for big cities vary from a 61 percent decline in Pittsburgh through a 15 percent decline in Chicago. The median decline was 40 percent, and seven cities reported highest decline percentages of between 43 percent and 38 percent. The New York decline is the third highest for major cities, behind Pittsburgh, equal to Houston, and about 25 greater than the cluster of city records around 40 percent. On the straight arithmetic, the New York experience is not unprecedented, but is a higher percentage drop than 12 of the Nation's 15 biggest cities have experienced in a five-year span. Of the very largest U.S. cities, NYC had the greatest percentage decline in reported homicide.



Drop in Accordance With Previous Abnormally High Rate?

The researchers tested the five cities with the highest five-year declines against the possibility that an abnormally high homicide rate for a short period of time is the reason for a large drop in the homicide rate -- negating the existence of a unique "trend". The low year in the largest five-year decline is compared to the mean rate in that city for the prior 15 years, as shown in Figure 4. Three of the five largest declines (including NYC) represent a substantial reduction from the average rate for the previous 15 years. Zimring et al. concluded that because of the steep decline in NYC homicides after 1993 (preceded by a temporary rise), it is difficult to argue that the drops in recorded homicides were merely part of a cyclical "roller-coaster" downward trend following abnormally high rates.

In a time when very wide swings in criminal homicide rates occur, sharp downward movements in the homicide rate might be expected after sharp upward movements, akin to a roller-coaster that drops faster after climbing to a great height. To use the roller-coaster metaphor, the homicide climb in New York City was not as steep before the post-1991 drop, so that less of the decline appears likely to be merely cyclical. However, as late as the end of 1995, New York's homicide rate was within 10 percent of its 1985 level.

The rate of homicide broke important "new ground" only after 1995. In sum, the percentage decline experienced by New York City in five years is quite large, but in no means unprecedented in major cities. Nevertheless, such a homicide decline is also rather uncommon. Thus, the decline is large by historical standards and not merely an "echo" of a sharp but temporary previous rise. This research dealt with the *size* of the homicide decline.

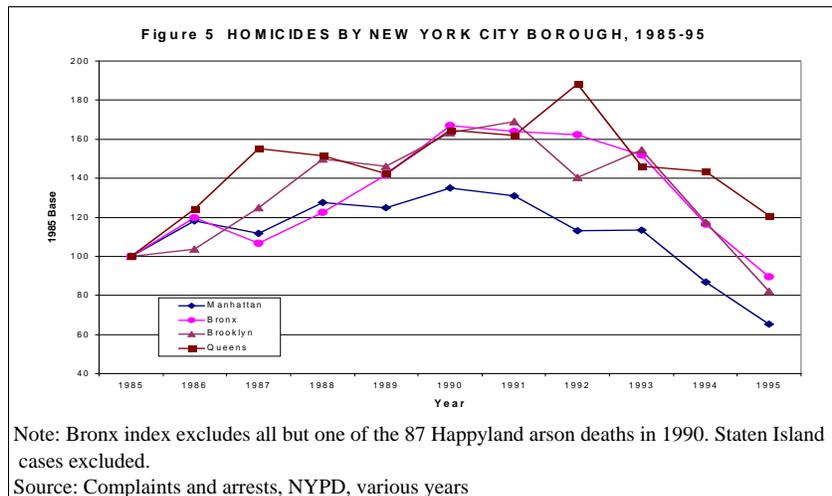
Nature of the Homicide Decline

The homicide statistics discussed above involve an aggregation of many different types of law enforcement, community areas and population groups within New York City. The researchers further analyzed the types of homicides that changed the most in order to detect probable causes of the changes. Specifically, they performed cross-tabulations of NYC homicide over time by borough, by weapon and by demographic groups in the City, which were separately analyzed.

