

THE ECONOMIC COST OF GUN VIOLENCE IN NEW JERSEY

A Business Case for Action



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In recent years, New Jersey has experienced an average of 280 gun-related homicides, 184 gun-related suicides, 764 non-fatal interpersonal shootings, and 599 unintentional shootings per year.ⁱ New Jersey has the sixth-lowest number of gun deaths per capita among the states. Nevertheless, **gun violence in the state exacts a high physical, emotional, and financial toll on families and communities**. We often hear about the heartbreak and physical pain these shootings cause, but there is another aspect of the gun violence epidemic that doesn't receive as much attention: the overwhelming financial cost.

TALLYING THE NUMBERS

The 2,014 shootings that occur each year in New Jersey are a serious drain on the state's economy. Based on the expenses we can directly measure, including **healthcare costs** (\$93 million per year), **law enforcement and criminal justice expenses** (\$131 million per year), **costs to employers** (\$8 million per year), and **lost income** (\$918 million per year), the initial price tag of gun violence in New Jersey is over \$1.2 billion per year. Much of this tab is picked up by the public. Up to 85% of gunshot victims, for example, are either uninsured or on some form of publicly funded insurance. Additionally, law enforcement efforts are funded entirely by taxpayer dollars. **As a result, gun violence costs New Jersey taxpayers approximately \$273 million each year.**ⁱⁱ

GUN VIOLENCE IS BAD FOR BUSINESS

New Jersey's business community is severely impacted by the negative economic consequences of gun violence. Shootings engender fear in affected neighborhoods, keeping potential customers away, forcing businesses to relocate or limit hours of operation, and decreasing foreign and local tourism.

A 2016 report by the Urban Institute found that in Washington DC **each additional homicide was associated with the loss of two retail or service establishments** in the following year.

A volley of shots fired recently in a northern New Jersey shopping mall caused chaos and confusion, as terrified shoppers reported fleeing and hiding for hours in closets, offices, and bathrooms. Additionally, the mall was closed for over a day—keeping customers away and causing revenue losses. With over 1,000 shootings occurring each year throughout the state, it's easy to see how the economy is directly impacted by gun violence.

Conversely, reducing shootings improves local economies. The same Urban Institute report found that in Minneapolis **just one fewer gun homicide was associated with the creation of 80 jobs and an additional \$9.4 million in sales** across all businesses the following year.

\$1.2+ BILLION TOTAL DIRECTLY MEASURABLE COSTS

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When the reduced quality of life attributable to pain and suffering (\$2.1 billion) is considered, the overall estimate of the economic cost of gun violence rises to **\$3.3 billion per year**. Although this number is staggering, it actually understates the true cost of gun violence in New Jersey because it doesn't include significant, yet difficult-to-measure costs, including lost business opportunities, lowered property values, and reductions in the tax base.

REDUCING GUN VIOLENCE

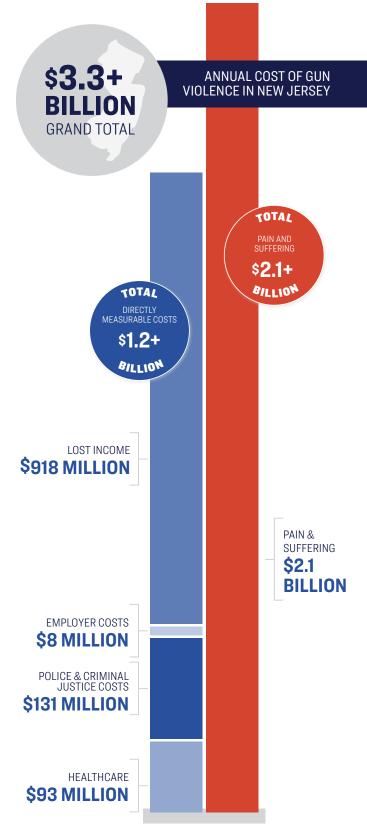
There is much work to be done. Fortunately, a number of proven solutions exist to reduce gun violence, including gun safety laws and evidence-based violence prevention and intervention strategies focused on delivering services to those most at risk for participating in violent behavior. The investment required to scale up and expand these lifesaving solutions in New Jersey is minuscule compared to the yearly cost of gun violence in the state.

Estimates of the cost of gun violence in New Jersey were created using a model of the cost of gun violence published in 2012 by economists at the Pacific Institute for Research and Evaluation (PIRE).
PIRE is a nonprofit research organization that focuses on using scientific research to inform public policy. This model can be found at www.pire.org/documents/gswcost2010.pdf. All cost estimates were adjusted to 2016 dollars.

