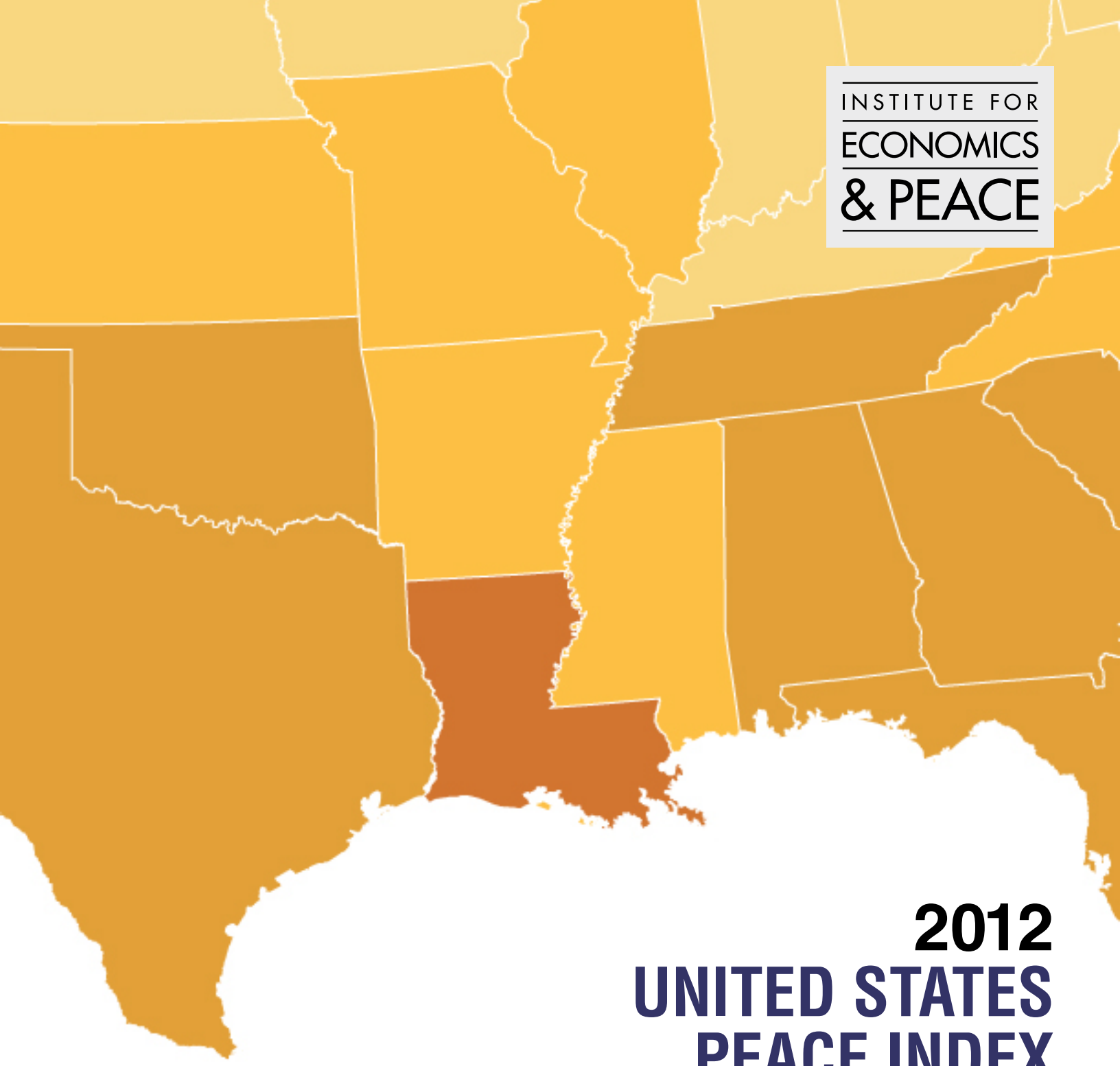


INSTITUTE FOR
ECONOMICS
& PEACE

2012
UNITED STATES
PEACE INDEX

The Institute for Economics and Peace (IEP) is an independent, non-partisan, non-profit research organization dedicated to shifting the world's focus to peace as a positive, achievable, and tangible measure of human well-being and progress.

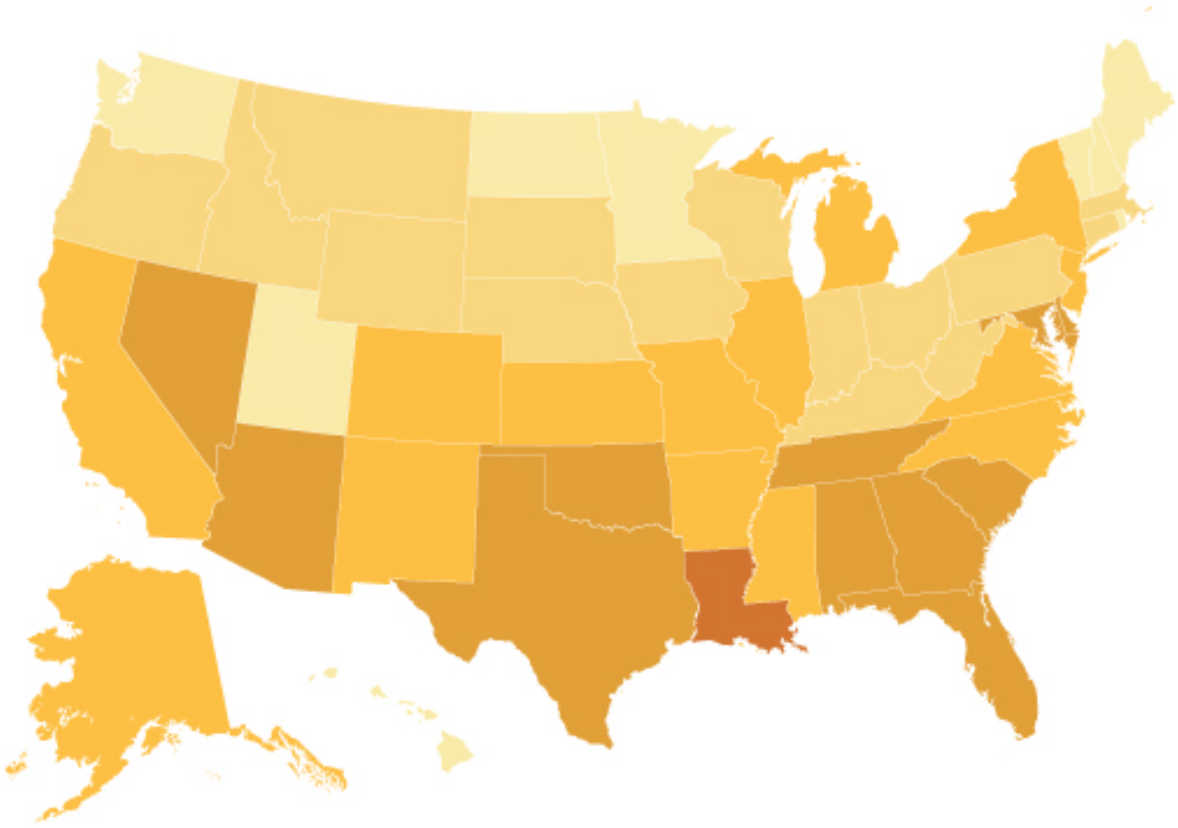
IEP achieves its goals by developing new conceptual frameworks to define peacefulness; providing metrics for measurement; uncovering the relationship between peace, business and prosperity, and by promoting a better understanding of the cultural, economic and political factors that drive peacefulness.

IEP has offices in Sydney, New York, and Washington, D.C. It works with a wide range of partners internationally and collaborates with intergovernmental organizations on measuring and communicating the economic value of peace.

For more information visit:
www.economicsandpeace.org

TABLE OF CONTENTS

2012 U.S. PEACE INDEX RESULTS

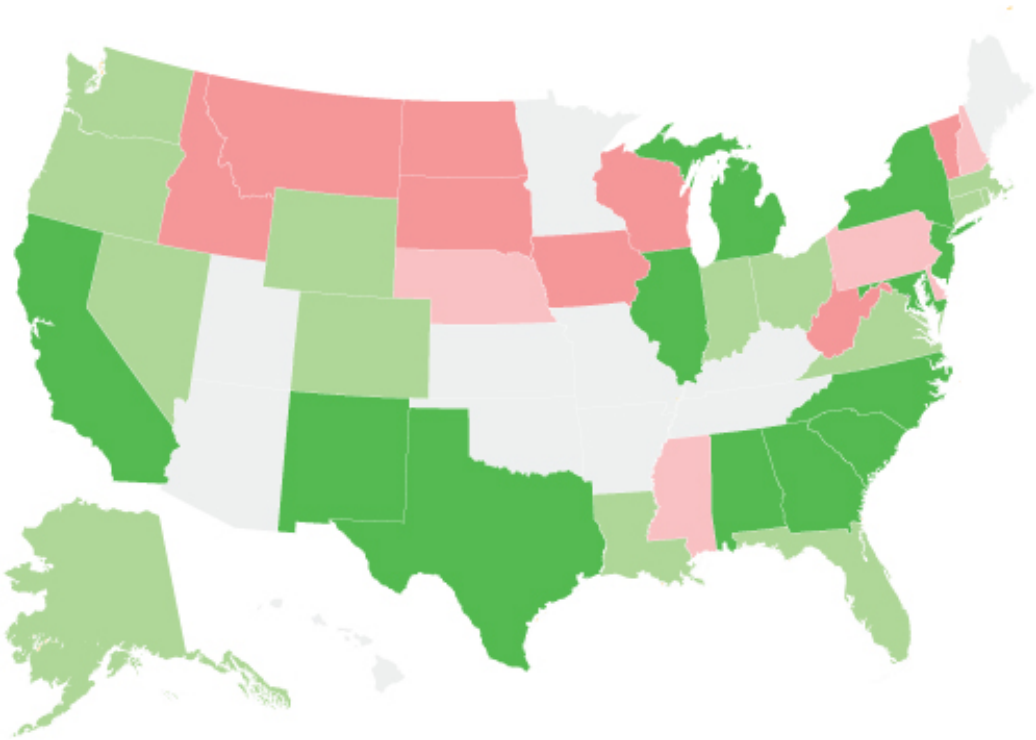


Most Peaceful Quintile
2nd Quintile
3rd Quintile
4th Quintile
Least Peaceful Quintile

	STATE	USPI SCORE
1	Maine	1.31
2	Vermont	1.55
3	New Hampshire	1.55
4	Minnesota	1.61
5	Utah	1.72
6	North Dakota	1.74
7	Washington	1.78
8	Hawaii	1.78
9	Rhode Island	1.79
10	Iowa	1.87
11	Nebraska	1.93
12	Massachusetts	2.00
13	Oregon	2.07
14	Connecticut	2.19
15	West Virginia	2.20
16	Idaho	2.23
17	Wyoming	2.26
18	Montana	2.27
19	Wisconsin	2.30
20	South Dakota	2.32
21	Kentucky	2.32
22	Ohio	2.33
23	Indiana	2.35
24	Pennsylvania	2.37
25	Virginia	2.48

	STATE	USPI SCORE
26	Colorado	2.53
27	Kansas	2.57
28	New Jersey	2.63
29	Michigan	2.69
30	North Carolina	2.71
31	New York	2.72
32	California	2.74
33	Alaska	2.75
34	New Mexico	2.85
35	Illinois	2.89
36	Georgia	3.04
37	Oklahoma	3.11
38	Maryland	3.14
39	Delaware	3.15
40	Alabama	3.17
41	Mississippi	3.17
42	South Carolina	3.18
43	Arkansas	3.20
44	Texas	3.20
45	Missouri	3.21
46	Arizona	3.22
47	Florida	3.36
48	Nevada	3.37
49	Tennessee	3.41
50	Louisiana	4.05

PERCENTAGE CHANGE IN USPI SCORE (1991-2010)



- >15% improvement
- 5% to 15% Improvement
- 5% to -5% Change
- 5% to 15% Decrease
- >15% Decrease

	STATE	USPI SCORE
1	New York	-31.39%
2	California	-27.51%
3	Michigan	-22.51%
4	Georgia	-21.00%
5	Illinois	-20.80%
6	Maryland	-20.48%
7	South Carolina	-18.88%
8	Texas	-18.88%
9	North Carolina	-16.95%
10	Alabama	-16.43%
11	New Mexico	-15.63%
12	New Jersey	-15.63%
13	Washington	-14.86%
14	Florida	-14.17%
15	Ohio	-13.70%
16	Massachusetts	-13.04%
17	Wyoming	-12.48%
18	Rhode Island	-12.41%
19	Connecticut	-10.48%
20	Virginia	-10.01%
21	Nevada	-9.05%
22	Alaska	-8.55%
23	Colorado	-6.91%
24	Indiana	-5.36%
25	Oregon	-5.36%

	STATE	USPI SCORE
26	Louisiana	-5.34%
27	Arizona	-4.78%
28	Kentucky	-3.91%
29	Oklahoma	-2.53%
30	Missouri	-2.47%
31	Kansas	-0.78%
32	Hawaii	0.19%
33	Arkansas	2.02%
34	Maine	3.29%
35	Tennessee	3.33%
36	Utah	3.38%
37	Minnesota	4.61%
38	New Hampshire	6.19%
39	Nebraska	6.38%
40	Mississippi	6.96%
41	Delaware	8.29%
42	Pennsylvania	8.29%
43	Vermont	15.27%
44	Wisconsin	16.49%
45	Iowa	20.90%
46	Idaho	21.04%
47	West Virginia	22.81%
48	Montana	40.06%
49	North Dakota	50.83%
50	South Dakota	57.43%

EXECUTIVE SUMMARY

"The last twenty years have seen a substantial and sustained reduction in direct violence in the United States"

The United States Peace Index (USPI), produced by the Institute for Economics and Peace (IEP), provides a comprehensive measure of U.S. peacefulness dating back to 1991. It also provides an analysis of the socio-economic measures that are associated with peace as well as estimates of the costs of violence and the economic benefits that would flow from increases in peace. This is the second edition of the U.S. Peace Index.

This year a Metropolitan Peace Index has also been produced which measures the peacefulness of 61 metropolitan statistical areas within the U.S.

The USPI is based on the work of the Global Peace Index, the preeminent global measure of peacefulness, which has been produced by IEP every year since 2007.

The last twenty years have seen a substantial and sustained reduction in direct violence in the U.S. The homicide rate has halved since 1991, with a concurrent reduction in the violent crime rate from 748 to 399 violent crimes per 100,000 over this period. Although this trend seemed to be levelling off at the turn of the century, the last three years have seen successive improvements in peace.

The 2012 USPI results have also been correlated against a large secondary dataset of economic, educational, health, demographic, and social capital factors, in order to determine the environments which are most closely associated with peace in the U.S.

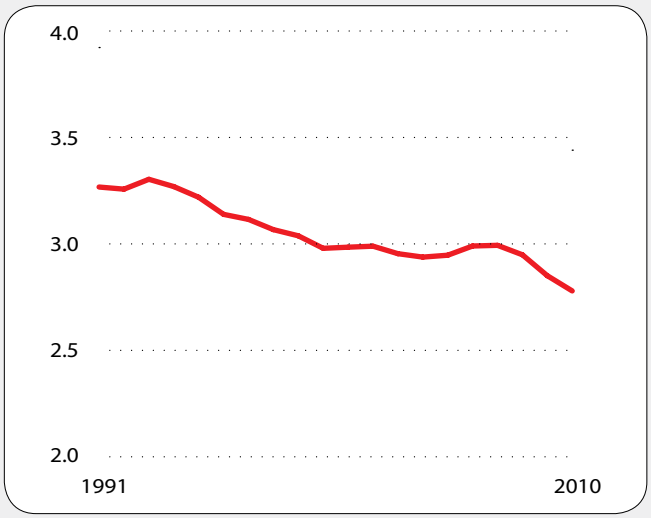
Although there was a strong relationship between the drop in crime and the increase in the incarceration rate in the 90s, this relationship is no longer evident with 27 states decreasing their incarceration rates while simultaneously experiencing reductions in their violent crime rates. Between 2000 and 2010, New York experienced a fall in violent crime and incarceration every year, as well as falls in its homicide rate.

Given the above findings, and the fact that 2.38% of the entire population (over 7.2 million people) is under some form of correctional supervision, as well as the extent of the economic resources that are devoted to incarceration, it is important to review the methods that have been used to maintain law and order. New approaches to dealing with non-violent offenders, combined with investments in proven recidivism programs that are cost effective hold promise in improving both the trend of crime reduction and also decreasing the rate of incarceration.

The economic cost of violence to the U.S. economy is substantial and can be categorized in three ways. The first is the expenditure borne by state governments to maintain law and order through the police, justice and the prison system or to deal with the direct consequences of violence. Secondly, the direct lost productivity from crime which can consist of time off work from injuries or lost earning capacity from early death. The third category is the lost productivity and job creation that comes from other, more productive investments than violence containment. The displacement of expenditure away from violence containment to support industry investment, schools or national infrastructure can improve the nation's productivity and competitiveness.

Chart 1: U.S. Peace Index Average Score, 1991-2010

The U.S. has become much more peaceful since 1991



KEY FINDINGS

The key findings of the 2012 USPI are:

• ***The U.S. is now more peaceful than at any time in the last 20 years.*** This has been driven by a steady decrease in the homicide and violent crime rates combined with recent modest decreases in the incarceration rate.

• ***There were improvements in all indicators from the 2011 to the 2012 Index.*** The homicide rate decreased by 3.78%, the violent crime rate fell 6.03%, and the total number of state prisoners fell by 0.6%. There were also slight reductions in the number of police employees and the number of firearm suicides as a percentage of total suicides, which suggests a fall in gun ownership.

• ***Maine is the most peaceful state in the U.S. for the 11th year in a row, Louisiana is the least peaceful.*** The Northeast continues to be the most peaceful region with three of the five most peaceful states. The South is once again the least peaceful region in America, with four of the five least peaceful states. For the 20th year in a row, Louisiana is the least peaceful state.

• ***There are significant economic benefits from improving peacefulness.*** Violence and violence containment cost the average taxpayer $3,257 each year. If all the states in the U.S. had the same level of peacefulness as the most peaceful state (Maine), the total economic effect would be over 274 billion dollars.

• ***The level of direct violence has decreased dramatically in the last 20 years.*** The homicide rate has decreased by over 50% since 1991, and there have been similar reductions in the rate of assaults, rapes, and robberies. Violent crime has decreased every single year except one in the last 20 years.

• ***The prison population has decreased for the second year running.*** The prison population appears to have peaked and a new trend is emerging where incarceration rates are falling. This has largely been driven by a combination of falling crime rates and budget constraints.

• ***The drop in officially recorded violence has been partially offset by increases in violence in prison.*** The explosive growth of the prison population in the U.S. has resulted in a purported epidemic of prison assault and rape. If this prison violence is included in USPI calculations, the decline in the total level of violence is smaller.

• ***Peace is linked to economic opportunity, health, education, and social capital.*** The 2011 USPI found a strong correlation between peace and a number of secondary factors, which has been reinforced by the 2012 USPI. More peaceful states tend to have more economic opportunities, better provision of basic services and higher levels of educational attainment. In addition, the 2012 USPI has found there is a strong correlation between social capital and peace. More peaceful states tend to have more social capital which represents a better sense of community, and higher rates of volunteerism.

• ***Cambridge-Newton-Framingham in Massachusetts is the most peaceful metropolitan area in America.*** Detroit-Livionia-Dearborn is the least peaceful metropolitan area in the U.S.

METHODOLOGY

The USPI is the first national peace index produced by the Institute for Economics and Peace. Similar in concept to the Global Peace Index (GPI), it uses "the absence of violence" as the definition of peace.

The starting point in creating the USPI was to imagine a perfectly peaceful state. In such a state there would be no direct violence, and thus no homicide and no violent crime. In addition, there would be no need for state violence against its citizens and therefore no need for the state to devote resources to violence containment. Thus, there would be no police employees and no incarceration. Finally, in a perfectly peaceful state, citizens would have no need to own firearms for the purpose of self-defense, and therefore there would be no ownership of small arms.

Such a hypothetical state is aspirational rather than realistic, and as such the USPI scores reflect no moral judgement on the appropriate level of police employment, incarceration, or firearm ownership.

Different contexts and circumstances will call for different government responses to the problem of violence. Therefore, USPI scores should be seen as a measure of how close a state currently is to realizing a perfectly peaceful environment.

The five indicators that were chosen are a subset of the twenty-three indicators that comprise the GPI. These five indicators were chosen because they are the most appropriate measures of violence at the state level. In addition, quantitative data for each of the indicators is readily available.

INDICATORS

The five indicators are:

• ***Number of homicides per 100,000 people***
Source: Federal Bureau of Investigation, Uniform Crime Report, 2010

The USPI uses the same definition of homicide as the U.S. Bureau of Justice Statistics, wherein homicide is defined as "murder or non-negligent manslaughter".

• ***Number of violent crimes per 100,000 people***
Source: Federal Bureau of Investigation, Uniform Crime Report, 2010

The USPI uses the Bureau of Justice Statistics definition of violent crime and the associated quantitative measures. In the U.S., the definition of violent crime includes homicide, forcible rape, robbery, and aggravated assault. The USPI measure of violent crime excludes homicide from this group, as it is already included in the homicide indicator.

• ***Incarceration rate per 100,000 people***
Source: U.S. Bureau of Justice Statistics, Prisoners in 2010

In order to allow for meaningful comparisons across states the USPI only includes prisoners under state jurisdiction who have been sentenced to more than one year in prison. This means that both federal prisoners and prisoners in jail are not included in calculating the USPI.

• ***Number of police employees per 100,000 people***
Source: Federal Bureau of Investigation, Uniform Crime Report, 2010

This number includes both sworn officers and civilian employees. The USPI uses the census population estimates for all states and indicators for the sake of consistency.

• ***Availability of small arms***
Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, Fatal Injury Reports, 2005-2009

There is no reliable state level data on small arms availability, small arms ownership, or small arms sales in the U.S. An accurate measure of gun prevalence cannot be calculated from administrative records alone. For this reason many studies on gun prevalence use a quantitative proxy. The proxy used in the USPI is firearm suicides as a percentage of total suicides (FS/S). As this indicator varied significantly from year to year for some states, a five year moving average was used in order to smooth out the variance. More detail on why this proxy was chosen is supplied in Appendix B to this report.

INDICATOR WEIGHTS

All indicators are scored between 1 and 5, with 1 being the most peaceful possible score, and 5 being the least peaceful.

In order to maintain consistency, the weights assigned to each indicator mirror those used by the equivalent indicators in the GPI, other than the availability of small arms. The weights for the GPI indicators were agreed upon by an international panel of independent experts based on a consensus view of their relative importance. The weighting of the 'availability of small arms' indicator has been set lower as it relies on a proxy rather than direct data.

Table 1: U.S. Peace Index Indicator Weights

INDICATOR	WEIGHT
Homicides	4
Violent Crime	4
Incarceration	3
Police Employees	3
Small Arms	1

Population Estimates

As four of the indicators are rates per 100,000 people, consistent population estimates were needed. The U.S. census bureau was used for population figures for all four indicators.

Scoring Bands

In order to compare changes in score over time, a base range of measurement must be used. When the index was first developed, data for the U.S. was available for all years between 1981 and 2008. Furthermore, some of the indicators experienced large swings in raw scores during this period. For example, there was large increase in the incarceration rate from 1981-2008, therefore using data from one end of this time period would have resulted in a lack of sensitivity to change in the Index.