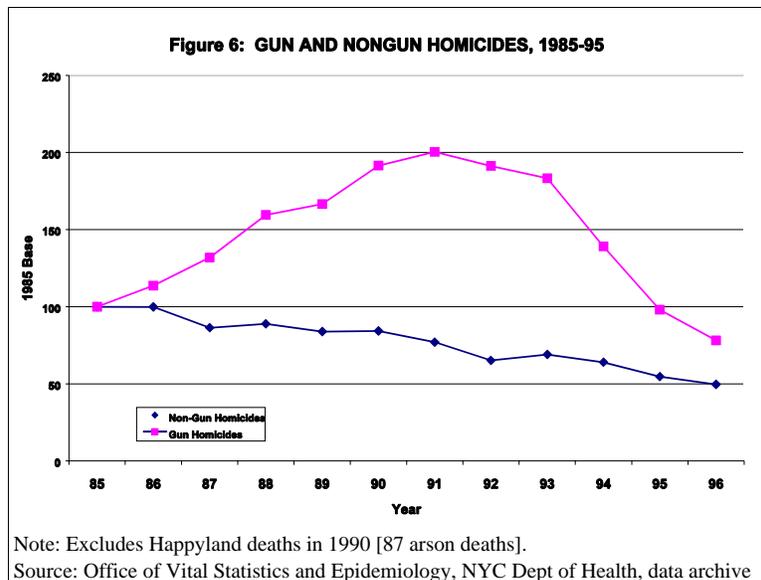
Variations by Individual Borough

The 1985-95 homicide patterns for the City's four largest boroughs were examined to determine whether individual boroughs disproportionately affected the City's steep decline in reported homicides starting in 1994. The boroughs differ importantly in the patterns observed while homicide rates grew in NYC, but are much less divergent during the years of decline -- all running parallel (see Figure 5), discounting disproportionate influence by individual boroughs.

Variation by Weapon



The significant break of homicides by weapon is between gun shot deaths and all others. As shown in Figure 6, the patterns for gun and non-gun homicides differing sharply between 1985 and 1996. Non-gun killings drift steadily downward during this period (interrupted only by the Happyland Social Club fire in 1990 -- 86 of the 87 killings were deleted for this one incident so as not to skew the data). However, gun deaths *double* between 1985 and 1991, and fall sharply from 1993. This reveals that the decreases in homicides *involving firearms* has been driving the reduction in overall homicide in the City since 1991, and the sharper decreases in overall homicides since 1993. In addition, increases in *firearm* homicides between 1985 and 1991 were also responsible for the rise in overall homicides in this time period.



Demographics

The distinct patterns of gun and non-gun homicide raise questions about whether these patterns were similarly distributed among the population of homicide victims. Using Medical Examiner records, the researchers disaggregated characteristics of gun and non-gun homicides by sex, age and race to test the strength of association of each variable with the decreasing homicide rates.