WE'RE ON A MISSION TO SAVE LIVES

For nearly 25 years, the legal experts at Giffords Law Center to Prevent Gun Violence have been fighting for a safer America by researching, drafting, and defending the laws, policies, and programs proven to save lives from gun violence. Founded in the wake of a 1993 mass shooting in San Francisco, in 2016 the Law Center joined with former Congresswoman Gabrielle Giffords to form a courageous new force for gun safety that stretches coast to coast.

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i. Fatal firearm injury data came from the Centers for Disease Control and Prevention's WISQARS Fatal Injury Reports (www.cdc.gov/injury/wisqars/fatal.html). Non-fatal firearm injury data came from the New Jersey Department of Health's New Jersey Discharge Data Collection System, (www26. state.nj.us/doh-shad/query/selection/ub/UBSelection.html).

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It's no secret that the United States suffers from an appalling gun violence crisis—and that New Jersey is far from immune to these horrific tragedies.

At least 475 New Jerseyans are killed by guns every year—that's more than one person a day—alongside an even greater number of nonfatal shootings.¹

Each year, New Jersey suffers approximately 280 gun-related homicides, 184 gunrelated suicides, 764 nonfatal interpersonal shootings, and 599 accidental shootings.² Many of these shootings are preventable, and all of them are life-altering for victims and their loved ones.

Although New Jersey has the sixth-lowest number of gun deaths per capita among the states,³ gun violence still exacts an extreme physical, emotional, and financial toll on families and communities in the state. Immediately after a trigger is pulled, the bills begin to pile up: healthcare costs to repair shattered limbs and punctured organs, law enforcement and criminal justice expenses to investigate violent gun crimes and incarcerate offenders, costs incurred by businesses to cover for seriously injured or dead employees, and lost employee wages.

Gun violence costs New Jersey \$1.2 billion per year—and that figure only includes the directly measurable losses associated with healthcare, law enforcement, employer costs, and lost employee income. We must also take into account reduced quality of life caused by pain and suffering, which raises the total price tag of gun violence in New Jersey to an estimated \$3.3 billion per year. This staggering figure still does not include many difficult-to-quantify costs such as lost business opportunities, lowered property values, neighborhood flight, and other negative consequences attributable to the extreme fear gun violence creates.

DIRECTLY MEASURABLE COSTS

HEALTHCARE

When a person is shot, a response from the medical system is almost always necessary. According to cost estimates developed by the Pacific Institute for Research and Evaluation (PIRE) and relied on by the Centers for Disease Control and Prevention (CDC), each gun-related death generates approximately \$49,164 in medical expenses.⁴ This includes the cost of initial ambulance transportation (\$601), direct medical care and treatment (\$33,923), mental health services (\$12,030), and health insurance claims processing (\$2,610).⁵

After a shooting, those who survive continue to undergo costly therapy to help address the ongoing mental and emotional toll of the incident. With so many in the community directly affected by such traumatic events, PIRE estimates only capture a fraction of the full cost of mental health services incurred in the wake of gun violence. Additionally, payouts from insurance for claims of wrongful death or fallout from workplace violence can create crushing premiums for businesses going forward.

When a shooting is not fatal, medical bills tend to be much higher. **The average total medical cost of a single nonfatal shooting that requires hospitalization is \$63,289.**⁶ Medical care and treatment costs are higher for nonfatal shootings because such injuries often require extensive post-release treatment, including physical therapy and prescription medications that generate tens of thousands of dollars in additional expenses.⁷ In this way, nonfatal shootings, which are twice as common as fatal shootings, exact an immense toll on the healthcare system. \$3.3+ BILLION GRAND TOTAL

HEALTHCARE

\$93 MILLION

ANNUAL COST OF GUN VIOLENCE IN NEW JERSEY

With an average of 2,014 shootings each year, the healthcare expenses of gun violence in New Jersey total over \$93 million per year.⁸ Moreover, much of this cost is shouldered directly by taxpayers—studies show that as many as 85% of gunshot victims are either uninsured or covered by publicly funded insurance, such as Medicaid.⁹

POLICE AND CRIMINAL JUSTICE

An incident of interpersonal gun violence is usually followed by an extensive police investigation. If a suspect is arrested, which is not always the case, there are enormous costs associated with bringing that person to justice, including the costs of a trial and, if a conviction is obtained, prolonged incarceration. So while the victim of a shooting is receiving expensive medical treatment, the perpetrator is also receiving costly attention from the criminal justice system, generating a substantial bill that is covered largely by New Jersey taxpayers.