If 2008 data had been used to create the bands, almost all states would have had scores of 'one' for incarceration until the mid-80's or later. Therefore, the scoring ranges were calculated using the average of state scores from 1981-2008.

Washington D.C.

Since incarceration data is not available after 2002 for Washington D.C., it has been excluded from the USPI rankings. However, imputed data was used to construct scores to allow Washington D.C. to be included in the correlation calculations and the economic value of peace sections.

PEACE IN THE UNITED STATES OF AMERICA

INTRODUCTION

Why Peace Matters in the United States

The containment of violence comes with a cost for both government and society. A lot of work has been done on the social implications of violence, however comparatively little work has been done on measuring peace, the economic costs of containing violence, and the economic benefits flowing from improvements in peace. The USPI provides a measurement of the U.S.'s peacefulness over the past 20 years and as such provides a useful platform for analyzing the changing patterns of peace.

The 2012 edition of the USPI updates the data from the 2011 USPI and additionally includes a Metropolitan Peace Index which measures the peacefulness of 61 of the most populous metropolitan statistical areas in the United States.

The USPI uses five indicators which are a subset of the twenty three indicators used in the GPI. These five indicators were chosen because they best encapsulate peace at the state level and also because similar data is available in other countries, allowing for a consistent framework to be applied to other national level peace indices.

The five indicators are:

- Homicide (rate per 100,000)
- Violent Crime (rate per 100,000)
- Incarceration (rate per 100,000)
- Police Employees (rate per 100,000)
- Small Arms (FS/S proxy)

Past research conducted by IEP suggests that there are eight key structures of peace, which when in place, should allow a country to reduce and avoid direct violence. These eight structures are closely correlated with the Global Peace Index. It is interesting to note that the U.S. performs relatively well on the 'Structures of Peace'. This means that the U.S. is well placed to improve its peacefulness.

The 2012 USPI is divided into six sections:

• **An overview of peace in the United States:** A comparison of the U.S. to the global average and trends in the USPI indicators over the last twenty years.

• **An analysis of the 2012 rankings:** The most and least peaceful states, the risers and fallers, and the most peaceful regions.

• **The 2012 Metropolitan Peace Index:** The first ever study to rank the major metropolitan areas of the U.S. by their peacefulness.

• **The correlates of peace:** An analysis of the environments that lead to peace.

• **The economic impact of violence:** A detailed study of the benefits to the U.S. economy from improving peacefulness.

• **A case study on incarceration:** Incarceration not only costs the U.S. economy billions of dollars, but it also conceals the true extent of violence in the U.S.

The fact that the U.S. is less peaceful than would be expected is a cause for some concern, but also represents a genuine opportunity for economic renewal in an area not usually associated with economic growth. As states across the U.S. struggle to balance budgets and meet outstanding financial obligations, comprehensive cost-effective reforms focused on increasing peacefulness offer one potential solution to these problems.

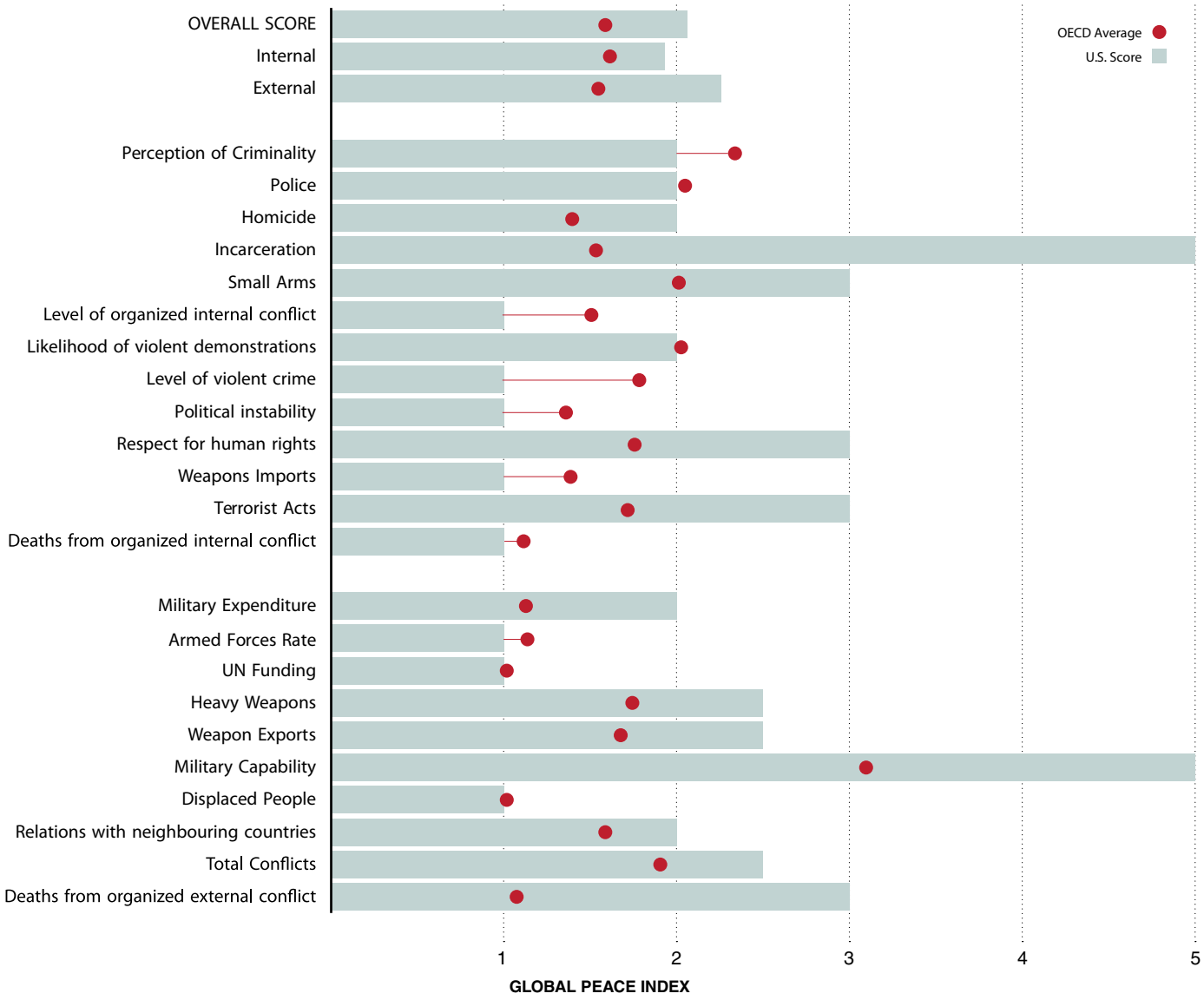
THE STRUCTURES OF PEACE

The 'Structures of Peace' are eight key factors that are closely associated with peaceful environments. Societies which have these structures in place tend to be more peaceful. The eight structures are:

- Well-functioning government
- Sound business environment
- Equitable distribution of resources
- Acceptance of the rights of others
- Good relations with neighbours
- Free flow of information
- High levels of education
- Low levels of corruption

Chart 2: U.S. vs OECD Average, Global Peace Index

The U.S. is less peaceful than the OECD average on most GPI indicators



HOW PEACEFUL IS THE U.S.?

The U.S. is a mid-ranked nation on the GPI. Its level of peacefulness is slightly lower than the global average. However, its GPI score is substantially worse than the OECD average, and it is one of only two OECD nations which are ranked outside of the top 50 on the 2011 GPI. This is primarily the result of having the world's highest incarceration rate, as well as extensive military spending and involvement in multiple military campaigns. However, contrary to popular belief, the U.S. performs better than the OECD average on many of the measures of peace. Of the five GPI indicators which form the basis of the USPI, the U.S. scores better than the OECD average on two: violent crime, which is well below the OECD average, and the number of police employees, which is slightly below the OECD average.

TWENTY-YEAR TRENDS

The last twenty years have seen a substantial and sustained reduction in direct violence in the U.S. The homicide rate has halved since 1991, with a concurrent reduction in the violent crime rate, from 748 to 399 violent crimes per 100,000. Although this trend seemed to be levelling off at the turn of the century, the last three years have seen successive improvements in peace.

Many suggestions have been put forward as to the root cause of this reduction, including improved policing techniques, the rise of private security companies and 'security bubbles', the legalization of abortion and decreased rates of lead exposure in the 1980s. Commentary on reasons for this reduction is beyond the scope of this paper. However, regardless of the cause,

NATIONAL LEVEL INDICATOR TRENDS 1991-2010

Table 2: U.S. Peace Index Indicator Changes, 1991-2010

INDICATOR	1991	2010	CHANGE
Homicide	9.80	4.78	-51%
Violent Crime	748	399	-47%
Incarceration	483	744	54%
Police	292	328	12.3%
Small Arms	60.03%	51.32%	-14.5%

Chart 3: U.S. Homicide Rate 1991-2010

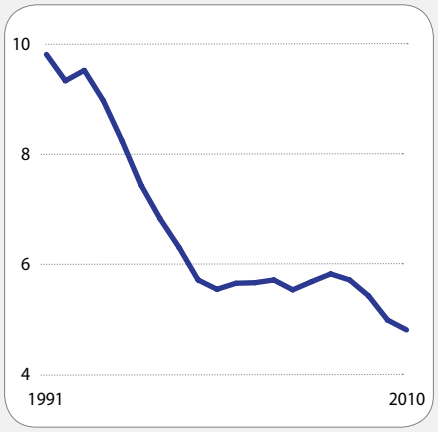


Chart 4: U.S. Violent Crime Rate 1991-2010

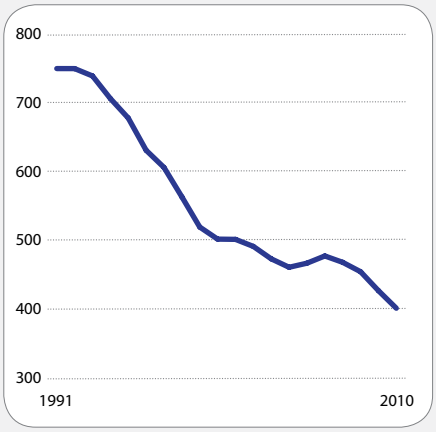


Chart 5: U.S. Incarceration Rate 1991-2010

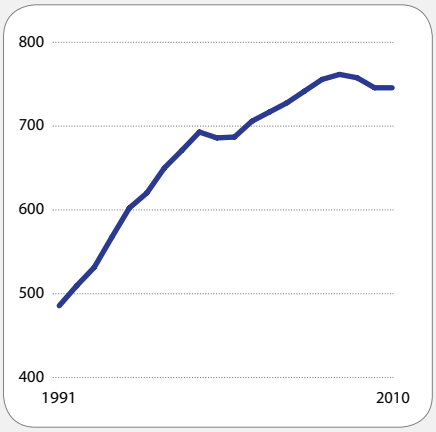


Chart 6: U.S. Police Employees Rate 1991-2010

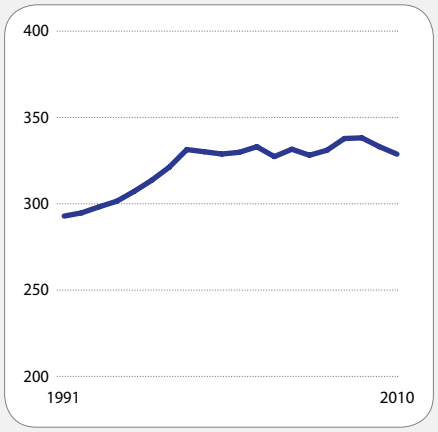
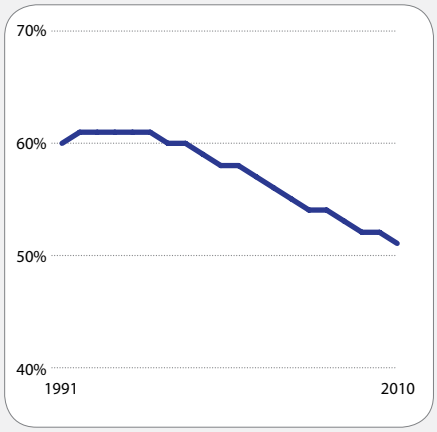


Chart 7: U.S. FS/S (Small Arms Proxy) 1991-2010



this sustained drop in direct violence suggests that the U.S. has become substantially more peaceful in the last twenty years. Similarly, despite public perceptions to the contrary, gun ownership appears to have declined in this period, suggesting that a declining number of households felt the need to have a gun in the house.

The relationship between the drop in direct violence and the increase in violence containment spending is somewhat controversial. The number of police employees and the level of incarceration were on the increase at the same time as homicide and violent crime were falling. However, the incarceration rate continued to increase even as the fall in violent crime and homicide levelled off, and the last few years have seen a drop in both the incarceration and violent crime rate.

While there is little doubt that increased incarceration and police numbers played a part in the fall in the crime rate in the 90s, there appears to be no relation between falling crime rates and incarceration since the turn of the century. Furthermore, as budgetary concerns and overcrowded detention facilities restrict the abilities of states to increase police numbers and incarceration, other more cost effective ways of reducing violence need to be explored.

THE 2012 UNITED STATES PEACE INDEX RESULTS

RESULTS

Table 3: 2012 U.S. Peace Index Indicator Scores

Where states are tied, scores were calculated to three decimal places

		OVERALL SCORE	HOMICIDE	VIOLENT CRIME	INCARCERATION	POLICE EMPLOYEES	SMALL ARMS
1	Maine	1.31	1.16	1.17	1.35	1.03	3.15
2	Vermont	1.55	1.00	1.21	2.35	1.51	2.76
3	New Hampshire	1.55	1.00	1.39	1.89	1.83	2.57
4	Minnesota	1.61	1.16	1.71	1.68	1.72	2.57
5	Utah	1.72	1.19	1.60	2.20	1.68	3.02
6	North Dakota	1.74	1.06	1.66	1.99	2.03	3.23
7	Washington	1.78	1.30	2.07	2.42	1.08	2.75
8	Hawaii	1.78	1.15	1.83	2.58	2.03	1.00
9	Rhode Island	1.79	1.45	1.80	1.79	2.48	1.00
10	Iowa	1.87	1.00	1.89	2.74	1.89	2.54
11	Nebraska	1.93	1.51	1.91	2.20	1.88	2.96
12	Massachusetts	2.00	1.59	2.79	1.40	2.45	1.00
13	Oregon	2.07	1.33	1.78	3.22	1.90	3.24
14	Connecticut	2.19	1.72	1.91	3.29	2.35	1.44
15	West Virginia	2.20	1.63	2.07	3.17	1.44	4.31
16	Idaho	2.23	1.02	1.64	4.16	2.08	4.03
17	Wyoming	2.26	1.04	1.52	3.31	3.27	3.99
18	Montana	2.27	1.41	1.88	3.31	2.42	3.73
19	Wisconsin	2.30	1.44	1.76	3.23	3.16	2.54
20	South Dakota	2.32	1.47	1.86	3.71	2.40	3.12
21	Kentucky	2.32	1.93	1.73	4.04	1.35	3.98
22	Ohio	2.33	1.87	2.07	3.94	1.51	2.78
23	Indiana	2.35	1.99	2.07	3.80	1.48	3.13
24	Pennsylvania	2.37	2.19	2.31	3.54	1.34	2.97
25	Virginia	2.48	2.02	1.59	4.10	2.34	3.37
26	Colorado	2.53	1.34	2.11	3.99	3.12	2.79
27	Kansas	2.57	1.68	2.33	2.81	3.63	3.21
28	New Jersey	2.63	1.90	2.04	2.53	5.00	1.12
29	Michigan	2.69	2.37	2.89	3.92	1.59	2.84
30	North Carolina	2.71	2.14	2.29	3.28	3.19	3.57
31	New York	2.72	1.98	2.43	2.59	4.63	1.51
32	California	2.74	2.10	2.66	3.87	2.78	2.07
33	Alaska	2.75	1.95	3.60	3.03	2.03	3.92
34	New Mexico	2.85	2.72	3.35	2.85	2.35	2.91
35	Illinois	2.89	2.30	2.63	3.33	3.94	1.88
36	Georgia	3.04	2.38	2.48	4.31	3.10	3.94
37	Oklahoma	3.11	2.20	2.84	5.00	2.65	3.54
38	Maryland	3.14	2.89	3.15	3.40	3.37	2.67
39	Delaware	3.15	2.25	3.51	3.88	3.35	2.53
40	Alabama	3.17	2.36	2.36	5.00	3.11	4.33
41	Mississippi	3.17	2.76	1.84	5.00	3.26	4.35
42	South Carolina	3.18	2.47	3.39	4.33	2.52	3.69
43	Arkansas	3.20	2.06	2.96	4.84	3.16	3.91
44	Texas	3.20	2.13	2.70	5.00	3.42	3.42
45	Missouri	3.21	2.76	2.72	4.48	3.13	3.33
46	Arizona	3.22	2.57	2.50	5.00	3.23	3.28
47	Florida	3.36	2.22	3.14	4.85	3.88	2.86
48	Nevada	3.37	2.40	3.69	4.08	3.56	3.23
49	Tennessee	3.41	2.33	3.47	3.80	4.20	3.96
50	Louisiana	4.05	4.06	3.14	5.00	4.26	4.15

MOST & LEAST PEACEFUL, RISERS & FALLERS

The results of the 2012 USPI indicate that domestically America is becoming a more peaceful nation and continues to close the 'peace gap' between itself and other highly developed countries. Average scores improved across all five indicators, with a concurrent drop in direct violence and violence containment.

Between the 2011 and 2012 indices, a substantial majority of states became more peaceful across all five indicators. As shown in table 4 below, 35 of the 50 states became more peaceful overall. Although the homicide indicator displayed the most variance, 29 states reduced their homicide rates, while 40 states had reductions in violent crime. Perhaps most encouragingly, 34 out of 50 states were able to reduce their incarceration rates while 37 states reduced police employee numbers.

Table 4: Number of States that Became More or Less Peaceful

INDICATOR	MORE PEACEFUL	LESS PEACEFUL	NATIONAL % CHANGE
Overall Score	35	15	-2.5%
Homicides	29	21	-3.78%
Violent Crime	40	10	-6.03%
Incarceration	34	16	-1.17%
Police Employees	37	13	-1.33%
Small Arms	33	17	-0.13%

Of particular interest is the fact that 17 states managed to simultaneously reduce their homicide, violent crime, and incarceration rates. This suggests that the link between reducing crime and increasing incarceration is not as clear cut as it once was.

There was little change in the 10 most peaceful and 10 least peaceful states in the 2012 USPI. Hawaii was the only state to move back into the 10 most peaceful. It has been ranked in the top 10 for 13 of the last 20 years. Hawaii replaced Massachusetts in the top 10, which fell to 12th place as a result of increases in homicide, violent crime, and the number of police employees. The five most peaceful states in the 2012 USPI are Maine, New Hampshire, Vermont, Minnesota, and Utah, which moves into the top 5 for the first time in the history of the USPI.

There also wasn't much change amongst the 10 least peaceful states, with only one state falling into the bottom 10 (Arizona, which was also the biggest faller for the 2012 USPI). Alabama moved out of the 10 least peaceful states for the first time in five years. Seven of the 10 least peaceful states improved their overall peacefulness, and only six of the 20 least peaceful states recorded decreases in peacefulness. The five least peaceful states in the 2012 USPI are Louisiana, Tennessee, Nevada, Florida, and Arizona.

Table 5 below highlights the performance of the five most and least peaceful states on five of the secondary factors that correlated most strongly with the 2012 USPI. The association seems to be stronger amongst the five least peaceful states. The five most peaceful states display greater variance in their performance on the secondary correlating factors.

Table 5: Most Peaceful & Least Peaceful States, Correlating Factors (Rank /50)

FACTOR	Maine	New Hampshire	Vermont	Minnesota	Utah	Louisiana	Tennessee	Nevada	Florida	Arizona
% With at least High School Diploma	10	4	5	2	9	46	42	40	34	38
Infant Mortality Rate	24	12	24	2	10	48	46	16	28	19
Gallup - Basic Access	15	1	12	1	15	47	40	48	43	33
% Children in Single Parent Families	26	3	18	5	1	49	40	36	44	41
Social Capital Index	13	8	3	4	14	44	43	48	36	21

MOST PEACEFUL: MAINE

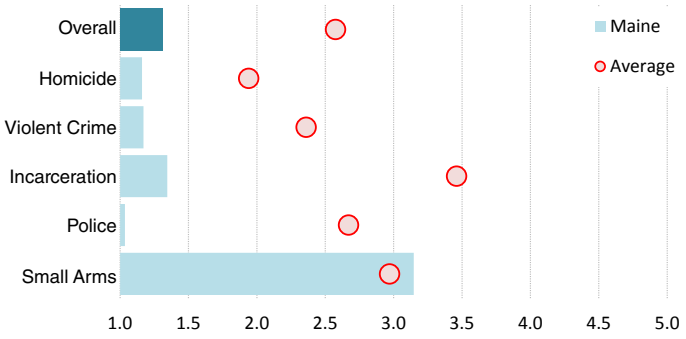
Maine is once again the most peaceful state in America, retaining the title it has held since the year 2000. Maine is ranked first in the U.S. on three of the five indicators, with the lowest levels of violent crime, incarceration, and police employees. It is also ranked in the top ten on the homicide indicator, but performs poorly on small arms, where it is ranked 28th.

Table 6: Maine, Changes in Peacefulness

INDICATOR	2012 SCORE	SCORE CHANGE	RANK	RANK CHANGE
Overall Score	1.308	-0.028	1	—
Homicide	1.160	-0.051	8	↑1
Violent Crime	1.171	+0.011	1	—
Incarceration	1.345	-0.034	1	—
Police	1.035	-0.052	1	—
Small Arms	3.147	+0.003	28	↑1

As shown in chart 8 below, all of these scores are well below the national average indicator scores, except for small arms where Maine is slightly above average.

Chart 8: Maine vs USPI Average



Although Maine is America's most peaceful state, it does not fare particularly well on the secondary factors which most closely correlate with the USPI. This is surprising as it is the only state of the five most peaceful states to not perform well on these significant socio-economic factors.

Table 7: Maine's Correlating Factor Scores

FACTOR	SCORE	RANK
% With at least High School Diploma	90%	10
Infant Mortality Rate	5.64	15
Gallup - Basic Access	84.3	10
% Children in Single Parent Families	33%	26
Social Capital Index	0.53	13

LEAST PEACEFUL: LOUISIANA

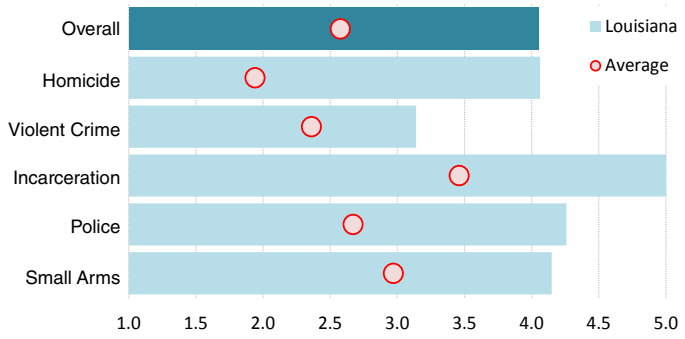
Louisiana is once again the least peaceful state in the U.S., a position it has held for the last twenty years. Furthermore, the gap between Louisiana and the 49th ranked Tennessee is greater than any other gap between two states. Louisiana is ranked last in the nation on homicides, equal last on incarceration and ranks in the bottom ten on the other three indicators.