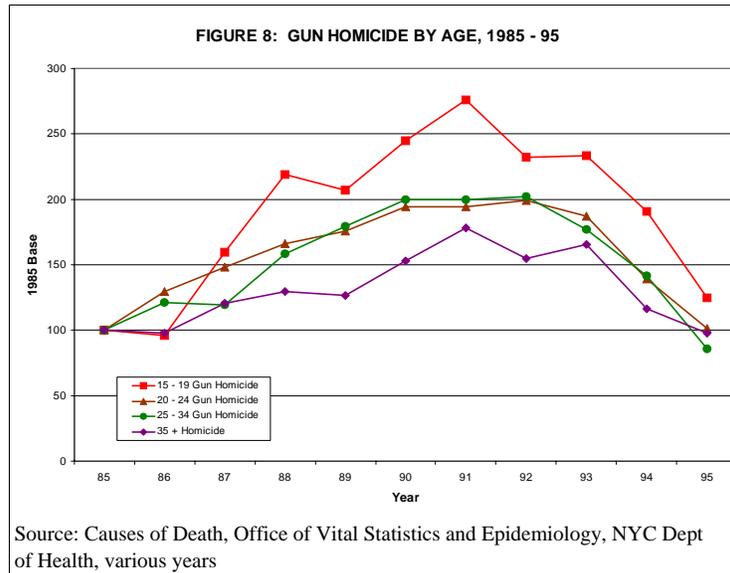
Sex

Overall homicide rates for women were lower than for men from 1985-1995, consistent with homicide trends historically. However, the trends in gun and non-gun homicides for males and females differed in the magnitude, timing and duration of change over the period. Figure 7 shows that *gun homicides* by women increases by 68 percent during this period, compared to an increase of over 105 percent for males. There were steady declines in *non-gun* homicides for both men and women, but the decline was greater for men. By 1995, non-gun homicide rates for males were 45% below their 1985 rates. However, the rates for women declined far less. Actually, the overall trend for women is no change since 1992.

Age

A great deal of public and scholarly attention on violence in the past decade has focused on the increase in gun homicides by adolescents. Trends nationwide indicate that gun homicide rates for adolescents increased during this period while gun homicide rates for persons over 25 years of age were declining. Figure 8 shows that while adolescent participation in gun homicide did rise sharply from 1985-91, rates for other age groups also continued to rise during this period. Gun homicides by adolescents ages 15-19 rose more quickly and sharply over this period. By

1991, gun homicide rates for this group reached a peak of 176 percent their 1985 rate. The other population groups also increased, peaking at approximately the same time at about 100 percent above their 1985 rate. Rates for the oldest population group, those 35 years of age or more, rose slightly more slowly, peaking at 77 percent of their 1985 rate. Accordingly, adolescents did not *replace*, but became an *active part* of a homicide epidemic that spanned age groups.

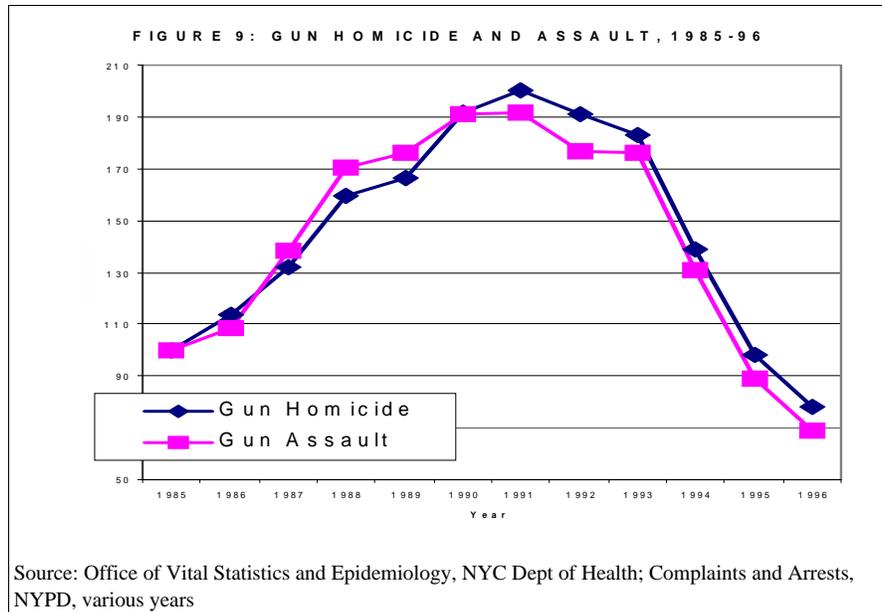


Race

None of the data sources allowed detailed disaggregation of the homicide trends by race over the entire 1985-95 period. Detailed data were available only for African Americans; whites and Hispanics were not distinguished in the police or Medical Examiner data until after 1990. Based on the available data, there were no substantial changes in the racial composition of NYC during this period.

