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Evaluation of State Ignition Interlock Programs: Interlock Use Analyses From 28 States, 2006–2011

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16. Abstract In 2010, the Centers for Disease Control and Prevention (CDC) and NHTSA began collaborating on a project to evaluate ignition interlock programs in selected States. The purpose of the evaluation was to provide information and best practices to States for ignition interlock programs. The project was managed by the Governor's Highway Safety Association and conducted by the Preusser Research Group. Research was conducted to determine the following: <ul style="list-style-type: none"> • How States can increase interlock use among DWI offenders who are required or eligible to install one. • Which changes in ignition interlock programs led to increases in ignition interlock use. • Identify the key features of ignition interlock programs. • Which key program features were related to higher ignition interlock use rates. 					
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The following terms and abbreviations are used throughout this report.

- BAC: blood alcohol concentration in the body, expressed as grams of alcohol per deciliter (g/dL) of blood, usually measured with a breath or blood test. States use different terminology for grams per deciliter, but they are all mathematically equivalent.
- DWI: the offense of driving while under the influence of alcohol. In different States the offense may be called Driving While Intoxicated (DWI), Driving Under the Influence (DUI), or other similar terms.
- Interlock: an alcohol ignition interlock device.
- DWI fatalities: traffic crash fatalities involving at least one driver with a BAC of .08 or higher.
- DWI arrests: offenders arrested for driving while intoxicated with BACs of .08 g/dL or higher.

Executive Summary

Introduction

Alcohol-impaired driving crashes in the United States accounted for 31 percent of all motor vehicle fatalities in 2012, killing 10,322 people (NCSA, 2013). Drivers with previous convictions for driving while impaired (DWI) are at increased risk of being involved in alcohol-impaired crashes (Elder et al., 2011). One way to prevent drivers who have been convicted of DWI from driving after drinking is to use ignition interlocks, breath-test devices connected to vehicle ignitions. The driver must provide a breath sample below a State-established set point to start the vehicle. Most States use a blood alcohol concentration set point of .02 grams per deciliter. While installed, interlocks are effective in reducing recidivism by a median of 67 percent (Elder et al., 2011; Willis, Lybrand, & Bellamy, 2006).

Most States have laws that require some or all convicted DWI offenders to install ignition interlocks on their vehicle and all States allow interlocks to be used for some offenders (NCSL, 2014; NHTSA, 2013a). Some States have implemented incentives for offenders to install ignition interlocks when the offenders are not required to do so. All States have implemented ignition interlock programs to manage interlock issues and monitor offenders who are required or eligible to install them. Despite these laws and programs, the proportion of convicted offenders who install interlocks is low. In 2013, the number of interlocks in use was 300,000 (Roth, 2013), but approximately 1.4 million people are arrested for DWI yearly (FBI, 2012). Therefore, only about 21 percent of those arrested for DWI install interlocks. Due to the low use of interlocks, the maximum potential reductions in alcohol-impaired driving are not being achieved.

In order to increase use of ignition interlocks through improving State programs, in 2010 the National Highway Traffic Safety Administration sponsored an expert panel on key features of State interlock programs. This panel identified a strong need for research to determine the benefits of different program features (Marques, 2010). In 2010, the Centers for Disease Control and Prevention (CDC) and NHTSA began collaborating on a project to evaluate ignition interlock programs in selected States. The purpose of the evaluation was to provide information and best practices to States for ignition interlock programs. The project was managed by the Governor's Highway Safety Association and conducted by the Preusser Research Group.

This report provides the results from the first part of the project that had the following objectives:

- Determine how States can increase interlock use among DWI offenders who are required or eligible to install one.
- Determine which changes in ignition interlock programs led to increases in ignition interlock use.
- Identify the key features of ignition interlock programs.
- Determine which key program features were related to higher ignition interlock use rates.

Methods

Data

Interlock-in-use rates

Data on interlocks in use for each State were obtained from Impact DWI, Inc. for 2006 to 2011 (Roth, 2006-2011). From these, 28 States that had more than 2,000 interlocks in use in 2010 were identified. Ignition interlock program personnel in the 28 States were contacted. Data from several sources was requested from each of the 28 States, including arrest, court and interlock data. Interlock-in-use data was difficult to obtain from some States. When available from the State, State interlock-in-use data was used. When State interlock-in-use data was not available, Impact DWI data was used.

Data also was collected to use as denominators in interlock-in-use rate calculations. Ideally, the number of DWI offenders who are required or eligible to install interlocks would be used as denominators; however, this information was not available from most of the States. The following denominator data was obtained for 2006 to 2011 for each of the 28 States:

- 1) Population data from the U.S. Census Bureau.
- 2) DWI arrests from the FBI's Uniform Crime Reports.
- 3) DWI fatalities in motor vehicle crashes that each involved at least one driver with a BAC \geq .08 g/dL from NHTSA's Fatality Analysis Reporting System (FARS).

Three different interlock-in-use rates were calculated by dividing the number of interlocks in use by the three denominators described above.

- 1) Interlocks in use per 10,000 population
- 2) Interlocks in use per 100 DWI arrests
- 3) Interlocks in use per DWI fatality

The three interlock-in-use rates were calculated for all 28 States for the years 2006 to 2011.

State interlock program features

Discussions with State interlock program staff and managers were conducted to obtain information on the State's interlock requirements and incentives including interlock eligibility for offenders in four categories (first offenders, repeat offenders, high-BAC offenders, and BAC-test-refusal offenders) and penalties for failing to comply with interlock requirements. These discussions also obtained information on interlock program features including program administration, resources, costs, data systems, offender monitoring procedures, training of program staff, alcohol screening and treatment requirements, and program changes from 2006 to 2011. Once this information was obtained, further discussions were conducted to determine features that might be associated with successful interlock programs. Additional information was

obtained from published studies, State public information sources on the internet, and from the Insurance Institute for Highway Safety's (IIHS) records of laws in each State.

Comparisons of State interlock use counts with program changes

Each State's interlock use counts from 2006 to 2011 were compared with its interlock program changes to evaluate whether program changes were associated with changes in interlock use.

State interlock program keys

Eight ignition interlock program keys believed to be important to program success were identified from the discussions with the 28 States and from review of previously published studies (Beirness & Marques, 2004; CDC, 2012; Elder et al., 2011; Fieldler, Brittle, & Stafford, 2012; Marques & Voas, 2010; NHTSA, 2011; Robertson, Holmes, & Vanlaar, 2013; Willis, Lybrand, & Bellamy, 2006).

These eight program keys are organized by three program aspects.

Program Design

1. Requirements: A requirement or strong incentive for all DWI offenders to install an interlock. Typical incentives include reduction of hard suspension periods, fines, or other penalties.
2. Penalties: Swift, certain, and appropriately severe penalties for offenders who are required or elect to install interlocks if they drive vehicles that do not have operating interlocks.

Program Management

3. Monitoring: Careful monitoring after interlocks are ordered or required to assure that offenders install the interlocks and that they do not circumvent the requirement after interlocks are installed.
4. Uniformity: Uniform interlock program operations statewide.
5. Coordination: Close coordination and communication across all agencies involved in interlock program operations, including law enforcement, prosecutors, judges, probation, licensing, alcohol treatment, and interlock vendors.
6. Education: Thorough education on interlock program requirements and procedures for the public and for all program staff and management.

Program Support

7. Resources: Adequate staff and funding resources to operate the program effectively and efficiently.
8. Data: Accurate, accessible, and up-to-date record systems to determine which offenders are required or eligible to install interlock, to monitor offenders and report violators, and to evaluate program effectiveness and suggest improvements.

The project's principal investigator reviewed all interlock program information collected and rated each State on the eight program keys using a 5-point rating scale with strongest performance scored 5 and least strong performance scored 1. The scores reflected each program's operations throughout 2011 and do not account for law or program improvements during or subsequent to 2011.

Some program keys were assessed objectively; for example, the requirements key received a higher rating for a State with a first-offender interlock requirement compared to a State with no first-offender requirement. Other keys lacked objective measures and were assessed more subjectively based on discussions with each State's program administrators and staff. If a State mentioned struggling with a key, and that struggle negatively affected the interlock program, then the State was given a low rating. For example, if a State mentioned a lack of communication between agencies such as the Department of Motor Vehicles, courts, and law enforcement, and this lack of communication resulted in information not being exchanged that caused a direct negative affect on the program, then that State received a lower rating on the coordination key.

Analysis Strategy

Descriptive analysis

Interlock use counts and rates were examined for the 28 States to determine variation. Trends in interlock use counts and rates were analyzed from 2006 to 2011. Interlock program keys and time of enactment were plotted from 2006 to 2011 for each State.

Relation of program changes to State interlock use counts

Each State's interlock use counts from 2006 to 2011 were compared with its interlock program changes to evaluate whether program changes were associated with changes in interlock use.

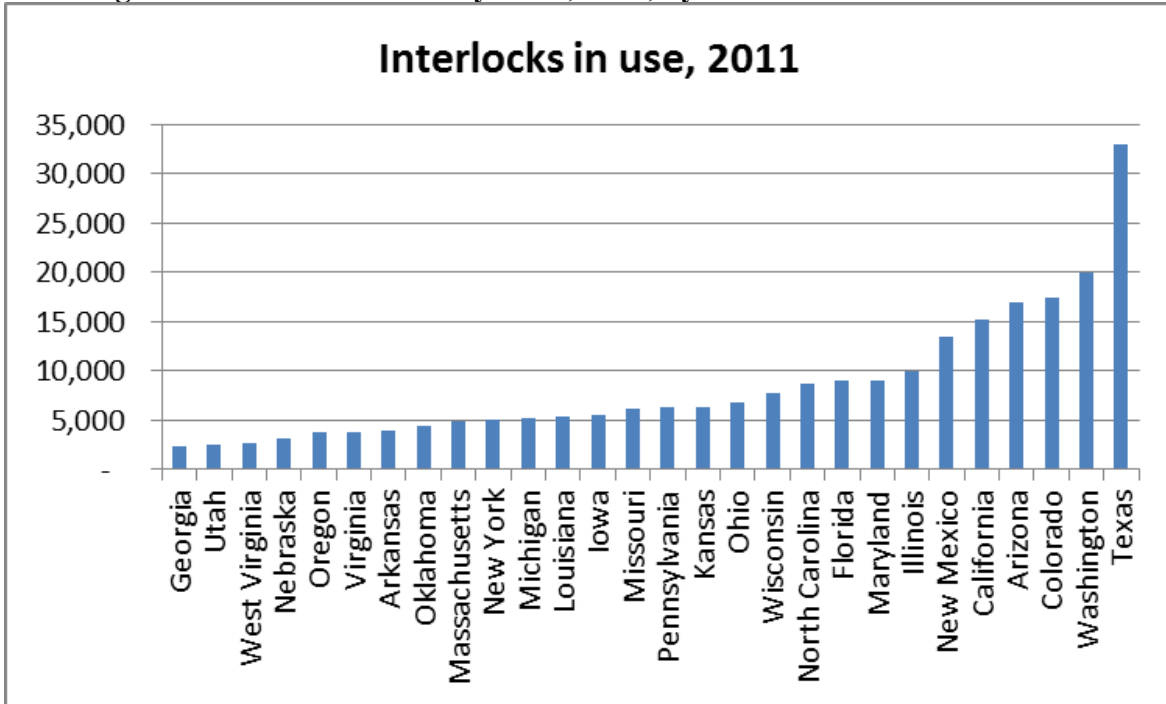
Relation of key program features to interlock use rates

Correlation analysis was used to measure the strength of the relationship between the key feature ratings and the three interlock-in-use rates for 2011 to determine which program keys were related to higher interlock use. For this analysis, California was excluded because two different interlock programs were in effect for that State due to a four-county pilot study.

Results

There were 238,997 interlocks reported in use in 2011 in the 28 study States. Georgia had the fewest, at 2,308, while Texas had the most, at 33,064. Only 6 States reported more than 10,000 interlocks in use.