According to estimates by PIRE, the average cost of a police investigation and related criminal justice expenses for a fatal shooting is \$439,217.¹⁰ Criminal justice expenses include salaries and benefits for public officials such as judges, prosecutors, and public defenders, as well as the cost of incarceration, which in a federal facility averages more than \$30,000 per year for each inmate.¹¹ New Jersey taxpayers spend approximately \$62,456 per year incarcerating each inmate in state prisons.¹² Since many nonfatal shootings result in shorter sentences or do not end with the apprehension of a suspect, criminal justice costs associated with a nonfatal shooting are much lower: an estimated \$8,391.¹³

Taxpayers in New Jersey are spending an estimated \$131 million per year on law enforcement and criminal justice expenses related to gun violence.¹⁴ \$3.3+ BILLION GRAND TOTAL

ANNUAL COST OF GUN VIOLENCE IN NEW JERSEY

POLICE & CRIMINAL JUSTICE COSTS \$131 MILLION HEALTHCARE \$93 MILLION

EMPLOYER COSTS

Another directly measurable expense of gun violence is the cost to employers of covering for employees who are unable to work, temporarily or permanently, due to serious injury or death. For example, an employer may have to pay for temporary workers, overtime, and additional training for current employees to fill in for a worker who is absent due to a gun violence incident. In the case of a death or debilitating injury, the employer will have to bear the costs of locating, hiring, and training a replacement.

The PIRE cost-of-injury model estimates that a single, nonfatal shooting requiring hospitalization costs employers an average of almost \$2,500, while a fatal shooting costs employers closer to \$10,000 per incident.¹⁵ Additional expenses, such as workers' compensation, clean-up, and funeral costs may be borne by employers, depending on the nature of the incident and the victim's job.

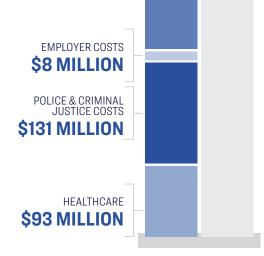
In New Jersey, the direct cost of fatal and nonfatal shootings to employers is an estimated \$8 million per year.¹⁶

LOST INCOME

Lost wages are the value of the income a gunshot victim or incarcerated perpetrator could have earned had they not been killed, forced to stop working because of a serious injury, or incarcerated. This cost is imposed directly on victims, perpetrators, and their families. According to data derived from the PIRE cost-of-injury model, the average value of lost work for a single fatal shooting is \$1,742,722, while for a nonfatal shooting requiring hospitalization, the figure is \$81,559.¹⁷ When a gunshot victim or incarcerated perpetrator is an income earner for his or her family— especially the primary breadwinner—the impact of lost wages on the family can be severe. \$3.3+ BILLION GRAND TOTAL

ANNUAL COST OF GUN VIOLENCE IN NEW JERSEY

LOST INCOME \$918 MILLION



With 475 gun-related deaths and 1,539 nonfatal shootings per year, lost wages attributable to gun violence in New Jersey total over \$918 million annually.¹⁸ Lost wages do more than just affect the families directly impacted by gun violence—loss of income also burdens taxpayers and the government. The \$918 million that New Jersey families lose in income every year translates into approximately \$95 million in lost tax revenue, a cost borne initially by the government, and ultimately by taxpayers who must make up the difference or receive decreased services.¹⁹

TOTAL DIRECTLY MEASURABLE COSTS

With healthcare costs of \$93 million, law enforcement costs of \$131 million, employer costs of \$8 million, and lost wages of \$918 million, the directly measurable cost of gun violence in New Jersey is \$1.2 billion per year.²⁰

However, simply adding up the directly measurable costs does not come close to fully covering the economic and societal damage inflicted by gun violence each year in the Garden State. Other substantial costs, such as emotional and physical pain and suffering, reduced quality of life, fear, lowered property values, and lost business opportunities must also be considered, even if they are harder to measure.

\$3.3+ ANNUAL COST OF GUN **VIOLENCE IN NEW JERSEY** BILLION **GRAND TOTAL** TOTAL DIRECTLY MEASURABLE COSTS \$1.2+ BILLION LOST INCOME **\$918 MILLION** EMPLOYER COSTS \$8 MILLION POLICE & CRIMINAL JUSTICE COSTS \$131 MILLION HEALTHCARE \$93 MILLION

THE COSTS OF PAIN, SUFFERING, AND FEAR

Directly measurable expenses represent only a fraction of the total cost of gun violence in New Jersey.

The pain and suffering, community fear, and neighborhood flight resulting from gun violence inflict real economic harm, including lost business opportunities, lowered property values, reductions in the tax base, and the cost of implementing additional security measures to avoid future violence.

Noted economists Philip Cook and Jens Ludwig have extensively studied the costs associated with gun violence and have concluded that "the threat of gun violence reduces the quality of life for all Americans by engendering concerns about safety, raising taxes, and limiting choices about where to live, work, travel, and attend school."²¹ While these expenses are sometimes more difficult to quantify, they are still very real and must be considered to understand the full cost of gun violence in our state.

