

2013 Survey of Currently-Installed Interlocks in the U.S.

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The purpose of this report is to track the increases in the utilization of ignition interlocks as a drunk driving sanction in the U.S. This is the eighth annual survey compiled by the author since 2006. Four figures in this report show the national trend and current snapshots for each state. The figures are:

1. the trend in the number of ignition interlocks installed in the US,
2. the number of interlocks currently-installed in each state,
3. the number of interlocks per capita in each state, and
4. the number of interlocks per Fatal Alcohol-Impaired-Driving Crash, FAIDC.

Methodology

Two independent sets of sources were used to estimate the number of interlocks in each state. The fifteen U.S. Interlock distributors comprised one set. The distributors included AlcoAlert Interlock, Alcohol Countermeasure Systems, Alcohol Detection Systems, Autosense, B.E.S.T. Labs, Consumer Safety Technology, Draeger, Guardian Interlock, Instant Interlock, Interceptor Ignition Interlocks, Lifesafer Interlock, Low Cost Interlock, Monitech, Sens-O-Lock of America and Smart Start. Independent official government contacts in each of the states comprised the second source. The data were collected in July-August 2013.

All fifteen US ignition interlock distributors provided estimates for the total number of their ignition interlocks that were currently-installed in the U.S. Fourteen of the fifteen distributors also provided state-by-state estimates of their currently-installed interlocks. Independent state estimates were acquired from forty-six states and those estimates were used for those states in this report. The author was unable to identify state sources in Alaska, Indiana, Rhode Island, and Wisconsin. For each of those four states, the sum of values from the fourteen distributors was increased by a percentage equal to the average U.S. market share of Smart Start, the company that did not report state data.

The columns of Appendix 1 contain the raw data and computed values used in this report.

Column 1 lists each of the states and the U.S.

Column 2 is the number of currently-installed ignition interlock devices, IID's, in each state.

Column 3 is the rank of each of the states on the number of currently-installed interlocks.

Column 4 is the population of each state.

Column 5 is the number of IID's per 10,000 population

Column 6 is the state rank on IID's per 10,000 population.

Column 7 is an estimate of the number of Fatal Alcohol-Impaired-Driving Crashes in 2013 based on a linear extrapolation of a least squares fit to the FAIDC data for 2007-2011.

This is a surrogate denominator for the number of drunk drivers in each state.

Column 8 is the number of IID's per FAIDC for each state and the US.

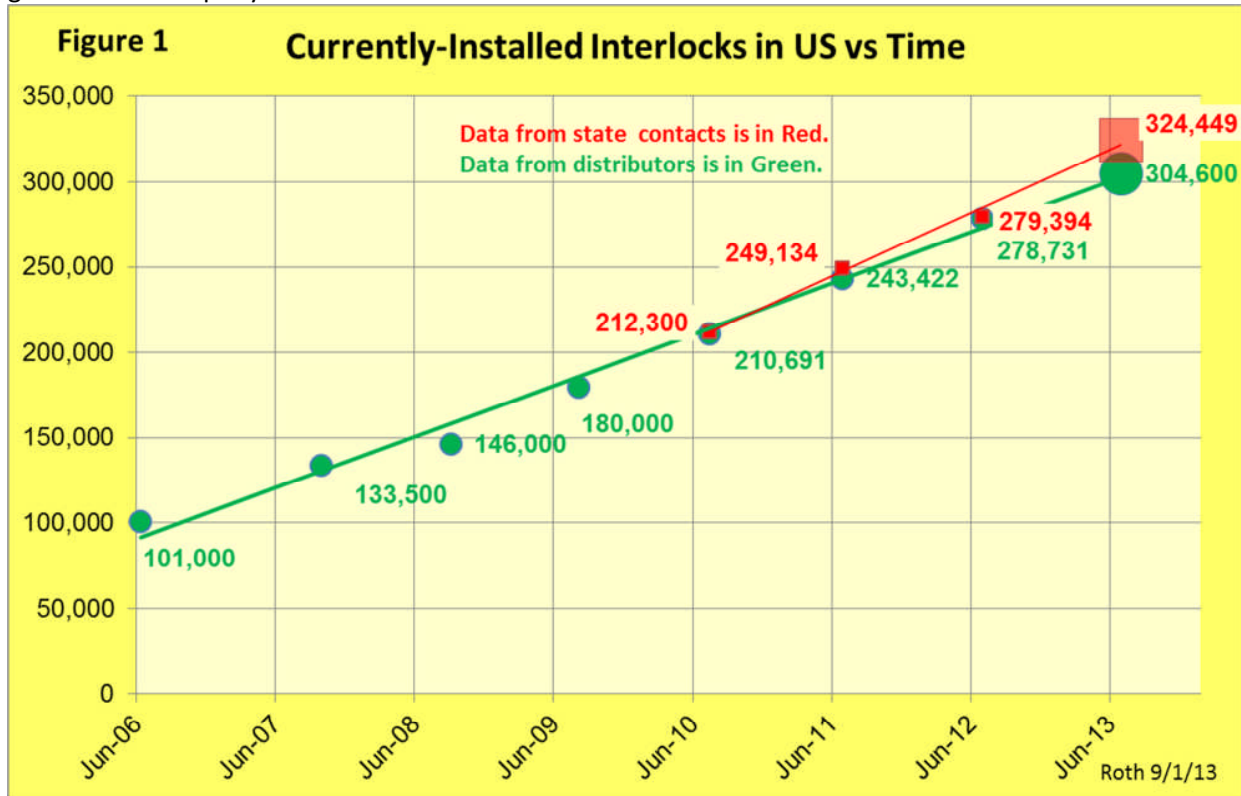
Column 9 is the state rank on IID's per FAIDC.

