## Report from the Crime Prevention Research Center

# Concealed Carry Permit Holders Across the United States

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## Summary

The last comprehensive report on the number of concealed carry permit holders was completed three years ago by the U.S. Government Accountability Office and showed that 8 million Americans held a concealed carry permit.

CPRC collected the most recent data available for each state and the results showed that there are total of 11,113,013 Americans who currently hold concealed carry permits representing 4.8 percent of the total population.

The number of concealed carry permit holders is likely much higher than 11.1 million because numbers are not available for all states that issue permits, such as New York. Additionally, five states and the majority of Montana do not require that residents have a concealed handgun permit to carry within the state so the number of residents who carry a concealed weapon is not recorded.

The percent of the adult population with concealed handgun permits is determined by how difficult it is to get the permits, how long the permits have been available, and whether the government has discretion over who gets the permit.

The report also examines the violent crime rate in relation to the rising percentage of the adult population with concealed carry permits. Between 2007 and the preliminary estimates for 2013, murder rates have fallen from 5.6 to 4.4 per 100,000 – a 22 percent drop in the murder rate at the same time that the percentage of the adult population with permits soared by 130 percent. Overall violent crime also fell by 22 percent over that period of time

## Background

Over the years, more and more states have adopted laws to allow individuals to obtain concealed carry permits. Illinois was the last state to do so, with the first permits began being issued earlier this year, in March 2014. Today all states permit concealed carry.

The rules vary greatly from state to state, and in many states it's still difficult to obtain a permit. It's easy in South Dakota, where the fee to obtain the four-year permit is only \$10 and there is no training requirement. In Pennsylvania, the permit only costs \$19 for five years and there is no training requirement. By contrast, Illinois costs \$150 fee and requires 16 hours of training. With training and range time in Illinois costing around \$450 to \$500, total dollar costs of getting a permit are over \$600. Not surprisingly, concealed carry is much more popular in states where permits are relatively inexpensive and easier to obtain.

This report will focus on the growth of concealed carry. Obviously, the main focus from a crime prevention point of view should be whether people actually do carry guns, not whether theoretically they could be allowed to do so after a long and difficult application process.

Perhaps needless to say, the number of permits issued has grown faster than the number of states that allow concealed carry. This is because in each state, as the law has allowed for concealed carry, more and more people have gradually applied and received permits. So, in other words, concealed carry has grown overall due to *both* more states allowing it and more and more people in each state getting permits.

Initially the increase in permits was relatively slow, growing from roughly about 2.7 million permit holders in 1999 to 4.6 million eight years later in 2007. But the number of concealed handgun permits has exploded during the Obama presidency. For December 2011, the federal Government Accountability Office estimated that there were at least 8 million concealed handgun permits. By the June 2014, it had grown to well over 11.1 million.

To put this in perspective, during the eight years from 1999 to 2007, the number of permits increased by about 240,000 per year. During the next four years that figure surged to 844,000 net new permits per year. And from the end of 2011 to 2014 the yearly increase had soared to 1,390,000 net new permits per year.

The rapid increase in concealed carry permits is mirrored by the rapid increase in gun sales. NICS background checks soared from 11.2 to 21.1 million between 2007 and 2013. The sale of guns accelerated further over the last two years -- averaging 14 million during 2008 to 2011 and over 20 million during 2012 and 2013.

Alas, permit data is somewhat sketchy and many states do not keep data on past permit rates. Some states publish their data on their state websites, but most states require researchers to contact every state each year. To make matters worse, for some states, the data is only available at the county level and each county has to be contacted separately.

The total number of permit holders presented in our report somewhat underestimate the true number of people who can legally carry concealed handguns. There are three reasons for this.

- 1) Permits are not required to carry a concealed handgun in five states and 99.4 percent of Montana. Generally, people only obtain permits in those states so that they can carry concealed when travelling outside of their home states. With no requirements, these states undoubtedly would be the states where people legally carry concealed guns the most frequently.
- 2) Data is not readily available for all states. For example, New Hampshire only collects data for permits issued to non-residents.
- 3) For some states the data is one or two years old and this misses the huge recent growth we have seen in the number of permits.