REDUCED QUALITY OF LIFE CAUSED BY PAIN AND SUFFERING

Shootings decrease the quality of life for gun violence survivors and for the families and friends of victims. These losses are difficult to quantify, since the value of human life is priceless, but models have been developed that attempt to place a monetary value on the deaths and injuries caused by gun violence. Economists from PIRE estimate that a single nonfatal firearm injury requiring hospitalization is associated with a \$327,747 decrease in quality of life due to pain and suffering.²²

With an average of 1,539 nonfatal shooting incidents per year, the cost of reduced quality of life associated with nonfatal shootings in New Jersey is approximately \$498 million.²³ Injuries requiring hospitalization make up \$346 million of that cost, while injuries only requiring treatment in an emergency department account for \$152 million.²⁴

With respect to gun-related deaths, PIRE estimates the value of the portion of life lost associated with a single firearm death at \$3.4 million.²⁵ This calculation is based on estimates of the monetary value of a life, estimates which range from \$5 million to \$13 million. The US Department of Transportation, for example, currently uses a midrange value of \$9.4 million in its own studies.²⁶

The loss of a single New Jerseyan to their family, coworkers, friends, and society in general is impossible to quantify, but reduced quality of life due to pain and suffering

in the millions of dollars is easy to fathom—all from a single shooting incident. Due to New Jersey's average of 475 firearm-related deaths per year, a reasonable estimate of quality of life costs associated with gun fatalities alone is \$1.6 billion.²⁷

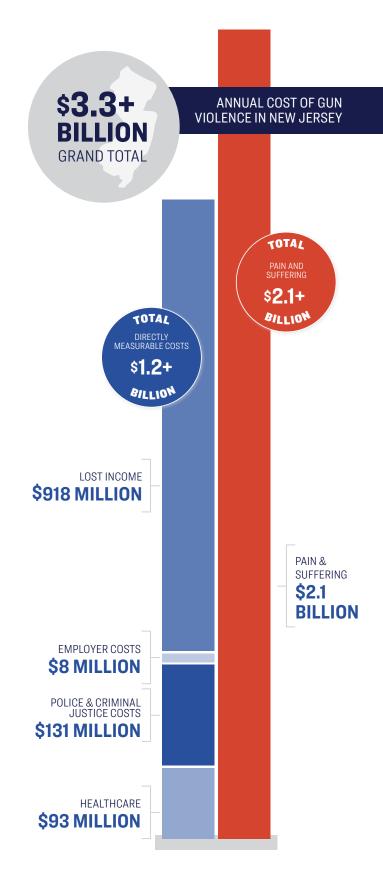
In total, these estimates show that decreased quality of life attributable to the pain and suffering caused by gun violence costs New Jersey more than \$2.1 billion each year.²⁸

FEAR AND FLIGHT

A shooting is a terrifying event. One of the most burdensome consequences of gun violence is the fear it unleashes. In addition to the direct negative impact this fear has on those who witness and live with regular gun violence, it also has a damaging economic effect as residents either flee for safer areas or remain inside their homes to reduce the risk of injury.

There is direct and potentially long-lasting damage inflicted when a person witnesses or is exposed to an act of violence. As David Hemenway, director of the Harvard Injury Control Research Center, explains, exposure to violence "increases the risk for psychiatric, emotional, behavioral, and health problems."²⁹ These problems include post-traumatic stress disorder (PTSD), depression, anxiety, withdrawal, lowered academic performance, substance abuse, and delinquency.³⁰

Moreover, exposure to violence has been linked to specific health problems that include asthma, heart disease, and babies born underweight.³¹ Importantly, witnessing or being a victim of gun violence also increases the risk that a person



will become a perpetrator of violence in the future.³² These negative outcomes are costly both for victims of violence and for society in general. In areas with high levels of gun violence, PTSD is of particular concern. **One hospital program working with violence victims in a high-crime area of Philadelphia found that 75% of its clients met the diagnostic criteria for PTSD**.³³ The costs of treating PTSD with professional counseling and therapy are substantial, but the costs of leaving PTSD untreated can be devastating, as the long-term effects include severe depression and suicidal thoughts and actions.³⁴

Compounding these adverse effects is the fact that residents in areas with high rates of gun violence are less likely to leave the house—due to fear—to take advantage of needed services or otherwise engage in activities that promote health. This social isolation imposes serious consequences on afflicted communities. "In addition to the obvious reductions in recreational and job opportunities that families experience," explain economists Cook and Ludwig, "being homebound may have effects on health outcomes by reducing exercise and trips to the doctor's office, grocery, or drug store."³⁵ This imposes a direct cost on individuals' health and wellbeing, and adds to societal healthcare costs. Moreover, this reluctance to venture outside entails decreased consumer spending at businesses, jeopardizing profits and damaging the local economy.