Concomitants

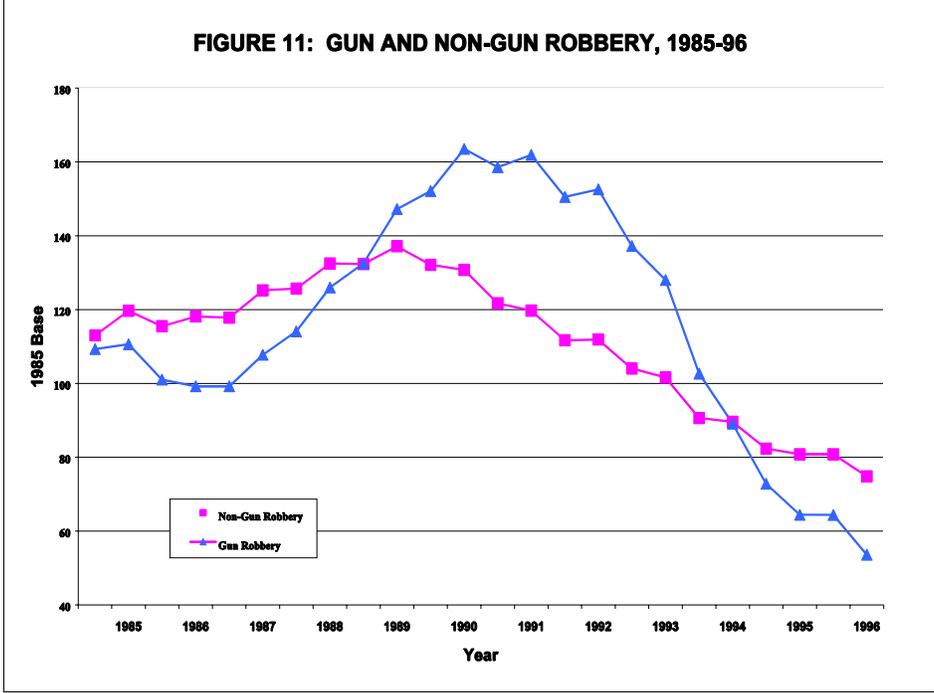
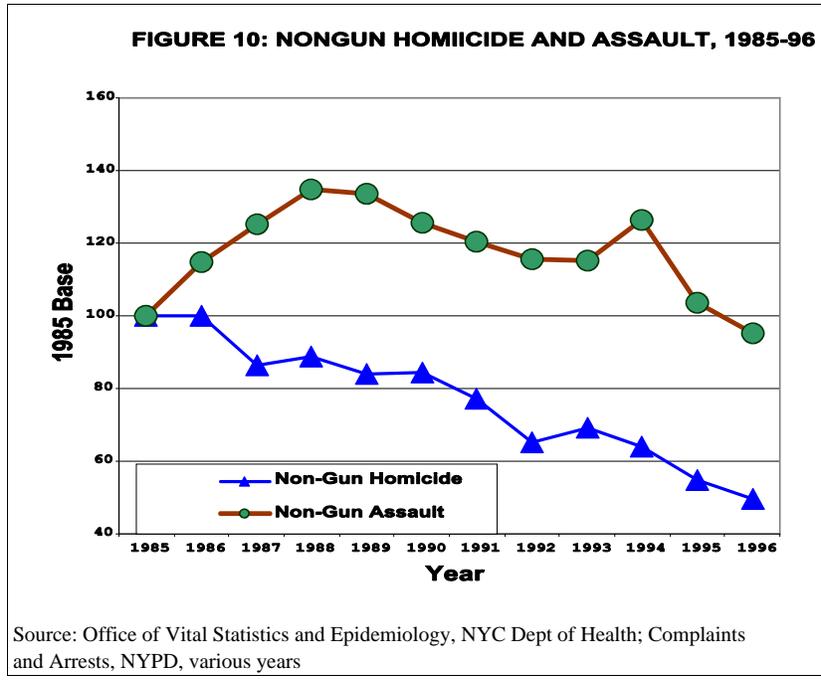
In addition to the aforementioned citywide homicide data, trends in crime statistics and other social data widely believed to be associated to trends in lethal violence should be examined for their possible influence on decreasing homicide rates. The historical data for gun and non-gun violence is presented separately below because of the finding that gun and non-gun homicides have distinctly different histories in the City.