## Number of Permits Issued

Overall, the percent of adults with permits is easily explained by how difficult it is to get permits, how many years permits have been available, and whether government officials have discretion in issuing permits.<sup>1</sup> Among our findings:

- -- Each \$10 increase in fees reduces the percent of adults with permits by about a half a percentage point.
- -- Each 10 years that the permit law is in effect increases the percent of adults with permits by 1.5 percentage points.
- -- Giving government officials discretion in who gets permits, reduces the percent of adults with get permits by more than two-thirds.

#### **How law-abiding are permit holders?**

One extremely easy fact to get information on is how law-abiding permit holders are. Much of the existing public discussion on crimes committed by permit holders in the media involves a report by the Violence Policy Center. Unfortunately, that report contains many inaccuracies as it often double or triple counts cases that shouldn't even be counted as crimes or problems with guns to begin with.<sup>2</sup>

Consider the two large states at the front of the current debate, Florida and Texas: Both states provide easy web access to detailed records of permit holders. During over two decades, from October 1, 1987 to May 31, 2014, Florida has issued permits to more than 2.64 million people, with the average person holding a permit for more than a decade.<sup>3</sup> Few -- 168 (about 0.006%) -- have had their permits revoked for any type of firearms related violation, the most common being accidentally carrying a concealed handgun into a gun-free zone such as a school or an airport, not threats or acts of violence. It is an annual rate of 0.0002 percent.

The already low revocation rate has been declining over time. Over the last 77 months from January 2008 through May 2014, just 4 permits have been revoked for firearms-related violations. With an average of about 875,000 active permit holders per year during those years, the annual revocation rate for firearms related violations is 0.00007 percent – 7 one hundred thousandths of one percentage point.

For all revocations, the annual rate in Florida is 0.012 percent.

The numbers are similarly low in Texas. In 2012, the latest year that crime data are available, there were 584,850 active license holders.<sup>4</sup> Out of these, 120 were convicted of either a misdemeanor or a felony, a rate of 0.021 percent, with only a few of these crimes involving a gun.<sup>5</sup>

The Florida numbers can easily be compared to data on firearms violations by police officers during the three years from January 1, 2005 through December 31, 2007. <sup>6</sup>
During that time period, the annual rate of such violations by police was at least 0.007 percent. That is higher than the rate for permit holders in Florida.

The police data on total annual offenses also provide a direct comparison for Florida and Texas. The rate of all crimes committed by police is 0.124 percent – a number about 6 times higher than the rate for in Texas and about 10 times higher than for Florida.

#### Deterrence

Thus, deterrence isn't just a matter of whether states have adopted right-to-carry laws. It very much depends on the percentage of the population with permits. The large majority of peer-reviewed academic research by economists and criminologists concludes that permitted concealed handguns reduce violent crime. The debate is between those who claim that concealed handgun permits reduce crime and those who say it has no effect (for a survey see Lott, "What a balancing test will show for right-to-carry laws," University of Maryland Law Review (2012): 1205-1218).

Nonetheless, the research focuses on what states allows right-to-carry, not the number of permits. Only peer-reviewed studies by John Lott in the second and third editions of More Guns, Less Crime (University of Chicago Press, 2000 and 2010) use the number of permits to measure the impact concealed carry laws have on crime rates. The third edition of his book examined crime data from 1977 to 2005. While crime rates have been falling nationally since 1991, he empirical tests measure whether crime rates fall in those states that issue the most permits relative to other states.

The six states that allow people to carry concealed handguns without a permit have much lower murder and violent crime rates than the six states with the lowest permit rates. Indeed, the murder rate is 23 percent lower in the states without permits. The violent crime rate is 12 percent lower. The murder and violent crime rates are also lower in the 25 states with the highest permit rates compared to the rest of the US.