Table 8: Louisiana, Changes in Peacefulness

INDICATOR	2012 SCORE	SCORE CHANGE	RANK	RANK CHANGE
Overall Score	4.049	+0.075	50	—
Homicide	4.062	-0.169	50	—
Violent Crime	3.140	-0.332	43	↑1
Incarceration	5.000	—	50	—
Police	4.258	+1.061	48	↓15
Small Arms	4.150	-0.049	48	—

As seen in chart 9, Louisiana is well above the national average on every indicator.

Chart 9: Louisiana vs USPI Average



Louisiana's USPI scores match its performance on the factors which correlate most strongly with the USPI. Its lack of peacefulness is mirrored by poor performance across the most important economic, health, education, and community factors. Louisiana has the second highest percentage of children born into single parent families (42%) and is ranked in the bottom five states for every factor other than social capital.

Table 9: Louisiana's Correlating Factor Scores

FACTOR	SCORE	RANK
% With at least High School Diploma	82%	46
Infant Mortality Rate	8.74	48
Gallup - Basic Access	78	47
% Children in Single Parent Families	42%	49
Social Capital Index	-0.99	44

BIGGEST RISER: WYOMING

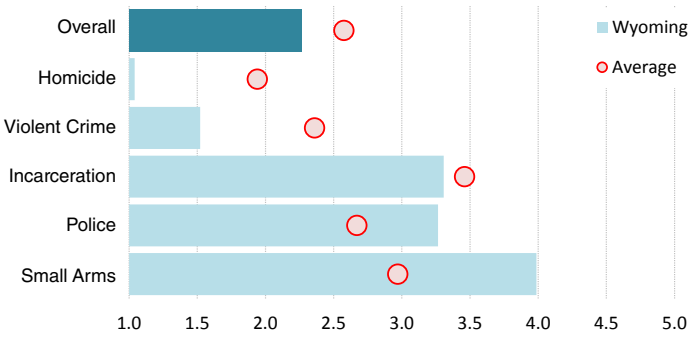
Wyoming moved into the top twenty states on the USPI for the first time since 1995, rising six places from 23rd to 17th. Although it is ranked in the bottom five on the small arms indicator, it improved across all the other indicators, and is now ranked in the top five states for homicide and violent crime.

Table 10: Wyoming, Changes in Peacefulness

INDICATOR	2012 SCORE	SCORE CHANGE	RANK	RANK CHANGE
Overall Score	2.264	-0.222	17	↑6
Homicide	1.041	-0.298	5	↑7
Violent Crime	1.521	-0.148	4	↑4
Incarceration	3.308	-0.056	23	↑1
Police	3.265	-0.541	39	↑5
Small Arms	3.988	+0.244	46	↓6

As seen in chart 10, Wyoming is well below the national average for homicide and violent crime. Any future gains in peacefulness are likely to come from other areas.

Chart 10: Wyoming vs USPI Average



Wyoming performs remarkably well on the factors that correlate most strongly with peace, as seen in table 11. Although establishing causation is beyond the scope of this report, it seems likely that Wyoming's performance on these factors bodes well for future increases in peacefulness.

Table 11: Wyoming's Correlating Factor Scores

FACTOR	SCORE	RANK
% With at least High School Diploma	92%	1
Infant Mortality Rate	5.96	17
Gallup - Basic Access	81.3	32
% Children in Single Parent Families	26%	6
Social Capital Index	0.67	9

BIGGEST FALLER: ARIZONA

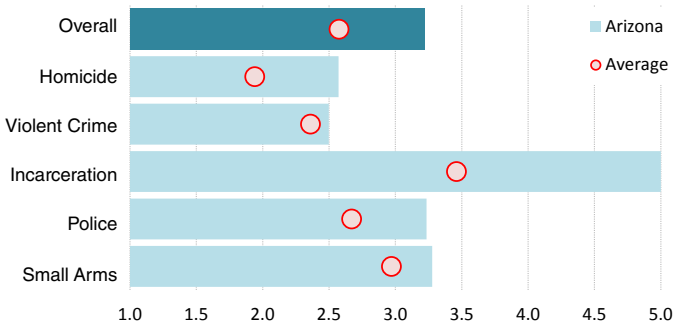
Arizona dropped into the five least peaceful states for the first time. Arizona had the second highest increase in its homicide rate, second only to Alaska. This increase in the homicide rate more than offsets the slight fall in the violent crime rate, policing and the availability of small arms. One of the main reasons for the fall in Arizona's rank was the improvement of most other states in the bottom twenty.

Table 12: Arizona, Changes in Peacefulness

INDICATOR	2012 SCORE	SCORE CHANGE	RANK	RANK CHANGE
Overall Score	3.217	+0.077	46	↓9
Homicide	2.571	+0.317	45	↓10
Violent Crime	2.498	-0.006	33	↓2
Incarceration	5.000	—	45	—
Police	3.234	-0.019	37	—
Small Arms	3.277	-0.036	33	—

Chart 11 shows that Arizona's scores for small arms and violent crime are not that far off the national average. However, its score on incarceration is well above the national average. It also has potential peace gains from reductions in homicide and police employees.

Chart 11: Arizona vs USPI Average

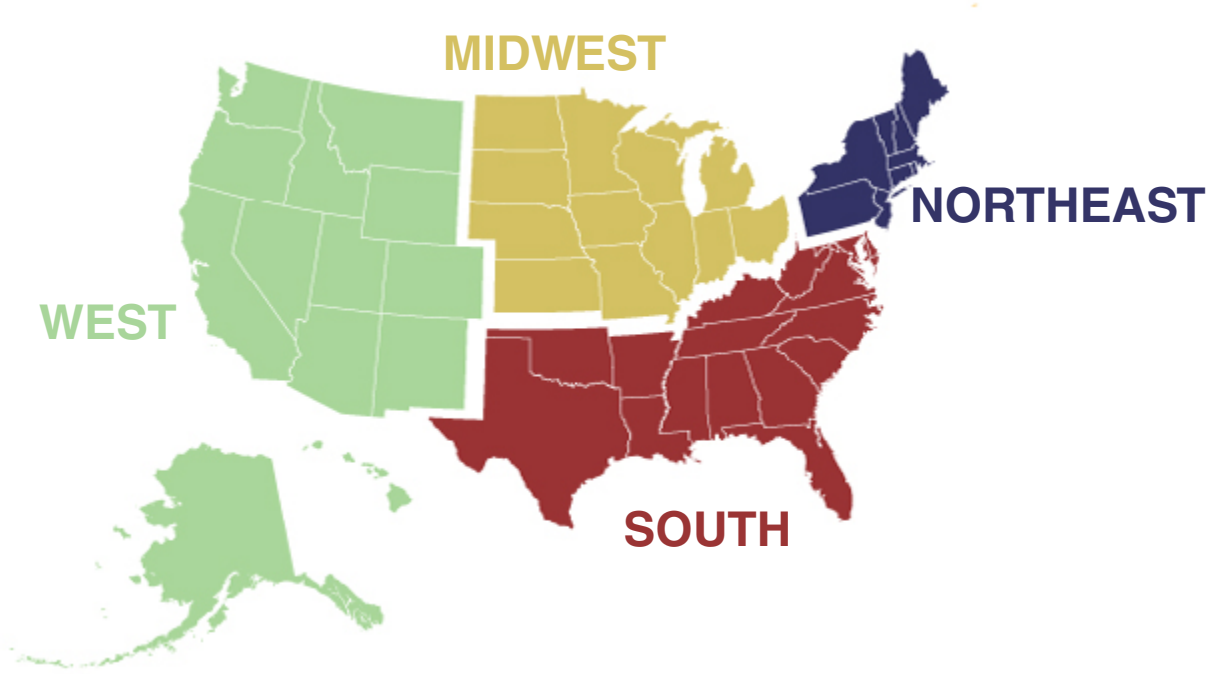


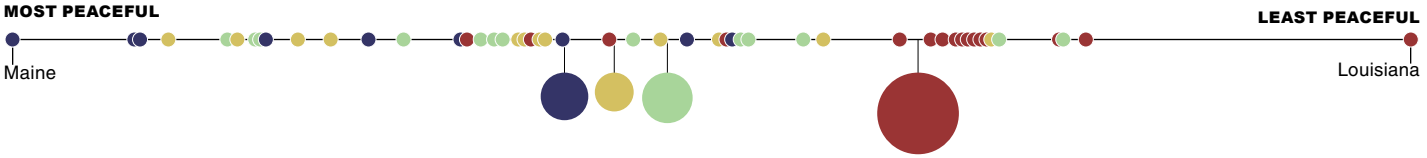
As seen in table 13, Arizona performs reasonably well on some of the correlating factors. It has a relatively low infant mortality rate, and also performs quite well on the social capital index.

Table 13: Arizona's Correlating Factor Scores

FACTOR	SCORE	RANK
% With at least High School Diploma	84%	38
Infant Mortality Rate	5.99	19
Gallup - Basic Access	80.9	33
% Children in Single Parent Families	37%	41
Social Capital Index	0.06	21

REGIONAL ANALYSIS





The Northeast is once again America's most peaceful region according to the 2012 USPI, with the lowest homicide, violent crime, and incarceration rates in the country. The Northeast has the highest police employees rate, however, if New York and New Jersey were factored out then the rate would be below the national average.

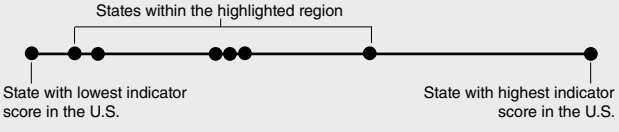
The South is the least peaceful region in the U.S., with the highest overall score and the highest homicide, violent crime, and incarceration rates, as well as the highest prevalence of gun ownership, and the second highest police employees rate. However, the South's average score on all five USPI indicators improved the most, suggesting that the largest gains in peace continue to come in the South, a trend that has been evident over the last twenty years.

Table 14: Regional Scores, 2012 U.S. Peace Index

REGION	USPI SCORE
Northeast	2.01
Midwest	2.32
West	2.43
South	3.06

REGIONAL ANALYSIS: LINE GRAPHS

The dot line graphs in the regional analysis section are designed to show the distribution of a region's scores within the total U.S. score distribution. The first dot is always the most peaceful state, and the last the least peaceful state in the nation for a given indicator. This makes regional distribution patterns easier to see.



WEST

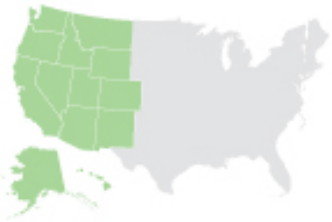
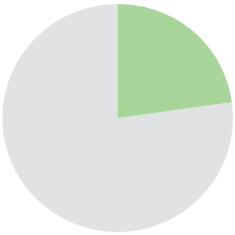


Table 14: 2012 USPI Scores, Western States

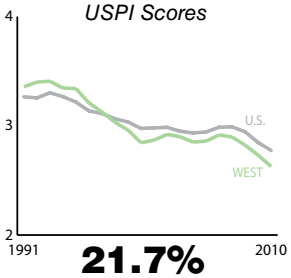
STATE	SCORE	STATE	SCORE
Utah	1.72	California	2.74
Washington	1.78	Alaska	2.75
Hawaii	1.78	New Mexico	2.85
Oregon	2.07	Arizona	3.22
Idaho	2.23	Nevada	3.37
Wyoming	2.26		
Montana	2.27		
Colorado	2.53		

Population
71.9 Million



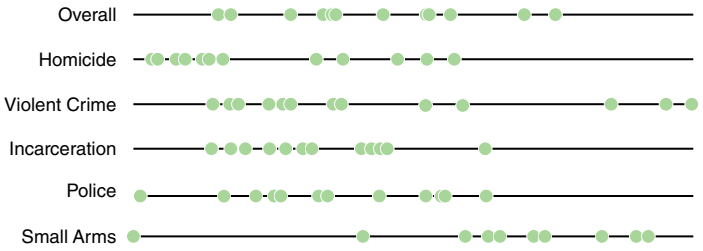
23.3%
of U.S.

Historical USPI Scores



21.7%
increase in peacefulness

SCORE DISTRIBUTION



The West, which comprises 23% of the total U.S. population, is the third most peaceful region in the U.S. It fares best on the homicide indicator, with the second lowest homicide rate of the four regions, as well as the second lowest police employees rate. Utah is once again the most peaceful state in the West, while Nevada remains the least peaceful state. Of all the regions, the West shows the most variance, with three of the top ten states (Utah, Washington, and Hawaii) as well as two of the ten least peaceful states (Nevada and Arizona). Of the 13 states in the West, 11 improved in peacefulness, with only Alaska and Arizona declining in peacefulness.

MIDWEST

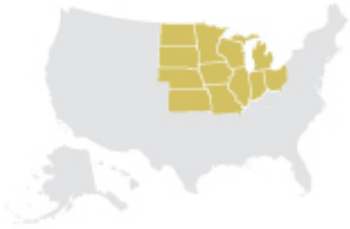
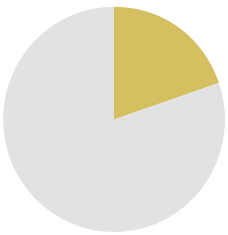


Table 15: 2012 USPI Scores, Midwestern States

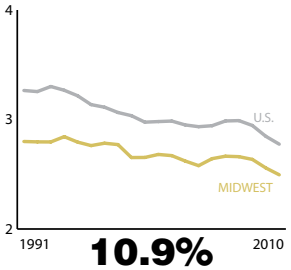
STATE	SCORE	STATE	SCORE
Minnesota	1.61	Kansas	2.57
North Dakota	1.74	Michigan	2.69
Iowa	1.87	Illinois	2.89
Nebraska	1.93	Missouri	3.21
Wisconsin	2.30		
South Dakota	2.32		
Ohio	2.33		
Indiana	2.35		

Population
66.9 Million



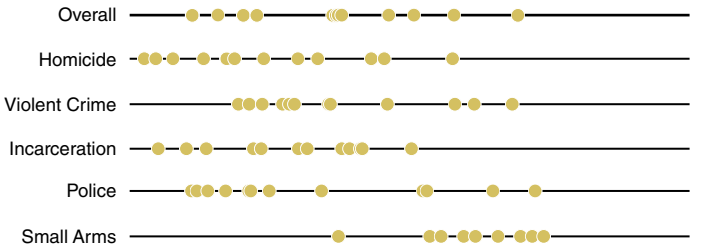
21.7%
of U.S.

Historical USPI Scores



10.9%
increase in peacefulness

SCORE DISTRIBUTION



The Midwest maintained its position as the second most peaceful region in the U.S. It has the lowest police employees rate and the second lowest violent crime rate. Of the 12 Midwestern states, only two are ranked outside of the top 30 (Illinois at 35, and Missouri at 45). While North Dakota continues to prosper, South Dakota's decade-long fall in peacefulness continues, as it drops down six places to 20th on the 2012 USPI. The three most populous regions in the Midwest (Ohio, Illinois, and Michigan) all experienced increases in peacefulness.

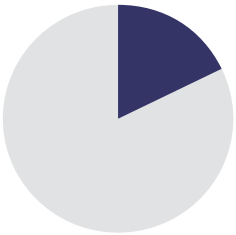
NORTHEAST

Table 16: 2012 USPI Scores, Northeastern States

STATE	SCORE
Maine	1.31
Vermont	1.55
New Hampshire	1.55
Rhode Island	1.79
Massachusetts	2.00
Connecticut	2.19
Pennsylvania	2.37
New Jersey	2.63

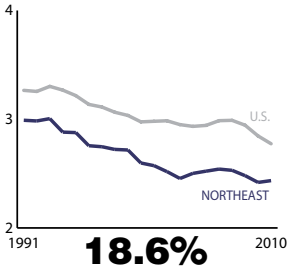
STATE	SCORE
New York	2.72

Population
55.3 Million



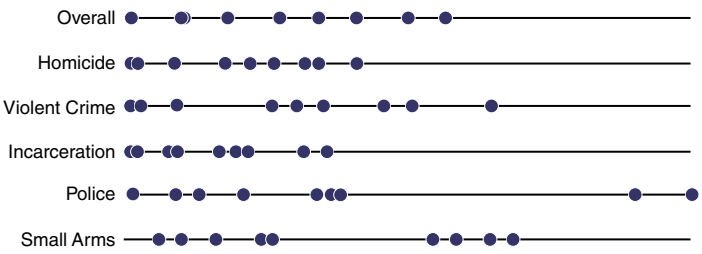
18%
of U.S.

Historical USPI Scores



18.6%
increase in peacefulness

SCORE DISTRIBUTION



The Northeast makes up 18% of the total U.S. population and is both the smallest and most peaceful region in the U.S., with the lowest average score on every indicator other than police employees. There is one Northeastern state outside of the top 30, New York, which is 31st. The three most peaceful states in the U.S. are all from the Northeast (Maine, Vermont, and New Hampshire). However, five of the nine states in the Northeast became less peaceful with Massachusetts having one of the biggest falls of any state. The correlation between population and peacefulness is very strong in the Northeast; the five most peaceful states all have populations smaller than five million.

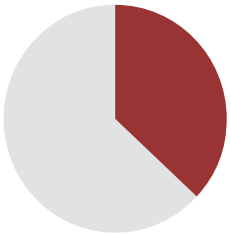
SOUTH

Table 17: 2012 USPI Scores, Southern States

STATE	SCORE
West Virginia	2.20
Kentucky	2.32
Virginia	2.48
North Carolina	2.71
Georgia	3.04
Oklahoma	3.11
Maryland	3.14
Delaware	3.15

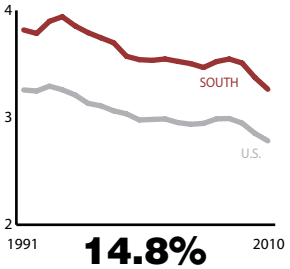
STATE	SCORE
Alabama	3.17
Mississippi	3.17
South Carolina	3.18
Arkansas	3.20
Texas	3.20
Florida	3.36
Tennessee	3.41
Louisiana	4.05

Population
113.9 Million



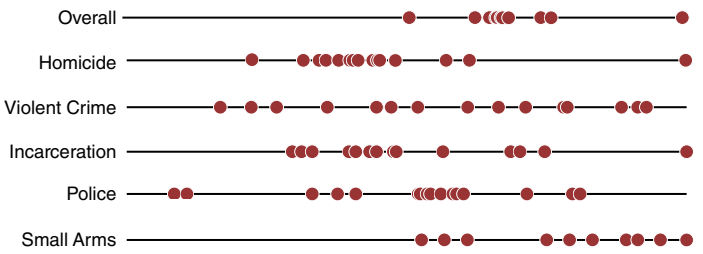
37%
of U.S.

Historical USPI Scores



14.8%
increase in peacefulness

SCORE DISTRIBUTION



The South is America's most populous region and also the least peaceful, with 37% of the population, 43.3% of the total homicides, 41.2% of the total violent crime, and just under half of the entire state prison population serving more than one year in prison. Only two Southern states are in the top half of the peaceful rankings: West Virginia is 15th and Kentucky is ranked 21st. Of the ten least peaceful states, seven are in the South, and twelve of the 16 Southern states are ranked 35th or worse. However, there has been a notable rise in peacefulness in the Southern states in recent years. Thirteen out of 16 Southern states increased their peacefulness in 2010, and every state other than West Virginia reduced its violent crime rate.

THE 2012 METROPOLITAN PEACE INDEX

RESULTS

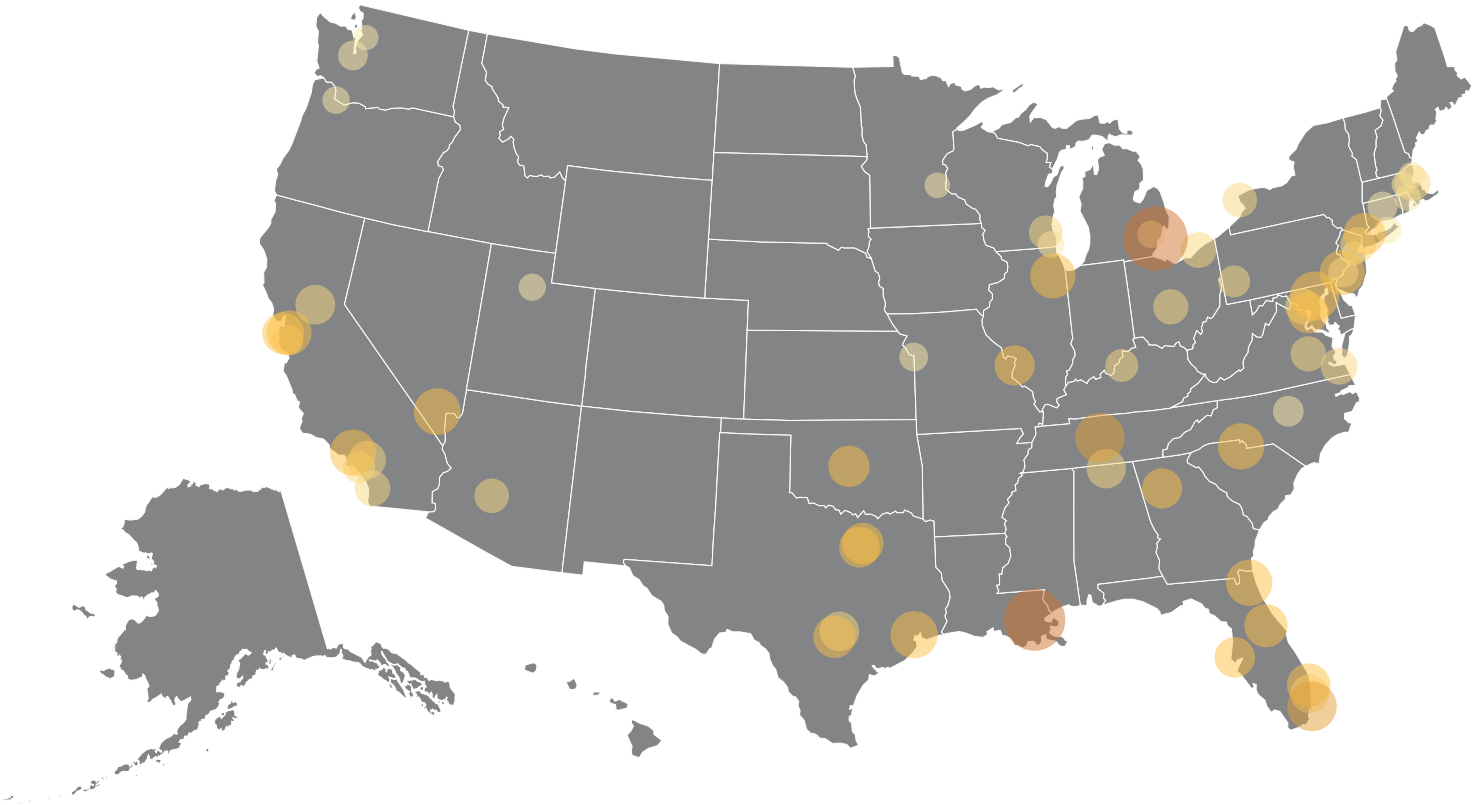


Table 18: Metropolitan Peace Index Results

		OVERALL SCORE	HOMICIDE	VIOLENT CRIME	INCARCERATION	POLICE EMPLOYEES
1	Cambridge-Newton-Framingham, MA	1.41	1.01	1.62	1.00	2.08
2	Edison-New Brunswick- NJ	1.41	1.09	1.00	1.74	2.07
3	Seattle-Bellevue-Everett, WA	1.48	1.09	1.50	1.66	1.78
4	Minneapolis-St. Paul-Bloomington, MN-WI	1.51	1.23	1.65	1.22	1.97
5	Peabody, MA	1.54	1.33	1.92	1.00	1.84
6	Providence-New Bedford-Fall River RI-MA	1.57	1.12	1.75	1.17	2.32
7	Lake County-Kenosha County, IL-WI	1.57	1.00	1.21	2.24	2.14
8	Nassau-Suffolk, NY	1.58	1.33	1.04	1.77	2.45
9	Salt Lake City, UT	1.61	1.26	1.85	1.52	1.86
10	Portland-Vancouver-Hillsboro, OR-WA	1.61	1.12	1.55	2.08	1.89
11	Warren-Troy-Farmington Hills, MI	1.63	1.13	1.35	2.64	1.65
12	Tacoma, WA	1.76	1.42	2.41	1.66	1.46
13	Hartford-West Hartford-East Hartford, CT	1.77	1.57	1.45	2.23	1.99
14	Camden, NJ	1.78	1.61	1.81	1.74	2.01
15	Raleigh-Cary, NC	1.81	1.51	1.42	2.22	2.32
16	San Jose-Sunnyvale-Santa Clara, CA	1.83	1.03	1.57	2.61	2.45
17	Pittsburgh, PA	1.89	1.76	1.50	2.39	2.06
18	Santa Ana-Anaheim-Irvine, CA	1.90	1.20	1.40	2.61	2.81
19	Cincinnati-Middletown, OH-KY-IN	1.94	1.61	1.77	2.66	1.89
20	Phoenix-Mesa-Glendale, AZ	2.05	1.85	1.94	3.50	1.00

Table 18: Metropolitan Peace Index Results (cont.)