Homicide and Assault Data

Figure 9 shows the pattern over time for firearm homicide and firearms assault, with 1985 rates of shooting deaths and firearm assaults expressed as 100 and all other values normed to that scale. In both timing and relative magnitude, the firearm assault trends match the firearm homicide trends. The increased level of *firearm assaults*, about 8,600 more known cases by 1990 and 1991, appears to be the mechanism driving the increase in gun fatalities until 1991. The sharp drop in firearm assaults after 1993 also seems to be the dynamic for the drop in firearm fatalities.

The police data on *non-firearm aggravated assault* trends and NYC Health Department records on homicides by all means other than firearms (Figure 10) are quite different from the firearm trends for assaults. The decline in non-gun killings that starts in the mid-1980s is merely a shift from knife and personal force attacks to gun attacks. It is widely believed that gun incidents increased largely due to turf conflict in the crack trade.

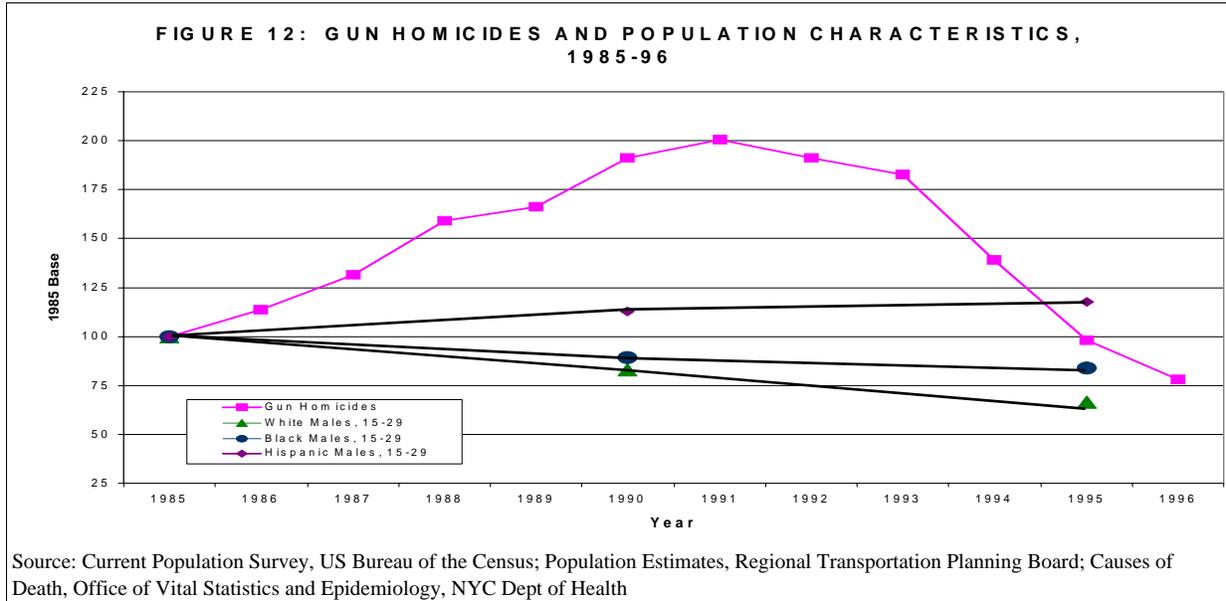


Note: Initial rate is greater than 100 due to smoothing of 3 six-month reporting periods.

Source: New York City Police Department, Complaints and Arrests, various years

Gun and Non-Gun Robbery

The pattern of firearm robbery from 1985-96 (Figure 11) is similar to the patterns of firearm assault and homicide, peaking in 1991 before declining sharply. The general, steady decline in non-firearm assault and homicide is mirrored by the trend for property crimes and non-firearm robberies.