Acknowledgements

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Results

Figure 1 shows the trend in the total number of currently-installed interlocks in the U.S.¹ The 2013 estimates are based on data supplied by 15 ignition interlock distributors and 46 independent state sources. A least-squares straight line fit to the distributor data indicates average yearly increases of about 30,000 units per year. A similar fit to the four data points from state estimates indicates a slightly greater increase per year.



There are approximately 1,400,000 impaired driving arrests² each year in the U.S. Accordingly, the ratio of currently installed interlocks to persons arrested is about 22%.

There are approximately 1,000,000 impaired driving convictions each year in the U.S. So the ratio of currently installed interlocks to impaired driving convictions is about 30%.

There is about one currently-installed interlock per thousand residents in the U.S.

There are about 41 ignition interlocks per fatal alcohol-impaired-driving crash in the U.S. (305,000 interlocks divided by 7400 fatal alcohol-impaired-driving crashes).

¹ Before 2010 there was insufficient data from state sources for the computation of a national total and only the totals of values from distributors were plotted. For the last 4 years, there has been sufficient state data for a national estimate in addition to the estimate from distributors.

² The numbers of arrests and convictions are not uniformly collected in the states. Doing so is complicated by state differences in diversion programs, plea deals, police enforcement, and variations in data reporting. The numbers used for arrests and convictions are the generally accepted estimates for the U.S. The author believes that the actual number of DWI arrests per year is significantly higher than the FBI's estimate which is based on voluntary reporting by law enforcement agencies. For example, the FBI reported 11,307 DWI arrests in New Mexico in 2010 whereas the NM Citation Tracking System reported 16,563.

Figure 2 shows estimates for the number of currently-installed ignition interlocks by state. Texas, California, Arizona, and Colorado have the most with over 20,000 each. Washington, Kansas, Wisconsin, New Mexico, and Maryland have between 10,000 and 20,000. Fifteen states have between 5000 and 10,000; ten states have between 1000 and 5000; and the remaining sixteen states have a combined total of less than 7000 currently-installed interlocks.