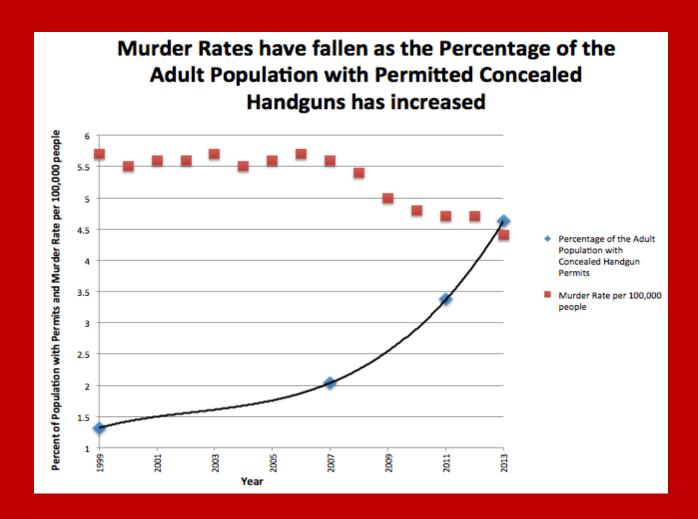
However, this is a much too simplistic of an approach. Despite their common use, simple cross-sectional comparisons can be very misleading. There are many factors that vary across places that explain differences in crime rates.

Unfortunately, it is often too difficult to account for them. A much better approach is to study how crime rates vary before and after changes in permit rules have occurred.

The current analysis doesn't provide the sophisticated estimates provided with earlier analyses simply because the necessary data won't be available for a couple years. Thus, it should only be viewed as suggestive.

Between 2007 and the preliminary estimates for 2013, murder rates have fallen from 5.6 to 4.4 per 100,000 – a 22 percent drop in the murder rate at the same time that the percentage of the adult population with permits soared by 130 percent. Overall violent crime also fell by the same percentage, 22 percent, over that period of time.

Using this new state level permit data from 2007 on, our analysis suggests that each one percentage point increase in the percent of the adult population holding permits is roughly associated with a 1.4 percent drop in the murder rate.<sup>7</sup>



# Number of Concealed Cary Permit Holders by State

| State                      | Active    | Data    |
|----------------------------|-----------|---------|
|                            | Permits   | Updated |
| Alabama                    | 379,917   | 7/12    |
| Alaska†                    | 8,000     | 5/14    |
| Arizona†                   | 222,191   | 6/14    |
| Arkansas†                  | 165,248   | 3/14    |
| California                 | 35,000    | 9/11    |
| Colorado                   | 170,636   | 12/13   |
| Connecticut                | 203,989   | 2/14    |
| Delaware                   | 5,000     | 9/11    |
| Florida                    | 1,278,246 | 12/13   |
| Georgia                    | 600,000   | 9/11    |
| Hawaii                     | 183       | 1/10    |
| Idaho                      | 85,535    | 12/12   |
| Illinois                   | 33,631    | 1/14    |
| Indiana                    | 537,964   | 12/13   |
| lowa                       | 201,901   | 12/13   |
| Kansas                     | 75099     | 12/13   |
| Kentucky                   | 203,266   | 12/12   |
| Louisiana                  | 136,505   | 12/13   |
| Maine                      | 33,000    | 12/13   |
| Maryland                   | 14,298    | 04/14   |
| Massachusetts              | 251,000   | 07/12   |
| Michigan                   | 430,095   | 03/14   |
| Minnesota                  | 163,758   | 02/14   |
| Mississippi                | 63,900    | 12/11   |
| Missouri                   | 171,000   | 2/13    |
| Montana ††                 | 38,616    | 2/14    |
| Nebraska                   | 30,505    | 12/2013 |
| Nevada                     | 80,892    | 2/14    |
| New Hampshire <sup>o</sup> | 10,133    | 12/13   |
| New Jersey                 | 1,212     | '12-'13 |
| New Mexico                 | 37,579    | 1/14    |
| New York¥                  |           |         |
| NYC                        | 5,700     | 12/10   |
| North Carolina             | 570,464   | 05/14   |
| North Dakota               | 30,997    | 2/14    |
| Ohio                       | 391,816   | 9/13    |
| Oklahoma                   | 191,263   | 3/14    |
| Oregon                     | 194,162   | 7/13    |
| Pennsylvania               | 872,277   | 12/12   |
| Rhode Island               | 3,280     | 2/14    |