		OVERALL SCORE	HOMICIDE	VIOLENT CRIME	INCARCERATION	POLICE EMPLOYEES
21	Buffalo-Niagara Falls, NY	2.06	1.98	2.40	1.77	1.98
22	Richmond, VA	2.08	2.17	1.44	2.76	2.15
23	Columbus, OH	2.09	1.90	1.90	2.65	2.05
24	Newark-Union, NJ-PA	2.11	2.18	1.96	1.75	2.60
25	Bethesda-Frederick-Gaithersburg, MD	2.12	1.07	3.21	2.30	1.89
26	San Diego-Carlsbad-San Marcos, CA	2.12	1.19	2.14	2.61	2.86
27	Milwaukee-Waukesha-West Allise, WI	2.13	2.10	2.38	2.19	1.78
28	Cleveland-Elyria-Mentor, OH	2.13	1.90	2.04	2.65	2.05
29	Boston-Quincy, MA	2.15	1.98	2.85	1.00	2.58
30	Virginia Beach-Norfolk-Newport, VA-NC	2.17	2.15	1.80	2.75	2.14
31	Riverside-San Bernardino-Ontario, CA	2.26	1.68	2.12	2.61	2.86
32	Fort Lauderdale-Pompano Beach, FL	2.32	1.49	2.50	3.24	2.25
33	Birmingham-Hoover, AL	2.34	1.67	1.66	3.73	2.76
34	Austin-Round Rock-San Marcos, TX	2.35	1.47	1.79	3.80	2.82
35	Sacramento-Arden Arcade-Roseville, CA	2.36	1.62	2.56	2.61	2.86
36	Atlanta-Sandy Springs-Marietta, GA	2.39	1.99	2.18	2.89	2.72
37	St. Louis, MO-IL	2.40	2.32	2.05	2.81	2.53
38	Tampa-St. Petersburg-Clearwater, FL	2.42	1.63	2.53	3.24	2.50
39	Fort Worth-Arlington, TX	2.42	1.51	2.09	3.80	2.69
40	Washington-Arlington-Alexandria, DC-VA-MD-WV	2.43	2.04	2.15	3.30	2.46
41	Dallas-Plano-Irving, TX	2.45	1.77	1.88	3.80	2.76
42	Oklahoma City, OK	2.47	1.94	2.75	3.79	1.46
43	San Francisco-San Mateo-Redwood City, CA	2.48	1.59	2.47	2.61	3.57
44	New York-White Plains-Wayne, NY-NJ	2.50	1.89	2.53	1.77	4.00
45	San Antonio-New Braunfels, TX	2.51	1.69	2.33	3.80	2.54
46	Kansas City, MO-KS	2.51	2.55	2.40	2.55	2.56
47	Orlando-Kissimmee-Sanford, FL	2.58	1.75	3.03	3.24	2.41
48	West Palm Beach-Boca Raton-Boynton Beach, FL	2.59	2.06	2.66	3.24	2.57
49	Oakland-Fremont-Hayward, CA	2.67	2.36	2.98	2.61	2.72
50	Nashville-Davidson-Murfreesboro-Franklin, TN	2.69	1.95	3.14	2.56	3.19
51	Philadelphia, PA	2.69	2.69	3.01	2.39	2.55
52	Chicago-Naperville-Joliet, IL	2.70	2.36	2.78	2.25	3.47
53	Charlotte-Gastonia-Rock Hill, NC-SC	2.75	1.76	2.39	2.31	5.00
54	Los Angeles-Long Beach-Glendale, CA	2.75	2.06	2.78	2.61	3.78
55	Jacksonville, FL	2.75	2.25	2.78	3.24	2.91
56	Las Vegas-Paradise NV	2.79	2.18	3.83	2.74	2.28
57	Houston–Sugar Land–Baytown, TX	2.82	2.27	3.08	3.80	2.23
58	Baltimore-Towson, MD	2.93	2.90	3.33	2.30	3.06
59	Miami-Miami Beach-Kendal, FL	2.97	2.63	3.60	3.24	2.31
60	New Orleans-Metairie-Kenner, LA	3.70	5.00	2.40	5.00	2.38
61	Detroit-Livonia-Dearborn, MI	3.87	4.52	5.00	2.64	2.74

PEACE AT THE METROPOLITAN LEVEL

The Metropolitan Peace Index is a new addition to this year's report. The goal of this index is to provide a more localized view of peace within the U.S. and to determine whether the same conditions that are associated with peace for the nation and the states also apply to cities. The Metropolitan Peace Index measures 61 metropolises using a similar methodology as the U.S. Peace Index. Through isolating metropolitan areas which do not conform to the peacefulness of the states in which they reside, a better understanding of the factors that are associated with peace can be obtained. The terms 'cities' and 'Metropolitan Statistical Areas' are used interchangeably for the sake of brevity.

METHODOLOGY

The 2012 Metropolitan Peace Index ranks the 61 largest Metropolitan Statistical Areas (MSAs) and Metropolitan Divisions (MDs) by their peacefulness. It uses four of the five indicators from the USPI; 'the availability of small arms' was excluded as suitable data on suicides by firearms is not available at the MSA level. Incarceration data has been imputed from state incarceration rates unless an MSA spanned more than one state, in which case a weighted average was applied.

What is an MSA?

MSAs are geographical entities defined by the Office of Management and Budget (OMB) that have a core urban area of 50,000 inhabitants or more. MSAs are typically centered on a county (or counties) which contains the urban centers ('the city' center) and include the adjacent counties which have a 'high degree of social and economic integration with the urban core.' The primary method for determining social and economic integration is by measuring 'commuting to work'. MSAs are used for statistical purposes only – they are not administrative, legal or sovereign regions.

What is an MD?

MSAs which are judged large enough are sub-divided into MDs. Currently, there are eleven MSAs which have been sub-divided into two to four MDs. MSAs which have been broken up into MDs are usually populous urban centers which span two or more distinct city/urban centers. For instance, the San Francisco-Oakland-Fremont, California MSA is split into two: the Oakland-Fremont-Hayward, California MD and the San Francisco-San Mateo-Redwood City, California MD.

Why not use 'City' level data?

A city is a geographical and administrative subdivision of a state and has a distinct boundary. Notwithstanding the varying legal definitions of a city in each state , it typically only includes areas which would be considered to be the 'city center' or the central business district and therefore do not meet the common understanding of where the city starts and stops. Although there is no precise single definition of a 'City' there are some features which are commonly identified:

- Permanent settlement.
- Large population and high population density.
- Complex systems (sanitation, transportation, utilities, etc.).
- Concentration of activity (economic, cultural/social, etc.).

Thus crucially, 'City' data would leave out adjacent and contiguous areas which would generally be considered to be a part of the city proper – the greater urban and suburban areas. It is more useful to talk about the city proper in terms of sprawl since it has no firm boundary/ border and can grow or decline. For example, the official 'City' of New York includes Manhattan but excludes the other four boroughs of New York: Bronx, Brooklyn, Queens and Staten Island. Thus, the 'City' of New York cannot be said to actually represent New York City proper.

MSAs are useful in capturing the geographical area which includes the city and its associated urban sprawl which forms a single metropolis. Moreover, there are large metro areas where 'separate' cities are integrated geographically, socially and economically, thereby forming a single contiguous entity like Minneapolis-St. Paul ('The Twin Cities'). In such cases using the MSA, which includes both areas, is not only more appropriate, but is likely to resonate with the actual residents who view it as a single, contiguous entity.

Notes on the Data

The 2012 Metropolitan Peace Index was compiled by aggregating county-level data from each relevant state's Uniform Crime Report (UCR). The reader should note that this data is also accessible in the FBI's 2010 UCR which collates nation-wide crime data for its *Crime in the U.S.* publications.

However, a critical issue with the data available through the FBI is that it is often unavailable for a large number of counties or demonstrably under-reported. Despite this, given that the state UCRs follow FBI data guidelines and are more comprehensive they proved to be a more reliable data source. For links and comments on specific states, please refer to Appendix C.

Population

Population figures were obtained from the U.S. Census 2010. Due to the number of MSAs, and the disparity in size between the larger metro areas compared to the smaller ones, only MSAs with a population of a million inhabitants or more were chosen.

Indicators and Weights

Reliable small arms data was not available at the MSA level, so this indicator had to be excluded from the index. All the other indicators have the same weights as their counterparts in the 2012 USPI.

PEACEFUL CITIES IN VIOLENT STATES

While the state of New Jersey performs quite modestly in the USPI state rankings (28), it is curious that two of its MSAs perform quite well: Edison-New Brunswick (2) and Camden (14). Intuitively, one would expect the more violent states to have more violent cities since the majority of the population is concentrated in city and urban areas.

Conversely, we would expect the more peaceful states to have more peaceful cities. This intuition, while not obviously false, can be misleading. The USPI aggregates data at the state level producing what is essentially the state average. Due to the properties of averages, variations in the data are 'dampened'. However, such dampening does not occur at the city level. For instance, California (32) occupies the lower-middle rank, but has eight metro areas which differ vastly: Los Angeles-Long Beach-Glendale and Santa Ana-Anaheim-Irvine sit adjacent to each other but occupy opposite ends of the USPI Metro ranks.

If we account for the other six metro areas, we observe a 'spectrum' in terms of violence in California from the relatively peaceful to the relatively violent. Similarly, this case also applies to New Jersey. Edison-New Brunswick has a relatively high median household income along with low levels of unemployment compared to other parts of New Jersey and the U.S. as a whole. Moreover, violent crime accounts for only 7.8% of the total number of crimes while the figure for Newark-Union is 16.7% even though they have an almost identical number of crime incidents.

The Camden MSA scores relatively well but this is due to the fact that the MSA also includes Burlington and Gloucester counties which have relatively low levels of crime, and low portion of violent crime. Even within an MSA, there can be substantial variation in crime, both violent and non-violent, in areas which are only kilometres apart.

Although the metro provides a deeper level of granularity than state based data there are still MSAs that have large variations in their peacefulness. Further research on spatial variations between areas within MSAs could highlight these differences.

METROPOLITAN PEACE GAP

Cambridge-Newton-Framingham and Detroit-Livonia-Dearborn occupy the first and last place in the USPI Metropolitan Peace Index, respectively. Both metro areas are MDs consisting of a single county. Although they have approximately the same population, there are clearly large differences in their indicator scores, and on a host of secondary factors.

Table 19: Most and Least Peaceful Cities

INDICATOR	Cambridge-Newton-Framingham, MA	Detroit-Livonia-Dearborn, MI
Population	1,503,085	1,820,584
Police Rate (per 100,000)	246	341
Violent Crime Rate (per 100,000)	293	1,043
Homicide Rate (per 100,000)	1	18
Less than High school Graduate	10%	23%
% With a Disability	8%	16%
Unemployment Rate	6%	13%
% Not in Labor Force	30%	41%
% Food Stamp/SNAP Benefits	6%	24%
Per Capita Income	$39,194	$20,948
Median Family Income	$95,008	$49,176

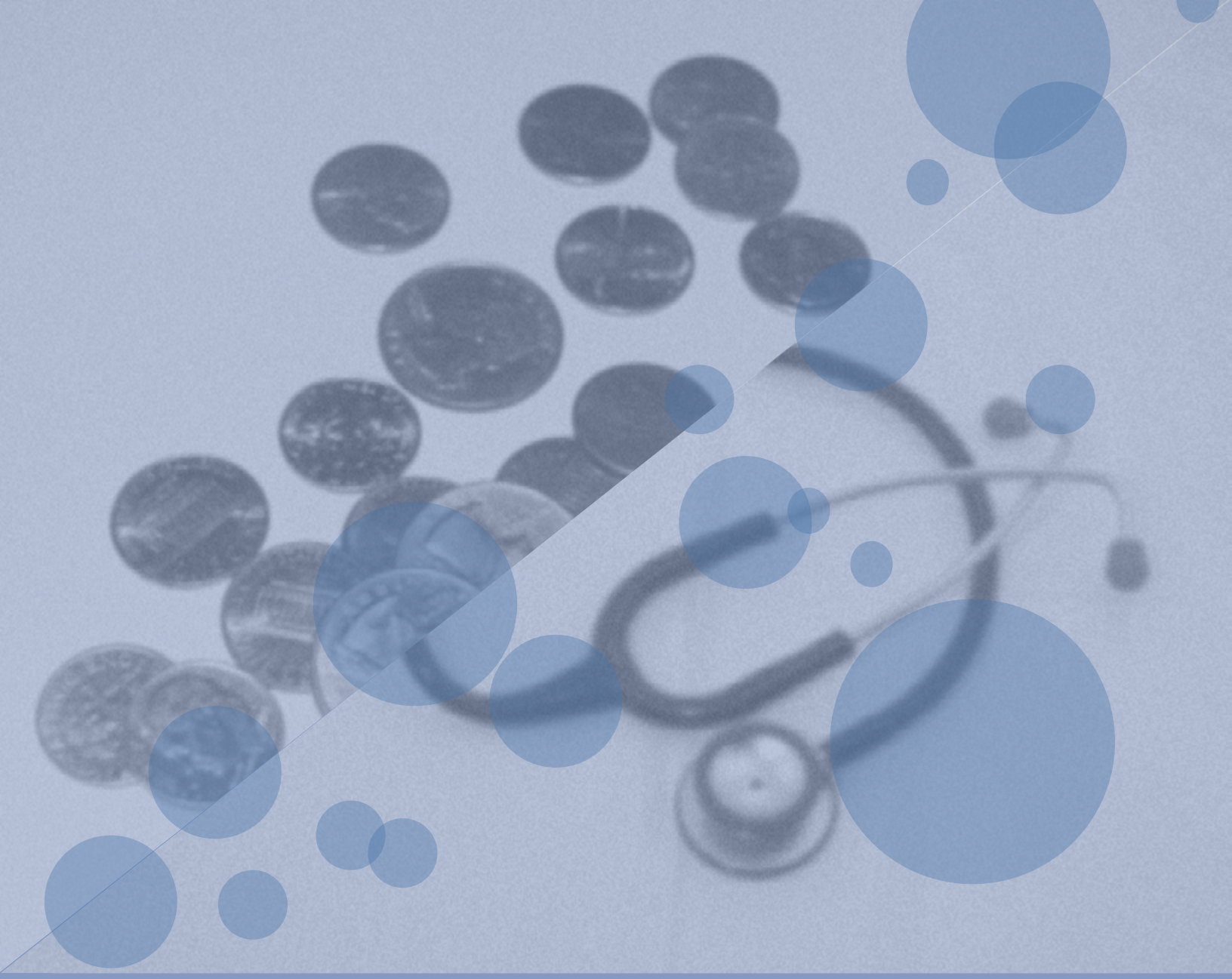
CITY CORRELATIONS

Due to the lack of data at either the metropolitan or county level only a limited number of correlations could be carried out. Moreover, if MSA data was available, it often did not include MDs. Thus, unlike the USPI, this paucity of data makes it difficult to undertake a detailed statistical analysis of what correlates with peace at the city level.

There were several data sets which could be described as having weak to moderate correlation with the Metropolitan Peace Index with the absolute value of the correlation coefficient ranging between 0.15 and 0.5. These include the percentage of the population that are uninsured (0.345), the percentage of the population on food stamps (0.327) and the percentage of the workforce in the 'creative class' (-0.393). The percentage of the population which was below the poverty line correlated the strongest at 0.585 suggesting a link between poverty and violence.

Table 20: Metropolitan Peace Index Correlations

FACTOR	R
Unemployment Rate	0.426
% Uninsured	0.345
% Below Poverty Level	**0.585**
% of Population on Food Stamps/SNAP	0.327
Gini Coefficient	0.433
Mean Income	-0.278
% with Diabetes	0.408
Percentage of Workforce in Creative Class	-0.393



CORRELATES OF PEACE

STATE LEVEL CORRELATES

What environments are associated with peacefulness at the state level?

To further understand what types of environments are associated with peace, IEP has correlated over 40 secondary datasets against the 2012 USPI. These factors have been arranged in five groups: education, health, economic opportunity, civics & demographics, and community & social capital.

The correlation coefficient (R) measures the strength of the relationship between two factors. An R score of 1 would mean that a perfect linear correlation exists between two factors, while a score of zero would suggest that there was no relationship at all between the two factors. Table 21 shows the correlation between the 2012 USPI and a number of other datasets. Because the USPI is scored from 1 to 5, where 1 is more peaceful, a strong positive correlation suggests that as peace increases, the secondary factor decreases, and vice versa. Conversely, a strong negative correlation suggests that as peace increases, the secondary factor increases also, and vice versa.

IEP considers a correlation of more than 0.5 or less than -0.5 to be significant. These correlations have been highlighted in bold in table 21. Of the 42 datasets correlated against the USPI, 20 pass this significance threshold. It should be stressed that a strong correlation does not necessarily imply a causal relationship in either direction.

The single strongest correlation was with the percentage of children living in single parent families (r= -.78), followed by Gallup's 'Basic Access' measure (r = .73) and Robert Putnam's comprehensive social capital index II (r = .72).

Gallup's 'Basic Access' measure is a survey that measures whether or not state residents feel they have access to 13 basic services such as clean water, health insurance, affordable fruits and vegetables etc. The Comprehensive Social Capital Index measures the strength of communal ties within a state, by looking at such measures as times volunteered, civic engagement, and whether residents feel that other residents can be trusted. For more information about the secondary datasets, please see Appendix A.

Table 21: USPI Correlating Factors

FACTOR	R
EDUCATION	
% With at least High School Diploma (2009)	**-0.61**
High School Graduation Rate (2008)	**-0.60**
% Bachelor's Degree or higher (2010)	0.14
Average annual Teacher Salary (2010)	0.10
Educational Opportunities (2009)	**0.52**
Average per Pupil Spending (2010)	-0.09
HEALTH	
% Without Health Insurance (2008-2009)	**0.50**
% With Diabetes (2008)	**0.53**
Life Expectancy at Birth (2010)	**-0.60**
Adult Obesity Rate (2009)	0.28
Teenage Pregnancy Rate (per 1,000) (2009)	**0.64**
Infant Mortality Rate (2009)	**0.63**
Perception of Wellbeing (2009)	-0.28
Teenage Death Rate (2007)	**0.59**
ECONOMIC OPPORTUNITY	
Tax Revenue per capita (2010)	-0.29
Household Gini Coefficient (2010)	**0.62**
% Households (Families) in Poverty (2010)	**0.61**
Gallup State of the States - Basic Access (2009)	**-0.73**
Unemployment Rate (2010)	0.39
Labor Force Participation Rate (2009)	**-0.53**
GDP per capita by state (2010)	0.35
Median Income (2008-2009)	-0.32
% Food stamp/SNAP recipiency (2010)	0.28
American Human Development Index (2010)	-0.23
CIVICS & DEMOGRAPHICS	
% Children in Single Parent Families (2009)	**0.78**
2008 Election (% Voted Republican)	0.00
2008 Election (% Voted Democrat)	0.03
2008 Election (Voter Turnout)	-0.40
% Identify as Conservative (2009)	0.04
% Identify as Moderate (2009)	-0.03
% Identify as Liberal (2009)	-0.03
Campaign Finance (2009)	-0.07
Government Management (2009)	-0.18
% Individuals with Home Internet Access (2009)	-0.48
Armed Forces Participation Rate (2009)	-0.02
% of Children with Immigrant Parents (2005-2006)	0.15
COMMUNITY & SOCIAL CAPITAL	
Comprehensive Social Capital Index II (2000)	**-0.72**
LifeStyle: Times Volunteered Last Year	**-0.54**
Roper: % Attended Meeting on Town or School Affairs	**-0.57**
GSS: Mean Number of Group Memberships	**-0.50**
GSS: "Most people can be trusted"	**-0.69**
Civic and Social Organizations per 1000 pop, (1977-1992)	**-0.61**