Figure 1. Interlocks in Use by State, 2011, by Number of Interlocks in Use



Interlock use increases following program changes

Table 1. Interlocks in use by State, 2006-2011

State	2006	2007	2008	2009	2010	2011	Percent difference from 2006 to 2011
Arizona	3,654	7,700	6,849	15,397	18,300	17,026	366%
Arkansas	1,250	1,697	1,366	1,704	5,880	3,952	216%
California	4,876	5,204	5,904	7,545	8,223	15,180	211%
Colorado	2,755	5,267	6,104	8,775	17,056	17,461	534%
Florida	5,434	5,950	6,738*	7,791	8,514	8,976	65%
Georgia	1,612	1,938	1,919	1,995	2,182	2,308	43%
Illinois	2,731	2,876	3,387	6,500	11,000	9,974	265%
Iowa	4,049	5,000	4,618	5,225	5,342	5,491	36%
Kansas	420	739	861	1,919	3,500	6,379	1419%
Louisiana	1,613	2,111	3,085	4,124	4,806	5,337	231%
Maryland	4,006	4,905	5,966	6,400	9,600	9,000	125%
Massachusetts	223	952	2,186	2,488	4,601	4,872	2085%
Michigan	4,000	4,825	3,994	4,038	4,974	5,249	31%
Missouri	1,852	3,020	2,743	4,649	4,693	6,179	234%
Nebraska	286	500	1,030	1,136	1,800	3,100	984%
New Mexico	6,311	7,437	8,955	8,625	12,064	13,500	114%
New York	702	1,544	1,276	1,762	2,500	5,000	612%
North Carolina	6,034	7,685	8,003	8,303	8,500	8,761	45%
Ohio	2,260	3,105	2,580	2,974	4,217	6,741	198%
Oklahoma	1,709	2,200	1,722	1,635	6,000	4,500	163%
Oregon	2,012	2,302	2,570	2,957	3,499	3,715	85%
Pennsylvania	2,875	4,254	4,336	5,122	5,722	6,331	120%
Texas	8,582	17,000	14,935	17,025	31,150	33,064	285%
Utah	1,111	1,186	1,311	1,497	1,950	2,550	130%
Virginia	3,593	4,306	4,253	4,641	4,200	3,841	7%
Washington	8,833	9,792	9,997	14,974	14,117	20,000	126%
West Virginia	701	1,252	1,095	1,503	2,112	2,686	283%
Wisconsin	832	998	967	945	1,195	7,824	840%
Total	84,316	115,745	112,012	151,649	207,697	238,997	183%

Key	Requirements	Penalties	Monitoring	Uniformity	Coordination	Education	Resources	Data
Shading	Red	Blue	Purple	Yellow	Orange	n/a	Green	n/a

*In 2008, Florida made changes to both requirements and monitoring.

Interlock use increased in all 28 States from 2006 to 2011, sometimes substantially (Table 1). Of the 28 States, 18 changed their interlock laws or programs during the period 2007 to 2010. The changes added to the number of offenders required or eligible for interlocks, changed the incentives for interlocks, or changed interlock program management in some way. The total percent increase for all 28 States from 2006 to 2011 was 183 percent.

The names of the 18 States with law or program changes are highlighted in yellow in the first column of Table 1. The columns of the year or years that law or program changes were implemented are shaded based on the key feature that was implemented during that year (see shading key above).

Many States implemented several changes at the same time or in sequential years, so an increase in interlock use might be associated with any of the changes or to a combination of the changes. The associations between interlock law or policy changes and the State's interlocks in use are summarized below and presented generally as follows.

Law or policy change: change in interlock use summary
State, year of change, change detail: outcome

Required interlocks for first offenders: interlock use increased in all three States

Florida, 2008, at court's discretion: small increases through 2011

Kansas, 2011: use almost doubled in 2011 (same year)

New York, 2010: use doubled in 2011

Required interlocks for repeat- or high-BAC offenders: interlock use increased in 3 of 4 States

Michigan, 2010, high-BAC: a small increase through 2011

Virginia, 2008, repeat offenders: use increased in 2009 then decreased through 2011

West Virginia, 2008, high-BAC: use more than doubled by 2011

Wisconsin, 2010, high-BAC, refusal-, and repeat offenders: use increased by 6 times in 2011

Required interlocks for hardship license: interlock use increased, at least slightly in all 3 States

Illinois, 2009, first offenders: use nearly doubled in 2009 (same year) and increased further in 2010

Iowa, 2010: increased slightly in 2011

Louisiana, 2007, first offenders: use more than doubled by 2010

Interlock to reduce or eliminate license suspension period: interlock use increased in 5 of 6 States

Arkansas, 2009, first offenders: use more than doubled in 2010

Colorado, 2007, first offenders: use more than tripled by 2010

Iowa, 2010, first offenders: increased slightly in 2011

Oregon, 2008, increased suspension times unless interlock installed: use increased about a half by 2011

Washington, 2009, first offenders: use increased about a third by 2011

West Virginia, 2008, first offenders: use more than doubled by 2011

Management and other changes: interlock use increased in most States

California, 2009, program administration moved from courts to DMV: use almost doubled in 2011

California, 2010, four-county pilot project: use (for entire State) almost doubled in 2011

Colorado, 2010, improved tracking system: use increased slightly in 2011

Florida, 2008, provisions for program violators, third-time and fourth-time offenders: small increases through 2011

Missouri, 2009, added administrative oversight to judicial program: use increased by almost half by 2011

New Mexico, 2007–2010, yearly changes to law: use increased steadily

Oklahoma, 2010, added treatment requirement: use decreased by one quarter by 2011

Washington, 2010 and 2011, standardized procedures and compliance-based interlock removal: use increased by about a third in 2011

Measures affecting first-time offenders, such as whether to require interlocks for all or to permit earlier licensure through a hardship or regular license with the use of the interlock, were associated with increased interlock use. Measures affecting only high-BAC or repeat offenders were associated with increased use in many States, as were management and other changes.

Comparison of interlock-in-use rate

The correlations of the three interlock-in-use rates – interlocks in use per 10,000 population, per 100 DWI arrests, and per DWI fatality – show the three rates are strongly related (Table 2).

A correlation value of 0.5 and above suggests a strong relationship, 0.3 to 0.5 a moderate relationship, 0.1 to 0.3 a weak relationship, and 0.0 to 0.1 no relationship.

Table 2. Correlations of State Interlock Rates, 2011

Rate	Population	DWI arrests	DWI fatalities
Population	1.00	0.85	0.87
DWI arrests		1.00	0.77
DWI fatalities			1.00

Comparison of program keys and interlock-in-use rate

The correlations of the eight program key ratings with the three interlock-in-use rates (Table 3) show the relationships between the program keys and the interlock-in-use rates. The range of the correlations for each key, shown in the final row, is color coded by strength of relationship as follows: uncorrelated (red), weak (tan), moderate (light green), and strong (dark green).

Table 3. Correlations of State Interlock Program Key Ratings With Interlock Rates, 2011

Interlock Rate per:	Requirements	Monitoring	Coordination	Uniformity	Penalties	Education	Resource	Data
10,000 Population	0.63	0.56	0.55	0.52	0.47	0.38	0.41	0.12
100 DWI Arrests	0.51	0.39	0.36	0.38	0.31	0.19	0.17	0.02
DWI Fatality	0.64	0.56	0.50	0.45	0.47	0.37	0.28	0.12
Range	0.51-0.64	0.39-0.56	0.36-0.55	0.38-0.52	0.31-0.47	0.19-0.37	0.17-0.41	0.02-0.12

Each of the State interlock program keys is associated with higher interlock use with the exception of data. This finding was consistent for all three interlock rates. The relative order of correlations was similar for each of the rates with the requirements key having the highest correlation with all three rates and monitoring the second highest. The population rates generally had the strongest correlations with the program keys, followed by the DWI fatality rates, and then the DWI arrest rates.

Further insight on the eight keys comes from the correlations of the keys with each other, or inter-correlations (Table 4). The requirements and penalties keys in program design are strongly related (0.82). The monitoring, uniformity, coordination, and education keys in program management also are strongly related to each other (range 0.80–0.94).

Table 4. Inter-Correlations of State Interlock Program Key Ratings, 2011

	Program Design		Program Management				Program Support	
	Requirements	Penalties	Monitoring	Uniformity	Coordination	Education	Resource	Data
Requirements	1.00	0.82	0.72	0.62	0.69	0.61	0.62	0.37
Penalties		1.00	0.70	0.47	0.70	0.64	0.65	0.36
Monitoring			1.00	0.82	0.94	0.89	0.72	0.77
Uniformity				1.00	0.85	0.80	0.65	0.67
Coordination					1.00	0.94	0.76	0.75
Education						1.00	0.79	0.82
Resources							1.00	0.59
Data								1.00

Conclusions

The majority of States in this study increased the numbers of ignition interlocks in use from 2006 to 2011 with an overall increase of 183 percent for all 28 States combined. The results of the two main analyses – interlock use increases associated with program changes, and the correlations of program key ratings with interlock-in-use rate – show that requirements that cover more types of offenders, especially first-time offenders, were associated with interlock use increases. This finding is supported by both systematic review findings (Elder et al., 2011) and recommendations from the ignition interlock research community (Marques, 2010).

Despite this increase, there was only one interlock installed for every 4.5 DWI arrests in 2013 (Roth, 2013). Additionally, over half the States still do not require ignition interlocks for first-time DWI offenders. Very few States require interlocks for all convicted offenders without exception.

The requirements key had the strongest relationship to higher interlock use rates. Changing requirements and incentives to cover more classes of offenders requires making changes to State law.

The program management keys of monitoring, coordination, uniformity, and education also are moderately to strongly related to higher interlock-in-use rates, and are keys that interlock program administrators can improve by working with others in the State. For example, some States have implemented ignition interlock task forces comprised of representatives from all agencies related to the interlock program. In these task forces, judges, prosecutors, administrative office of the courts staff, defense attorneys, law enforcement, licensing authority, treatment facilities staff, and legislative representatives discuss and work on interlock program issues.

The resources and data keys had weaker relationships to interlock use rates but are important because they support the other program keys. Data especially plays an important role in that accurate, timely, coordinated, and accessible records are critical for an effective interlock program. Complete and coordinated record systems help determine which offenders are required or eligible to install an interlock, help monitor offenders and report violators, and can be used to evaluate program effectiveness and suggest improvements. If reporting could be standardized and data from different sources could be coordinated, then tracking of offenders would be less time consuming and more efficient. Florida and Colorado have data systems that can track offenders in this manner. States that want to evaluate and improve their interlock programs should improve their record systems.

One limitation to the current study was the availability of data. Data on DWI convictions, interlock orders, interlock installations, and interlock completions were needed to fully evaluate how State program factors affect the proportion of convicted DWI offenders who receive an interlock order, the proportion of those who receive an order who install an interlock, and the proportion of those who complete their requirement successfully. These data were not available. In addition, most States do not have a central repository where data from these sources can be merged and accessed.

In summary, to achieve and sustain high ignition interlock use, States should consider the following:

- Start with a program design of strong interlock requirements and incentives, coupled with effective penalties for non-compliance.
- Support these with strong program management: monitoring, uniformity, coordination, and education.
- The final two program support keys, data and resources, are necessary to support program management and to evaluate changes in program design.

Evaluation of Ignition Interlock State Programs Interlock Use Analyses From 28 States

I. Introduction

Background

Alcohol-impaired driving crashes in the United States accounted for 31 percent of all motor vehicle fatalities in 2012, killing 10,322 people (NCSA, 2013). Drivers with previous convictions for driving while impaired (DWI) are at increased risk of being involved in alcohol-impaired crashes (Elder et al., 2011). One way to prevent drivers who have been convicted of a DWI from driving after drinking is to use ignition interlocks. An ignition interlock is a breath-test device connected to a vehicle's ignition. The driver must provide a breath sample below a State-established calibration setting (called a set point) to start the vehicle. Most States use a calibration setting of .02 blood alcohol concentration. While installed, interlocks are effective in reducing recidivism by a median of 67 percent (Elder et al., 2011; Willis, Lybrand, & Bellamy, 2006).

Most States have laws that require some or all convicted DWI offenders to install ignition interlocks on their vehicles and all States allow interlocks to be used for some offenders (NCSL, 2014; NHTSA, 2013a). Some States have implemented incentives for offenders to install ignition interlocks when the offenders are not required to do so. All States have implemented ignition interlock programs to manage interlock issues and monitor offenders who are required or eligible to install them. Despite these laws and programs, the proportion of convicted offenders who install interlocks is low. In 2013, the number of interlocks in use was 300,000 (Roth, 2013), but approximately 1.4 million people are arrested for DWI yearly (FBI, 2012). Therefore, only about 21 percent of those arrested for DWI install interlocks. Due to the low use of interlocks by convicted offenders, the maximum potential reductions in alcohol-impaired driving are not being achieved.