Social isolation imposes a direct cost on individuals' health and well-being, and adds to societal healthcare costs.

The fear that causes many to take shelter inside their homes also causes individuals and businesses with sufficient means to relocate to safer areas. This flight exacts a very real financial toll in the form of lost business opportunities, lowered property values, and reduced tax base.

LOST BUSINESS OPPORTUNITIES

Gun violence diminishes business opportunities in a number of ways, including by limiting the hours businesses are willing to stay open, discouraging residents from patronizing firms and retail establishments where violence is more prevalent, preventing employees from taking night and evening work, and hurting both foreign and local tourism. At the same time, we know that reducing shootings has a significant and measurable benefit in terms of job creation and increased sales numbers.

When a shooting occurs, people in the area feel less safe, and are less inclined to frequent public places and businesses. As Philip Cook and Jens Ludwig point out, a number of economic decisions may be influenced by the threat of gun violence,

"including residential and commercial location decisions, hours of operation for retail establishments, and family decisions about when and where to go out for the evening."³⁶ In the aggregate, "the result may be blighted neighborhoods, playgrounds abandoned to gang members, and business districts that close down at sunset."³⁷ When businesses feel obligated to shutter early because of safety concerns, the opportunity cost imposed is difficult to measure, but is still very real.

Potential customers are also discouraged from patronizing local businesses where gun violence is prevalent. As David Hemenway has described, to avoid being shot, residents of neighborhoods with high rates of gun violence modify their behavior concerning shopping, recreation, leisure, and other activities.³⁸ Residents are less likely to go out at night. When people are forced to live behind locked doors, they are discouraged from frequenting local establishments or otherwise participating in the local economy. This wreaks substantial losses on businesses—particularly on those dependent upon high levels of in-store traffic.

The fear created by gun violence also limits business opportunities by altering when and where people are willing to work. Daniel Hamermesh, an economist at the University of Texas, has shown that each additional homicide in a city causes an annual loss of between \$293,000 and \$732,000 because people are afraid to work evenings and at night.³⁹ These estimates indicate that in New Jersey each year from 2010 to 2014, gun homicides alone accounted for more than \$220 million per year in lost business opportunity.⁴⁰

Conversely, a new study by the Urban Institute confirms the economic benefits of reducing gun violence in terms of job creation and improved sales volumes. Urban Institute researchers concluded that one less gun homicide within a Minneapolis census tract was "associated with the creation of 80 jobs and an additional \$9.4 million in sales across all business establishments the next year."⁴¹ This study provides further evidence that reducing the frequency of shooting incidents is good for business.

Estimates indicate that from 2010 to 2014, gun homicides alone accounted for more than \$220 million per year in lost business opportunity.

Finally, gun violence has a direct impact on foreign and local tourism. For example, after a string of high-profile shootings in Miami in the 1990s, economists estimated that European travel to Florida fell by 20%. One Miami-based travel company reported that the number of tourist packages sold to Europeans dropped by 80%.⁴² By discouraging travelers from visiting metropolitan areas, gun violence further dampens economic activity.

Local tourism suffers as well. As Cook and Ludwig explain, "Those who live outside of areas with high rates of gun violence may suffer a reduction in their quality of life if the threat of gunshot injury prevents them from taking advantage of the amenities offered by big city life."⁴³ This affects more than just quality of life for those in safer areas— when individuals decide not to visit certain areas of a city because of safety concerns, businesses lose out on potential customers and local tourism suffers.

Simply put, shootings are bad for business. Although difficult to directly measure, the negative economic impact of the great number of business opportunities lost due to gun violence must not be overlooked.

LOWERED PROPERTY VALUES

When crime rates are high, property values decrease, inflicting losses on all manner of property owners. By the same token, when crime is reduced, property values rise. For example, research by New York University economist Amy Ellen Schwartz showed that the large crime drop experienced by New York City in the 1990s contributed substantially to the growth of property values.⁴⁴ Similarly, a study by Devin Pope of the University of Chicago and Jaren Pope of Brigham Young University showed that the national crime rate decrease of the 1990s translated into an average gain of \$2,000 per house, and in areas with denser crime, the gain was closer to \$11,000 per house.⁴⁵ There is a direct economic benefit from reductions in crime levels, particularly when it comes to violent crime.

The relationship between homicides and property values is well established. A 2012 study by economists working with the Center for American Progress found that significant gains in property values consistently followed reductions in homicides at particular zip codes.⁴⁶ More specifically, the study found that a 10% decrease in homicides caused a 0.83% increase in property prices during the next year, while a 25% reduction yielded a 2.1% increase in property values.⁴⁷ Since gun deaths account for nearly 70% of all homicides, gun violence is a major driver of homicide-related property value loss.