Chart 12: USPI vs % High School Diploma Holders

R = -0.61

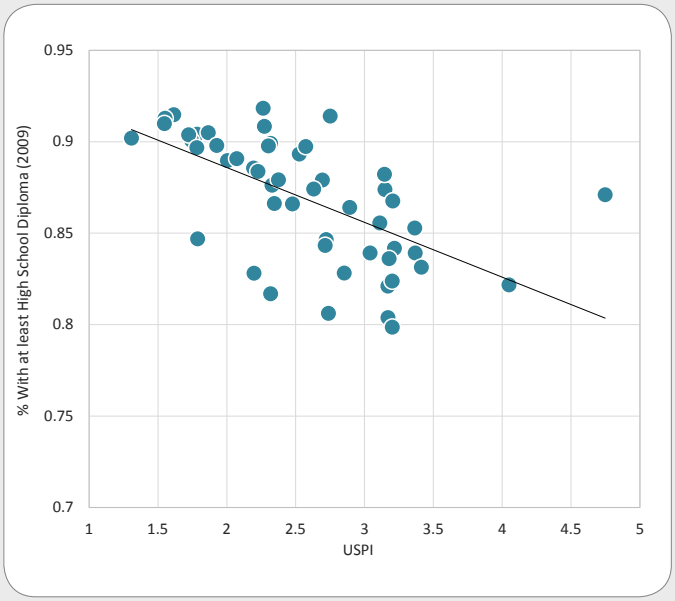


Chart 13: USPI vs Educational Opportunities

R = 0.52

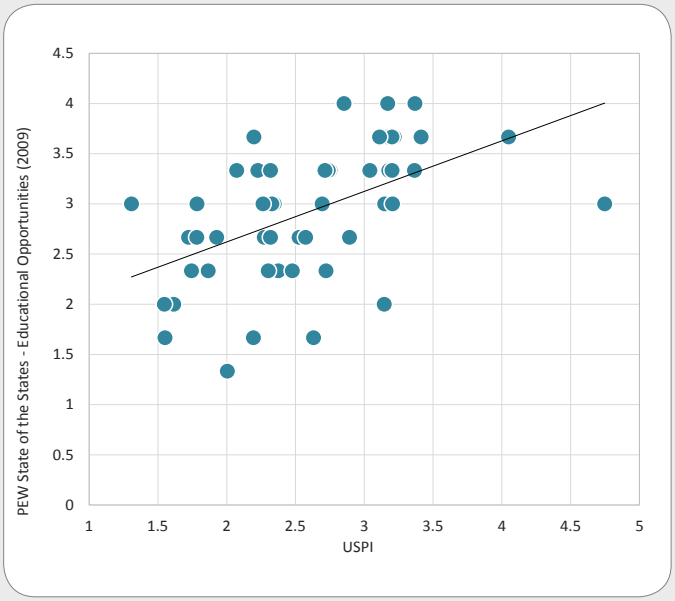


Chart 14: USPI vs Average Teacher Salary

R = 0.10

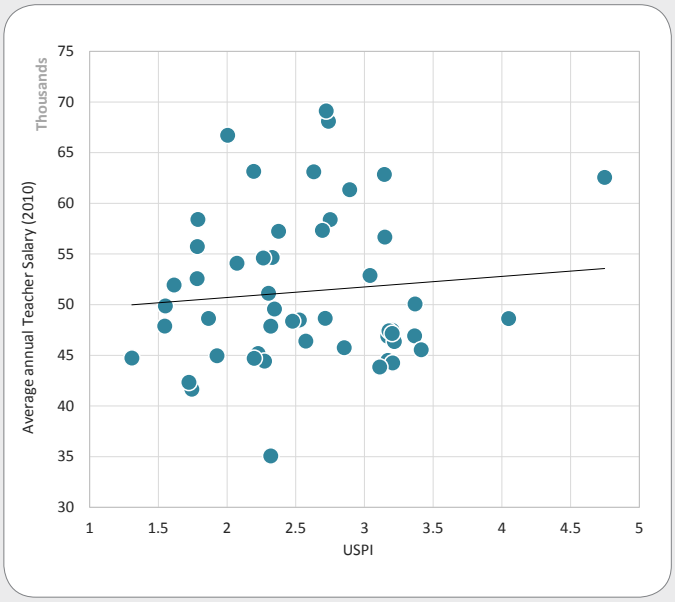
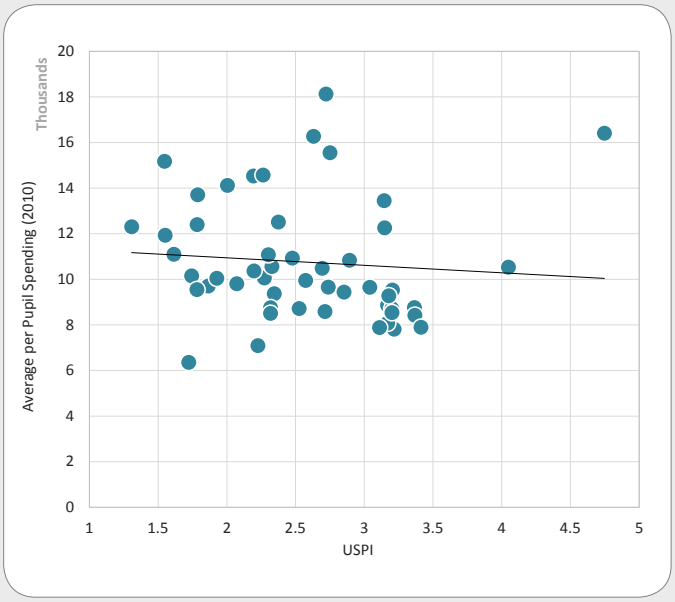


Chart 15: USPI vs Average Per Pupil Spending

R = -0.09



EDUCATION

While there are some strong links between education and peace, not every measure of educational performance correlates with the USPI. Completing high school has a significant relation to peace, with both high school diploma holders and the high school graduation rate showing strong correlations to the USPI. However, average annual teacher salary and average per pupil spending did not correlate, suggesting that increased educational funding would not automatically result in increased peacefulness. These findings are borne out by an analysis of the GPI where educational spending as a percentage of GDP did not correlate significantly with the GPI, while secondary graduation rates did show a meaningful correlation.

Pew's 'Educational Opportunities' measure also correlated with the USPI above the significance threshold. This dataset includes indicators from preschool, schooling up until the end of high school, and also post school outcomes, which suggests that a successful and comprehensive schooling system is associated with peacefulness.

Chart 16: USPI vs Life Expectancy

R = -0.60

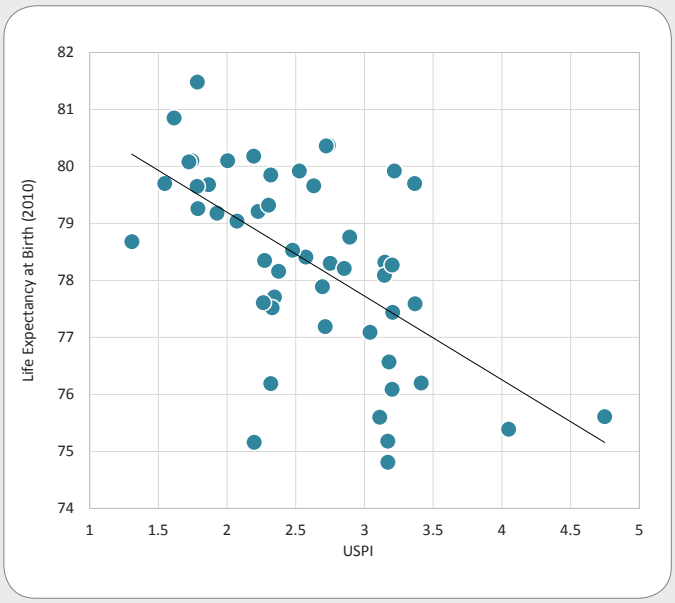


Chart 17: USPI vs Teenage Pregnancy Rate

R = 0.64

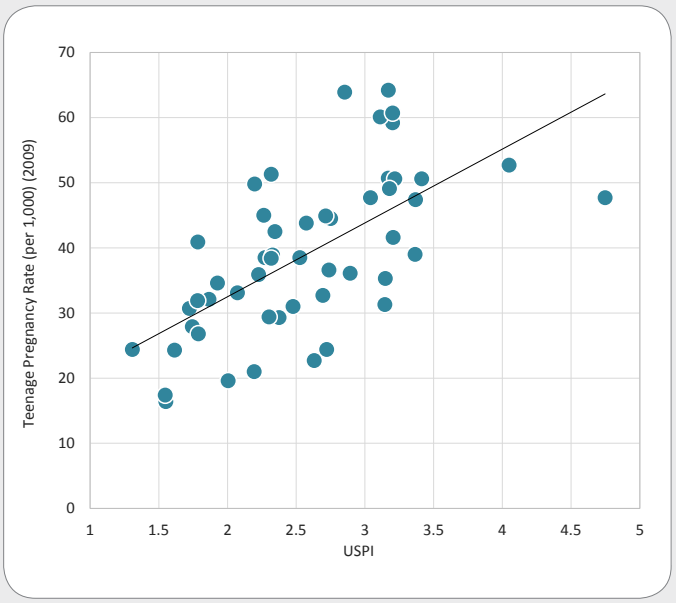


Chart 18: USPI vs % Without Health Insurance

R = 0.50

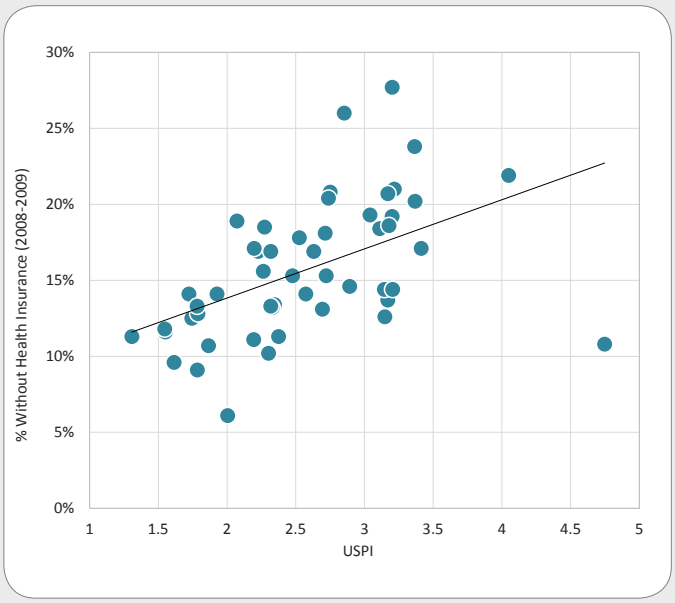
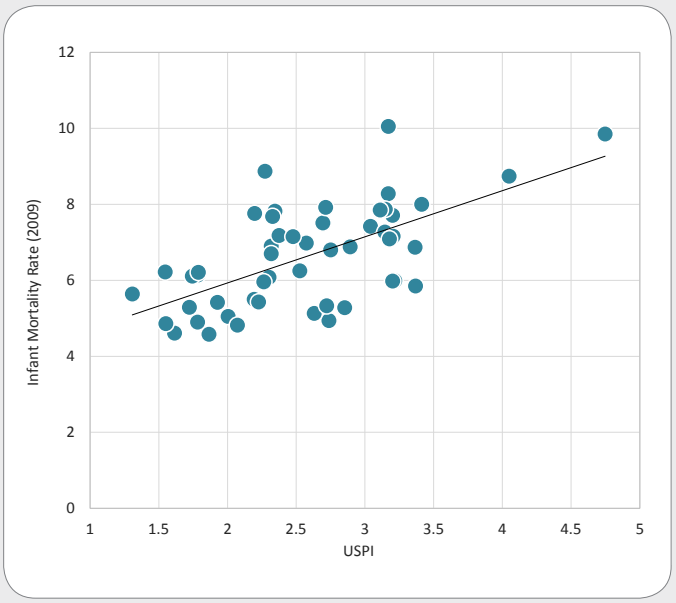


Chart 19: USPI vs Infant Mortality Rate

R = 0.63



HEALTH

There is a clear association between most health factors and peacefulness. Two factors that are strongly correlated with peace are the teenage pregnancy rate and the infant mortality rate. This relationship is mirrored at the national level, as the Global Peace Index also correlates strongly with infant mortality.

There is also a strong relationship between peacefulness and life expectancy. In this case the direction of the relationship is fairly clear, as increased violence, in particular a high homicide rate, would clearly reduce the average life expectancy of a state. However, most states are tightly clustered between an average life expectancy of 77 and 80, which suggests that the size of this effect is not large.

Finally, there is a fairly significant relationship between peacefulness and the percentage of people without health insurance. Not one of the 10 most peaceful states has more than 15% of citizens without health insurance.

Chart 20: USPI vs Economic Inequality

R = 0.62

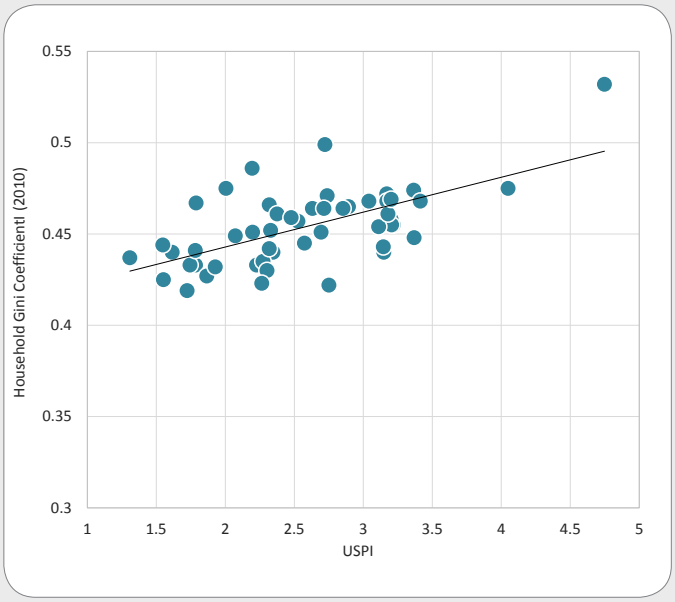


Chart 21: USPI vs Access to Basic Services

R = -0.73

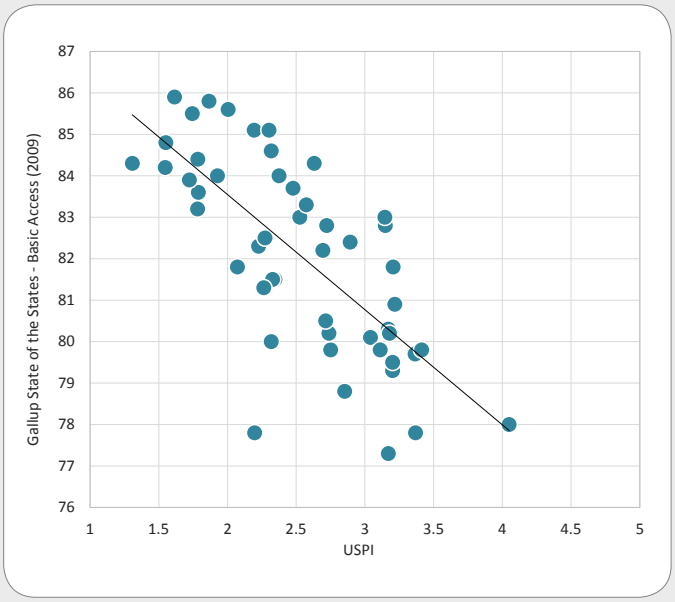


Chart 22: USPI vs % of Families in Poverty

R = 0.61

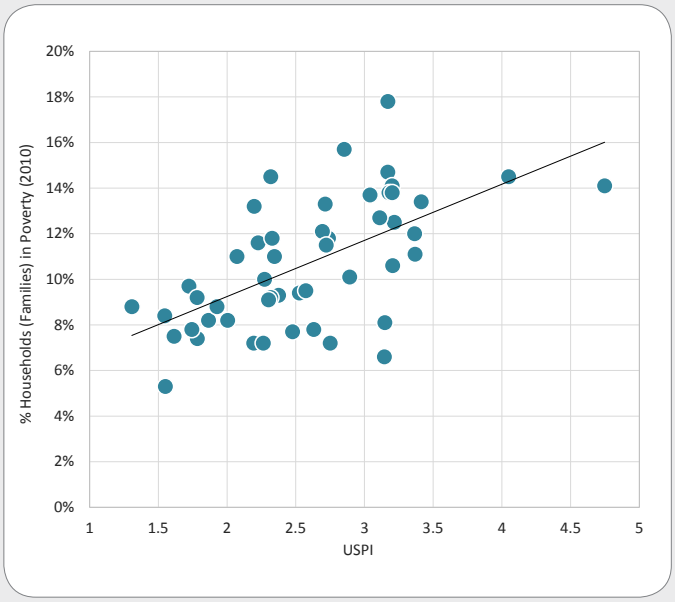
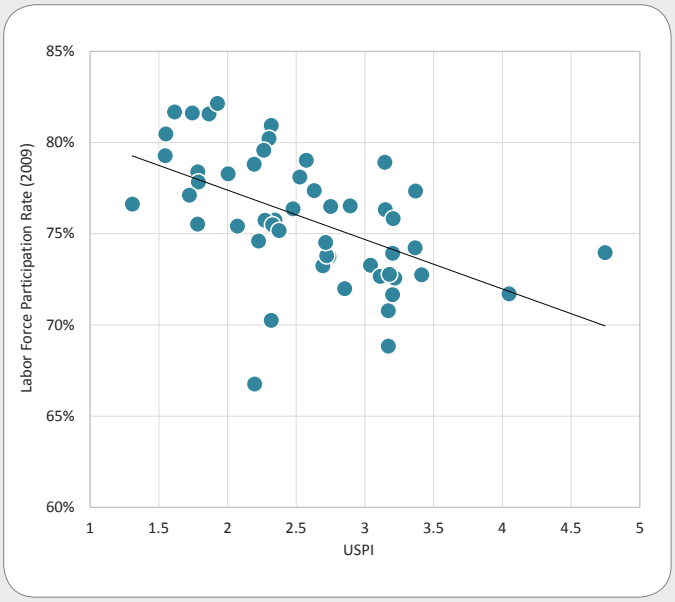


Chart 23: USPI vs Labor Force Participation Rate

R = -0.53



ECONOMIC OPPORTUNITY

Economic opportunity has a strong association with peace. Both absolute and relative measures of economic opportunity are significantly associated with peace, as the percentage of families living in poverty, as well as the household Gini coefficient (a measure of income inequality) correlate significantly with the USPI. Only one of the ten most peaceful states has a Gini coefficient higher than .45, and none of the ten most peaceful states has more than 10% of families living in poverty.

As mentioned previously, the Gallup 'Basic Access' measure correlates very strongly with the USPI. People in more peaceful states tend to have the perception that they have better access to a number of basic services.

Finally, there is also a moderately significant relationship between the labor force participation rate (the percentage of residents who are working or actively seeking work) and peacefulness. Only two of the twenty most peaceful states have a labor force participation rate less than 75%.

Chart 24: % Children in Single Parent Families
R = 0.78

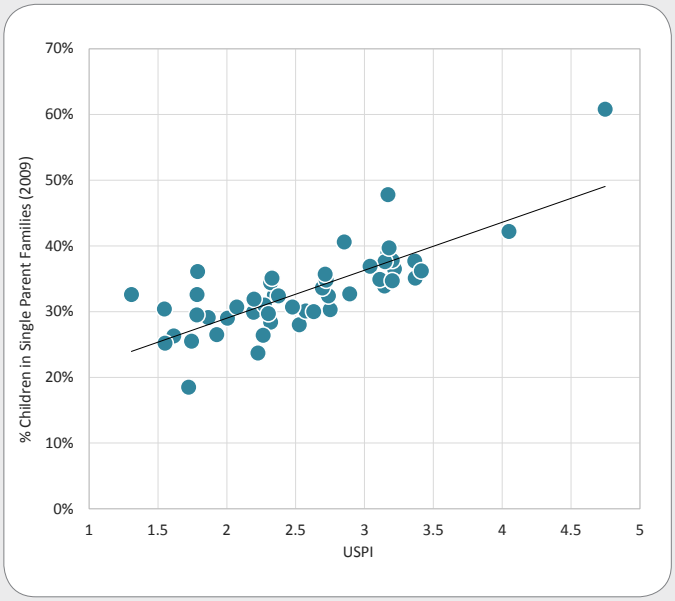


Chart 25: USPI vs Voter Turnout (2008 Presidential Election)
R = -0.40

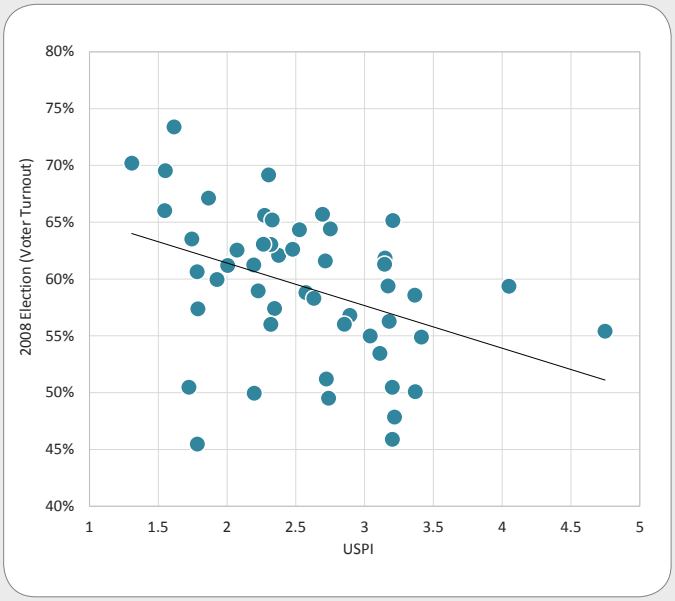


Chart 26: % Individuals with Home Internet Access
R = -0.48

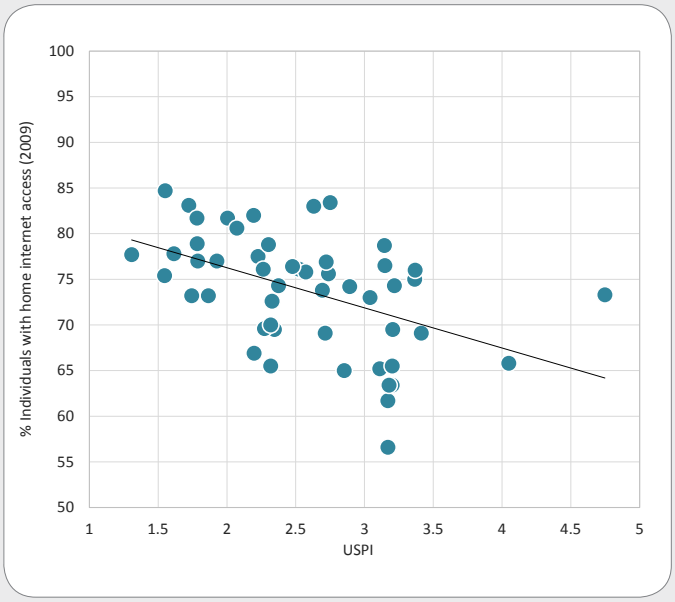
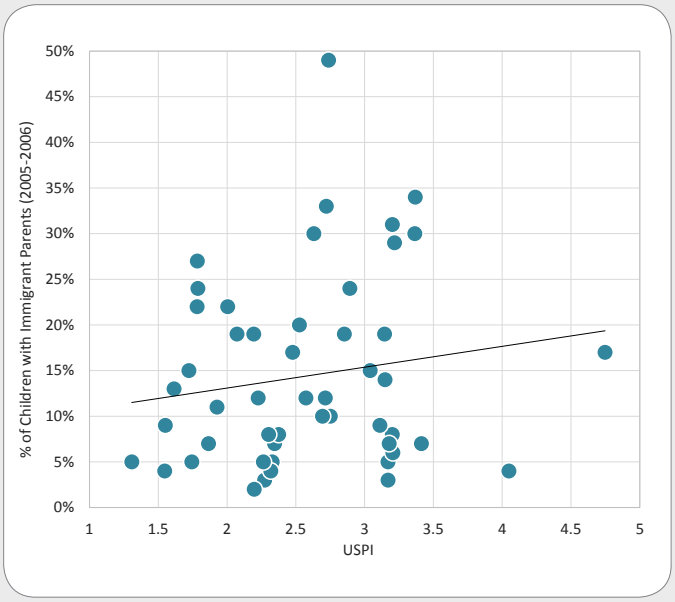


Chart 27: USPI vs % Children with Immigrant Parents
R = 0.15



CIVICS & DEMOGRAPHICS

A number of secondary factors in the civics and demographics category correlate strongly with the USPI. The strongest overall correlation with the 2012 USPI is the percentage of children in single parent families (although curiously the most peaceful state, Maine, is something of an outlier in this relationship).

While the correlation between voter turnout and the USPI does not pass IEP's significance threshold, there is still a clear relationship in existence between these two factors. However, it doesn't seem to hold for states with low voter turnout, as there are a number of peaceful states with less than 50% voter turnout. The relationship is clear for those states with voter turnout between 55% and 75%.

There appears to be only a slight relationship between the percentage of children with at least one immigrant parent and peacefulness. The states with the highest percentage on this factor tend to be clustered in the middle ranking on the USPI.