In order to increase use of ignition interlocks through improving State programs, in 2010 NHTSA sponsored an expert panel on key features of State interlock programs. This panel identified a strong need for research to determine the benefits of different program features (Marques, 2010). In 2010, the Centers for Disease Control and Prevention and NHTSA began collaborating on a project to evaluate ignition interlock programs in selected States. The purpose of the evaluation was to provide information and best practices to States for ignition interlock programs. The project was managed by the Governor's Highway Safety Association and conducted by the Preusser Research Group.

This report provides the results from the first part of the project that had the following objectives:

- To determine how States can increase interlock use among DWI offenders who are required or eligible to install one.
- To determine which changes in ignition interlock programs led to increases in ignition interlock use.
- To identify the key features of ignition interlock programs.
- To determine which key program features were related to higher ignition interlock use rates.

Interlock programs are receiving increasing attention from both policymakers and researchers. NHTSA recently released its *Model Guideline for State Ignition Interlock Programs* (NHTSA 2013b). Other NHTSA publications regarding interlocks and interlock programs include *Ignition Interlock: An Investigation Into Rural Arizona Judges' Perceptions* (Cheesman, Kleiman, Lee, & Holt, 2014), *Countermeasures That Work* (NHTSA, 2013a, Sec. 4.2) and *Ignition Interlocks – What You Need to Know* (Mayer, 2014). The CDC's Community Guide (CDC, 2012), *Case Studies of Ignition Interlock Programs* (Fiedler, Brittle & Stafford 2012), the Traffic Injury Research Foundation Alcohol Interlock Curriculum for Practitioners (TIRF, 2013), and Marques and Voas (2010) document interlock programs and program features in the United States as of 2010.

Interlock types and function

Most States currently use interlocks with semiconductor or fuel cell technology sensors. Fuel cell interlocks use an ethanol-specific fuel cell for a sensor. NHTSA recently published *Model Specifications for Breath Alcohol Ignition Interlock Devices (BAIIDs)* (Model Specifications, 2013) stating that:

Model Specifications should ensure that BAIIDs are as accurate as possible and that it is not desirable to accept devices that generate high levels of false positives. The agency is also persuaded by the comments that current technology has progressed sufficiently to expect that BAIIDs should be able to distinguish between alcohol and other chemicals or substances. Accordingly, the Model Specifications provide in Test 12 and 13 that BAIIDs should distinguish between alcohol and other specific substances, such as acetone and cigarette smoke, which are commonly found on breath. BAIIDs that are unable to distinguish these substances from alcohol will not meet the Model Specifications.

At one time, States used interlocks with semiconductor technology. Semiconductor interlocks require more service than fuel cell interlocks and are not specific to alcohol detection. Over time, there has been a shift to fuel cell interlocks, and most States now require fuel cell interlocks.

Interlock effectiveness while installed

Interlocks work as intended. Extensive day-to-day experience with over 300,000 interlocks currently in use, produced and managed by 13 commercial vendors, demonstrates that ignition interlocks accurately and consistently locks the vehicle's ignition for an impaired driver and do not lock it for a sober driver. Post-start retests require the driver to remain sober while driving.

The best formal evidence comes from comparing DWI arrests for offenders with an interlock installed and for similar offenders with no interlock. Beirness and Marques (2004) summarized 10 evaluations of interlock programs in the United States and Canada. They concluded that interlocks reduce DWI arrests by at least half, and sometimes more, compared to similar offenders without interlocks. The CDC's Community Guide Systematic Review (Elder et al., 2011) and a Cochrane review of 14 studies (Willis, Lybrand, & Bellamy, 2006) reached similar conclusions.

What's known about interlock use?

Many offenders required or eligible to install an interlock fail to do so. As a first estimate, compare the number of interlocks in use with the number of DWI arrests. The number of interlocks in use has nearly tripled in the past 7 years, from about 101,000 in 2006 to about 210,000 in 2010 and 313,000 in 2013 (Roth, 2006-2013; see Appendix K). However, from the FBI Uniform Crime Report (FBI, 2012), at least 1,400,000 people were arrested for DWI in 2010. Therefore at most 15 to 20 percent of those arrested for DWI in 2010 installed interlocks. Across the 28 States that provided State-level data for this report, the ratio of interlocks in use to DWI arrests in 2010 ranged from 3 percent to 73 percent with the median State at 17 percent.

This low interlock use, measured either by interlocks in use per DWI arrest or by interlock installations per offender required to install one, seriously impair the effectiveness of interlock programs. As the CDC states:

Public health benefits of the intervention [alcohol interlocks] are currently limited by the small proportion of offenders who install interlocks in their vehicles. More widespread and sustained use of interlocks among this population could have a substantial impact on alcohol-related crashes (CDC, 2012).

Carryover effect

The interlock's effect is only temporary. The studies reviewed by Beirness and Marques (2004), Willis, Lybrand, and Bellamy (2006), and Elder et al. (2011) concluded that after the interlock was removed, interlock and comparison drivers had similar recidivism rates. Additional research is needed to investigate whether there are strategies for combining an interlock with other offender measures to produce longer-lasting reductions in impaired driving.

Report organization

The report is organized into the following sections:

Methods:

- Describes how interlock and program data were sought.
- Documents what data were obtained from States and from national sources.
- Documents how interlock and State program data were collected and analyzed.
- Describes the eight interlock program keys believed to be important to program success.
- Documents how each State's performance or correlation on each key was assessed.

Results:

- Provides data on interlocks in use, by State, from 2006 to 2011.
- Provides an overview of program and law changes since 2006.
- Analyzes interlock use increases following law and program changes.
- Calculates three interlock-in-use rates for each State.
- Compares program keys with interlock-in-use rates.

Program successes and obstacles:

- Documents interlock program successes and obstacles in the 28 States.

Potentially promising practices:

- Provides examples of States with potentially promising practices for each key.

Conclusions:

- Summarizes the program changes associated with increases in interlocks in use between 2006 and 2011.
- Summarizes the correlations of the eight program keys with interlock use.
- Provides advice to States seeking to increase interlock use.
- Notes how the study was limited by the lack of data on DWI convictions, interlock orders, interlock installations, and interlock completions.

II. Methods

Data

Counting interlocks – installed or in use

Interlocks can be counted by the number of interlocks installed in a year or the number of interlocks in use at a given date during the year. These measures differ because the length of an offender's interlock requirement varies, typically from 6 months to 2 years.

Each measure must be interpreted with care. Interlocks installed are a cumulative measure over a year, while interlocks in use are a snapshot of the number of interlock vehicles on the road at a moment in time. If an offender installs an interlock, removes the interlock for some reason, and then reinstalls it later in the year, this would be counted twice under interlocks installed and may not count at all under interlocks in use (depending on the date when interlocks in use are counted). If an offender receives an interlock term of more than one year, that one interlock could be counted in 2 or more years under interlocks in use, but would be counted only in one year under interlocks installed.

Interlock-in-use measures (see Appendix F) were used exclusively in this report because data was available from all 28 States while interlock installation data was available only for a few States.

Interlock use data

Data on interlocks in use for each State was obtained from Impact DWI, Inc. for 2006–2011 (Roth, 2006-2011). This data identified the 28 States that had more than 2,000 interlocks in use in 2010. Ignition interlock program personnel in these 28 States were contacted. Data from several sources was requested from each of the 28 States including arrest, court and interlock data. Interlock-in-use data was difficult to obtain from some States. When available from the State, State interlock-in-use data was used. When State interlock-in-use data was not available, Impact DWI data was used. Fifteen States provided data for at least some years. In 9 of the 15, the Roth data and State totals agree to within about 10 percent and in 3 more they agree to within

about 20 percent. In Arkansas, Nebraska, and North Carolina they differ quite substantially. Florida's 2010 count appears far too low based on previous years and on Roth's data.

Data also were collected to use as denominators in interlock-in-use rate calculations. The number of DWI offenders who are required or eligible to install an interlock could potentially be used as a denominator; however, this information was not available from most of the States. The following denominator data were obtained for 2006–2011 for each of the 28 States:

- 1) Population data from the U.S. Census Bureau.
- 2) DWI arrests from the Federal Bureau of Investigation's Uniform Crime Reports or the State data when available.
- 3) DWI fatalities (fatalities in motor vehicle crashes that involved at least one driver with a BAC \geq .08) from NHTSA's Fatality Analysis Reporting System (FARS).

DWI arrests are reported to the FBI by police agencies in each State. All police agencies in a State may not report every year, so it is not known how complete the totals are for any State and year. Some agencies in some States never report their data. FBI arrest counts in some States vary greatly from year to year.

DWI arrest data for 2006 through 2011 were requested from each study State. Eighteen States provided data for at least some years. The State and FBI arrest totals were consistently very close in only 3 States – California, Nebraska, and Pennsylvania. In a fourth – Maryland – they were close except for 2010. In all other States except Texas the FBI total was smaller than the State total, as expected. In 6 States, the FBI totals were consistently less than two-thirds of the State totals. In Texas, the reported State total was less than one-third of the FBI total in the only year when a State total was provided. Illinois confirmed that only two agencies reported data to the FBI, so the FBI totals substantially under-report true statewide arrests. Overall, State arrest data usually are more accurate than the FBI data but even State totals may not be complete for some States or some years (see Appendix C and D).

Three different interlock-in-use rates were calculated by dividing the number of interlocks in use by the three denominators described above.

- 1) Interlocks in use per 10,000 population
- 2) Interlocks in use per 100 DWI arrests
- 3) Interlocks in use per DWI fatality

The three interlock-in-use rates were calculated for all 28 States for 2006 to 2011. Data was estimated by extrapolation when not provided or available. Data was most frequently not provided or available for 2011.

Statistical analyses

The interlock-in-use rates cannot be analyzed with formal statistical models for two reasons. First, as noted above, there are uncertainties in both the interlock-in-use and the DWI arrest data and the uncertainties vary across the States. Next, State interlock laws, policies, and programs vary enormously. The laws, policies, and programs all interact to affect interlock use. This means

that statistical comparisons of interlock-in-use rates across States with specific law, policy, or program components make little sense unless the interactions with other components are considered. For example, one could consider comparing interlock-in-use rates of States with a first-offender interlock requirement to States without a first-offender requirement. But if a first-offender requirement is enforced only judicially then interlock-in-use rates may be low because some courts may not order interlocks. If a State with no first-offender requirement has a strong first-offender incentive, for example, to eliminate a license suspension or to divert the offender from a DWI charge, then interlock-in-use rates may be high. Instead of formal models, the changes in interlock use associated with program changes and the correlations of program factors with interlock-in-use rates were used to assess which interlock program features are most effective in producing higher interlock use.

State interlock program features

Discussions with State interlock program staff and managers were conducted to obtain information on the State's interlock requirements and incentives including interlock eligibility for first, repeat, high-BAC, and BAC test refusal offenders and penalties for failing to comply with interlock requirements. These discussions also obtained information on interlock program features including program administration, resources, costs, data systems, offender monitoring procedures, training of program staff, alcohol screening and treatment requirements, and program changes from 2006 to 2011. Once this information was obtained, further discussions were conducted to determine features that might be associated with interlock programs that had achieved higher levels of, or increases in, use. Additional information was obtained from published studies, State public information sources on the Internet, and from IIHS records of laws in each State.

Each State's interlock laws, programs, recent changes, and interlock use rates are provided in Appendix B, State Profiles, along with observations on anomalies in the data or the rates and potential explanations for rate changes. Each State's program successes, obstacles, and key features are summarized and tabulated in the Overview of Interlock programs section: program types; interlock requirements, and eligibility for first-, repeat-, high-BAC, and BAC-test-refusal offenders; interlock vendors; offender monitoring procedures; penalties for failing to comply with an interlock requirement; and alcohol screening and treatment requirements.

Comparisons of State interlock use counts with program changes

Each State's interlock use counts from 2006 to 2011 were compared with its interlock program changes to evaluate whether program changes were associated with changes in interlock use.

State interlock program keys

Eight ignition interlock program keys believed to be potentially important to program success were identified from the discussions with the 28 States and from review of previously published studies (Beirness & Marques, 2004; CDC, 2012; Elder et al., 2011; Fieldler, Brittle, & Stafford 2012; Marques & Voas, 2010; NHTSA, 2011; Robertson, Holmes, & Vanlaar, 2013; Willis, Lybrand & Bellamy, 2006).