Florida is the state that has issued the most concealed carry permits at 1.28 million

| South Carolina | 229,456    | 12/13 |
|----------------|------------|-------|
| South Dakota   | 76,600     | 5/14  |
| Tennessee      | 468,079    | 5/14  |
| Texas          | 708,048    | 12/13 |
| Utah*          | 550,663    | 3/14  |
| Vermont†       |            |       |
| Virginia       | 363,274    | 5/14  |
| Washington     | 456,270    | 5/14  |
| West Virginia  | 92,000     | 12/11 |
| Wisconsin      | 212,848    | 2/14  |
| Wyoming†       | 27,517     | 2/14  |
| TOTAL          | 11,113,013 |       |

<sup>†</sup> States where permits not required to carry within the state. Permits only obtained to carry outside of state.

<sup>††</sup> Permits not required to carry in 99.4 percent of Montana. For those people, the only reason that they would obtain a permit is to carry in other states.

<sup>\*</sup> Only Utah's permits issued to residents are included here.

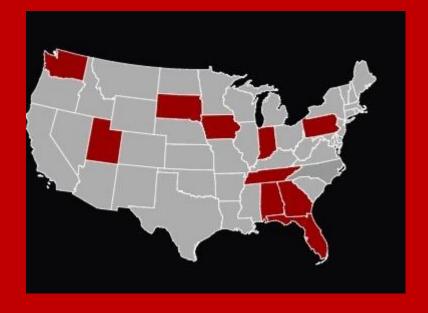
<sup>&</sup>lt;sup>9</sup> New Hampshire's permit numbers only include out-of-state permits.

<sup>¥</sup> Data are not available for New York State.

# Percent of adult population with permits by state

|                | 0/ -f           |
|----------------|-----------------|
|                | % of Population |
| State          | with cc permit  |
|                | 12.03%          |
| South Dakota   |                 |
| Indiana        | 10.79%          |
| Alabama        | 10.21%          |
| Utah††         | 9.75%           |
| Tennessee      | 9.35%           |
| Pennsylvania   | 8.67%           |
| lowa           | 8.53%           |
| Washington     | 8.49%           |
| Floridaº       | 8.23%           |
| Georgia        | 8.00%           |
| North Carolina | 7.54%           |
| Arkansas†      | 7.35%           |
| Connecticut    | 7.26%           |
| Idaho          | 7.22%           |
| Oklahoma       | 6.59%           |
| Oregon         | 6.32%           |
| West Virginia  | 6.25%           |
| South Carolina | 6.21%           |
| Wyoming*       | 6.18%           |
| Kentucky       | 6.01%           |
| Virginia       | 5.68%           |
| Michigan       | 5.62%           |
| North Dakota   | 5.53%           |
| Montana†       | 4.88%           |
| Wisconsin      | 4.80%           |
| Massachusetts  | 4.74%           |
| Arizona*       | 4.44%           |
| Ohio           | 4.39%           |
| Colorado       | 4.23%           |
| Maine          | 4.12%           |
| Minnesota      | 3.95%           |
| Louisiana      | 3.89%           |
| Nevada         | 3.80%           |
| Missouri       | 3.68%           |
| Texas          | 3.65%           |
| Kansas         | 3.46%           |
| Mississippi    | 2.84%           |
| New Mexico     | 2.38%           |
| Nebraska       | 2.17%           |

8% or more of the population in 10 states hold concealed carry permits (see figure).



| 1.46% |
|-------|
| 0.96% |
| 0.69% |
| 0.39% |
| 0.34% |
| 0.31% |
| 0.12% |
| 0.09% |
| 0.02% |
| 0.02% |
|       |
|       |
|       |

<sup>\*</sup>States where permits not required to carry within the state. Permits only obtained to carry outside of state. These numbers will dramatically underestimate the true rate that guns are legally carried concealed in these states.