The situation in New Jersey is no different. **In 2015, 273 of the state's 388 homicides—70%—were committed with a gun.** Reducing gun violence in New Jersey will raise property values, particularly in the neighborhoods where shootings are most common.

There is a direct economic benefit from reductions in crime levels, particularly when it comes to violent crime.

REDUCED TAX BASE

Gun violence also inflicts direct losses on local governments by causing residents to flee, thereby reducing the tax base. Research has demonstrated that the rate of migration out of urban neighborhoods is highly dependent on homicide rates.⁴⁸ Since guns dramatically increase the probability that violent crimes result in homicide, the use of guns in crime contributes significantly to flight away from afflicted areas.⁴⁹ It's not just individuals who seek safer areas—gun violence also compels businesses to relocate to provide greater security for employees.

Cities with high rates of gun violence, such as Chicago, have experienced this phenomenon. Census Bureau data shows that from 2000 to 2008, the total population of Chicago declined by nearly 50,000 people, a decline that represented 1.4% of Chicago's population in 2000. According to Jens Ludwig, if not for the city's unusually high rates of gun violence, Chicago's population would have actually increased by several hundred thousand residents over this period, rather than declined.⁵⁰

Economists estimate that every homicide reduces a city's population by around 70 people.⁵¹ This population loss caused by gun violence diminishes the local tax base, creating a negative feedback cycle. As Ludwig has explained, "One thing that happens when violence is driving people and business out of the city is that it obviously reduces the tax base, which denigrates the ability of the city government to address the violence problem, which generates more violence, which drives out more tax base."⁵²

This cycle demonstrates why the effort of multiple stakeholders, including the business sector, is needed to combat gun violence, since the most affected local governments are often not in a strong enough financial position to adequately address the problem.

ADDITIONAL SECURITY MEASURES

Finally, gun violence imposes further financial costs in the form of additional security measures that individuals, businesses, and government bodies pay for to reduce risk. As Cook and Ludwig explain, "The threat of gun violence imposes costs on all Americans, even those who are not actually victimized, because most people and many government agencies engage in costly behaviors designed to reduce the risk of gunshot injury."⁵³

Research has demonstrated that the rate of migration out of urban neighborhoods is highly dependent on homicide rates. One concrete example of this is public schools, which purchase metal detectors and hire security guards to deter gun violence, often at great cost. As of the 2013–14 school year, more than 1 in 10 American high schools used metal detectors, which have a midrange cost of \$5,000 each.⁵⁴ In addition, 43% of public schools employ one or more security guards or law enforcement officers to provide security services.⁵⁵ The mean cost for a full-time school security guard is \$33,020.⁵⁶

A 2015 *Wall Street Journal* analysis examined the increased security spending that occurred in the wake of the massacre at Sandy Hook Elementary in December 2012, finding that in 2014 alone, American schools and universities spent \$768 million on security cameras, mass notification systems to inform parents of an emergency, and equipment to prevent unauthorized access to school and university buildings.⁵⁷ That spending is expected to total \$907 million in 2016.⁵⁸

In 2014 alone, American schools and universities spent \$768 million on security cameras, mass notification systems, and equipment to prevent unauthorized access to schools.

Businesses and individuals in high-violence areas also take expensive precautions to increase safety, including the hiring of full-time security guards, the installation of security cameras, and the addition of external lighting. All of these security measures impose additional costs that add to the overall price tag of gun violence.

THE TRUE COST OF GUN VIOLENCE IN NEW JERSEY

The directly measurable cost of gun violence in New Jersey is an astounding \$1.2 billion per year.

The more easily quantifiable costs associated with gun violence include healthcare costs, law enforcement expenses, employer costs, and the burden of lost income. However, this limited estimate doesn't fully encapsulate the economic and societal burden of gun violence in the state.

When the reduced quality of life caused by pain and suffering is also considered, the estimated cost of gun violence in New Jersey rises to \$3.3 billion. This figure still does not capture a number of critical, albeit difficult to measure, costs, including lost business opportunities, lowered property values, a reduced tax base, and additional security measures taken to lower risk of exposure to gun violence. While \$3.3 billion per year is a more complete estimate, it is still an understatement of the true cost of gun violence in New Jersey.

Even if we only consider the costs we can directly measure—\$1.2 billion—it's clear that gun violence is an unacceptable economic drain on the state. We should understand and appreciate, however, that the actual costs are much higher. The price of gun violence appears especially steep when compared to the relatively low cost of implementing proven solutions, including evidence-based gun safety laws and community-based prevention and intervention strategies.

When the reduced quality of life caused by pain and suffering is considered, the estimated cost of gun violence in New Jersey is \$3.3 billion.