Chart 28: USPI vs Social Capital Index

R = -0.72

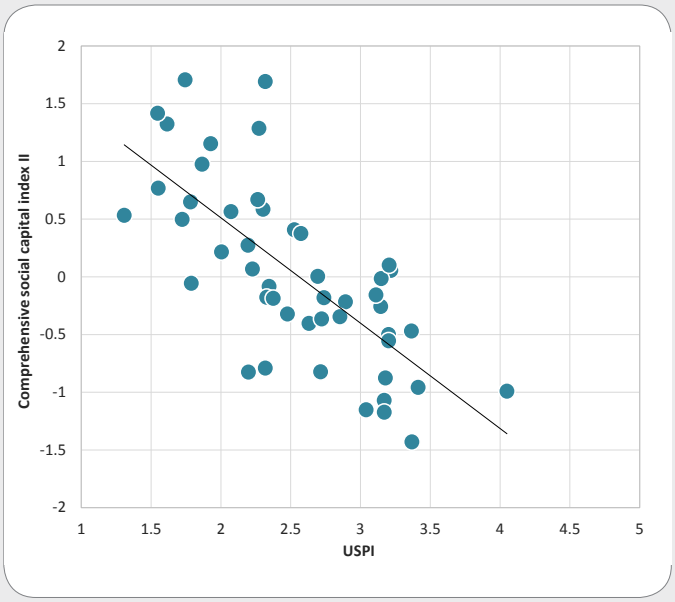


Chart 29: USPI vs Volunteerism

R = -0.54

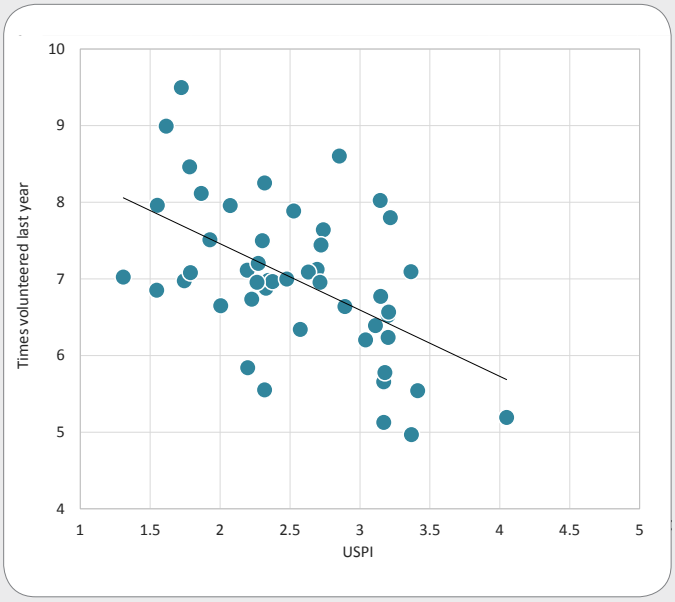


Chart 30: USPI vs Perception of Trust

R = -0.69

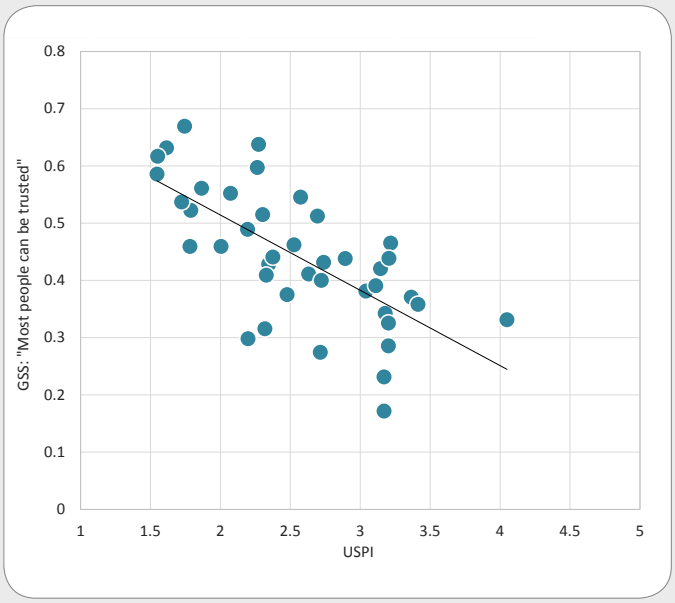
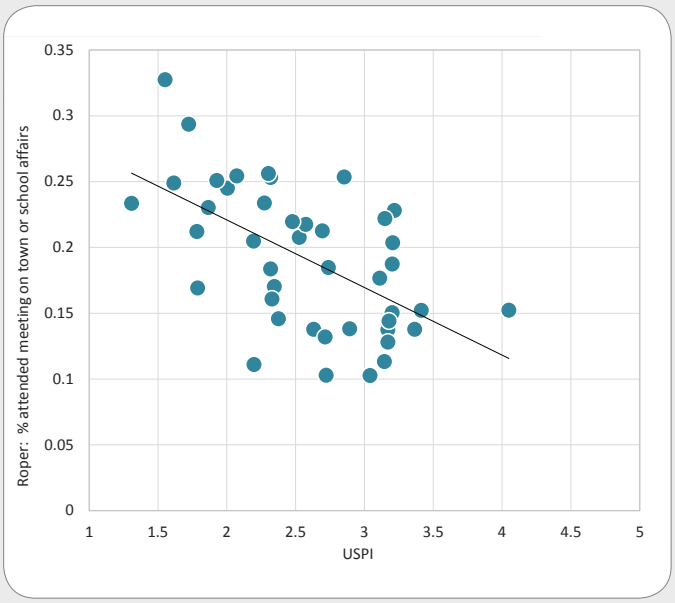


Chart 31: % Attended Meeting on Town or School Affairs

R = -0.57



SOCIAL CAPITAL

Social capital measures have been correlated with for the first time in the 2012 USPI. Robert Putnam's Comprehensive Social Capital Index is very strongly correlated to the USPI. The dataset is slightly older than the other secondary datasets, however the correlation is still strong when the Social Capital Index is correlated against previous versions of the USPI, which suggests that there is an enduring relationship between social capital and peacefulness.

Although it is hard to disaggregate the relative importance of formal and informal institutions, it seems clear that legal, economic, social and cultural environments are all associated with peacefulness.

More peaceful states tend to have higher levels of volunteerism and trust. Only two of the ten least peaceful states had fewer than 50% of citizens who believe that most people can be trusted. More peaceful states also tend to be more civically active at the local level, with higher percentages of people attending town or school meetings.

THE ECONOMIC IMPACT OF VIOLENCE

THE COST OF VIOLENCE TO THE U.S. ECONOMY

"Violence costs the U.S. economy hundreds of billions of dollars every year"

While the social and emotional impact of violence is well understood, the full financial and economic impact of violence on the U.S. economy is rarely discussed. This report seeks to broaden the argument for peace by focusing on its positive economic impact. As such, the economic impact of four of the five indicators (homicide, violent crime, incarceration and police) has been analyzed and tabulated.

Some of the key economic findings are as follows:

• On average, the cost of violence related only to paying for police, justice, corrections and the productivity effect of violent crime, homicide and robbery is $3,257 for each U.S. taxpayer or $460 billion for the United States economy.

• The total economic effect of violence for each state taxpayer varies greatly, from $7,166 per taxpayer in Washington D.C. to $1,281 for Maine taxpayers.

• The cost of violence in the least peaceful state, Louisiana, is $5,011 per taxpayer.

• California has the highest static cost of violence at over $22 billion per year. Vermont has the lowest at $188 million. This effectively represents expenditure that could be diverted by state governments into other, more productive areas of expenditure or handed back to taxpayers in the form of tax cuts.

• The dynamic dividend (see table 22 on page 37) from peace is greatest in California where it is estimated direct forms of violence measured in this study cost the Californian economy at least $40 billion in 2010. The improvement in peace in California since 1991 has effectively meant this figure is $25 billion less in real terms today than it was in 1991.

• If every state in the United States was as peaceful as Maine, the total economic effect would be $274 billion dollars. This additional economic activity would theoretically be enough to generate over 1.7 million jobs.

HOW DOES VIOLENCE AFFECT THE U.S. ECONOMY?

The economic impact of violence on the U.S. economy is two-fold: firstly, government spending on violence prevention and containment diverts money away from other more productive and socially beneficial areas. In short, every dollar spent on a prison is a dollar that can't be spent on enhancing business competitiveness, schools or infrastructure. This is known as the 'static dividend' or savings that result from reductions in violence. The static dividend does not directly increase GDP, but it allows for existing expenditure to be employed in more fruitful ways.

In addition, there is a 'dynamic dividend' which would result from the liberation of human capital from violence. The dynamic peace dividend is additional economic value generated by releasing the productivity that is trapped by violence. Some examples are:

• If there were fewer homicides then there would be additional economic activity generated from the lifetime earning capacity of the victims.

• State governments could invest in transport infrastructure to reduce the costs and time involved in transporting goods and people. This would then result in additional economic activity.

• Governments could reduce taxes to drive economic stimulus from the private sector.

• Investment could be made in basic healthcare which reduces child mortality rates and improves chronic health issues, thereby improving the productive capacity of individuals.

• When a skilled person is placed in prison, there is a decay in their skills during the term of their incarceration, affecting their future productivity. Similarly, if an employed person is placed in prison then their earning capacity is lost to society.

The dynamic peace dividend also has a multiplier effect throughout the economy. Every additional dollar of economic activity created by the dynamic peace dividend would in turn lead to additional spending. The economic calculations in this section use a conservative 1 to 1 multiplier. It is assumed that for every dollar of additional economic activity created, there would be an additional dollar's worth of economic activity in the same year.

Table 22 below highlights some of the costs that have been measured in the 2012 USPI. The data sources for each of these items are detailed in the corresponding section. The static peace dividend consists of costs that mainly accrue to state and federal government budgets and represent a subset of the actual costs. This can be seen as the taxpayers' burden of violence. Alleviation of these costs will theoretically lower the taxation burden and allow state governments to either issue tax cuts, increase spending on necessary public goods, or simply pay down state government debt.

Table 22: The Static and Dynamic Dividend

STATIC PEACE DIVIDEND	DYNAMIC PEACE DIVIDEND
Costs to society and government	*Costs that affect economic activity*
Medical cost of homicide	Productivity loss from assault
Medical cost of violent crime	Productivity loss from rape
Incarceration cost per prisoner	Productivity loss from homicide
Cost of police and the judicial system	Individuals in the workforce rather than in jail

To realize the peace dividend there will be a need for governments to invest in policies that actively reduce or minimize violence. Lowering the rate of incarceration of low risk nonviolent offenders who are employed would have immediate benefits to state government budgets as well as the economy. For each person imprisoned the value of their wage is lost to the economy, additionally tax receipts are lost to the government while the state also has to fund their imprisonment. It is important to note that while many states lag behind the international comparators, the best performing states in the U.S. actually fare much better than Canada and many European countries. This demonstrates that improvements are realistic and achievable.

The peace gap is the difference in measurement between two states and is useful for highlighting the potential gains that would be achieved if the states aligned. The peace gap has been used in this study to highlight the gap between the most peaceful and least peaceful state on each of the indicators. Chart 32 highlights the homicide peace gap in the U.S., which has narrowed considerably since 1980. The homicide rate peace gap was 19.3 in 1980, and is now 10.2. This is used to not only highlight the variance within the U.S., but also the feasible improvements that each state could make.

Through measuring the peace gap it is possible to determine the likely economic benefits that would flow from closing this gap. As Canada is one of America's closest neighbors, with similar economic conditions and legal institutions, it has also been used to highlight the peace gap. A reduction in violence to Canadian levels is feasible and provides a realistic comparison.

Chart 32: The Peace Gap, Homicide Rate 1960-2010

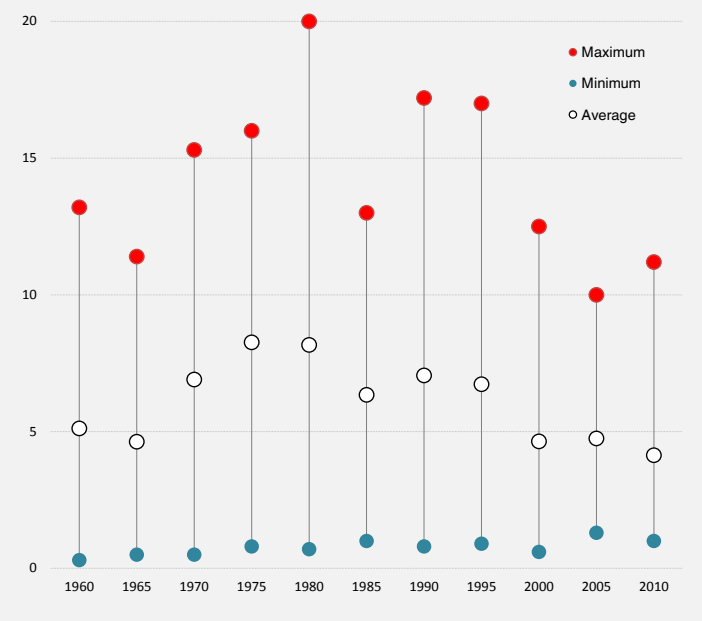
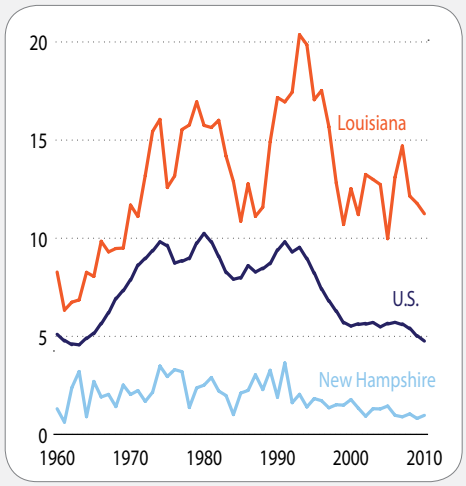
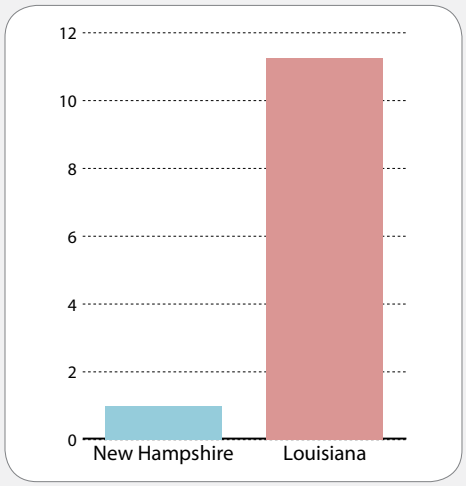


Chart 33: Homicide Rate (1960-2010)



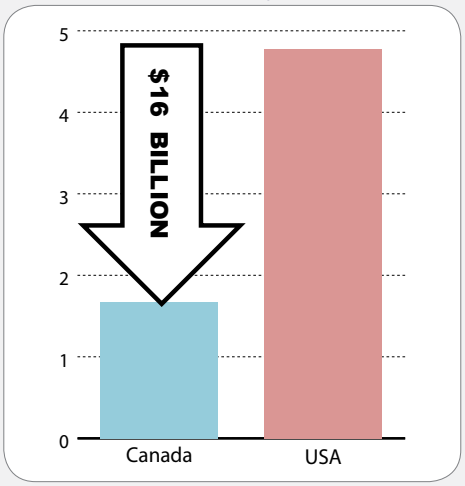
The homicide rate in the U.S. is lower in 2010 than it was in 1960. Louisiana's homicide rate is at its lowest level since 1970.

Chart 34: Homicide Peace Gap



New Hampshire has the lowest homicide rate in the U.S. at 0.99 homicides per 100,000 people, while Louisiana's homicide rate is over 11.

Chart 35: Homicide Savings (U.S. vs Canada)



If the U.S had the same homicide rate as Canada, an extra $16 billion of economic activity would be generated.

COST OF HOMICIDE

Although the full cost of homicide is almost impossible to capture due to empirical limitations, some clear areas of economic loss resulting from homicide can be easily identified. These include the initial medical costs and lost productivity resulting from a homicide. A study by the Centers for Disease Control and Prevention (CDC) has been used as the basis for the homicide cost estimates.

According to the CDC, the total medical cost of homicide in the year 2000 was approximately $83 million, or $5,000 per victim. The associated costs resulting from lost lifetime productivity are much higher, at an estimated $24 billion in total, an average of $1.6 million per victim. The medical costs of homicide consist of ambulance transport, coroner/ medical examiner costs, emergency department and immediate in-patient hospitalization. These costs can be further decomposed into those savings that accrue to the general economy and those which would generate more economic activity.

The medical costs of homicide accrue to both state and federal governments as well as the general community. The CDC estimates the average medical cost of a homicide to be $6,212 in 2010 dollars.

The U.S. recorded 14,748 homicides in 2010; the medical cost (assumed to accrue to government) was at least $91 million. This figure does not include policing or judicial costs which would include prosecutions on behalf of the state. Policing and judicial costs have been included in the section on policing costs.

The largest cost that is excluded from this approach is the tax receipts that would have been gained from the life-long employment of the victims as well as the lost productivity to the broader economy. If the U.S. had the same homicide rate as Canada then there would have been 9,746 fewer homicides in 2010. This would have resulted in a $60 million reduction in medical costs.

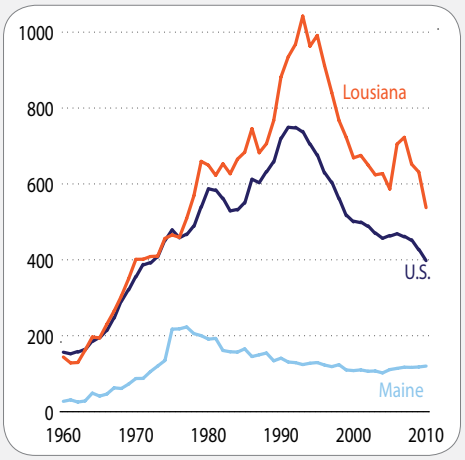
The total cost of homicide will be significantly higher than the costs borne by government because of the lost work days that result from homicide. This represents a substantial productivity loss to the wider economy and the CDC calculates that for each life cut short by homicide, the economy loses $1,652,000 which is the lost lifetime average earning capacity of the victim. It should be noted that not only are the police, judicial and medical costs not included in this figure, but other economic costs are also not taken into account, such as defensive measures against crime, less productive investments, expenditure on funeral services, or higher life insurance premiums. It is therefore reasonable to suggest actual economic returns from a reduction in the homicide rate would likely be much higher as only the medical costs mentioned earlier and the value of lost life-time work have been included.

If the U.S. managed to reduce its homicide rate to that of Canada, it would potentially add $16.4 billion to the U.S. economy.

Chart 36: U.S. vs Canada: Assault, Robbery, Rape Rate (per 100,000)

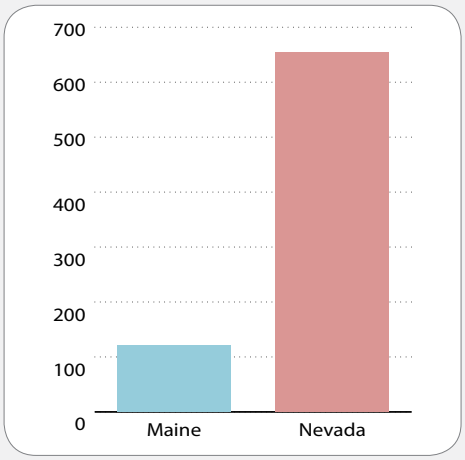
The USPI measure of violent crime includes aggravated assault, robbery, and forcible rape. Canada's assault and robbery rates are both lower than their American equivalents, however the difference is not substantial. By contrast, the U.S.'s rape rate is significantly higher than its Canadian equivalent.

Chart 37: Violent Crime Rate (1960-2010)



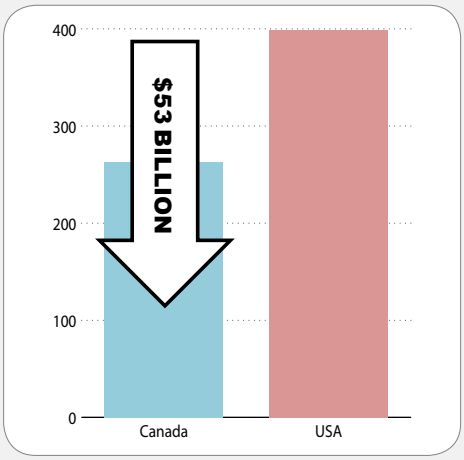
Violent Crime in the U.S. has now returned to the same level as the early 1970s. Louisiana's violent crime rate has fallen considerably in the last ten years.

Chart 38: Violent Crime Peace Gap



Maine has the lowest violent crime rate in the U.S. (120 per 100,000), while Nevada has the highest (654 per 100,000).

Chart 39: Violent Crime Savings (U.S. vs Canada)



If the U.S had the same level and kind of violent crime as Canada, an extra 53 billon dollars of economic activity would be generated.

COST OF VIOLENT CRIME

In the U.S., the definition of violent crime encompasses four categories: homicide, assault, rape, and aggravated robbery. Since homicide is included as a separate indicator, it has been excluded from the calculations of violent crime. As shown in chart 37, the violent crime rate in the U.S. has been falling steadily since the mid-90s and after a slight increase in 2007, dropped in 2008, 2009, and 2010. It has now reached a level not previously seen since the early 1970s.

While violent crime has continued to drop in the United States, it is still higher than in Canada. This applies across all three USPI violent crime categories, as shown in the charts above.

As with homicide, the full economic cost of violent crime is very difficult to capture and only the following items have been included: for assault, the economic costs consist of the medical costs as well as lost productivity. For rape, the economic costs consist of the medical costs and lost productivity costs, as well as costs associated with pain and suffering. For aggravated robbery, the average value of property stolen was used to calculate the cost of robbery. There are many other costs associated with violent crime that have not been captured in this study. Police and judicial costs associated with violent crime have been estimated later in the report under costs of policing. The total cost of violent crime in this model is $237 billion in 2010. Lost productivity from assaults accounts for the majority at $178 billion, while the productivity costs associated with rape totals $20 billion and robbery half a billion.

The total violent crime rate in the U.S. is approximately 397 incidents per 100,000 people. If the U.S. could reduce its violent crime rate to that of Canada (252), then the benefits would be worth over $53 billion. This aggregate cost includes the cost to both governments and the general community. The cost of lost productivity from violent crime mainly consists of work days lost.

COST OF INCARCERATION

Data from the U.S. Bureau of Justice Statistics (BJS) shows state incarceration rates in the U.S. have dramatically increased from 1981 to 2007. However this trend seems to have reached a plateau and the incarceration rate has even slightly decreased over the last two years.

The BJS has kept detailed records on the prison population and the associated costs of imprisonment from 1982 until 2005. The total cost of incarceration has been estimated from 2006 onwards using the number of prisoners from the BJS statistics and using the cost of incarceration from 2005 in 2010 dollars. A close examination of these figures reveals that from 1982 to 2009, the prison population has increased by 269%, while the total cost of imprisonment has increased by approximately the same rate. The total cost per prisoner has fluctuated mildly since 1982, and was estimated to be $42,173 in 2005 (in 2010 dollars). Of this cost, $34,727 was the result of costs associated with incarceration in correctional facilities, while the remaining $7,446 was the results of costs associated with arrest, conviction, and judicial costs.

Since 1982 the prison population has increased dramatically, with the cost of imprisonment per inmate rising from $30,673 in 1982 to $37,997 in 1991 (representing an increase of 24%). While the average cost in 2010 has come down marginally, to $34,727 per inmate. The resulting effect of this has been a large increase in state and federal government's expenditure on incarceration. This increased expenditure means that larger portions of state budgets are devoted to correction.

POLICE AND JUDICIAL COSTS

Police protection is defined by the BJS as the function of enforcing the law, preserving order and traffic safety, and apprehending those who violate the law. The estimate of cost per police officer is determined by dividing policing services costs, as identified by the BJS, by the number of police to arrive at a cost per police officer.

Total costs related to judicial and legal services include all civil and criminal courts and activities associated with courts such as law libraries, grand juries, petit juries, medical and social service activities, court reporters, judicial councils, bailiffs, the activities of attorney generals, state attorneys and indigent cases.