The eight program keys are organized by three program aspects.

Program Design

1. Requirements: A requirement or strong incentive for all DWI offenders to install an interlock.
2. Penalties: Swift, certain, and appropriately severe penalties for offenders who are required or elect to install interlocks if they fail to install or circumvent the requirement.

Program Management

3. Monitoring: Careful monitoring after interlocks are ordered or required to assure that offenders install the interlocks and that they do not circumvent the requirement after interlocks are installed.
4. Uniformity: Uniform interlock program operations statewide.
5. Coordination: Close coordination and communication across all agencies involved in interlock program operations, including law enforcement, prosecutors, judges, probation, licensing, alcohol treatment, and interlock vendors.
6. Education: Thorough education on interlock program requirements and procedures for the public and for all program staff and management.

Program Support

7. Resources: Adequate staff and funding resources to operate the program effectively and efficiently.
8. Data: Accurate, accessible, and up-to-date record systems to determine which offenders are required or eligible to install interlocks, to monitor offenders and report violators, and to evaluate program effectiveness and suggest improvements.

The project's principal investigator reviewed all interlock program information collected and rated each State on the eight program keys using a 5-point rating scale with strong performance scored 5 and least strong performance scored 1 (see Table 1 and Table 2). The scores reflected each program's operations throughout 2011 and do not account for law or program improvements during or subsequent to 2011.

Table 1. Rating Scores for Performance Keys-1, 3, 5 Ratings

Key	5-Rating	Example	3-Rating	Example	1-Rating	Example
Requirement	Strong law or incentives to install	All offender law, significant reduction of hard suspension period	Moderately strong law with moderate incentives	High-BAC and repeat-offender law with small reduction of hard suspension period	Weak or no law	Repeat-offender law only, exceptions in mandatory programs that let offenders drive without interlocks for certain purposes, no incentives to install
Penalties	Strong, swift and appropriate penalties	Jail time, home monitoring if refuse to install	Moderate penalties	Extension of interlock installation period for failure to install, license suspension until term is completed	No penalties	No license suspension, no extension of interlock installation period
Monitoring	Careful monitoring to assure interlocks are installed	Random checks by DMV, probation, treatment center or other interlock involved agency to ensure installation	Average monitoring of offender, ex.	Letter of notification sent to offender from monitoring agency if failed to install	No agency monitoring of offender	Only vender reports, no other monitoring of offender
Uniformity	Uniform and consistent operations statewide	All agencies report data regularly in same format, on same time frame	Moderately consistent operations statewide	Most agencies are consistent with operations throughout State	No uniformity or consistency statewide	County or municipalities govern interlock operations individually, no consistency across the State
Coordination	Close coordination, communication across all agencies,	Regular task force meetings with representatives from all interlock involved agencies	Moderate coordination, communication across all agencies	Occasional meetings or discussions between interlock involved agencies, may not include all agencies involved	No communication between interlock involved agencies	No meetings or discussions between interlock involved agencies
Education	Regular training or education for all interlock involved agency staff and management	Regular meetings between interlock program managers, law enforcement, vendors, DMV, and court staff	Intermittent training or education for all interlock involved agency staff and management	May hold some training or education sessions for one or more agencies yearly or quarterly	No education or training of interlock involved agency staff and management	No meetings between any interlock agency staff
Resources	Adequate staff and funding resources	Designated interlock program manager and interlock staff	Average staff and funding resources	Interlock staff has other duties in addition to interlock responsibilities	Few or no staff or funding resources	No designated interlock program manager or staff-duties are completed by regular staff when time permits
Data	Excellent data records	Available from all agencies to monitor offenders, report violators and evaluate program effectiveness	Average data records	Available from some agencies to monitor offenders, report violators and evaluate program effectiveness	Poor data records	Data unavailable to monitor offenders, report violators and evaluate program effectiveness

Table 2. State interlock program ratings, 2011

	Program Design			Program Management			Program Support	
	Requirements	Penalty	Monitor	Uniform	Coordination	Education	Resource	Data
Arizona	5	5	3	3	3	3	3	2
Arkansas	3	1	2	4	2	2	2	2
Colorado	4	3	5	5	5	5	4	5
Florida	3	3	5	5	5	5	3	5
Georgia	2	2	2	3	2	3	3	2
Illinois	3	3	3	3	3	3	3	2
Iowa	3	2	3	5	3	3	3	2
Kansas	2	1	2	3	2	2	2	2
Louisiana	3	2	2	3	3	3	3	2
Maryland	3	4	3	3	3	3	3	2
Massachusetts	2	1	1	1	1	1	1	1
Michigan	2	2	2	3	3	3	2	2
Missouri	1	2	2	3	3	3	3	2
Nebraska	3	3	3	2	3	3	3	2
New Mexico	5	5	5	5	5	4	4	2
New York	4	5	3	3	3	3	3	3
North Carolina	3	3	3	3	3	3	4	3
Ohio	1	1	1	1	1	1	1	1
Oklahoma	2	3	3	3	3	4	3	3
Oregon	3	2	2	2	2	3	3	2
Pennsylvania	2	2	3	3	3	3	3	3
Texas	3	3	3	3	3	3	3	2
Utah	1	1	1	1	1	1	1	1
Virginia	3	3	3	3	3	3	3	2
Washington	5	5	5	5	5	5	3	3
West Virginia	3	3	2	3	3	3	3	2
Wisconsin	3	3	2	3	3	3	3	2
Total	2.85	2.70	2.74	3.11	2.93	3.00	2.78	2.30

5= Strongest

3=Moderate Strength

1=Least Strength

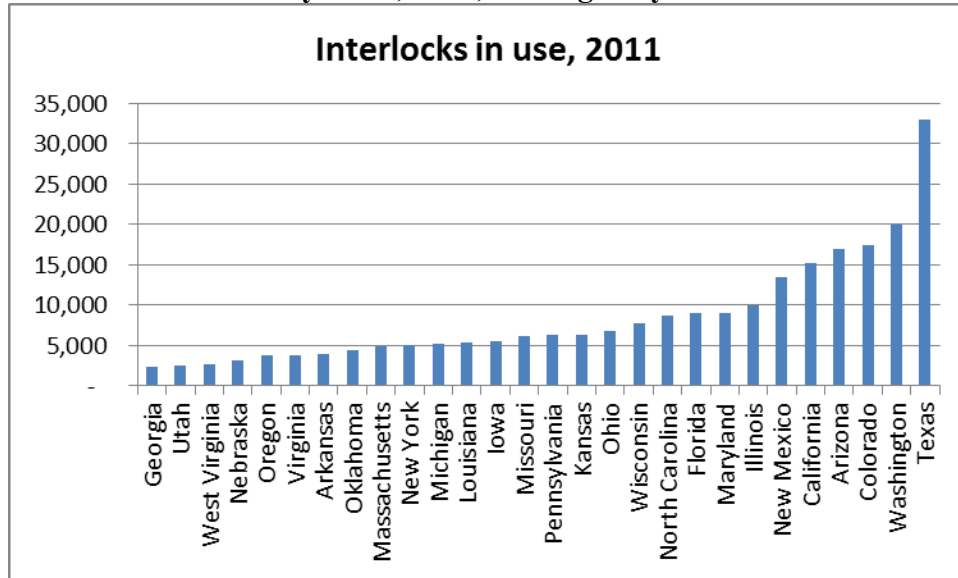
Some program keys were assessed objectively; for example, the Requirements key received a higher rating for a State with a first-offender interlock requirement compared to a State with no first-offender requirement. Other keys lacked objective measures and were assessed more subjectively based on discussions with each State’s program administrators and staff. If a State mentioned struggling with a key, and that struggle negatively affected the interlock program, then the State was given a low rating. For example, if a State mentioned a lack of communication between agencies, such as the DMV, courts, and law enforcement, and this lack of communication resulted in information not being exchanged which caused a direct negative affect on the program, then that State received a lower rating on the coordination key. Individual key ratings vary in correlation with program performance; they cannot be added to a meaningful overall score.

Relation of key program features to interlock use rates

Correlation analysis was used to measure the strength of the relationship between the key feature ratings and the three interlock-in-use rates for 2011 to determine which program keys were related to higher interlock use. For this analysis, California was excluded because two different interlock programs were in effect for that State due to a four-county pilot study.

III. Results

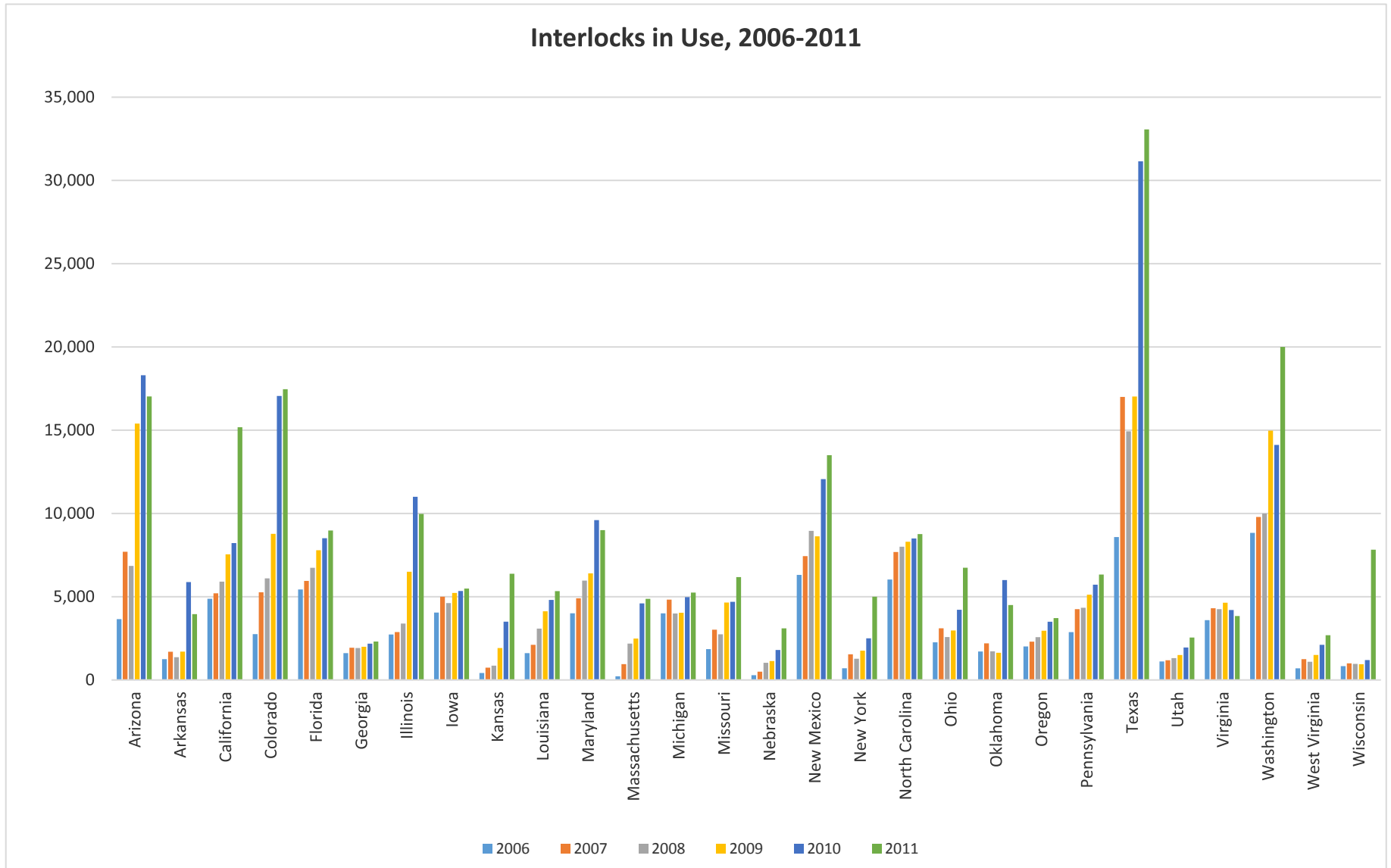
Figure 1. Interlocks in Use by State, 2011, Arranged by Number of Interlocks in Use



There were 238,997 interlocks reported as in use in 2011 in the 28 study States. Georgia had the fewest, at 2,308, while Texas had the most, at 33,064. Only 6 States reported more than 10,000 interlocks in use (Figure 1).