CONCLUSION

The thousands of gun-related deaths and injuries New Jerseyans endure each year are a human tragedy—and they're also terrible for the economy.

Between healthcare costs, police and criminal justice expenses, employer costs, and lost wages, gun violence in 2015 alone cost New Jersey more than \$1.2 billion. When pain and suffering is factored in, the cost was more than \$3.3 billion for a single year.

Yet, this larger estimate still does not encapsulate the true cost of gun violence in New Jersey—it does not account for other significant costs that are difficult to measure, since they arise from the fear felt in a community due to shootings. These costs include decreased business opportunities and damage to the local economy, negative effects on public health, reduced property values, population loss and its subsequent impact on the local tax base, and investment in expensive security measures. Clearly, there is not just a moral imperative, but also a financial obligation to address this epidemic.

Promising solutions exist that will reduce shootings without impacting lawful, responsible gun ownership. These goals are not mutually exclusive. By implementing lifesaving gun safety laws and evidence-based violence prevention and intervention strategies, we can save lives and begin to reverse the devastating consequences of gun violence and the fear it instills in communities.

When it comes to saving lives from gun violence, we know what works—what we need is advocacy and support for the implementation of these solutions. We simply cannot afford to maintain the status quo in the face of this costly, destructive epidemic. Change will require the effort of many different segments of our society. All of us, including the policymakers and business community of New Jersey, must work together to fight for a safer future.

Eliminating gun violence is both a moral imperative and a goal that makes good business sense. Working together, we can create the safer and more prosperous future we all deserve.

Leverage the legal and policy acumen of our experts to develop a plan for saving lives and reducing the financial burden gun violence has on the state of New Jersey. For assistance or inquiries, email **lawcenter@giffords.org**.

ENDNOTES

INTRODUCTION

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DIRECTLY MEASURABLE COSTS

- 5. *Id.*
- 6. *Id.* This consists of ambulance transportation (\$364), the provision of direct medical care and treatment (\$58,953), the provision of mental health services (\$263), and insurance claims processing (\$3,709).
- 7. Philip J. Cook and Jens Ludwig, Gun Violence: The Real Costs (New York: Oxford University Press, 2000).
- The precise estimate is \$92,993,290. The cost of medical care amounts to \$80,080,283, the cost of mental health treatment \$6,255,989, the cost of emergency transport \$708,761, and the cost of health insurance claims processing \$5,948,258.

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- 10. "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf.
- "Federal Register, Vol. 80, no. 45: Annual Determination of Average Cost of Incarceration," Department of Justice: Bureau of Prisons, Mar. 9, 2015, https://www.gpo.gov/fdsys/pkg/FR-2015-03-09/pdf/2015-05437.pdf.
- 12. In 2010, the cost of incarceration per inmate in New Jersey was \$54,865. In today's dollars, that cost is \$62,456. "The Price of Prisons: New Jersey," Vera Institute of Justice: Center on Sentencing and Corrections, Jan. 2012, http://archive.vera.org/files/price-of-prisons-new-jersey-fact-sheet.pdf; "CPI Inflation Calculator," US Department of Labor: Bureau of Labor Statistics, http://www.bls.gov/data/inflation_calculator.htm.
- "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf.
- 14. The precise estimate is \$131,302,010.
- 15. "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf.
- 16. The precise estimate is \$7,777,181.
- 17. "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf. Bruce A. Lawrence and Ted R. Miller, "Medical and Work Loss Cost Estimation Methods for the WISQARS Cost of Injury Module," Pacific Institute for Research and Evaluation, Aug. 2014, http://www.pire.org/documents/WisqarsCostMethods.pdf. Lost wages were inflated from 2010 dollars using the Employer Cost Index, calculated by the Bureau of Labor Statistics.
- 18. The precise estimate is \$918,339,822.
- 19. The precise estimate is \$95,227,199.
- 20. The estimated total of directly measurable costs is \$1,150,412,304.