Population of Highest Risk Subgroups

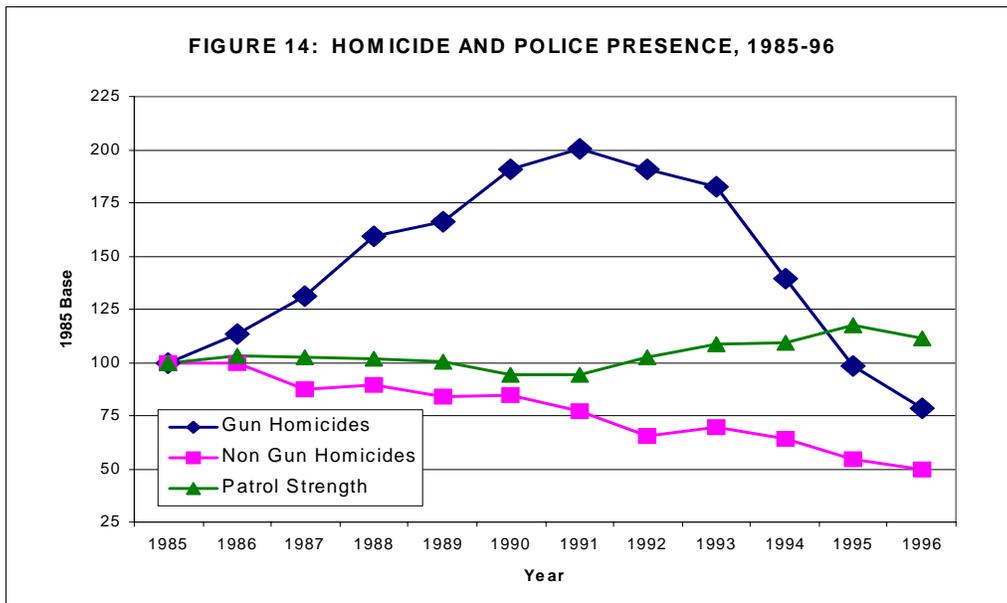
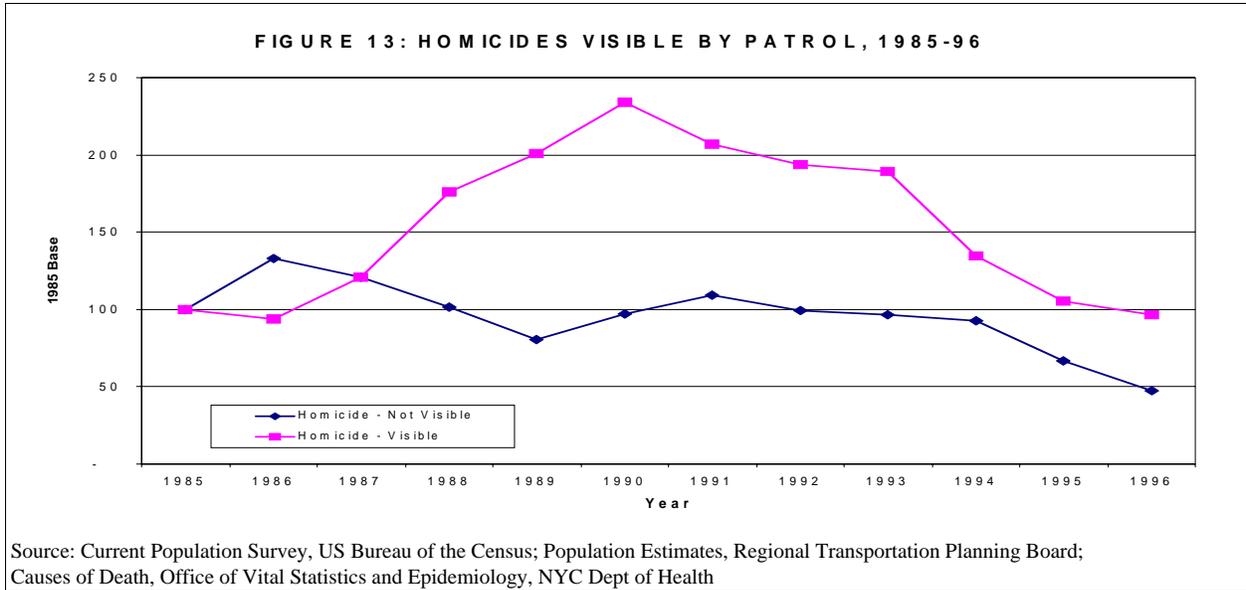
Figures 12 and 13 represent the trends for firearm and nonfirearm homicides arrayed with population estimates for the subgroups with the highest homicide risk: males 15-29 years of age. Demographic trends appear to be unrelated to firearm homicides. However, as shown in Figure 13, non-firearm trends appear to coincide with population declines among white and black males.