<sup>†</sup> Permits not required to carry in 99.4 percent of Montana. For those people, the only reason that they would obtain a permit is to carry in other states.

<sup>††</sup> Only Utah's permits to residents are included here.

<sup>&</sup>lt;sup>9</sup> Florida's number includes a significant number of out of state residents.

### Notes

- \*Alexander Gallo, Chengyu Huang, and Sherwin Lott provided valuable research assistance in producing this report.
- 1. To calculate what influences whether people get permits, we ran a simple regression on the right-to-carry and may issue states, excluding the six states that do not require that people have to have permits to legally carry a concealed handgun. The absolute t-statistics are shown in parentheses.

Percent of adult population with permits = 0.00148 (1.61) years that the right-to-carry law has been in effect + 0.0229 (0.84) whether the right-to-carry law was in effect before 1977 - 0.044 (1.87) May Issue law with discretion on who gets a permit – 0.00051 (2.71) Fees for getting permit – 0.00035 (0.17) Hours of training required to get permit + 0.085 (3.21) Constant

|  | Average |
|--|---------|
| Years Right-to-Carry Law in effect by 2014 | 11.14   |
| Fee  | \$66.99 |
| Hours                                      | 5.57    |

- 2. "Massive errors in the Violence Policy Center's 'Concealed Carry Killers'," Crime Prevention Research Center, July 6, 2014 (<a href="http://crimepreventionresearchcenter.org/2014/04/massive-errors-in-the-violence-policy-centers-concealed-carry-killers/">http://crimepreventionresearchcenter.org/2014/04/massive-errors-in-the-violence-policy-centers-concealed-carry-killers/</a>). See also John Lott, "Bogus Gun-Control Numbers," National Review Online (<a href="http://www.nationalreview.com/article/376745/bogus-gun-control-numbers-john-r-lott-jr">http://www.nationalreview.com/article/376745/bogus-gun-control-numbers-john-r-lott-jr</a>).
- 3. <a href="http://www.freshfromflorida.com/content/download/7499/118851/cw\_monthly.pdf">http://www.freshfromflorida.com/content/download/7499/118851/cw\_monthly.pdf</a>
  <a href="http://www.freshfromflorida.com/content/download/7471/118627/Number\_of\_Licensees\_By\_Type.pd">http://www.freshfromflorida.com/content/download/7471/118627/Number\_of\_Licensees\_By\_Type.pd</a>
  <a href="http://www.freshfromflorida.com/content/download/7471/118627/Number\_of\_Licensees\_By\_Type.pd">http://www.freshfromflorida.com/content/download/7471/118627/Number\_of\_Licensees\_By\_Type.pd</a>
- 4. http://www.txdps.state.tx.us/rsd/chl/reports/ActLicAndInstr/ActiveLicandInstr2012.pdf
- 5. http://www.txdps.state.tx.us/RSD/CHL/Reports/ConvictionRatesReport2012.pdf
- 6. This is surely an underestimate of the true rate of crime by police because it is derived solely from news reports and not all crimes by police will get media attention. Stinson, Liederbach and Freiburger, "Exit Strategy: An Exploration of Late-Stage Police Crime," Police Quarterly, December 2010 13: 413-435 (<a href="http://pqx.sagepub.com/content/13/4/413.full.pdf">http://pqx.sagepub.com/content/13/4/413.full.pdf</a>). The number of full-time law enforcement employees in 2006 is available here (<a href="http://www2.fbi.gov/ucr/cius2006/data/table\_70.html">http://www2.fbi.gov/ucr/cius2006/data/table\_70.html</a>).
- 7. To estimate this we ran a couple simple regressions on the murder rate on the percentage of adult population with permits as well as with and without state and year fixed effects. There is a lot of noise in these estimates both because the permit numbers come from many different years as well as the estimated number of murders in 2013. These estimates have a great deal of measurement error and should only be taken as suggestive. That said, the simplest estimate regressing the murder rate on the percentage of the adult population with permits produces a coefficient and absolute t-statistics of 12.68 (1.66). With fixed effects, the estimate was 6.8 (0.82).