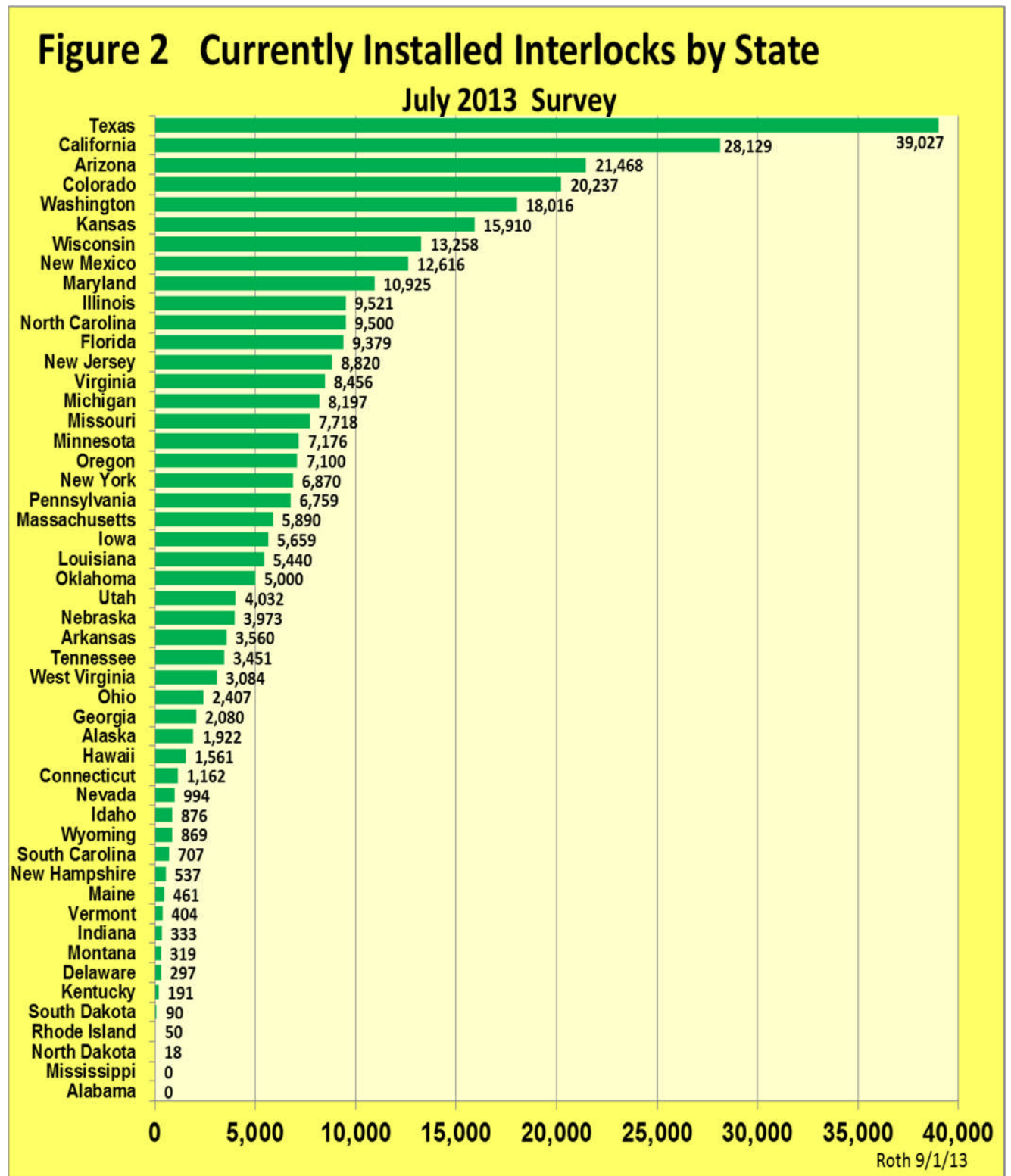


Figure 3 shows currently-installed interlocks per capita by state. New Mexico, Kansas, Colorado, and Arizona rank highest on this measure. Sanctions have a general deterrent effect only if members of the public know about them. Therefore the number of interlocks per capita represents one relative measure of the general deterrent effect of interlocks in each state.