Law and Policy

Significant changes occurred in law and criminal justice policy from 1985-96 which produced important changes in the likelihood of detection and punishment of crime (with special emphasis on NYPD's gun strategy), and included a rapidly expanding prison population.

Figure 14 shows the changes in policing over the 11-year period were unrelated to the long-term decline in *non-gun* homicides. However, there are some apparent links between police resources and *firearm* homicides, as well as police strategy and homicide trends. Patrol strength increased from its 1991 count of 6,647 officers to over 8,305 officers in 1995 -- an increase of almost 25

percent. The increase in patrol strength was sharpest from 1991 to 1994, the period of onset of the decline in firearm homicides. Also, marked shifts in policing strategy began in 1994, concurrently with even sharper declines in firearm homicides from 1994-96.



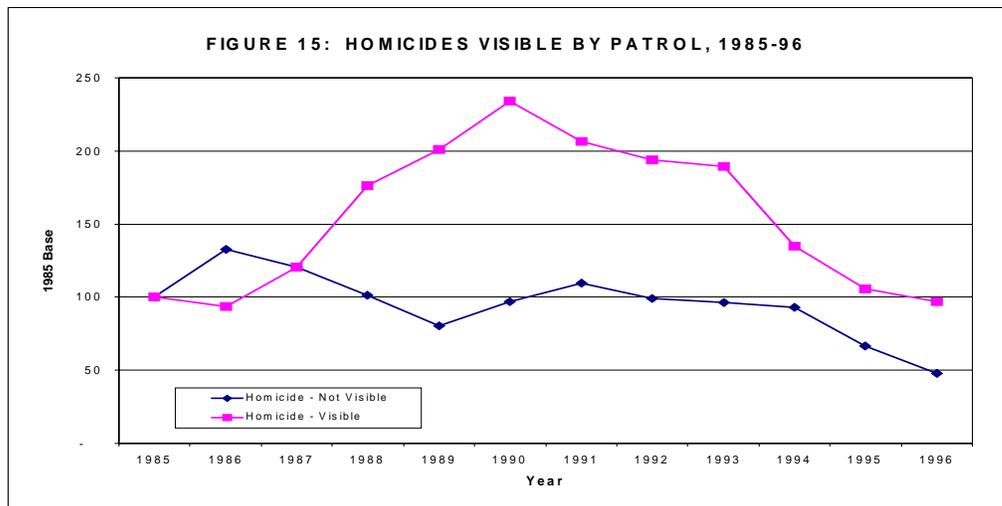
While the increased and aggressive patrol tactics should reduce opportunities for visible or outdoor crime commission, the researchers found no evidence of displacement from outdoor to indoor homicide in these trends (Figure 15).

Increase in Patrol Strength

The authors found that the increase in patrol strength beginning in 1991 had a positive effect on reducing *visible* homicides. The second pressure was tied to changes in the dynamics of drug distribution. The decline in visible homicide was concurrent with the shift from outdoor to indoor drug selling, reducing the volatility of drug transactions and the opportunities for conflicts over money or turf. The dramatic 1994-96 decline in *firearm* homicides (greatly influencing overall homicides) coincides with changes in NYPD strategy. Combined with earlier downward pressures, the shift toward an aggressive enforcement strategy targeted at firearms is believed to be significantly associated with sharp declines in *both* indoor and outdoor homicides.