# Data Sources for Number of Concealed Handgun Permits

| Alabama ht Us Alaska* De | hata Source ttp://blog.al.com/breaking/2012/10/armed_in_alabama_permits_show.html Using these counties to estimate a state rate   |
|--------------------------|---|
| Us<br>Alaska* De         |   |
| Alaska* De               | Ising these counties to estimate a state rate   |
|                          |   |
| Arizona* ht              | Department of Public Safety, Permits & Licensing  |
|                          | ttp://www.azdps.gov/Services/Concealed_Weapons/Statistics/  |
|                          | R State Police email  |
|                          | ttp://www.gao.gov/assets/600/592552.pdf   |
|                          | tureau of Justice statistics annual reports.  |
|                          | mail reply from DESPP, 3rd party email (Sgt Kraus) says 168,000 as of 3/2011  |
|                          | ttp://www.gao.gov/assets/600/592552.pdf   |
|                          | ttp://www.freshfromflorida.com/content/download/7499/118851/cw_monthly.pdf  |
|                          | ttp://www.gao.gov/assets/600/592552.pdf Hard to find any data or contacts   |
|                          | GAO says zero permits. Legally Armed says 183 security guards in 2010. http://www.hawaiireporter.com/hawaii-<br>drearms-registrations-reach-record-high-after-70-percent-jump/123 |
|                          | ttp://www.gao.gov/assets/600/592552.pdf. State AG office replied to email saying there are no centralized tatistics.  |
|                          | ttp://www.suntimes.com/25287211-761/police-object-to-very-few-concealed-carry-applications.html   |
|                          | tate Police Quarterly publication http://www.in.gov/isp/images/4th_Quarter_2013_Handgun_Report.pdf. GAO eported 406,000 as of 12/31/2011  |
|                          | PS email 4/8/2014   |
|                          | ttp://ag.ks.gov/search-results-detail/2014/01/06/ag-schmidt-record-number-of-concealed-carry-applications-eceived-in-2013   |
|                          | um of Issued & Renewal numbers for 5 years, reports at http://www.kentuckystatepolice.org/conceal.htm   |
| ·                        | egally armed.   |
|                          | x the # of permits issued in 2013. http://www.maine.gov/dps/msp/licenses/weapons_permits.html.  |
|                          | erified by Maine State Police via email. Permits last for four years so that this is a conservative estimate.   |
|                          | mail from MSP.  |
|                          | ttp://www.usacarry.com/massachusetts_concealed_carry_permit_information.html,   |
|                          | ttp://www.handgunlaw.us/states/massachusetts.pdf  |
|                          | ttp://www.michigan.gov/msp/0,4643,7-123-1591_3503_4654-77621,00.html  |
| Minnesota ht             | ttp://madfi.org/permitcount.asp   |
| Mississippi G/           | SAO.  |
| Missouri Vi              | ince Winkeler, Missouri Carry LLC   |
| Montana † M              | Montana Department of Justice / Division of criminal investigation, Bryan Lockerby, Division Administration,  |
| Nebraska Ne              | lebraska State Patrol / Criminal investigation devision, <a href="mailto:nsp.webmaster@nebraska.gov">nsp.webmaster@nebraska.gov</a>   |
|                          | ttp://www.nvrepository.state.nv.us/ccw_stats.shtml  |
| New Hampshire No         | lew Hampshire department of safety/ Division of State Police /Permits and Licensing Unit, Linda   |
|                          | Penoncourt, Program Assistant II, PermitsandLicensing@dos.nh.gov  |
| New Jersey Ne            | lew Jersey State Police/ Firearm investigation office, Glenn Ross #5092, Assistant Unit Head, <a href="mailto:lep5092@gw.njsp.org">lep5092@gw.njsp.org</a>                        |
| New Mexico ht            | ttp://www.dps.state.nm.us/index.php/nm-concealed-carry/concealed-handgun-carry-statistics/  |
|                          | Sawker FOIA release of NYPD licensees. 114 pages of carry licenses with 50 names each = 5,700.  |
|                          | ttp://gawker.com/5974190/here-is-a-list-of-all-the-assholes-who-own-guns-in-new-york-city   |
|                          | IC Attorney General, email from public information officer  |
|                          | ttp://www.ag.nd.gov/BCI/CW/CW.htm and   |
|                          | ttp://www.ag.nd.gov/BCI/CW/GeneralInfo/CWLIssuedCounty.pdf  |
|                          | ttp://www.ohioattorneygeneral.gov/Files/Publications/Publications-for-Law-Enforcement/Concealed-Carry-ublications/Concealed-Carry-Annual-Reports                                  |
| Oklahoma ht              | ttp://www.ok.gov/osbi/ and  |
| ht                       | ttp://www.ok.gov/osbi/documents/2012%20SDA%20Annual%20Report%20Final.pdf  |
| Oregon Er                | mail, and   |
|                          | ttp://www.oregonlive.com/clackamascounty/index.ssf/2013/10/revised_figures_show_1_in_16_o.html  |
|                          | ttp://www.portal.state.pa.us/portal/server.pt?open=512&objID=4451&&PageID=462425&mode=2   |
|                          | mail and http://www.riag.ri.gov/bci/permits.php   |
| South Carolina ht        | ttp://www.sled.sc.gov/CWPStats.aspx?MenuID=CWP  |
| South Dakota er          | mail from SD Sec of State   |

