

The Economic Benefits of Reducing Violent Crime

A Case Study of 8 American Cities

Robert J. Shapiro and Kevin A. Hassett

June 2012

Introduction and summary

Violent crimes are costly. Murders, rapes, assaults, and robberies impose concrete economic costs on the victims who survive as well as the families of those who lose their lives, in the loss of earnings and their physical and emotional tolls. Violent crimes also impose large costs on communities through lower property values, higher insurance premiums, and reduced investment in high-crime areas. In addition, violent crimes impose significant costs on taxpayers, who bear the financial

burden of maintaining the police personnel and operations, courts, jails, and prisons directed toward these crimes and their perpetrators.

Fortunately, the incidence of violent crimes in the United States has fallen sharply over the last 20 years. From 1960 to 1990 the rates of these crimes rose sharply as did their attendent costs. Over that period murder rates nearly doubled, rates of rape and robbery increased fourfold, and the rate of assualt quintupled. Since the early 1990s, however, rates of most violent crimes have been cut nearly in half. (see Figure 1)

FIGURE 1 The good news: Falling crime rates

Violent crime in the United States, offenses per 100,000 population, 1960-2010

Use of weapons and guns in violent crimes, 2010

Violent crime	Percent committed with weapons	Percent committed with handguns
Homicide	94%	67%
Robbery	58%	41%
Aggravated assault	73%	20%

Source: Federal Bureau of Investigation, Uniform Crime Report, Crime in the United States, 2010 (Department of Justice, 2011).

Source: FBI, Uniform Crime Reports as prepared by the National Archive of Criminal Justice Data, http://www.ucrdatatool.gov/ Search/Crime/State/StateCrime.cfm

Yet rates of most violent crimes in the United States remain high compared to the 1950s and 1960s and to other advanced societies today. The U.S. murder rate, for example, has fallen to a 50-year low, but that rate is still nearly three times the level in Canada and more than four times the level in the United Kingdom.¹ Among all

of the world's developed countries, the United States today, on a per capita basis, ranks second in murders, fourth in rapes, and sixth in robberies.

The Bureau of Justice Statistics reports that the majority of all violent crimes involve the use of weapons, and in two-thirds of all homicides and 41 percent of all robberies, the weapon is a handgun. (see Table 1)

TABLE 1 Most violent crimes involve weapons

Use of weapons and guns in violent crimes, 2010

Violent crime	Percent committed with weapons	Percent committed with handguns
Homicide	94%	67%
Robbery	58%	41%
Aggravated assault	73%	20%

Source: Federal Bureau of Investigation, Uniform Crime Report, Crime in the United States, 2010 (Department of

Moreover, from 2005 to 2010 the nationwide incidence of homicides declined by 12.5 percent, the number of robberies decreased by nearly 9 percent, and the number of aggravated assaults declined by 7 percent. The share of crimes committed with guns in all three categories, however, remained constant.

By most measures, violent crime continues to impose significant costs on Americans and their communities. The costs borne by the American public for this level of criminal activity are significant. Medical care for assault victims, for example, costs an estimated \$4.3 billion per year. We spend \$74 billion per year on incarcerating 2.3 million criminals, including some 930,000 violent criminals.³

Moreover, the costs of the pain and suffering borne by the victims of violent crimes is several times greater than the more direct costs of those crimes. As a result, successful efforts to reduce violent crime can produce substantial economic benefits for individuals, communities, and taxpayers.

This report presents the findings and conclusions of a yearlong project to examine and analyze the costs of violent crimes in a sample of eight major American cities and estimate the savings and other benefits that would accompany significant

reductions in those crimes. This analysis draws on data pinpointing the incidence and location of murders, rapes, assaults, and robberies. The data were provided by the police departments of Boston, Chicago, Dallas, Houston, Jacksonville, Milwaukee, Philadelphia, and Seattle.

We examined a broad range of both direct and intangible costs associated with those violent crimes based on their incidence in each of the eight cities in 2010. The direct costs reported here are those borne by the residents and city governments of the eight cities, although additional costs are also borne by state and federal governments and the taxpayers who finance them. Finally, we calculated the benefits to those residents associated with substantial reductions in violent crime, including the impact on residential home values and a variety of savings to the city governments.

In today's tight fiscal and economic environment, the mayors and city councils of every city—along with state and the federal governments—are searching for ways to reduce their spending and expand their revenues. The common challenge is to achieve sustainable fiscal conditions without hobbling government's ability to provide the vital goods and services that most Americans expect, all without burdening businesses and families with onerous new taxes. This analysis provides another way available to many American municipalities: Secure budget savings, higher revenues, and personal income and wealth gains by reducing violent crime rates.

To calculate the extent of those savings and benefits, we analyze a broad range of direct costs associated with the violent crime in the eight cities sampled here. These direct costs start with local spending on policing, prosecuting, and incarcerating the perpetrators of those crimes. These costs also encompass out-ofpocket medical expenses borne by surviving victims of violent crime as well as the income those victims must forgo as a result of the crimes. These costs also include the lost incomes that would otherwise be earned by the perpetrators of violent crimes had they not been apprehended—as distasteful as it is to calculate the foregone income of rapists or armed robbers who are arrested, convicted, and incarcerated. These direct, annual costs range from \$90 million per year in Seattle to around \$200 million per year in Boston, Jacksonville, and Milwaukee, to more than \$700 million in Philadelphia and nearly \$1.1 billion for Chicago.

This report also examines certain intangible costs associated with violent crime, including the pain and suffering of the surviving victims of violent crime and the costs to the families of murder victims. Across the eight cities examined here, the total annual costs of violent crimes, including these intangible costs as well as the more direct ones, range from more than \$300 million per year in Seattle to more than \$900 million in Boston, to some \$3.7 billion per year in Philadelphia and \$5.3 billion for Chicago.