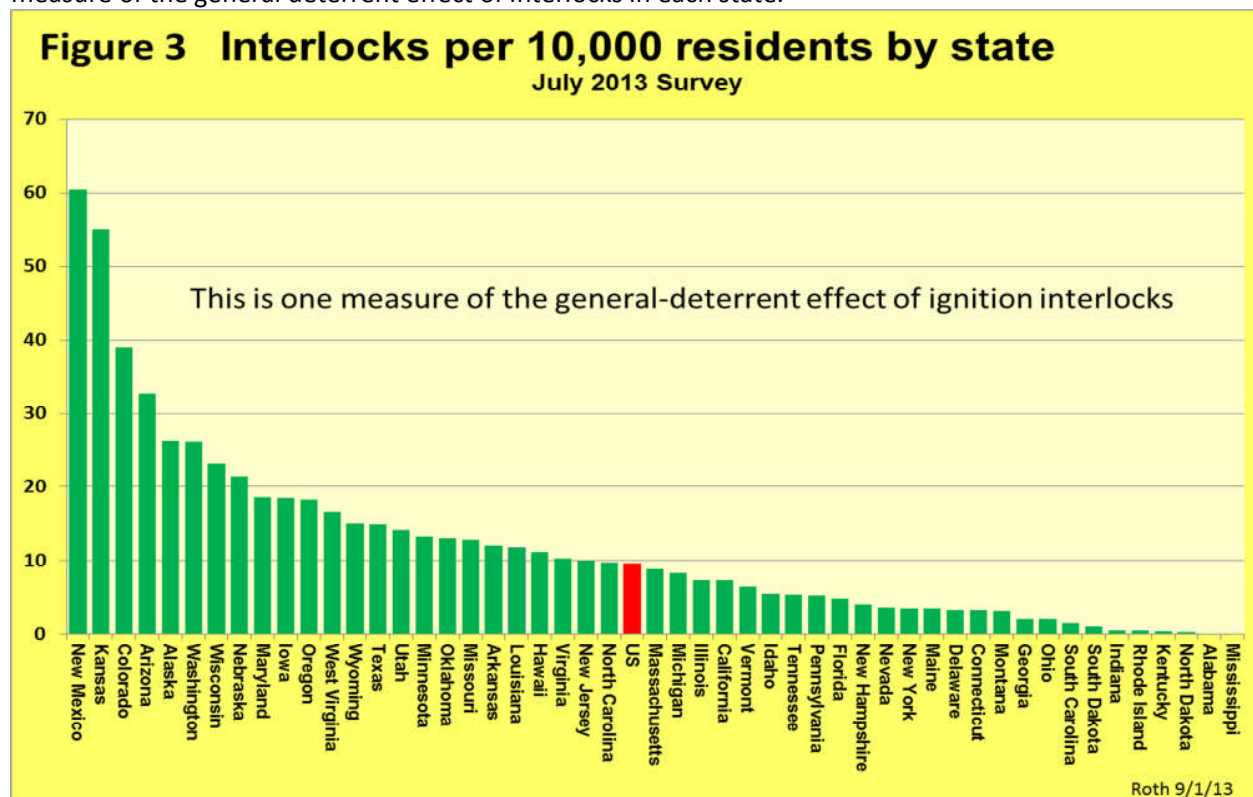
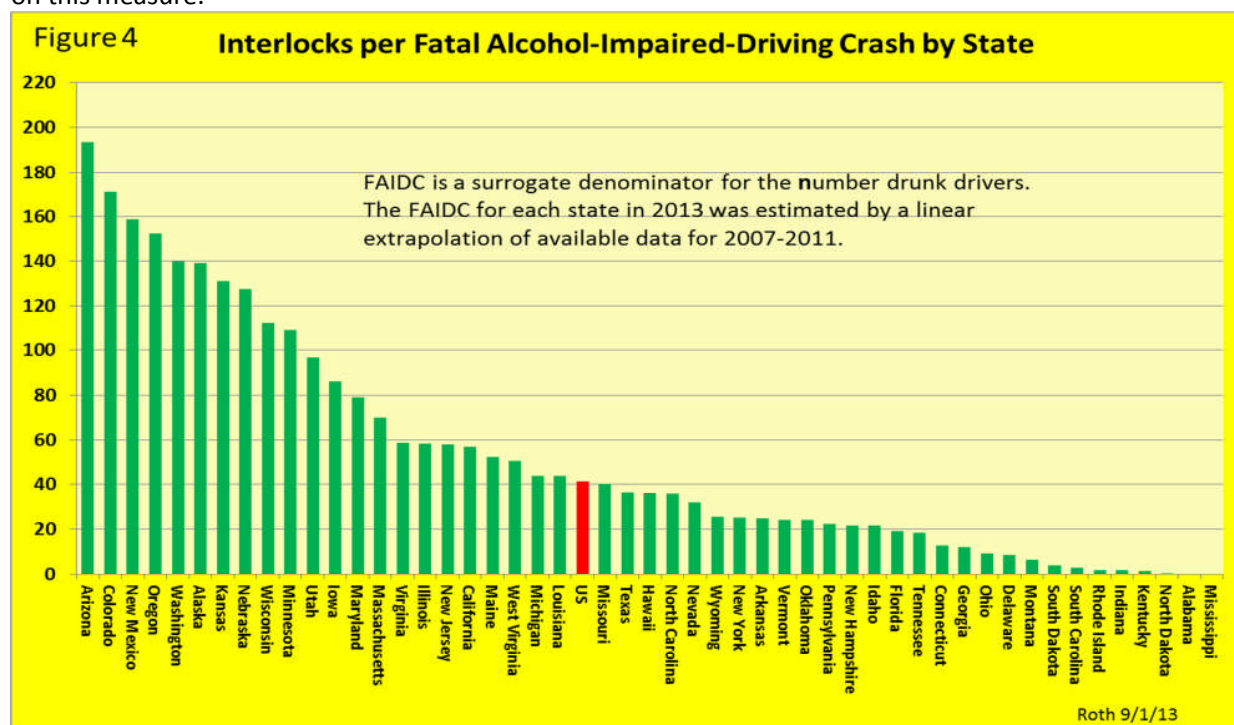