| Tennessee     | http://www.tn.gov/safety/stats/DL_Handgun/handgun.shtml  |
|---------------|--|
| Texas         | http://www.txdps.state.tx.us/rsd/chl/reports/ActLicAndInstr/ActiveLicandInstr2013.pdf  |
| Utah††        | http://publicsafety.utah.gov/bci/documents/2014Q1.pdf  |
| Vermont*      |  |
| Virginia      | email from State Police  |
| Washington    | email from WA Licensing  |
| West Virginia | http://www.gao.gov/assets/600/592552.pdf   |
| Wisconsin     | Wisconsin Department of Justice, Dana Brueck, Communications Officer, <a href="mailto:brueckdl@doj.state.wi.us">brueckdl@doj.state.wi.us</a> |
| Wyoming*      | http://wyomingdci.wyo.gov/dci-criminal-justice-information-systems-section/concealed-firearms-permits  |

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William M. Landes is the Clifton R. Musser Professor Emeritus of Law and Economics, and Senior Lecturer at the University of Chicago Law School. Mr. Landes has written widely on the application of economics and quantitative methods to law and legal institutions, including multiple victim public shootings, hijacking of airplanes, and the bail system. Landes has been an editor of the Journal of Law and Economics (1975–1991) and the Journal of Legal Studies (1991–2000), is past president of the American Law and Economics Association, and is a member of the American Economic Association, the Mont Pelerin Society, and the Council of Economic Advisers of the American Enterprise Institute. He is also a Fellow of the American Academy of Arts and Sciences.

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**J. Scott Armstrong** is a professor at the Wharton Business School of the University of Pennsylvania. He is internationally known for his pioneering work on forecasting methods. Most recently, his research activities have involved forecasting for terrorism and conflicts. He is author of Long-Range Forecasting, the most frequently cited book on forecasting methods. He is a co-founder of the Journal of Forecasting, the International Symposium on Forecasting, and forecastingprinciples.com. He is a co-developer of new methods including rule-based forecasting, causal forces for extrapolation, simulated interaction, structured analogies, and the "index method." In addition to forecasting, Professor Armstrong has published papers on survey research, educational methods, applied statistics, social responsibility, strategic planning, and scientific peer review.

**Arthur Z. Berg, M.D.** is a Distinguished Life Fellow of the American Psychiatric Association and former member of the APA Violence Task Force. He was founding Psychiatrist-in-Chief at Beverly Hospital (emeritus) and former Associate Professor of Psychiatry at Harvard Medical School. A recent article that Dr. Berg had in the Wall Street Journal on multiple victim public shootings is available here.

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