Figure 2 illustrates the number of interlocks in use in each study State from 2006 to 2011. Figure 2 also shows how and when use increased in the States (see also Appendix G).

Figure 2 Interlocks in Use by State, 2006-2011



Interlock use increases following program changes

Table 3. Number of Interlocks in use by State, 2006-2011

State	2006	2007	2008	2009	2010	2011	Percent difference from 2006 to 2011
Arizona	3,654	7,700	6,849	15,397	18,300	17,026	366%
Arkansas	1,250	1,697	1,366	1,704	5,880	3,952	216%
California	4,876	5,204	5,904	7,545	8,223	15,180	211%
Colorado	2,755	5,267	6,104	8,775	17,056	17,461	534%
Florida	5,434	5,950	6,738*	7,791	8,514	8,976	65%
Georgia	1,612	1,938	1,919	1,995	2,182	2,308	43%
Illinois	2,731	2,876	3,387	6,500	11,000	9,974	265%
Iowa	4,049	5,000	4,618	5,225	5,342	5,491	36%
Kansas	420	739	861	1,919	3,500	6,379	1419%
Louisiana	1,613	2,111	3,085	4,124	4,806	5,337	231%
Maryland	4,006	4,905	5,966	6,400	9,600	9,000	125%
Massachusetts	223	952	2,186	2,488	4,601	4,872	2085%
Michigan	4,000	4,825	3,994	4,038	4,974	5,249	31%
Missouri	1,852	3,020	2,743	4,649	4,693	6,179	234%
Nebraska	286	500	1,030	1,136	1,800	3,100	984%
New Mexico	6,311	7,437	8,955	8,625	12,064	13,500	114%
New York	702	1,544	1,276	1,762	2,500	5,000	612%
North Carolina	6,034	7,685	8,003	8,303	8,500	8,761	45%
Ohio	2,260	3,105	2,580	2,974	4,217	6,741	198%
Oklahoma	1,709	2,200	1,722	1,635	6,000	4,500	163%
Oregon	2,012	2,302	2,570	2,957	3,499	3,715	85%
Pennsylvania	2,875	4,254	4,336	5,122	5,722	6,331	120%
Texas	8,582	17,000	14,935	17,025	31,150	33,064	285%
Utah	1,111	1,186	1,311	1,497	1,950	2,550	130%
Virginia	3,593	4,306	4,253	4,641	4,200	3,841	7%
Washington	8,833	9,792	9,997	14,974	14,117	20,000	126%
West Virginia	701	1,252	1,095	1,503	2,112	2,686	283%
Wisconsin	832	998	967	945	1,195	7,824	840%
Total	84,316	115,745	112,012	151,649	207,697	238,997	183%

Key	Requirements	Penalties	Monitoring	Uniformity	Coordination	Education	Resources	Data
Shading	Red	Blue	Purple	Yellow	Orange	n/a	Green	n/a

*In 2008, Florida made changes to both Requirements and Monitoring.

Interlock use increased in all 28 States from 2006 to 2011, sometimes substantially (Table 3). Of the 28 States, 18 changed their interlock laws or programs during the period 2007–2011. The changes added to the number of offenders required or eligible for interlocks, changed the incentives for interlocks, or changed interlock program management in some way. The total percent increase for all 28 States from 2006 to 2011 was 183 percent.

The names of the 18 States with law or program changes are highlighted in yellow in the first column of Table 3. The columns of the year or years that law or program changes were implemented are shaded based on the key feature that was implemented during that year (see shading key above).

Many States implemented several changes at the same time or in sequential years, so an increase in interlock use might be associated with any of the changes or to a combination of the changes. The associations between interlock law or policy changes and the State's interlock use are summarized below and presented generally as follows.

Law or policy change: interlock use outcome summary

State, date of change, change detail: outcome

Required interlocks for first offenders: interlock use increased in all 3 States.

Florida, October 2008, at court's discretion: small increases through 2011

Kansas, July 2011: use almost doubled in 2011 (same year)

New York, August 2010: use doubled in 2011

Required interlocks for repeat or high-BAC offenders: interlock use increased in 3 of 4 States.

Michigan, October 2010, high BAC: a small increase through 2011

Virginia, 2008, repeat offenders: use increased in 2009 then decreased through 2011

West Virginia, June 2008, high BAC: use more than doubled by 2011

Wisconsin, July 2010, high BAC, refusal, and repeat offenders: use increased by six times in 2011

Required interlocks for hardship license: interlock use increased, at least slightly in all 3 States.

Illinois, January 2009, first offenders: use nearly doubled in 2009 (same year) and increased further in 2010

Iowa, July 2010: increased slightly in 2011

Louisiana, August 2007, first offenders: use more than doubled by 2010

Interlock to reduce or eliminate license suspension period: interlock use increased in 5 of 6 States.

Arkansas, April 2009, first offenders: use more than doubled in 2010

Colorado, 2007, first offenders: use more than tripled by 2010

Iowa, July 2010, first offenders: increased slightly in 2011

Oregon, 2008, increased suspension times unless interlock installed: use increased by about a half by 2011

Washington, 2009, first offenders: use increased by about a third by 2011

West Virginia, June 2008, first offenders: use more than doubled by 2011

Management and other changes: interlock use increased in most States.

California, 2009, program administration moved from courts to DMV: use almost doubled by 2011

California, July 2010, four county pilot: use (for entire State) almost doubled in 2011

Colorado, 2010, improved tracking system: use increased slightly in 2011

Florida, October 2008, provisions for program violators, third and fourth offenders: small increases through 2011

Missouri, 2009, added administrative oversight to judicial program: use increased by almost a half by 2011

New Mexico, 2007–2010, yearly changes to law: use increased steadily

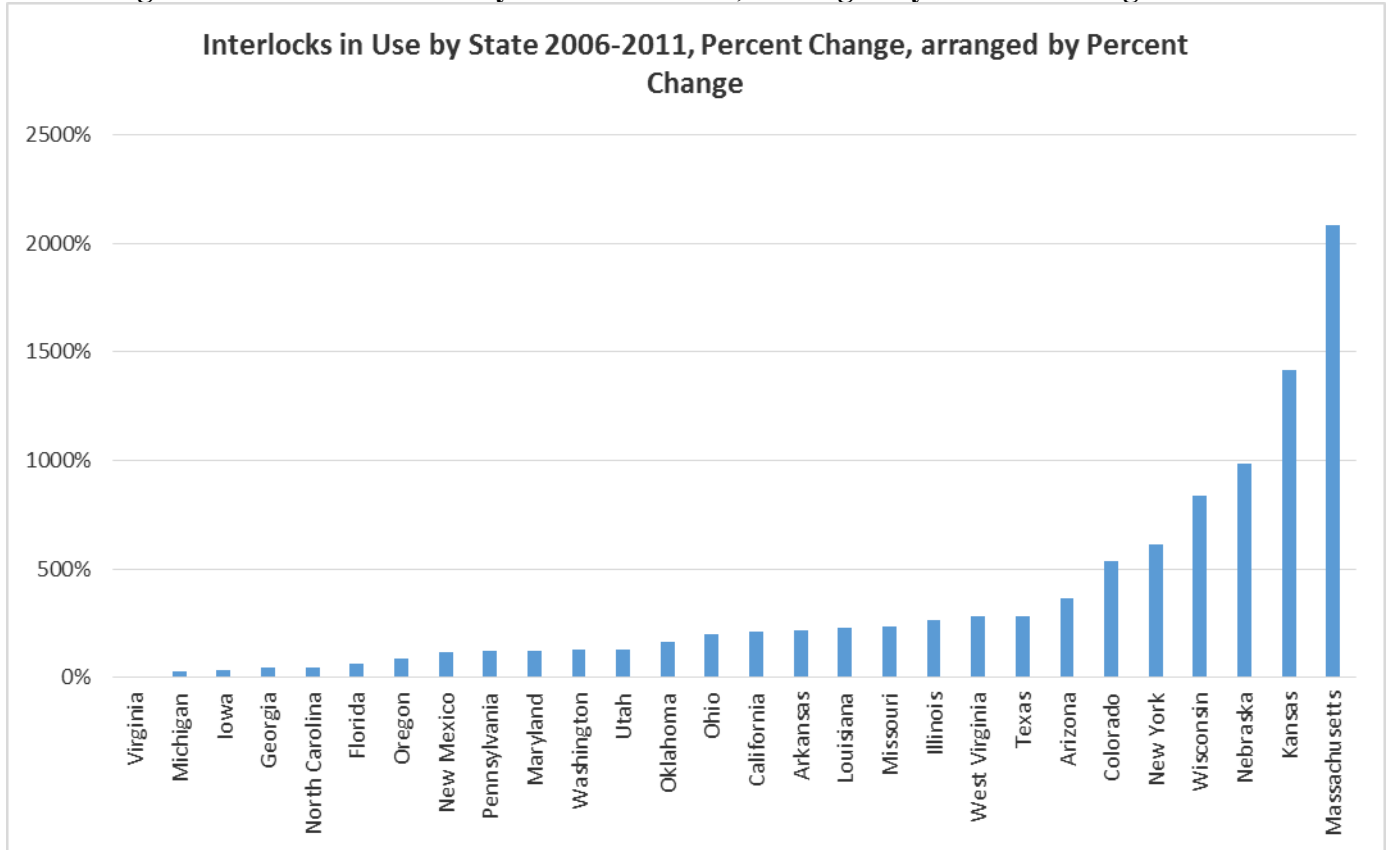
Oklahoma, 2010, added treatment requirement: use decreased by one quarter by 2011

Washington, 2010 and 2011, standardized procedures and compliance-based interlock removal: use increased by about a third 2011

Measures affecting first time offenders, such as whether to require interlocks for all or to permit earlier licensure through hardship or regular licenses, were associated with increased interlock use. Measures affecting only high-BAC or repeat offenders were associated with increased use in many States, as were management and other changes.

Figure 3 arranges the interlock-in-use percentage changes from the lowest State, 7 percent in Virginia, to the highest, 2,085 percent in Massachusetts.

Figure 3. Interlocks in Use by State 2006-2011, Arranged by Percent Change



Comparison of interlock-in-use rate

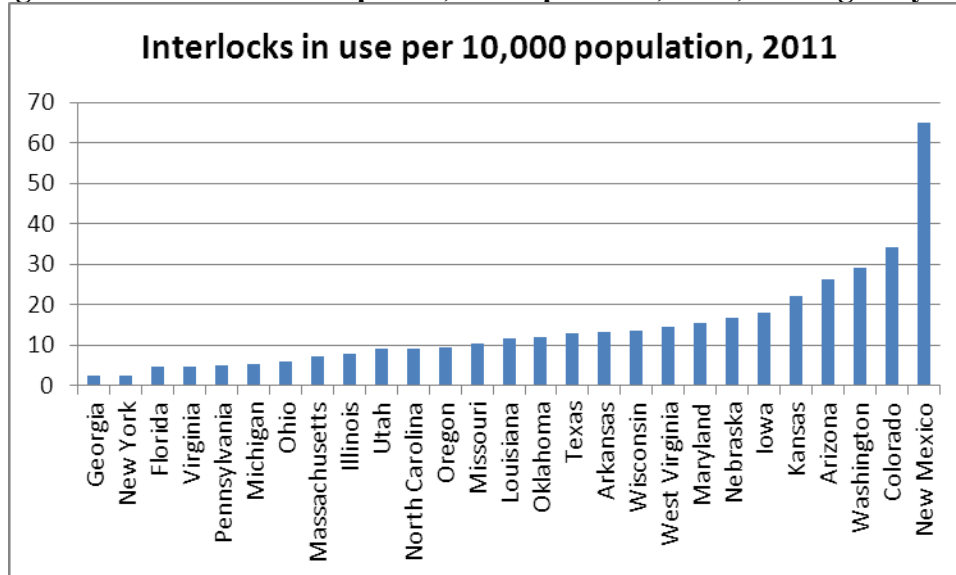
The correlations of the three interlock-in-use rates – interlocks in use per 10,000 population, per 100 DWI arrests, and per DWI fatality – show the three rates are strongly related (Table 4). A correlation value of 0.5 and above suggests a strong relationship, 0.3 to 0.5 a moderate relationship, 0.1 to 0.3 a weak relationship, and 0.0 to 0.1 no relationship.