Incapacitation

Incapacitating potential homicide offenders through changes in incarceration did *not* show an identifiable impact on homicide trends. The NYC jail and State prison populations of NYC offenders rose in lockstep with NYC homicide through 1991, and continued to rise even as firearm homicides, and homicides overall, began their rapid decline after 1993. (See Figure 16.)

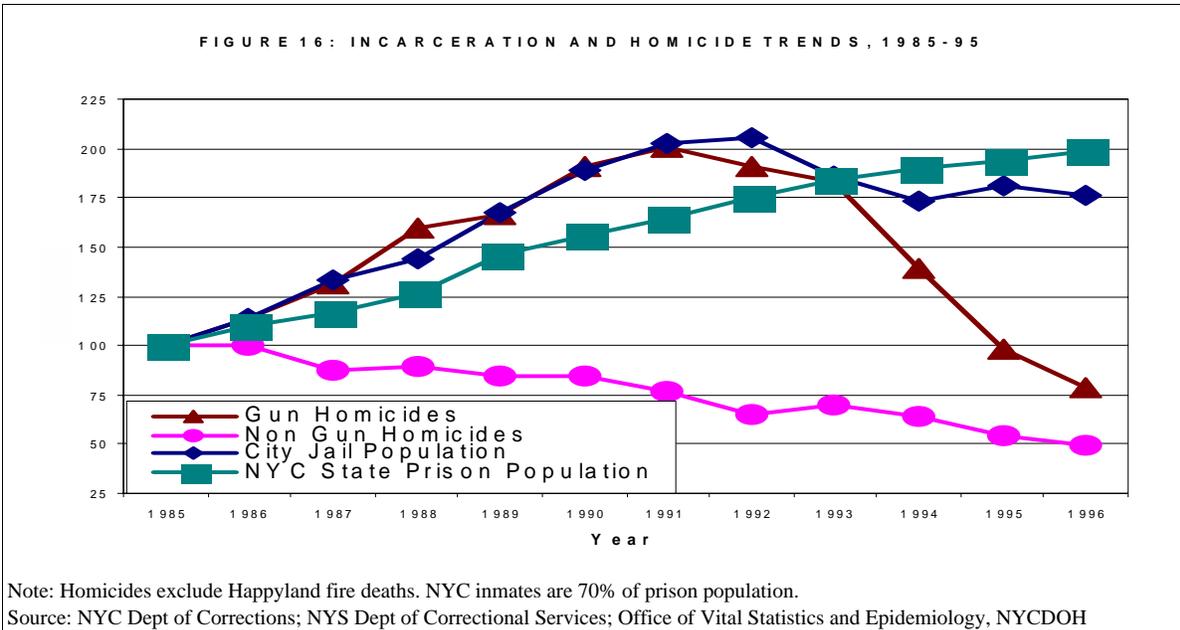


Source: Complaints and Arrests, New York City Police Department, various years; UCR "Return "A" reports, NYPD, various years

Other Factors

Other factors besides the gun strategy likely have contributed to the decline in gun homicides. It is difficult to exactly apportion credit between demography, policing including NYPD's Operation FLARE which has helped reduce the number of federally licensed firearm dealers in

NYC through police interviews of license applicants and enforcement of City fire and zoning codes applying to retail business in firearms, and other strategies being implemented by the NYPD including quality-of-life offense enforcement. Changes in State and Federal gun laws and enforcement efforts also may be influential. Cyclical variation as well as social trends in risk and exposure may also be relevant -- such as people avoiding areas of higher crime incidence. While the researchers concluded that NYPD's firearm law enforcement efforts appear to be strongly associated with decreases in NYC gun homicides in recent years, the question remains: how long will this "trend" of declining firearm homicides continue?



Conclusion

The authors concluded that the effects of both manpower and tactical changes in policing are "no doubt" important and strong contributors to the homicide decline. However, the size and timing of the decline in firearm homicides are so great as to require additional, contemporaneous explanations and effects that interact with policing to produce unprecedented change, including the steady decline in non-gun homicides.