THE COSTS OF PAIN, SUFFERING, AND FEAR

- Philip Cook and Jens Ludwig, "The Costs of Gun Violence against Children," *The Future of Children* 12, no. 2 (2002), at 86–99, http://home.uchicago.edu/ludwigj/papers/Future_of_Children_2002.pdf.
- 22. "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf. To estimate the quality of life losses associated with nonfatal firearm injuries, economists at PIRE considered several factors—the "value of a statistical life" (VSL), gunshot victims' life expectancy, and the quality-adjusted life years (QALYs) lost due to particular types of firearm injuries. Estimates of the VSL are developed by economists based on the trade-offs people make between wealth and the risk of fatal injury. Philip J. Cook and Jens Ludwig, *Gun Violence: The Real Costs* (New York: Oxford University Press, 2000); Orley Ashenfelter, "Measuring the Value of a Statistical Life: Problems and Prospects," Institute for the Study of Labor (IZA) Discussion Paper No. 191, Jan. 2006, http://ftp.iza.org/dp1911.pdf. QALYs measure the impact injuries have on the quality as well as the length of victims' lives. Economists calculate QALYs based on the degree of impairment particular types of injuries cause and how long that impairment lasts. Rebecca S. Spicer et al., "Quality-Adjusted Life Years Lost to Road Crash Injury: Updating the Injury Impairment Index," *Annals of Advances in Automotive Medicine* 55 (2011): 365–377. PIRE economists converted QALYs associated with firearm injuries into quality of life costs using the VSL of gunshot injury survivors and their remaining life expectancy.
- 23. The precise estimate is \$498,481,681.
- 24. The estimated quality of life cost associated with nonfatal firearm injuries requiring hospitalization is \$346,215,543. For nonfatal firearm injuries only requiring treatment in an emergency department, the precise estimate is \$152,266,138.
- 25. "Societal Cost per Firearm Injury, United States, 2010," Pacific Institute for Research and Evaluation, Dec. 2012, http://www.pire.org/documents/gswcost2010.pdf.
- 26. Kathryn Thomson and Carlos Monje, "Guidance on Treatment of the Economic Value of a Statistical Life (VSL) in US Department of Transportation Analyses—2015 Adjustment," US Department of Transportation: Office of the Secretary of Transportation, June 17, 2015, https://www.transportation.gov/sites/dot.gov/files/docs/VSL2015_0.pdf. PIRE economists calculated the quality of life cost associated with fatal firearm injuries based on the VSL and the remaining life expectancy of gunshot victims, had they not been killed.
- 27. The precise estimate is \$1,624,412,600.
- 28. The precise estimate is \$2,122,894,281.
- David Hemenway, "Costs of Firearm Violence: How You Measure Things Matters," in Social and Economic Costs of Violence: Workshop Summary, ed. Deepali Patel and Rachel Taylor, (Washington DC: The National Academies Press, 2012), 61, https://www.nap.edu/read/13254/chapter/1.
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- 32. Jeffery B. Bingenheimer, Robert T. Brennan, and Felton J. Earls, "Firearm Violence, Exposure and Serious Violent Behavior," *Science* 308 (2005): 1323–1326.

- 33. Theodore Corbin et al., "The Prevalence of Trauma and Childhood Adversity in an Urban, Hospital-based Violence Intervention Program," *Journal of Health Care for the Poor and Underserved* 24, no. 3 (2013): 1021–1030, http://www.sanctuaryweb.com/Portals/0/2016%20PDFs/2013%20Corbin%20Purtle%20 Rich%20Rich%20Adas%20Yee%20Bloom.pdf; Jonathan Purtle et al., "Hospital-based Violence Intervention Programs Save Lives and Money," *Journal of Trauma and Acute Care Surgery* 75, no. 2 (2013): 331–333, http://www.youthalive.org/wp-content/uploads/2016/03/JoT-2013-Purtle-HVIPs-Save-Lives-and-Money.pdf.
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- 37. Id.
- David Hemenway, "Costs of Firearm Violence: How You Measure Things Matters," in Social and Economic Costs of Violence: Workshop Summary, ed. Deepali Patel and Rachel Taylor, (Washington DC: The National Academies Press, 2012), 61, https://www.nap.edu/read/13254/chapter/1.
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- 44. "The Social Costs of Handgun Violence," Testimony given by Jens Ludwig, PhD, to the Chicago City Council, June 29, 2010, http://citeseerx.ist.psu.edu/ viewdocdownload?doi=10.1.1.169.5937&rep=rep1&type=pdf; Philip J. Cook and Jens Ludwig, *Gun Violence: The Real Costs* (New York: Oxford University Press, 2000), at 9 ("The sharp declines in the rate of violent crime during the 1990s have brought windfall gains in property values to many property owners in urban neighborhoods."); Philip Cook and Jens Ludwig, "The Costs of Gun Violence against Children," *The Future of Children* 12, no. 2 (2002), at 88, http://home.uchicago.edu/ludwigj/papers/Future_of_ Children_2002.pdf. ("Lower violence rates have played a leading role in stimulating a renaissance in many central cities. Cities have become more livable and attractive because they are safer. That change is worth billions of dollars, as demonstrated by rising urban property values.").
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For 25 years, the legal experts at Giffords Law Center to Prevent Gun Violence have been fighting for a safer America by researching, drafting, and defending the laws, policies, and programs proven to save lives from gun violence. Founded in the wake of a 1993 mass shooting in San Francisco, in 2016 the Law Center joined with former Congresswoman Gabrielle Giffords to form a courageous new force for gun safety that stretches coast to coast.

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