Table 4 Correlations of State Interlock Rates, 2011

Rate	Population	DWI arrests	DWI fatalities
Population	1.00	0.85	0.87
DWI arrests		1.00	0.77
DWI fatalities			1.00

Figure 4 presents the interlock-in-use rates per population (see also Appendix H) from the smallest to the largest. While the pattern of interlock use rates is similar to that of interlock counts, with a few States notably higher than the rest, the order of the States has changed considerably. Texas, the State with the most interlocks in use, has an average rate per population. Kansas is quite the opposite, with an average number of interlocks in use and a high rate per population. Five States had rates of 20 or higher: New Mexico, Colorado, Washington, Arizona, and Kansas.

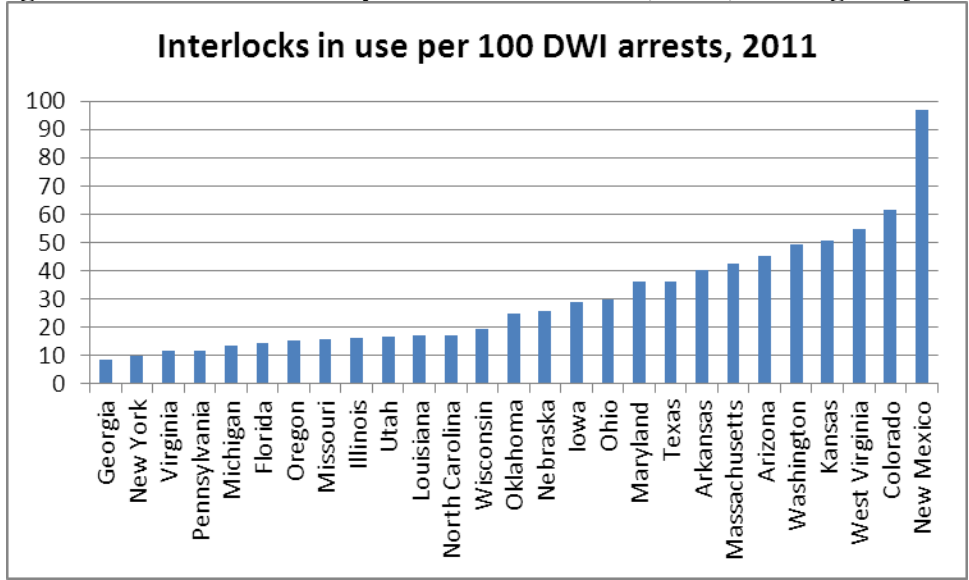
Figure 4. Interlocks in Use per 10,000 Population, 2011, Arranged by Size



A second useful rate is interlocks in use per DWI arrest. The number of persons arrested for DWI provides a reasonable measure of the impaired driving problem in a State. It's not a perfect measure, because many impaired drivers are never detected. Some of those who are detected may not be arrested or may not be charged with DWI, and data in many States is incomplete, but it's the best measure that's reasonably consistent across the States.

Figure 5 present the interlock-in-use rates per DWI arrest (see also Appendix I) from the smallest to the largest. The pattern arranged by size is similar to that of the rates per population. Four States had rates of 50 or higher: New Mexico, Colorado, West Virginia, and Kansas, with Washington close behind with a rate of 49. Four of the top 5 States also were in the top 5 in population rates.

Figure 5. Interlocks in Use per 100 DWI Arrests, 2011, Arranged by Size



A third useful rate is interlocks in use per DWI fatality – a fatality in which at least one driver had a BAC at or above the per se legal limit of .08. DWI fatalities are a good measure of the societal harm caused by impaired driving, so it’s reasonable to expect that interlocks, whose purpose ultimately is to reduce or prevent this harm, should be used in proportion to the amount of harm.

Figure 6. Interlocks in Use per DWI Fatality, 2011, Arranged by Size

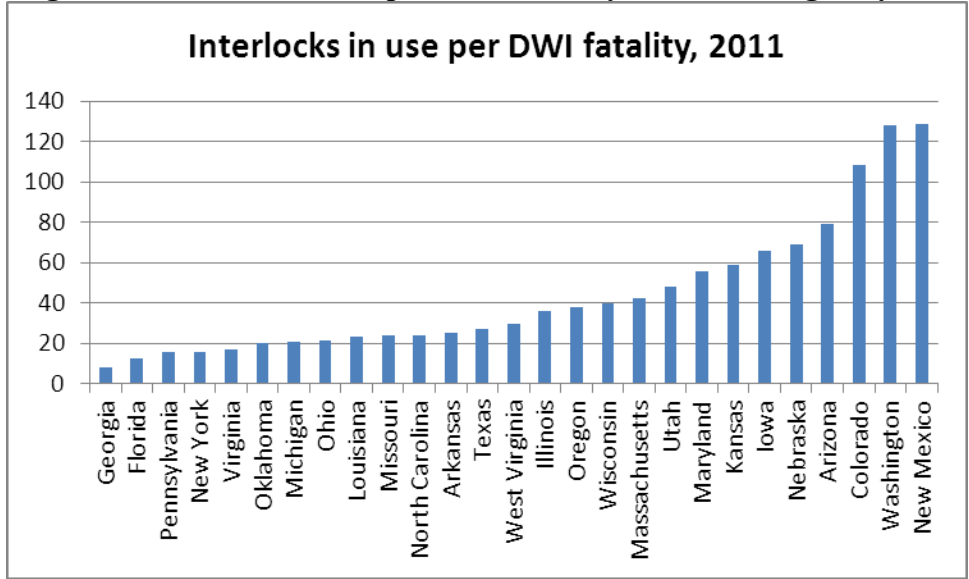


Figure 6 present the interlock-in-use rates per DWI fatality (see also Appendix J) from the smallest to the largest. The pattern arranged by size is again similar to those of the rates per population and per DWI arrest. Six States had rates of 60 or higher: New Mexico, Washington, Colorado, Arizona, Nebraska, and Iowa, with Kansas close behind with a rate of 59. Of these 7

States, only Nebraska and Iowa were not in the top group in either population or DWI arrest rates. Colorado, New Mexico, and Washington were in the top group in all three rates.

Table 5 provides more detail on State performance across the three rates. For each rate, States are ranked from 1 – the State with the lowest ranking – to 27 – the State with the highest ranking. In table 5, States in the top third (19-27) are highlighted green, States in the bottom third (1-9) are highlighted red, and States in the third middle (10-18) are highlighted yellow. With very few exceptions, each State’s ranking is quite similar for each of the three rates.

Table 5. State Interlock Rate Rankings, 2011

State interlock rate rankings, 2011			
	per 10,000 pop	per 100 DWI arrests	per DWI fatality
Arizona	24	22	24
Arkansas	17	20	12
Colorado	26	26	25
Florida	3	6	2
Georgia	1	1	1
Illinois	9	9	15
Iowa	22	16	22
Kansas	23	24	21
Louisiana	14	11	9
Maryland	20	18	20
Massachusetts	8	21	18
Michigan	6	5	7
Missouri	13	8	10
Nebraska	21	15	23
New Mexico	27	27	27
New York	2	2	4
North Carolina	11	12	11
Ohio	7	17	8
Oklahoma	15	14	6
Oregon	12	7	16
Pennsylvania	5	4	3
Texas	16	19	13
Utah*	10	10	19
Virginia	4	3	5
Washington	25	23	26
West Virginia	19	25	14
Wisconsin	18	13	17

Another way to examine how States compare across the three rates is to scale each rate to a baseline of 100. Each State's scaled score is its percentage of the highest State's rate. These scaled rates are presented in Table 6 and Figure 7. As in Table 5, States with scaled rates in the top third (67-100) are highlighted green, States in the bottom third (1-33) are highlighted red, and States in the middle third (34-66) are highlighted yellow.

New Mexico's rate is highest in each case, so each State's scaled rate compares it to New Mexico. In general, the scaled population rates are lower than the DWI rates that in turn are

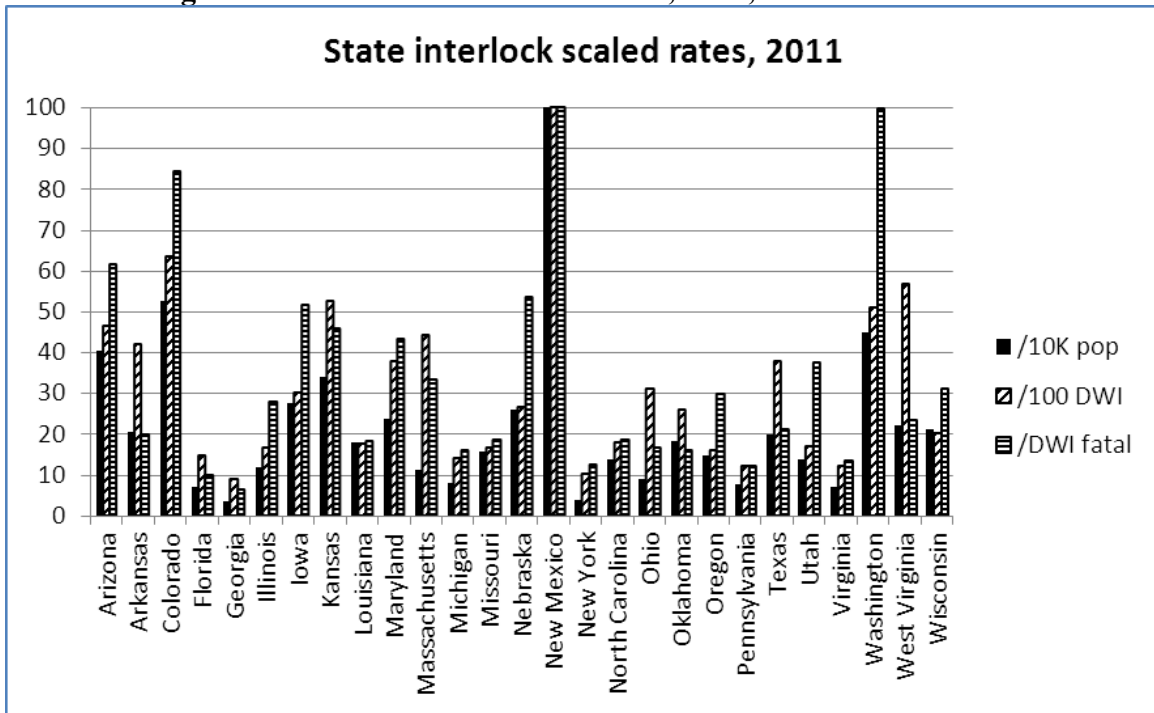
lower than the fatality rates: the population rate average is 22, the DWI rate average is 31, and the fatality rate average is 34.

These scaled rates also can be used to evaluate and set goals for State programs. The average State needs to triple or quadruple its interlock rate (depending on which rate is used) to reach the level of the best State. Said another way, only 8 States exceed 50 percent of the best State on even one of their scaled rates.

Table 6. State Interlock Scaled Rates, 2011

State interlock scaled rates, 2011			
	per 10,000 pop	per 100 DWI arrests	per DWI fatality
Arizona	41	47	62
Arkansas	21	42	20
Colorado	53	64	84
Florida	7	15	10
Georgia	4	9	6
Illinois	12	17	28
Iowa	28	30	51
Kansas	34	53	46
Louisiana	18	18	18
Maryland	24	38	43
Massachusetts	11	44	33
Michigan	8	14	16
Missouri	16	17	19
Nebraska	26	27	54
New Mexico	100	100	100
New York	4	10	12
North Carolina	14	18	19
Ohio	9	31	17
Oklahoma	18	26	16
Oregon	15	16	30
Pennsylvania	8	12	12
Texas	20	38	21
Utah*	14	17	37
Virginia	7	12	13
Washington	45	51	100
West Virginia	22	57	23
Wisconsin	21	20	31

Figure 7. State Interlock Scaled Rates, 2011, New Mexico = 100



Comparison of program keys and interlock-in-use rate

The correlations of the eight program key ratings with the three interlock-in-use rates (Table 7) show the relationships between the program keys and the interlock-in-use rates. The range of the correlations for each key, shown in the final row, is color-coded by strength of relationship as follows: uncorrelated (red), weak (tan), moderate (light green), and strong (dark green).