Based on this analysis we also estimate the budgetary savings that each of the eight cities should expect to achieve if their rates of violent crime declined by either 10 percent or 25 percent. These savings include lower expenditures on law enforcement and the justice system, as well as the additional revenues that each city could expect to collect from applying local taxes to the income earned by those who otherwise would have been victims or perpetrators of those crimes.

All told, the estimated savings for municipal budgets from a 25 percent reduction in violent crime range from \$6 million per year in Seattle to \$12 million per year in Boston and Milwaukee, to \$42 million per year in Philadelphia and \$59 million for Chicago. We also estimate the value of other benefits associated with reduced rates of violent crime, including lower out-of-pocket medical costs for those who otherwise would have been victims as well as their averted pain and suffering.

The largest economic benefits, however, arise from the impact of lower rates of violent crime on the housing values in the cities sampled here. To estimate this effect, we use data covering several years on the incidence of violent crimes by zip code in each city and changes in housing values in the same zip codes over the same period. Five of the eight cities were able to provide data by zip code covering at least six years. Our analysis of those data found that a reduced incidence of murders in a particular zip code is followed by a predictable and significant increase in housing values in the same zip code in the next year.

On average, a reduction in a given year of one homicide in a zip code causes a 1.5 percent increase in housing values in that same zip code the following year. We applied these findings to available data on the value of the housing stock in the metropolitan areas of all eight cities. The estimated increases in the value of the housing stock for the eight cities and their immediate metropolitan areas, following a 10 percent reduction in homicides, range from \$600 million in Jacksonville and the surrounding area to \$800 million in the Milwaukee area, to \$3.2 billion in Philadelphia and the surrounding suburbs, and \$4.4 billion in the Boston area. Unfortunately, inconsistent reporting of other types of violent crime—rapes, assaults, and robberies—preclude a reliable analysis of the impact on housing values of changes in the incidence of those crimes.

Methods to reduce violent crime

A full analysis of the ways communities reduce crime is beyond the scope of this report, but it is important to note that many strategies for reducing violent crime entail budgetary costs as well. We do not attempt to calculate those costs. Nevertheless, readers should be aware that scholars have conducted extensive research to identify which crime control and prevention strategies contributed most to the reductions in violent crimes in recent decades.

Problem-oriented policing is an evidence-based intervention for reducing violence.⁴ An evaluation of the "pulling levers" strategy policing that "focuses criminal justice and social service attention on a small number of chronically offending gang members"—found a 43 percent decline in assaultive gun violence events and a 66 percent reduction in gang-related homicides after the intervention.5

An economic analysis of underground gun markets in Chicago suggests that intervening in networks of black-market gun brokers may also offer promise in reducing illegal access to guns.⁶ Police stings of gun dealers engaged in illegal gun sales were associated with a subsequent reduction in the supply of new guns to criminals in some but not all cities.⁷

Many empirical studies, for example, have examined which strategies have been most cost effective.8 A 1997 meta-analysis commissioned by the U.S. Department of Justice identified a range of practices that have proved successful with various kinds of offenders. Family therapy and parent-training efforts have been guite effective for atrisk pre-adolescents while vocational training has worked well for certain groups of older, male ex-offenders. Additional police patrols also reduced the incidence of serious offenses in high-crime hotspots.9

Similarly, a 1998 RAND Corporation study analyzed the cost effectiveness of several approaches in California. It found that \$1 million expended on graduation incentives reduced the number of yearly serious crimes by 258.10 By contrast, \$1 million for parent training led to 157 fewer crimes, \$1 million on supervising delinquents led to 72 fewer serious crimes, and \$1 million devoted to three-strike laws led to just 60 fewer serious offenses.11

As a crime-prevention strategy, longer and more certain prison sentences seem to reduce property crimes, but not violent crimes.¹² Yet incarceration does make it much easier to build up DNA databases and recent research has found that criminals included in DNA databases are less likely to commit new crimes as well as more likely to be apprehended when they do so.¹³ According to one analysis a 50 percent increase in the size of the average DNA database could produce a 13.5 percent reduction in murders, a 27.2 percent reduction in rapes, and a 12.2 percent reduction in aggravated results.

Many social and economic policies designed for other purposes may also reduce the incidence of serious crimes. Programs to encourage young people to remain in school, for example, have proved to be one of the most cost-effective crime-reduction strategies.¹⁴ Similarly, community-development efforts to increase business investment in at-risk neighborhoods have also been shown to reduce crime rates.¹⁵ Finally, demographics play a role. Male youth are the population group most prone to commit serious crimes so as their share of the population grew with the initial baby boom and then fell with the subsequent baby bust, crime rates also increased and then subsided.16

About The Center for American Progress

The Center for American Progress is a nonpartisan research and educational institute dedicated to promoting a strong, just, and free America that ensures opportunity for all. We believe that Americans are bound together by a common commitment to these values and we aspire to ensure that our national policies reflect these values. We work to find progressive and pragmatic solutions to significant domestic and international problems and develop policy proposals that foster a government that is "of the people, by the people, and for the people."



About Doing What Works

CAP's Doing What Works project promotes government reform to efficiently allocate scarce resources and achieve greater results for the American people. This project specifically has three key objectives:

- Eliminating or redesigning misguided spending programs and tax expenditures, focused on priority areas such as health care, energy, and education
- Boosting government productivity by streamlining management and strengthening operations in the areas of human resources, information technology, and procurement
 - Building a foundation for smarter decision-making by enhancing transparency and performance measurement and evaluation