Figure 4 shows the estimated number of currently-installed interlocks per fatal alcohol-impaired-driving crash by state. This is one relative measure of the specific deterrent effect of interlock programs in the states. Arizona, Colorado, New Mexico, Oregon, Washington, Alaska, Kansas, and Nebraska rank highest on this measure.



Appendix 1: A summary of raw data and computed values used in figures 1-4

State	Installed Interlocks (IID's)	Rank on IID's	Population Estimate	IID's Per 10,000	Rank on IID's Per 10,000	FAIDC Estimate	IID's Per FAIDC	Rank on IID's Per FAIDC
Alabama	0	49	4822023	0.0	49	172	0	49
Alaska	1922	32	731449	26.3	5	14	139	6
Arizona	21468	3	6553255	32.8	4	111	193	1
Arkansas	3560	27	2949131	12.1	19	144	25	30
California	28129	2	38041430	7.4	28	496	57	18
Colorado	20237	4	5187582	39.0	3	118	171	2
Connecticut	1162	34	3590347	3.2	39	90	13	38
Delaware	297	44	917092	3.2	38	35	9	41
Florida	9379	12	19317568	4.9	33	490	19	36
Georgia	2080	31	9919945	2.1	41	173	12	39
Hawaii	1561	33	1392313	11.2	21	43	36	25
Idaho	876	36	1595728	5.5	30	41	22	35
Illinois	9521	10	12875255	7.4	27	164	58	16
Indiana	333	42	6537334	0.5	45	186	2	46
Iowa	5659	22	3074186	18.4	10	66	86	12
Kansas	15910	6	2885905	55.1	2	122	131	7
Kentucky	191	45	4380415	0.4	47	124	2	47
Louisiana	5440	23	4601893	11.8	20	124	44	22
Maine	461	40	1329192	3.5	37	9	52	19
Maryland	10925	9	5884563	18.6	9	138	79	13
Massachusetts	5890	21	6646144	8.9	25	84	70	14
Michigan	8197	15	9883360	8.3	26	187	44	21
Minnesota	7176	17	5379139	13.3	16	66	109	10
Mississippi	0	50	2984926	0.0	50	94	0	50
Missouri	7718	16	6021988	12.8	18	192	40	23
Montana	319	43	1005141	3.2	40	50	6	42
Nebraska	3973	26	1855525	21.4	8	31	127	8
Nevada	994	35	2758931	3.6	35	31	32	27
New Hampshire	537	39	1320718	4.1	34	25	22	34
New Jersey	8820	13	8864590	9.9	23	153	58	17
New Mexico	12616	8	2085538	60.5	1	79	159	3
New York	6870	19	19570261	3.5	36	275	25	29
North Carolina	9500	11	9752073	9.7	24	267	36	26
North Dakota	18	48	699628	0.3	48	52	0	48
Ohio	2407	30	11544225	2.1	42	258	9	40
Oklahoma	5000	24	3814820	13.1	17	208	24	32
Oregon	7100	18	3899353	18.2	11	47	152	4
Pennsylvania	6759	20	12763536	5.3	32	305	22	33
Rhode Island	50	47	1050292	0.5	46	28	2	45
South Carolina	707	38	4723723	1.5	43	232	3	44
South Dakota	90	46	833354	1.1	44	23	4	43
Tennessee	3451	28	6456243	5.3	31	187	18	37
Texas	39027	1	26059203	15.0	14	1074	36	24
Utah	4032	25	2855287	14.1	15	42	97	11
Vermont	404	41	626011	6.5	29	17	24	31
Virginia	8456	14	8185867	10.3	22	144	59	15
Washington	18016	5	6897012	26.1	6	129	140	5
West Virginia	3084	29	1855413	16.6	12	61	50	20
Wisconsin	13258	7	5726398	23.2	7	118	112	9
Wyoming	869	37	576412	15.1	13	34	26	28
US	304,600		313914040	9.7	24.5	7356	41	