Table 7. Correlations of State Interlock Program Key Ratings With Interlock Rates, 2011

Interlock Rate per:	Requirements	Monitoring	Coordination	Uniformity	Penalties	Education	Resource	Data
10,000 Population	0.63	0.56	0.55	0.52	0.47	0.38	0.41	0.12
100 DWI Arrests	0.51	0.39	0.36	0.38	0.31	0.19	0.17	0.02
DWI Fatality	0.64	0.56	0.50	0.45	0.47	0.37	0.28	0.12
Range	0.51-0.64	0.39-0.56	0.36-0.55	0.38-0.52	0.31-0.47	0.19-0.37	0.17-0.41	0.02-0.12

Each of the State interlock program keys is associated with higher interlock use with the exception of Data. This finding was consistent for all three interlock rates. The relative order of correlations was similar for each of the rates with the requirements key having the highest correlation with all three rates and monitoring the second highest. The population rates generally had the strongest correlations with the program keys, followed by the DWI fatality rates, and then the DWI arrest rates.

Further insight on the eight keys comes from the correlations of the keys with each other, or inter-correlations (Table 8). The requirements and penalties keys in program design are strongly related (0.82). The monitoring, uniformity, coordination, and education keys in program management also are strongly related to each other (range 0.80–0.94).

Table 8. Inter-correlations of State Interlock Program Key Ratings, 2011

	Program Design		Program Management				Program Support	
	Requirements	Penalties	Monitoring	Uniformity	Coordination	Education	Resource	Data
Requirements	1.00	0.82	0.72	0.62	0.69	0.61	0.62	0.37
Penalties		1.00	0.70	0.47	0.70	0.64	0.65	0.36
Monitoring			1.00	0.82	0.94	0.89	0.72	0.77
Uniformity				1.00	0.85	0.80	0.65	0.67
Coordination					1.00	0.94	0.76	0.75
Education						1.00	0.79	0.82
Resources							1.00	0.59
Data								1.00

IV. Program successes and obstacles

Many States are aware of the obstacles they face with interlock programs and have taken steps to overcome these obstacles. Program successes and obstacles faced by the States are summarized below, organized into the three categories of the eight program keys. Details for each State are provided in Appendix B, State Profiles.

Program successes

Program Design:

- Legislative changes – laws and penalties: As State interlock programs are evolving, States are learning what works and what doesn't. Many States have improved their interlock laws and programs in recent years and are implementing laws which close loopholes in their programs. From 2006 to 2011, 3 States added an interlock requirement for first offenders, 4 States added interlock requirements for repeat or high-BAC offenders, 3 States added interlock requirements as conditions of hardship licenses, and 6 States added interlock requirements for offenders to reduce or eliminate their license suspensions.

Program Management:

- Data for monitoring offenders: States are moving towards bridging the gaps between agencies involved in their interlock programs. For example, the Florida Department of Highway Safety and Motor Vehicles serves as the governing agency with a central data repository and staff members assigned to the interlock program. The central repository makes data on interlock offenders easily available and allows Florida to monitor offenders efficiently and impose sanctions for interlock requirement violations in a timely manner. The interlock program is uniform across the State, with a statewide cost structure for interlock and DUI education fees.
- Monitoring of offenders through alcohol screening and treatment: Most States require screening and risk assessment for DWI offenders dependent upon offense or conditions of the offense (see Appendix E State Ignition Interlock Program Features). Risk assessment may lead to mandatory or court-ordered treatment as a condition of license reinstatement or probation or as an ignition interlock requirement. Some States require all offenders to receive treatment as a condition of license reinstatement. Florida and West Virginia have voluntary treatment programs unrelated to interlock requirements. New York has a voluntary treatment program for conditional license or license reinstatement of driving privileges (NYS Drinking Driver Program). Missouri, New Mexico, North Carolina, and Texas have treatment programs unrelated to the interlock requirements.
- Uniformity and coordination – communication through interagency taskforces: Some States, including Colorado, Oregon and Texas, have implemented inter-agency task forces which include representatives from the judicial, administrative, and law enforcement agencies where communication is critical. Colorado also has implemented a Persistent Drunk Driver Committee to provide continual program assessment, education, and training.

- Education: Education of law enforcement, judges, prosecutors, probation officers, treatment providers, and driver licensing agency staff is crucial to proper ignition interlock program implementation. Several States have regular training sessions for agency staff. Most training is agency specific – for example, the Texas Center for the Judiciary holds regular education and information sessions for judges. Some law enforcement agencies are considering implementing interlock training into their academy curriculum.

Program Support:

- Data and resources – electronic reporting: Some States have implemented interlock reporting systems that provide more accurate and timely data. Without the ability to monitor offenders regularly through good and accessible data, offenders may ignore or violate an interlock order without any consequences. Required time intervals for interlock downloads can vary from every 30 days to every 60 days. A greater time lapse between downloads could miss a greater number of violations. Colorado implemented the Online Interlock System (OIS) in 2007. The OIS allows interlock program staff to monitor interlock offenders efficiently and regularly – daily if appropriate. Offenders tracked through the OIS are aware that they may be monitored daily, so that violations, including failure to install an interlock, may be considered more of a risk than in States where this data is not easily accessible.

Program obstacles

Program Design:

- Requirements – laws: In several States the interlock law itself is a major obstacle to high levels of, or increases in interlock use. Several States have implemented laws but have not educated their law enforcement, courts, or licensing divisions on these laws. Many courts are reluctant to require interlocks for low income or first time offenders.
- Requirements – delays in processing the offender: Long delays between a DWI arrest and conviction contribute to reporting delays and make it difficult to match interlock use to specific offenses. DWI arrests occurring in one year may not be adjudicated until the next calendar year or even later. Interlocks associated with an arrest may be installed within weeks of the arrest or may not be installed until 1, 2, or 3 years later.
- Penalties – lack of consequences for interlock violations: Many administrative States do not monitor positive alcohol event, or failure to retest or other violations. Vendors are instructed only to send reports of installations and removals, not of violations. Therefore, an offender can have several confirmed interlock lockouts, tampering, or circumventions, pay for recalibration of the interlock upon a lockout, and serve no penalties for these violations. As long as the offender completes the full interlock term, their license will be reinstated. Many States are now moving towards extending the interlock term upon notification of these violations. Some are moving to compliance-based removal.

Program Management:

- **Monitoring – offender monitoring:** Offender monitoring is difficult. Agencies are rarely alerted if an offender does not install an ignition interlock when ordered. Several States do not track offenders who do not install or who violate an interlock order; therefore the licensing agency will only have a record that the offender has a suspended license. Vendors usually monitor individual offenders while the interlock is in use and report start and end dates and violations to the appropriate agency. If the administrative agency is alerted by the vendor, there is little they can do other than suspend the offender's license or extend the interlock period. If the interlock is required by a court order, often the probation officer or judge will monitor the offender and deal with the offender on an individual basis. If the offender does not appear for court or probation, a warrant is issued. However, most courts and probation services do not have sufficient staff to chase down offenders who do not install interlocks or who violate their interlock requirement. Interlock-required offenders are a small percentage of probation officer's cases and are viewed by many probation officers as a lower priority.
- **Monitoring – vendor oversight:** Many States require vendors to receive certification. Utah vendors are not required to be licensed or certified. Most States with statewide vendor service require each vendor to have installation sites in all areas of the State or have other distribution requirements to ensure that all State residents have access to installation sites. All 28 States except Florida, North Carolina, and West Virginia allow the offender to choose an interlock vendor among those registered and certified and all 28 States allow the offender to select the installation facility. Several States have no vendor oversight. In these States each vendor proposes their specific interlock equipment to the certifying agency. If the interlock meets the criteria required by the State and is approved, any vendor who provides one may do business in that State. In most States, vendors are left to provide oversight of their own garages and technicians.
- **Uniformity and coordination:** Several staff members who are familiar with State databases have retired or will be retiring and their positions have not been filled or will not be filled due to budget cuts within the State. Their interlock program knowledge is not being passed on and will be difficult to recover. Reporting agencies within a State sometimes report different totals for the same events. This could be due to some citations, arrests, or convictions not being reported or reported late or to inconsistent reporting rules or practices. Of course, data entry errors or coding differences also can contribute to inconsistencies. Reporting may be confounded because more than one interlock installation may be associated with a single arrest – one associated with an administrative license suspension and one after adjudication, or two interlocks installed at the same time on two vehicles.
- **Education:** Funding for multiagency staffing, including resources for training and education, is limited. Many agencies have staff that are knowledgeable about the interlock requirements of their agencies but are not familiar with other agencies' interlock involvement or procedures. A good understanding of the State's entire interlock program and of how interlocks work is crucial, especially in States where interlocks may be elected by offenders or ordered at the discretion of the court.

Program Support

- Resources – indigent offenders: Resources for indigent funding are difficult to find and uniform indigence requirements are difficult to establish and maintain. Most States have suggested using Federal income tax records as guides. This may not always be an adequate representation of those offenders who are truly indigent. Also, those who may not qualify for indigence according to Federal or State poverty levels may still not be able to afford all the fees and fines associated with DWI arrests. Several States assess hefty fees or fines for DWI offenses. For example, a Texas DWI offender must pay a fine designated by the Driver Responsibility Program that for a repeat or high-BAC offender could be as high as \$4,500 to \$6,000. This fine is in addition to other fines or fees assessed for a DWI. The need for an established indigence fund is often questioned and responsibility to lower offender costs is left to the vendors or courts. Several States reported that inadequate funding hindered effective implementation of their interlock programs. Several States have suggested allocating money from alcohol fines or fees to set up an indigence fund. However, in most States this money is already allocated to fund other projects, so that creating an additional fund with this money would further deplete the funds for existing programs. Many judges are hesitant to impose interlocks on low-income offenders.
- Staffing resources for agency programs: Often States are forced to “borrow” funds from other State programs. Few States have appointed staff for interlock purposes only. It is common that interlock duties are a small portion of a person’s daily responsibilities. These staff members are doing the work of more than one person. Several agencies were incapable of providing interlock data simply because they do not have the personnel or time to answer requests.
- State data: Most States do not have a central repository for interlock program participant data. Many State record systems use hardware and software that are extremely outdated and/or incompatible with other agencies. Several State agency database programs were written in languages that few programmers now understand. Very few States have data available to monitor offenders and evaluate their programs. Cells with blank or X in Appendix D – more than half the table’s cells – show where data is not available or not accessible. Appendix E shows that even when data was available, in many instances States were unable to provide it. Arrest records often are housed within municipalities and may not be reported to State repositories at all; if reported, they frequently are incomplete. Conviction records usually are housed within the State judiciary administrative office of the courts (AOC). These records are reported by county and district courts, again often incompletely if reported at all. The likelihood of county and district court reporting is further diminished if they do not have electronic reporting systems since manual reporting requires data to be input to staff members at the repositories. Most State agencies are overwhelmed with data reports and understaffed so that record reporting may be delayed by several months.

- Vendor data: Vendor software is usually fully electronic and more sophisticated than that of the State agencies. However, most States have multiple vendors, each with its own proprietary software and methods of reporting. In some instances States are receiving more than 15 different forms from 15 different vendors. This is one of the reasons why Florida chose to deal with only 2 vendors. Tarrant County, Texas, did the same.

Other obstacles

Offenders who otherwise would be required or encouraged to install interlocks may be prohibited from doing so. Florida, for example, has over 370 reasons, few of them driving-related, that can disqualify drivers from obtaining interlock-based driving privileges. That these drivers do not obtain interlocks in timely fashion should not affect interlock use, but these drivers often are classified as non-compliant in the driver record data. The Responsible Driver Act in Texas requires a fine of \$1,000 per year over a 3-year period for an offender to be eligible for relicensure, in addition to other DWI-related fees. These expenses may discourage offenders from serving a probation that requires interlocks and may require treatment. It is estimated that in recent years approximately 75 percent of DWI offenders in Texas plead to jail time and risk driving on suspension rather than going on probation with interlocks.

V. Potentially promising practices

Potentially promising practices for each of the eight program keys follow. Details of specific State programs may be found in the State Profiles of Appendix C.

Program Design

Requirements: Interlock use cannot be high unless all or most DWI offenders are required or have a strong incentive to install them. That means a requirement or strong incentives for first offenders, since most DWI offenders do not have previous DWI convictions within the State's look back period. Because plea bargains, diversion, and pretrial programs may involve a large proportion of DWI offenders, there should be an interlock requirement associated with them.