For the purposes of this study judicial expenses have been calculated using 30% of the total criminal justice system expenditure. Violent crime, weapon and related property offenses constitute 22.4% of the total civil and criminal caseload of the federal government's caseload and more for local and state governments.

In 2010 the U.S. had 37% more violent crimes than Canada. According to the BJS, total federal, state, local judicial and legal spending in 2005 was approximately $53 billion in 2010 dollars. It is therefore assumed that the total judicial and legal costs associated to related crimes is in the region of $16 billion. A reduction in judicial expenditure to bring the U.S. in line with Canada would yield $5.8 billion in savings.

Furthermore, it is worth noting that aspects of judicial spending on criminal cases are proportionally much higher than for civil cases. Both state and local governments carry a large burden of the spending on indigent criminal defences which requires employment of counsel attorneys, public defenders and other court expenses. The resources committed to these functions are therefore much greater for criminal cases. So much so, the BJS found in a 2002 study there is a strong correlation (r=0.635) between general crime rates and judicial expenditure, as states with high crime rates tend to have higher than average expenditures and employment devoted to criminal and civil justice.

INCARCERATION PEACE GAP

There is a large incarceration peace gap in the U.S. Louisana's incarceration rate is eight times higher than Maine's. However, state incarceration rates across the U.S. are now beginning to fall.

Canada's incarceration rate is 117 per 100,000 population, whereas the U.S.'s rate is 743 (the highest in the world). Canada's rate is 16% of the U.S. incarceration rate. Therefore, if the U.S. reduced its incarceration rate to the same level as Canada, its total incarceration costs would be 16% of its current spending. This would result in a fall in incarceration spending of 64 billion dollars.

Chart 40: Incarceration Peace Gap

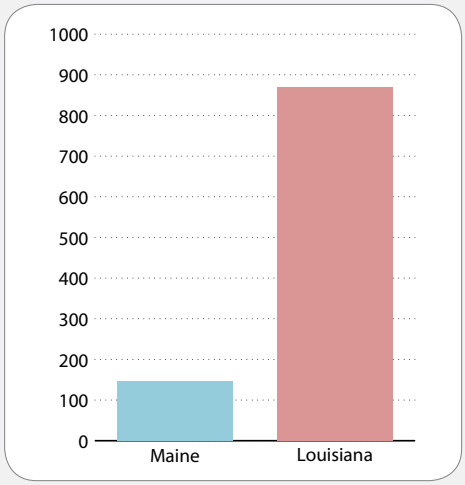
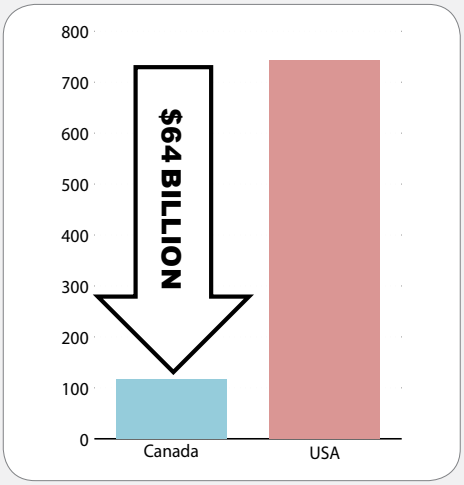


Chart 41: Incarceration Savings



POLICE PEACE GAP

There is significant variance in state police employee rates in the U.S. New Jersey has by far the highest police employees rate in the U.S., with over 450 police employees per 100,000 people. By contrast, Maine has just over 200 police employees per 100,000.

In order to make a comparison between the U.S. and Canada, it is necessary to use the police officers rate rather than the police employees rate. The Canadian police officers rate (196) is close to the U.S. rate (227). A 13.6% decrease in the U.S. police officer rate would bring it into line with the Canadian rate, and would save U.S. governments around $15 billion annually.

Chart 42: Police Peace Gap

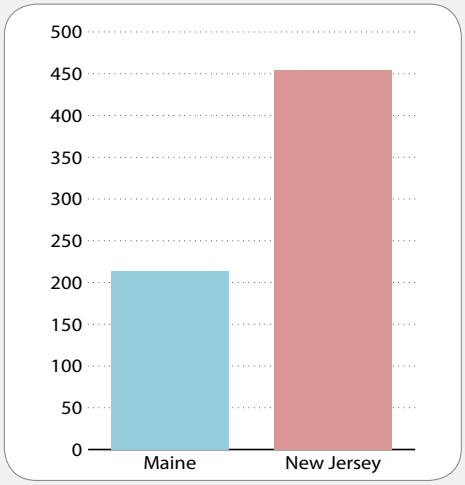
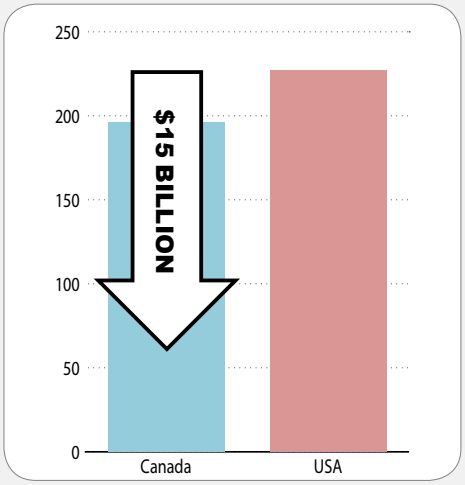


Chart 43: Police Savings



TOTAL COST OF VIOLENCE

Table 23 highlights the total cost to the U.S. economy of homicide, aggravated assault, rape, robbery, incarceration, police, and judicial costs associated with violence. These are conservative estimates, and given the lack of data on the costs associated with violence, it is likely that the total impact of violence on the U.S. economy is much higher than listed here. The total cost of violence to the U.S. economy was at least $460 billion in 2010.

Table 24 on page 42 shows the estimated economic impact if each state had the same level and type of violence as Maine, the most peaceful state in the 2012 USPI. If every state was as peaceful as Maine, the cost of violence would be reduced from $460 billion to $186 billion, a difference of around $274 billion. This economic impact would be potentially large enough to generate 1.7 million new jobs.

Table 23: Total Cost of Violence to the U.S. Economy, 2010

TOTAL COST OF VIOLENCE	
Static	
Homicide (Medical)	$91,621,065
Assault (Medical)	$37,976,997,000
Robbery (Property)	$489,952,224
Incarceration (Govt)	$41,684,095,292
Legal and Judicial (Govt)	$5,702,206,630
Police (Wages)	56,394,985,300
Total	**142,339,857,511**
Dynamic	
Incarceration (Lost Work)	$71,009,662,500
Assault (Lost Productivity)	$178,427,109,000
Homicide (Lost Productivity)	$48,555,813,768
Rape (Lost Productivity)	$20,498,525,474
Total	**$318,491,110,742**
Total Economic Effect	
$460,830,968,253	

COST OF VIOLENCE PER STATE

Table 24: Total Economic Impact if Each State Were as Peaceful as Maine

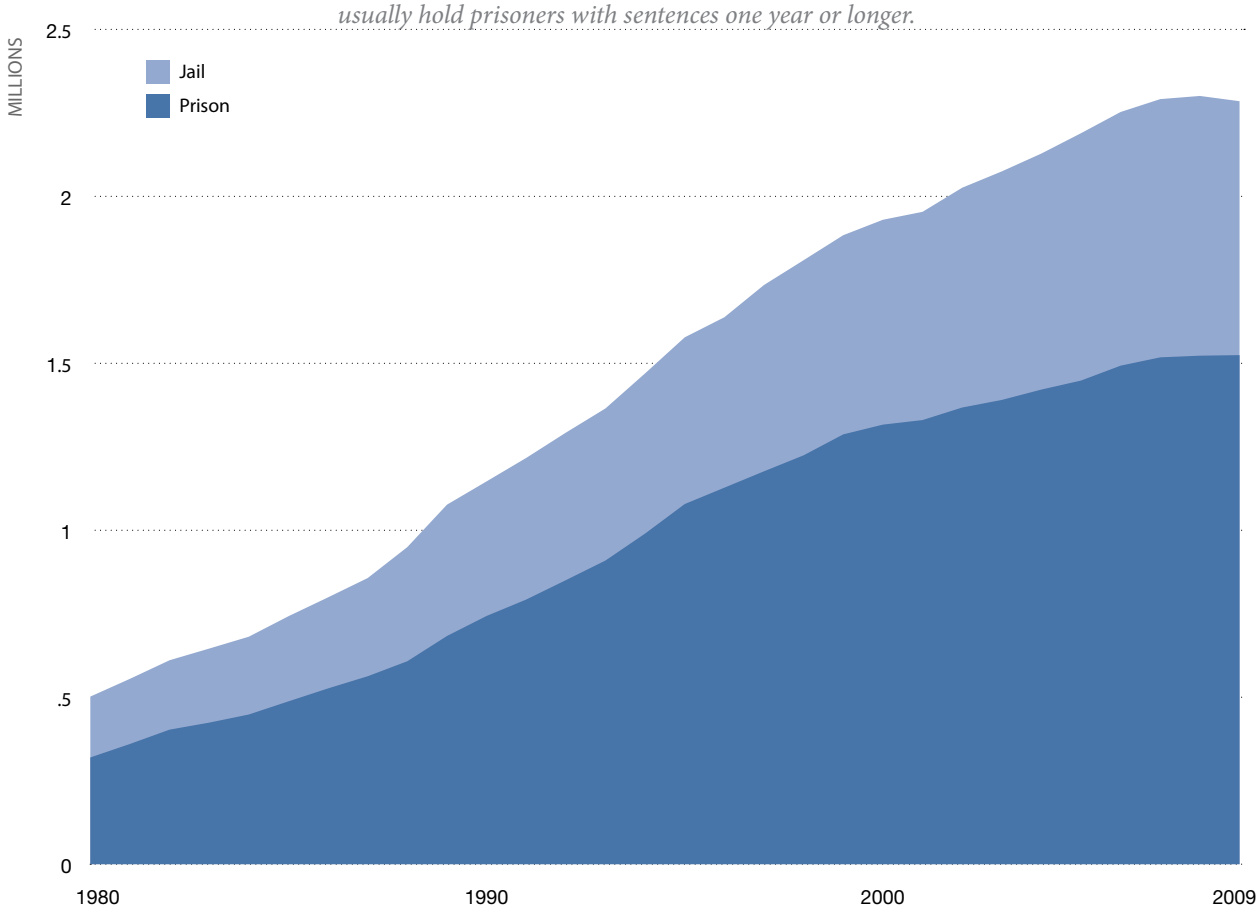
STATE	TOTAL STATIC COST	TOTAL DYNAMIC COST	TOTAL ECONOMIC EFFECT	COST OF VIOLENCE IF SAME LEVEL OF PEAEFULNESS AS MAINE	SAVINGS IF SAME LEVEL OF PEACEFULNESS AS MAINE
Alabama	1,791,880,315	5,415,339,034	7,207,219,349	2,880,874,275	4,326,345,074
Alaska	409,755,605	1,011,333,288	1,421,088,893	428,075,153	993,013,741
Arizona	3,161,184,037	7,607,422,760	10,768,606,797	3,852,639,004	6,915,967,793
Arkansas	1,256,031,880	3,734,235,414	4,990,267,294	1,757,501,493	3,232,765,801
California	22,922,788,470	40,110,166,740	63,032,955,210	22,453,952,164	40,579,003,045
Colorado	2,315,969,590	4,444,455,694	6,760,425,284	3,031,230,466	3,729,194,818
Connecticut	1,727,987,288	2,705,943,128	4,433,930,416	2,154,203,518	2,279,726,899
Delaware	521,670,655	1,242,219,454	1,763,890,109	541,208,753	1,222,681,356
District of Columbia	616,008,250	1,620,355,618	2,236,363,868	362,674,489	1,873,689,379
Florida	9,626,645,479	24,655,817,900	34,282,463,379	11,332,050,625	22,950,412,755
Georgia	3,649,372,431	10,424,198,078	14,073,570,509	5,839,006,656	8,234,563,853
Hawaii	445,196,074	888,424,614	1,333,620,688	819,889,667	513,731,021
Idaho	472,011,399	1,085,211,120	1,557,222,519	944,823,450	612,399,069
Illinois	7,086,141,951	13,587,221,816	20,673,363,767	7,733,363,865	12,939,999,902
Indiana	1,819,896,789	5,769,623,356	7,589,520,145	3,907,960,270	3,681,559,875
Iowa	1,005,714,942	2,025,119,950	3,030,834,892	1,836,119,349	1,194,715,542
Kansas	994,911,906	2,583,416,920	3,578,328,826	1,719,650,259	1,858,678,566
Kentucky	1,093,279,371	3,494,587,250	4,587,866,621	2,615,452,143	1,972,414,478
Louisiana	2,242,874,931	7,579,824,322	9,822,699,253	2,732,384,127	7,090,315,126
Maine	294,215,094	506,423,484	800,638,578	800,638,578	-
Maryland	3,150,524,994	7,400,864,814	10,551,389,808	3,479,873,666	7,071,516,143
Massachusetts	2,679,438,340	6,033,707,148	8,713,145,488	3,946,430,504	4,766,714,984
Michigan	4,195,313,477	12,251,763,426	16,447,076,903	5,957,133,244	10,489,943,658
Minnesota	1,616,147,404	3,064,492,326	4,680,639,730	3,196,816,956	1,483,822,774
Mississippi	1,061,918,040	3,107,582,492	4,169,500,532	1,788,468,986	2,381,031,546
Missouri	2,260,535,946	7,223,898,976	9,484,434,922	3,609,685,918	5,874,749,003
Montana	342,089,074	744,727,340	1,086,816,414	596,346,790	490,469,624
Nebraska	561,895,273	1,308,111,448	1,870,006,721	1,100,784,396	769,222,325
Nevada	1,490,751,692	3,974,761,196	5,465,512,888	1,627,694,062	3,837,818,826
New Hampshire	347,829,490	603,959,832	951,789,322	793,471,555	158,317,766
New Jersey	5,583,422,549	6,637,700,692	12,221,123,241	5,299,108,833	6,922,014,408
New Mexico	909,585,551	2,782,730,272	3,692,315,823	1,241,122,064	2,451,193,759
New York	11,214,219,980	17,368,012,564	28,582,232,544	11,679,698,536	16,902,534,009
North Carolina	3,605,210,952	8,866,112,724	12,471,323,676	5,747,289,741	6,724,033,934
North Dakota	194,733,281	386,066,632	580,799,913	405,388,521	175,411,391
Ohio	4,163,271,734	10,376,504,334	14,539,776,068	6,953,358,429	7,586,417,639
Oklahoma	1,507,100,331	4,857,449,982	6,364,550,313	2,261,039,228	4,103,511,085
Oregon	1,590,679,320	2,712,344,418	4,303,023,738	2,309,090,405	1,993,933,333
Pennsylvania	5,461,324,247	12,314,381,394	17,775,705,641	7,656,062,364	10,119,643,277
Rhode Island	378,634,407	663,708,318	1,042,342,725	634,410,184	407,932,541
South Carolina	1,924,240,087	6,439,768,580	8,364,008,667	2,787,830,157	5,576,178,510
South Dakota	235,275,339	663,550,916	898,826,255	490,727,985	408,098,269
Tennessee	2,949,682,758	8,720,951,302	11,670,634,060	3,824,966,618	7,845,667,442
Texas	11,922,083,516	30,824,186,470	42,746,269,986	15,155,899,788	27,590,370,198
Utah	740,255,452	1,604,585,990	2,344,841,442	1,665,867,152	678,974,291
Vermont	188,063,164	258,607,454	446,670,618	377,150,778	69,519,840
Virginia	2,838,789,140	5,971,583,506	8,810,372,646	4,822,430,406	3,987,942,240
Washington	2,650,143,924	5,111,334,410	7,761,478,334	4,053,059,479	3,708,418,856
West Virginia	540,644,790	1,474,139,128	2,014,783,918	1,116,848,869	897,935,048
Wisconsin	2,362,693,210	3,916,509,926	6,279,203,136	3,427,698,030	2,851,505,106
Wyoming	219,823,596	335,672,792	555,496,388	339,712,412	215,783,976
U.S. TOTAL	**142,339,857,511**	**318,491,110,742**	**460,830,968,253**	**186,089,164,359**	**274,741,803,894**

INCARCERATION AND VIOLENCE IN PRISONS

INCARCERATION IN THE UNITED STATES

Chart 44: U.S. Correctional Population, 1990-2009

Jails usually hold short term local prisoners at the county level, while state and federal prisons usually hold prisoners with sentences one year or longer.



INTRODUCTION

The scope of incarceration in the U.S. is well known: the U.S. has the world's highest incarceration rate, is the only country in the world to score a maximum 5 on the Global Peace Index's prison indicator and 1 in 200 residents is in jail or prison. 2.38% of the entire U.S. population is under some form of correctional supervision, whether in direct custody or out on probation or parole. The correctional population has exploded since the early 80s, from less than half a million in 1980, to over 2.2 million in 2009, at an average annual growth rate of 5.42%. The U.S. population grew at an average of 1% per year over the same time period.

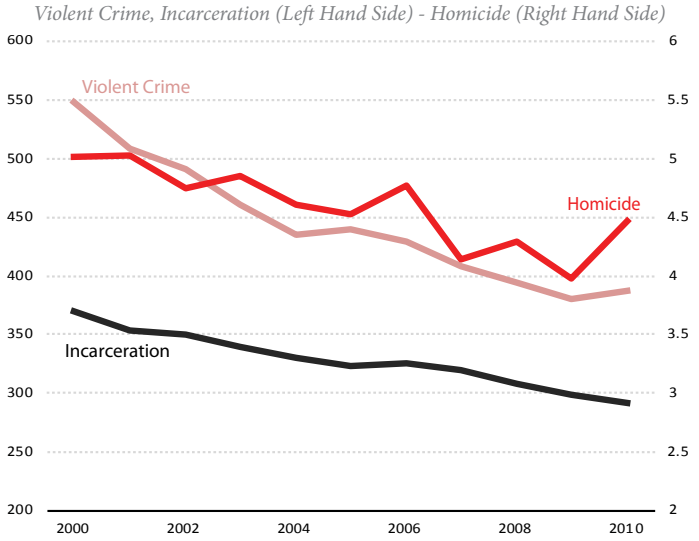
Even as the well documented decline in homicide and violent crime began to level off at the turn of the century, the prison population continued to grow. However, the last few years might have marked the point at which the incarceration rate in the U.S. has reached its limit. Budgetary constraints, overcrowding, and a growing awareness of the problems of mass incarceration may have reached a tipping point from which reform is inevitable. In fact, 2010 marked only the second decline in the total prison population in the U.S. since 1972.

The massive increase in the U.S. correctional population has long been linked to the decline in homicide and violent crime despite the existence of numerous competing theories which seek to downplay the importance of mass incarceration.

Regardless of whether or not massive increases in incarceration played an important role in cutting the crime rate in the past, it seems as if this correlation no longer applies. As the growth in incarceration at first slowed and then begun to decline the crime rate also continued to decline even in the midst of the worst financial crisis of the last seventy years. Of the forty states that recorded declines in their state incarceration rate, 16 recorded concurrent reductions in violent crime, homicide, and incarceration while 27 recorded reductions in violent crime and incarceration. Although it is still too early to

conclusively assume that large scale reductions in incarceration will not increase violent crime, it appears that there has been no relationship in the last three years between reductions in the prison population and increases in violent crime. In some states the simultaneous reduction in incarceration and violent crime has been a long term trend. Between 2000 and 2010, New York has experienced a fall in violent crime and incarceration every year, as well as an overall fall in its homicide rate from 5 to 4.4 per 100,000 residents.

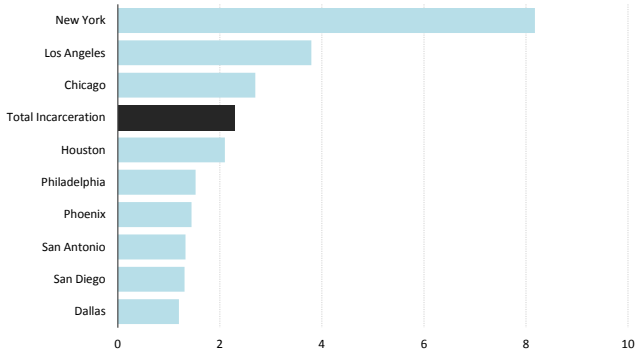
Chart 45: New York - Homicide, Violent Crime, Incarceration (2000-2010)



VIOLENCE IN PRISONS

While it is no doubt true that America has become more peaceful over the last two decades, the true scale of this change has been somewhat obscured. While violent crime has declined in society, violent crime in prison has risen. If all the prisoners in the U.S. were concentrated in one city, that city would be the 4th largest in the United States.

Chart 46: City Populations vs Total Prison Population



It would also be an extraordinarily violent city. While accurate data concerning homicides and violent crime in prison is difficult to come by, the creation of the Prison Rape Elimination Act in 2003 has led to a raft of attention and resources being focused on this area. Estimates by the Bureau of Justice Statistics suggest that there were around 151,000 victims of unwanted sexual contact in 2008. Those who were victimized multiple times were only counted once.

There were at least 69,800 forcible rapes in the correctional system in 2008. In the same year, the FBI reported that there were 90,479 forcible rapes in the U.S. Therefore, the actual prevalence of reported, forcible rape is around 1.7 times higher than the figure used in the USPI.

Table 25: Sexual Assault in the U.S. Prison System, Number of Victims

CATEGORIES OF SEXUAL ASSAULT	PRISON	JAIL	JUVENILES	TOTAL
Rape involving force/threat of force	26,200	39,200	4,400	69,800
Nonconsensual sexual acts involving pressure/coercion	18,400	14,800	2,900	36,100
Abusive sexual contacts	19,200	23,000	3,000	45,200
Total	63,800	77,000	10,300	151,100

WHAT CAN BE DONE?

Table 26: Cost-Effectiveness of Recidivism Prevention Programs

Table is taken from the Washington Institute's paper "Return on investment: Evidence-based options to improve statewide outcomes."

TYPE OF PROGRAM	Number of Studies Meta Analyzed	Cost per Participant	Victimizations avoided per Participant	Taxpayer benefit per participant	State % of benefits	Victim Benefit per Participant
ADULT PROGRAMS						
Vocational Education in Prison	4	$1,296	0.26	$2,965	47%	$7,070
Education in Prison (basic or post-secondary)	17	$1,055	0.22	$2,525	47%	$5,961
Cognitive Behavioral Programs in Prison	27	$517	0.19	$2,080	47%	$5,100
Correctional Industries in Prison	4	$457	0.16	$1,907	47%	$4,592
Drug Treatment in Prison	21	$1,758	0.16	$1,883	47%	$4,592
Drug Treatment in Community	6	$629	0.14	$2,000	42%	$4,804
Drug Courts (adults)	67	$4,792	0.09	$2,044	44%	$4,376
JUVENILE PROGRAMS						
Multi-dimensional Treatment Foster Care	3	$7,418	0.76	$7,363	50%	$24,068
Family Integrated Transitions	1	$10,795	0.4	$3,867	50%	$13,050
Coordination of Services	14	$379	0.07	$723	45%	$2,135
Functional Family Therapy	7	$3,134	0.68	$6,692	45%	$20,623
Aggression Replacement Training	4	$1,449	0.32	$3,195	45%	$9,731
Multi-systemic Therapy	10	$7,076	0.36	$3,641	45%	$11,027

Mass incarceration can mask the true nature of violence in society by hiding it away from public view. The burden of victimization falls mainly on non-violent offenders. It also imposes a huge cost on the economy, as discussed in the economic cost of violence section. Furthermore, there are signs that the economic burden is becoming too much for some states to handle. A recent court case in California has led to a legal requirement for California to return its prison population to 135% of capacity as it was hovering around 200% in some prisons. There is also a groundswell of support across the political spectrum for prison reform, focusing mainly on the untenable costs of incarceration. Thus, if prison reform is to happen, the right questions must be asked: Who should be released? And what are the most cost-effective ways to reduce recidivism?

There are naturally widespread concerns about releasing violent offenders back into the community. However, data from 2009 suggests that the majority of the combined federal and state prison system inmates were incarcerated for non-violent offences:

Table 27: % of Offenders by Offense Type, 2008

TYPE OF OFFENSE	FEDERAL	STATE
Violent	>10%	53%
Property	>10%	19%
Drugs	51%	18%
Other	35%	9%

Therefore there is some scope for paroling non-violent offenders. However, there is a justifiable concern about recidivism when prisoners are released back into society.

Therefore, the top priority of any prison reform should be to find the most cost-effective method of reducing recidivism amongst prospective parolees. A recent study of prison programs that aim to reduce reoffending has attempted to do just that. The study, conducted by the ***Washington State Institute for Public Policy***, in conjunction with the ***Pew Center on the States***, has combined a number of studies of the cost-effectiveness of a number of different programs that aim at preventing recidivism, as summarised in table 26 above.

The table shows the cost and benefit of a number of different treatment and recidivism prevention programs for both adults and juveniles. For example, the first row in the table shows a study of four "in prison" vocational educational programs. The study found that the average cost per prisoner of such programs was $1,296. For every prisoner who went through the program, 0.26 victimizations were avoided, meaning that for every 1000 prisoners who were put through the program and were then released there were 260 fewer crime victims. This led to a benefit to the taxpayer of $2,695 for each prisoner that went through the program.

Table 26 shows that there are a wide variety of programs available which vary widely in cost, ranging from $10,795 per participant for family integrated transitions for juveniles, down to $457 per participant for “in prison” correctional industries for adults. While programs targeting juveniles are on the whole more expensive than programs aimed at adults, they are also more cost-effective in the long run, leading to larger reductions in victimization and a greater return on investment for the taxpayer. All the programs surveyed are more cost-effective than having no program training in place.

There is a growing recognition across the political spectrum that both the economic and social costs of incarceration are unsustainable. Violence in prison, which is typically targeted against vulnerable inmates serving sentences for non-violent crimes, destroys the lives of those who might otherwise be rehabilitated and returned to society. Furthermore, the economic impact of mass incarceration is immense. It places an enormous strain on state budgets, diverts resources from vital areas, and destroys the ability of inmates to find work in the future, thereby increasing the likelihood of recidivism. Cost-effective alternatives to incarceration exist, and cost-effective programs for those currently incarcerated are clearly beneficial to both prisoners and the wider community.

APPENDIX A: SOURCES & REFERENCES

FACTOR	SOURCE
EDUCATION	
% With at least High School Diploma (2009)	U.S. Census Bureau, American Community Survey
High School Graduation Rate (2008)	Digest of Education Statistics, National Center for Education Statistics
% Bachelor's Degree or higher (2010)	U.S. Census Bureau, American Community Survey
Average annual Teacher Salary (2010)	National Education Association. “Rankings and Estimates”
Educational Opportunities (2009)	The PEW center on the states, Grading the States
Average per Pupil Spending (2010)	Public Education Finances Report, U.S. Census Bureau
HEALTH	
% Without Health Insurance (2008-2009)	Kaiser Family Foundation, Kaiser State Health Facts, http://www.statehealthfacts.org
% With Diabetes (2008)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System
Life Expectancy at Birth (2010)	Social Science Research Council, American Human Development Project
Adult Obesity Rate (2009)	Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System
Teenage Pregnancy Rate (per 1,000) (2009)	Centers for Disease Control and Prevention, “Births: Final Data for 2008”
Infant Mortality Rate (2009)	Centers for Disease Control and Prevention, “Deaths: Final Data for 2009”
Perception of Wellbeing (2009)	Gallup, State of the States
Teenage Death Rate (2007)	Annie E. Casey Foundation , “Kids Count National Data”
ECONOMIC OPPORTUNITY	
Tax Revenue per capita (2010)	http://www.census.gov/govs/statetax/ and IEP calculations
Household Gini Coefficient (2010)	U.S. Census Bureau, American Community Survey
% Households (Families) in Poverty (2010)	U.S. Census Bureau, Small Area Income and Poverty Estimates
Basic Access (2009)	Gallup, State of the States
Unemployment Rate (2010)	Bureau of Labor Statistics, Geographical Profi le of Employment and Unemployment
Labor Force Participation Rate (2009)	U.S. Census Bureau, American Community Survey
GDP per capita by state (2010)	Bureau of Economic Analysis, Gross Domestic Product by State
Median Income (2008-2009)	U.S. Census Bureau, American Community Survey
% Food stamp/SNAP recipiency (2010)	U.S. Census Bureau, American Community Survey
American Human Development Index (2010)	Social Science Research Council, American Human Development Project
CIVICS & DEMOGRAPHICS	
% Children in Single Parent Families (2009)	U.S. Census Bureau, American Community Survey
2008 Election (% Voted Republican)	Federal Electoral Commission, 2008 Offi cial Federal Presidential Election Results
2008 Election (% Voted Democrat)	Federal Electoral Commission, 2008 Offi cial Federal Presidential Election Results
2008 Election (Voter Turnout)	McDonald, Michael P. “Voter Turnout 1980-2010” United States Election Project <http://elections.gmu.edu/index.html>
% Identify as Conservative (2009)	Gallup, State of the States
% Identify as Moderate (2009)	Gallup, State of the States
% Identify as Liberal (2009)	Gallup, State of the States
Campaign Finance (2009)	The PEW center on the states, Grading the States
Government Management (2009)	The PEW center on the states, Grading the States
% Individuals with home internet access (2009)	U.S. Census Bureau, Current Population Survey
Armed Forces Participation Rate (2009)	U.S. Census Bureau, American Community Survey
% of Children with Immigrant Parents (2005-2006)	Urban Institute, “Children of Immigrants: National and State Characteristics, Urban Institute”
COMMUNITY & SOCIAL CAPITAL	
Comprehensive Social Capital Index II (2000)	Robert Putnam, http://bowlingalone.com/?page_id=8
LifeStyle: Times volunteered last year	State Social Capital Index, http://bowlingalone.com/?page_id=8
Roper: % attended meeting on town or school affairs	State Social Capital Index, http://bowlingalone.com/?page_id=8
GSS: Mean number of group memberships	State Social Capital Index, http://bowlingalone.com/?page_id=8
GSS: "Most people can be trusted"	State Social Capital Index, http://bowlingalone.com/?page_id=8
Civic and Social Organizations per 1000 pop, (1977-1992)	State Social Capital Index, http://bowlingalone.com/?page_id=8

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APPENDIX B: SMALL ARMS PROXY

Why use firearm suicides as a percentage of total suicides as a proxy for the availability of small arms?

Due to the lack of accurate administrative data on gun statistics, several proxies for gun prevalence have been used in studies in the past. Earlier proxies used in studies in the U.S. and overseas focused on the fraction of criminal homicides committed with a gun; however this is less common in studies today. Some examples of commonly used proxies are[1]:

- Fraction of criminal homicides committed with a gun (Brearley 1932) (Fisher 1976) and across nations (Etzioni and Remp).

- "Cook Index" – average of the gun percent in homicide with the gun percent in suicide applied to study of city robbery rates.

- Kleck and Patterson (1993) – a five item factor computed from the percentage gun use in homicide, suicide, assault and robbery, as well as the value of stolen guns relative to the total property stolen.

- Krug (1968) statistical information on participation in gun-related activities – use of data on the rate of hunting licenses issues per capita. More recent studies used county-level subscription to Guns & Ammo and on membership per capita in the National Rifle Association.

These proxies are based on either vital statistics mortality data or on subscription and membership information. They can then be correlated with available survey information from the General Social Survey and the CDC's Behavioral Risk Factor Surveillance System (BRFSS) which are primary sources accounting for gun ownership. The reason why these surveys have not been used in this study for the primary source on gun prevalence is because of limited availability over time and lack of data at the state level required by the USPI.

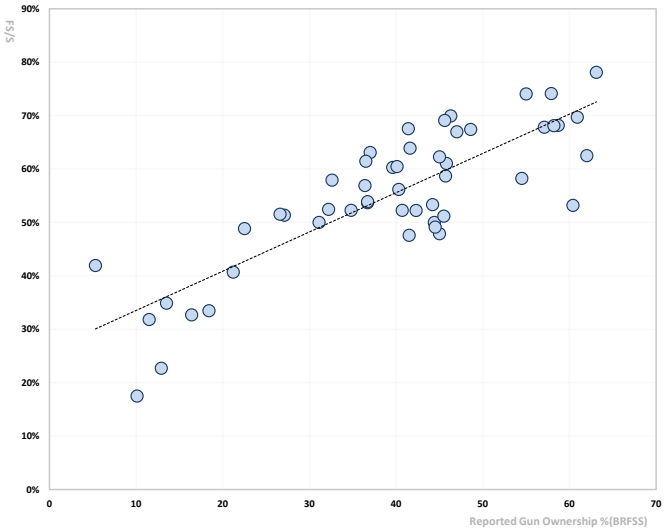
The USPI is based on research from Azreal (2001), Miller (2007), and Kovandzic (2005) which show, based on the availability of data and other proxies, percentage of suicides committed with a firearm is the best performing of all proxies. Research conducted by the IEP also reaffirm the findings of these studies that for data required at the state level, the percentage of suicides committed with a firearm is the most suitable proxy.

In order to cross-check the validity of the firearm by suicides proxy (FS/S) the USPI ran a correlation with the results of the BRFSS for the years 2001 and 2002. The USPI would have used the General Social Survey (GSS) but data is not available at the state level on questions related to firearms.

As chart 47 shows, when the percentage of suicides by gun is correlated with the results of reported gun ownership on the BRFSS , there is a very strong correlation of r=.831. Importantly, a similar result on the national level is also reached for the GSS, while it should be noted the BRFSS has over 200,000 respondents compared to the GSS's 2,000. Changes in the national average of the FS/S from 1991 to 2006 closely track the changes in reported gun ownership in the GSS at a statistical correlation of r=.77. The ability of the FS/S to track trends in gun prevalence was also reflected in Azrael et.al.

Several other studies have verified the relative strength of this proxy, as stated by Kovandzic et.al. in 2005, "recent research indicates [FS/S] is the best measure of gun levels for cross-sectional research"; Azrael et. al. from 2004 "Of the readily computed proxies for the prevalence of gun ownership, one, the percentage of suicides committed with a gun, performs consistently better than the others in cross-section comparisons". A recent study by Miller et. al. (2007) uses the BRFSS survey data to inform the accuracy of the FS/S statistic and addresses some of the issues associated with using the proxy. A 2008 study by Neill and Leigh showed firearm suicides decreased as a result of the Australian Government's gun buyback scheme, suggesting a relationship between gun availability and firearm suicide demonstrating the applicability of the proxy in a different context. Cook and Ludwig also validated the superiority of the FS/S proxy in their 2006 study, where they also found significantly positive correlations on GSS and FS/S while subscription rate to Guns and Ammo "performed less well and in some cases yielded a negative coefficient estimate."

Chart 47: % Firearm Suicides vs Reported Gun Ownership, 2002



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APPENDIX C: METROPOLITAN PEACE INDEX

STATE/DISTRICT	SOURCE	DATA NOTES
Alabama	http://www.acjic.alabama.gov/cia/2010_cia.pdf	Alabama Criminal Justice Information Center (ACJIC), the publisher of the Alabama UCR, "functions in accordance with the FBI's standards of operation which specify uniform data collection device and quality control procedures which provide viable crime statistics for accurate indication of crime and crime trends." (pg 2)
Arizona	http://www.azdps.gov/About/Reports/docs/Crime_In_Arizona_Report_2010.pdf	Arizona UCR program originally submitted their data directly to the FBI. However, in 1992 it became mandatory that the Arizona Department of Public Safety administer the UCR program for the state. The Arizona Revised Statute 41-1750.D reads: "... law enforcement agencies of this state or its subdivisions shall provide to the central state repository such information as necessary to operate the statewide uniform crime reporting program and to cooperate with the federal government uniform crime reporting program." (pg 8)
California	http://ag.ca.gov/cjsc/datatabs.php	State of California's Department of Justice is the clearinghouse for crime statistics. "Data are also reported to the FBI for publication in Crime in the United States." (see, 'Criminal Statistics Reporting Requirements' in http://ag.ca.gov/cjsc/misc/rptreq.pdf?). Police employment and Violent Crime data are from 2009 as the 2010 report does not have these data by counties. Homicide figures are 2010 figures (available here: http://ag.ca.gov/cjsc/publications/homicide/hm10/preface.pdf?)
Connecticut	http://www.dpsdata.ct.gov/dps/ucr/ucr.aspx	"In July 1977, Connecticut began its own Uniform Crime Reporting Program... The State Program ensures quality control and uniformity of the crime and arrest reports submitted. The centralized state collection agency streamlines the time consuming process of resolving questions between contributors and verifiers. Upon completion of the quality control process, the returns are forwarded to the F.B.I." (see http://www.dpsdata.ct.gov/dps/ucr/data/2009/UCR%20Program%20Description%202009.pdf). 2009 data is used for Connecticut as 2010 is currently not made available.
District of Columbia	http://www.mpdc.dc.gov/mpdc/cwp/view,a,1239,q,547256,mpdcNav_GID,1556.asp & http://www.mpdc.dc.gov/mpdc/frames.asp?doc=/mpdc/lib/mpdc/publications/ar_2010_lowres.pdf	The Metropolitan Police Department, District of Columbia (MPDC) reports the official crime totals for the District of Columbia: "These statistics reflect official Index crime totals as reported to the FBI's Uniform Crime Reporting program."
Florida	http://www.fdle.state.fl.us/Content/getdoc/94900edb-7699-4add-918f-4c4cf2a44b9a/cnty_annual10.aspx	The Florida Department of Law Enforcement is mandated by Florida legislation the responsibility and authority of UCR data collection and dissemination. The first fundamental objective of the Florida UCR Program is to "collect from all law enforcement agencies in the state accurate summary crime data that meet the minimum requirements of the National Uniform Crime Reports (UCR) Program." (see http://www.fdle.state.fl.us/Content/getdoc/7fad02e4-96bd-46d9-82fc-4a5c46f0be22/datahistory_ucrmanual-1-.aspx). Unfortunately, police employee data by county or department was not available. Instead, the state police rate (per 100,000 inhabitants) was used as an approximation.
Georgia	http://gbi.georgia.gov/vgn/images/portal/cit_1210/23/32/1734093362010%20Summary%20Report.pdf	"Georgia's Uniform Crime Reporting (UCR) Program is derived from the Federal Bureau of Investigation's national program. Utilizing standard definitions and procedures established by the national program, crime data on the number of serious criminal offenses reported to or investigated by law enforcement and the number of arrests for all crimes are collected from law enforcement agencies." (pg 1) Police employee by counties or departments was not available. However, Georgia's UCR gives the total number of sworn and civilian officers working full-time in the state of Georgia. This was used to calculate the state rate (per 100,000 inhabitants) which in turn was used to approximate the number of police in the MSAs.
Illinois	http://www.isp.state.il.us/docs/cii/cii09/cii09_Section_II_Pg27_to_196.pdf	"The I-UCR Program's crime index translates into the FBI National Program's eight Crime Index offenses." (see pg 6, http://www.isp.state.il.us/docs/cii/cii09/cii09_Intro_Pg1_to_8.pdf). 2009 data was used as the 2010 I-UCR has not been made available.
Kansas	http://www.accesskansas.org/kbi/stats/docs/pdf/Crime%20Index%202010.pdf	The Kansas Crime Index is compiled by the Kansas Bureau of Investigation and it is "designed to support the Crime in the U.S. report published annually by the FBI." (pg 1) Police employee data was not available for 2010. A simple average of 2009 and 2011 was used for the final estimate.
Kentucky	http://www.kentuckystatepolice.org/pdf/cik_2010.pdf	The Crime in Kentucky reports are published in "accordance with UCR guidelines." (pg 2).
Louisiana	http://www.lcle.la.gov/programs/uploads/crime_in_la_2009.pdf	2010 data is currently unavailable for all indicators. The latest data (2009) was used. "In October 1993, the FBI certified the Louisiana Summary UCR program... In 2009, 160 law enforcement agencies that participate in submitting UCR data reported all 12 months to the FBI." (pp. 4-5)
Maryland	http://www.goccp.maryland.gov/msac/documents/2010_Crime_in_Maryland.pdf	"The Maryland UCR Program provides the means to forward valid data to the Federal Bureau of Investigation from a single agency and also to consolidate to into and annual report entitled Crime in Maryland." (page 1)
Massachusetts	http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/tables/table-6 & http://www.ucrstats.com/	
Michigan	http://www.michigan.gov/msp/0,4643,7-123-1645_3501_4621-259467--,00.html	"National Incident-Based Reporting System (NIBRS) is the FBI's incident-based reporting system in which data are collected on each single crime occurrence... Michigan provides data to NIBRS through MICR (Michigan Incident Crime Reporting)." (see http://www.michigan.gov/documents/msp/Dd-appa_313531_7.pdf). NIBRS is a part of FBI's UCR program.
Minnesota	https://dps.mn.gov/divisions/bca/bca-divisions/mnjis/Documents/2010%20State%20Crime%20Book.pdf	"Reports are collected for urban places (cities and towns) and rural areas according to the definitions of Uniform Crime Reporting." (pg 1) The report also states that "the data has been submitted to the Federal Bureau of Investigation's Uniform Crime Reporting Program."
Missouri	http://www.mshp.dps.missouri.gov/MSHPWeb/SAC/data_and_statistics_ucr_query_backup.html	"In 2001 Missouri instituted mandatory UCR reporting on a statewide basis... Missouri Highway Patrol (MSHP) creates and maintains computer files of the Missouri UCR data and supplies information not only to the FBI for use in national crime statistics, but also to local agencies and organizations."
Nevada	http://nvrepository.state.nv.us/UCR/annual/Crime%20in%20Nevada%202010.pdf	The Crime In Nevada 2010 report states that "all contributors are given data submission guidelines, report forms, and a UCR Guide furnished by the FBI that outlines, in detail, procedures to score and to classify offenses." (pg 10)
New Jersey	http://www.njsp.org/info/ucr2010/index.html	The Crime in New Jersey 2010 states that it uses "the standard classification of offenses established by the Federal Bureau of Investigation. Regardless of the label placed on a particular offense in the various states' systems... if the incident meets the federal standard it will be reported as an offense." (pg 2)

STATE/DISTRICT	SOURCE	DATA NOTES
New York	http://www.nyc.gov/html/nypd/downloads/pdf/analysis_and_planning/citywide_seven_major_felony_offenses_2000_to_2010.pdf	"The data is [sic]... classified and scored in the same fashion as the [FBI's] UCR."
North Carolina	http://crimereporting.ncdoj.gov/Introduction.aspx	"North Carolina Uniform Crime Reporting (UCR) Program is part of a nationwide, cooperative statistical effort administered by the Federal Bureau of Investigation."
Ohio	http://www.ocjs.ohio.gov/crime_stats_reports.stm	"The FBI's UCR Program provides a standardized way for law enforcement to voluntarily report their crime statistics... In 2010, law enforcement agencies active in the UCR Program represented 97.4 percent of the total population. In Ohio, 90 percent of the population actively reported data to the UCR Program." (pg 3, http://www.publicsafety.ohio.gov/links/ocjs_Statistics.pdf). 2009 data used as 2010 data is unavailable. Police data was calculated using the state rate.
Oklahoma	http://www.ok.gov/osbi/documents/2010%20UCR%20Annual%20Report.pdf	One of the fundamental objectives of the Oklahoma UCR Program is to "provide the FBI with complete UCR data to be included in the national publication "Crime In The United States."(Chapter 2, pg 3)
Oregon	http://www.oregon.gov/OSP/CJIS/docs/2009/2009_ANNUAL_REPORT.pdf	The Oregon Uniform Crime Report Manual states the "state UCR Program... forwards the data, using uniform offense definitions, to FBI's national CUR Program." (see http://www.oregon.gov/OSP/CJIS/docs/OUCR_MANUAL_SECT_1_W_TOC_JAN2010.pdf?ga=t). 2009 data was used as 2010 is not yet available.
Pennslyvania	http://ucr.psp.state.pa.us/UCR/Reporting/Annual/AnnualFrames.asp?year=2010	"In view of the need for compatibility with the Federal system, the categories of offense classification employed in this program [i.e. Pennsylvania's UCR Program] remain the same as those employed on the national level." (see 'Introduction')
Rhode Island	http://www.risp.ri.gov/docs/UCR/2010.pdf	"In June 2005, the FBI certified the Rhode Island Incident Based Reporting system as compliant with their stringent standards for certification in the National Incident Based Reporting System (NIBRS)." Data for the number of full time police employees was not available. The state police rates was used to impute the numbers.
South Carolina	http://www.sled.sc.gov/documents/CrimeReporting/SCCrimeBooks/2009/2009%20Crime%20in%20South%20Carolina.pdf	"The information collected and the uniform classification under which it is collected are based directly upon the guidelines developed by the IACP [International Association of Chiefs of Police] and FBI." 2010 data was unavailable. 2009 data used.
Tennessee	http://www.tennesseecrimeonline.com/tibrspublic2005/Browse/browsetables.aspx	"The Tennessee Bureau of Investigation's Crime Statistics Unit, housed within the Information Systems Division, compiles and published this report based upon crime statistics submitted by all law enforcement agencies across the state. The crimes are reported to the Tennessee Incident Based Reporting System, (TIBRS) which is the state's version of the FBI's National Incident Based Reporting System (NIBRS)." Police data was unavailable. The state police rate was used to impute the numbers.
Texas	http://www.txdps.state.tx.us/administration/crime_records/pages/crimestatistics.htm	"The Texas version of IBR [Incident Based Reporting], TIBRS, includes all national data elements as well as Texas-specific data." (pg 5)
Utah	http://publicsafety.utah.gov/bci/documents/2010CrimeinUtahReport_000.pdf	"The Utah Incident Based Reporting System was implemented in 1991... The data accepted by the Utah repository is also forwarded to the NIBRS repository where the FBI uses it to depict criminal activity nationwide." (pg 62)
Virginia	http://www.vsp.state.va.us/downloads/Crime_in_Virginia_2010.pdf	"All information in this report uses an incident based reporting format. The Incident Based Reporting (IBR) central repository went into production in January 1994." (pg iii)
Washington	http://www.waspc.org/index.php?c=crime%20statistics	"In December 2006, after many years of participating in the testing process that is required to officially collect and submit accurate NIBRS data, Washington State was certified by the FBI." (pg 6)
West Virginia	http://www.statepolice.wv.gov/about/Documents/CrimeStatistics/2010wvcrimes.pdf	"In September of 1998, West Virginia became the sixteenth state to receive NIBRS certification by the FBI. As of January 1, 1999, West Virginia fully committed to IBR by only accepting data in the WV-IBR format." (pg 2)
Wisconsin	http://oja.wi.gov/docview.asp?docid=21985&locid=97	"This report, prepared by the OJA Statistical Analysis Center (SAC), is a collection of crime data reported to Wisconsin law enforcement agencies in 2010. It contains detailed information on crime volume, rates, and trends on eight major criminal offenses as designated by the FBI." (pg 1)

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