Penalties: Offenders who are required or elect to install interlocks must face consequences if they fail to install or circumvent the requirement. This of course requires good monitoring. A common consequence is that an offender cannot be relicensed until the interlock requirement is completed. However, many offenders simply choose to drive unlicensed unless they are likely to be detected and to receive substantial consequences. In programs with judicial components, judges have the ability to impose more serious consequences, such as revoking probation or even jail.

Program Management

Monitoring: Vendors must assist monitoring by reporting interlock installations, violations, and removals to probation or the DMV in a timely fashion. Proactive field inspections can be very useful in uncovering attempted circumvention of ignition interlock requirements even after installation, such as driving other vehicles and/or "parking" the interlock vehicle for the duration of the installation period and driving another vehicle. Inspections require staffing, funding, and consequences for inspection failures; as a result, the inspection programs are often less effective than they might be.

Few States have interlock monitoring and reporting systems that provide accurate and timely data. Without good monitoring, offenders may ignore an interlock order without any consequences. Required time intervals for downloads can vary from every 30 days to every 60 days. A greater time lapse between downloads could miss a greater number of violations.

Uniformity: It is difficult for a State to have high interlock use statewide unless the program requirements and administration are similar, if not uniform, across the State. Proper documentation of offenses and uniform reporting among agencies would increase overall program efficiency and provide the ability to monitor offenders accurately. Uniform certification procedures for vendors and interlocks, certified installation centers, and uniform reporting procedures also would increase efficiency.

Coordination: Interlock programs involve several independent parties, including law enforcement, DMV, courts, probation, and interlock vendors. Information from each is needed to determine which offenders are required or eligible to install interlocks, to monitor interlock requirements and use, to report violators, and to evaluate program effectiveness and suggest improvements. This information includes DWI arrests with BAC levels or test refusal status, driver history to determine repeat offender status, court and DMV records that include conviction records and interlock orders, and vendor and probation records to track installations, violations, and successful completion of an interlock requirement. These record systems must be coordinated so that the same offender can be identified and tracked through law enforcement, court, DMV, probation, and vendor records. Data systems also need to be organized to report on overall system performance through such measures as summary counts of interlock requirements, installations, violations, dropouts, and completions by classes of offenders (first-offender basic DWI, first high-BAC DWI, etc.) with further breakdowns of interest to the State, such as by court district, county, interlock vendor, and year. In June 2013 the Traffic Injury Research Foundation released a report looking at the implementation of automated reporting systems to alcohol interlock programs. This report, *Alcohol Interlock Programs: Data Management System Implementation* (Robertson, Holmes, & Vanlaar, 2013), provides useful information for States to streamline reporting systems and aid in monitoring offenders and program evaluation.

Close cooperation and regular communications are necessary to keep the program operating effectively and efficiently. Several States reported regular organized conferences or meetings between agencies to discuss impaired-driving matters including interlocks.

Education: All participants in the interlock program must know how it operates. In particular, the driving public must understand that interlocks will be required for specified DWI offenses that may reduce driving after drinking. Offenders must understand the interlock requirements, incentives, and consequences for failing to comply or violating the requirements. Judges must understand how interlocks protect the public and serve as a useful component of probation. Law enforcement must know what installed interlocks look like and how to determine if drivers are required to use them. An interlock liaison or interlock interagency taskforce would improve interlock program communications and logistics between State agencies in many States.

Program Support

Data: Accurate, timely, coordinated, and accessible records are important for an effective interlock program. Good record systems help determine which offenders are required or eligible to install interlocks, monitor offenders and report violators, evaluate program effectiveness, and suggest improvements. If reporting could be standardized, then tracking of offenders would be less time consuming and more efficient.

Resources: Interlock programs require sufficient funding to operate effectively. While data on interlock program costs and funding was not examined, two conclusions are apparent. First, interlocks are expensive to install and maintain. Each State realizes this. Some States have established indigent offender programs or some other methods to accommodate offenders who cannot afford these charges. Additionally, overall program management is expensive. States wishing to achieve high interlock use must plan for and provide adequate funding for these management costs.

VI. Conclusions

There are eight interlock program features, or keys that were examined to determine whether they are associated with interlock use in different ways. They fall into three groups: requirements and penalties, in the program design group; monitoring, uniformity, coordination, and education, in the program management group; and resources and data, in the program support group.

Every State in this study increased the number of ignition interlocks in use between 2006 and 2011; some by very large margins; with an overall increase of 183 percent for all 28 States combined. The results of the two main analyses – interlock use increases associated with program changes, and the correlations of program key ratings with interlock-in-use rates – show that program requirements that cover more types of offenders usually were associated with interlock use increases and with higher interlock use. More specifically, requirements that apply to first offenders, whether to require interlocks for all or to permit earlier licensure through a hardship or regular license, usually were associated with substantially increased interlock use. Requirements that apply only to high-BAC or repeat offenders were not always associated with increased use. This finding is supported by both systematic review findings (Elder et al., 2011) and recommendations from the ignition interlock research community (Marques, 2010).

The analyses, together with discussions conducted with interlock program staff and managers, lead to the following additional conclusions.

- The single most important influence on high interlock use is a strong program design of requirements or incentives to install an interlock, especially for first offenders.
- Strong program management, measured by offender monitoring, program uniformity and coordination is important to achieving high interlock use, but not as important as requirements or incentives, which are part of program design.
- Penalties, which are also a part of program design, were also moderately associated with high levels of or increases in interlock use.
- Strong program design (including requirements, incentives, and penalties) by itself does not guarantee high interlock use: some States with acceptable or higher program design ratings have low interlock use.

- Similarly, strong program management by itself does not guarantee high interlock use.
- Some States with acceptable or lower design and management ratings have achieved relatively high interlock use.

Despite the recent substantial increase in interlock use, there was only one interlock installed for every 4.5 DWI arrests in 2013 (Roth, 2013). Additionally, over half the States still do not require ignition interlocks for first-time DWI offenders. Very few States require interlocks for all convicted offenders without exception, so they do not employ the most effective strategy to raise their interlock use rates.

The requirements key had the strongest relationship to higher interlock use rates. Changing requirements and incentives to cover more classes of offenders requires making changes to State law.

The program management keys of monitoring, coordination, uniformity, also are moderately to strongly related to higher interlock-in-use rate, and are keys that interlock program administrators can improve by working with others in the State. For example, some States have implemented ignition interlock task forces comprised of representatives from all agencies related to the interlock program. In these task forces, judges, prosecutors, judicial liaisons, administrative office of the courts staff, defense attorneys, law enforcement, law enforcement liaisons, licensing offices, DMV staff, treatment facilities staff, and legislative representatives discuss and work on interlock program issues. Penalties are also moderately related to higher interlock-in-use rates. Changing penalties may require changes to State law.

The education, resources and data keys had weaker relationships to interlock use rates but are important because they support the other program keys. Data especially play an important role in that accurate, timely, coordinated, and accessible records are critical for an effective interlock program. Good record systems help determine which offenders are required or eligible to install an interlock, help monitor offenders and report violators, and can be used to evaluate program effectiveness and suggest improvements. If reporting could be standardized and data from different sources could be coordinated, then tracking of offenders would be less time consuming and more efficient. Florida and Colorado have data systems that can track offenders in this manner. Most States that want to evaluate and improve their interlock programs could improve their record systems.

Determining which offenders arrested for DWI are required or eligible to install interlocks is not easy. State laws on who must or may install an interlock vary substantially and change over time. There is no single source of data on DWI convictions by State, much less a breakout of DWI convictions by the offenses for which interlocks are required. There also is no single source of data on the number of offenders who have volunteered to install interlocks or who have been ordered to install interlocks by judges rather than required to install them by statute. This means that the national number of DWI offenders who are required or who have volunteered to install interlocks cannot be determined accurately.

The State-level analyses in this report provide useful though highly incomplete information. In 2009, the year with the most complete data, 6 States provided data on both the number of interlocks required and the number installed (Appendix E). In these 6 States the proportion of offenders required to install interlocks who in fact installed them ranged from 37 percent to 77 percent. Even in the best States, interlock use leaves real room for improvement.

One limitation to the current study was the availability of data. Data on DWI convictions, interlock orders, interlock installations, and interlock completions was needed to fully evaluate how State program factors affect the proportion of convicted DWI offenders who receive interlock orders, the proportion of those who receive orders who install interlocks, and the proportion of those who complete their requirement successfully. This data was not available. In addition, most States do not have central repositories where data from these sources can be merged and accessed.

In summary, to achieve and sustain high ignition interlock use, States should consider the following:

- Start with a program design of strong interlock requirements and incentives, coupled with effective penalties for non-compliance.
- Support these with strong program management: monitoring, uniformity, coordination, and education.
- The final two program support keys, data and resources, are necessary to support program management and to evaluate changes in program design.

VII. References

Beirness, D. J., & Marques, P. R. (2004). Alcohol ignition interlock programs. *Traffic Injury Prevention, Vol. 5*, pp. 299-308.

Centers for Disease Control and Prevention. (2012). The Community Guide: Reducing Alcohol-Impaired Driving: Ignition Interlocks. (Web page). Atlanta: Author. Available at www.thecommunityguide.org/mvoi/AID/ignitioninterlocks.html

Cheesman, F., Kleiman, M., Lee, C.G., & Holt, K. (2014, May). *Ignition interlock: An investigation into rural Arizona judges' perceptions*. (Report No. DOT HS 812 025). Washington DC: National Highway Traffic Safety Administration. Available at www.nhtsa.gov/staticfiles/nti/pdf/812025-Ignition-Interlock-Investigation-Rural-AZ-Judges.pdf

Elder, R. W., Voas, R., Beirness, D., Shults, R. A., Sleet, D.A., Nichols, J. L., Compton, R., & the Task Force on Community Preventive Services. (2011). Effectiveness of ignition interlocks for pre-venting alcohol-impaired driving and alcohol-related crashes, a community guide systematic review. *American Journal of Preventive Medicine* 40(3):362-376.

Federal Bureau of Investigation. (n.a.). Crime in the United States: Table 29, Estimated Number of Arrests. (FBI Uniform Crime Reports, 2006-2010. Web page). Washington, DC: Author. Retrieved October 3, 2012, from www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2010/crime-in-the-u.s.-2010/tables/10tbl29.xls

Fieldler, K., Brittle, C., & Stafford, S. (2012). *Case studies of ignition interlock programs*. (Report No. DOT HS 811 594). Washington, DC: National Highway Traffic Safety Administration. Available at www.nhtsa.gov/staticfiles/nti/pdf/811594.pdf

Insurance Institute for Highway Safety. (2013). Highway Safety Laws in the U.S. Arlington, VA: Author. Available at www.iihs.org/laws/default.aspx

Marques, P. R., & Voas, R. B. (2010). *Key features for ignition interlock programs*. (Report No. DOT HS 811 262). Washington, DC: National Highway Traffic Safety Administration. Available at www.nhtsa.gov/staticfiles/nti/impaird_driving/pdf/811262.pdf

Mayer, R. (2014). *Ignition Interlocks – What You Need to Know: A Toolkit for Policymakers, Highway Safety Professionals, and Advocates, 2nd Edition*. (Report No. DOT HS 811 883). Washington, DC: National Highway Traffic Safety Administration. Available at www.nhtsa.gov/staticfiles/nti/pdf/IgnitionInterlocks_811883.pdf

Model Specifications for Breath Alcohol Ignition Interlock Devices (BAIIDs). 78 FR 26849 Pages 26849 -26867, Docket No. NHTSA-2013-0058, Document Number 2013-10940. (2013, May 8). Available at www.federalregister.gov/articles/2013/05/08/2013-10940/model-specifications-for-breath-alcohol-ignition-interlock-devices-baiids

National Center for Statistics and Analysis. (2013, November). 2012 Motor Vehicle Crashes: Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 811 856). Washington, DC: National Highway Traffic Safety Administration. Available at www-nrd.nhtsa.dot.gov/Pubs/811856.pdf.

National Conference of State Legislatures. (2014). State Ignition Interlock Laws. (Web page). Washington, DC: Author. Available at www.ncsl.org/research/transportation/state-ignition-interlock-laws.aspx

National Highway Traffic Safety Administration. (2013a). Countermeasures That Work. (Report No. DOT HS 811 727). Washington, DC: Author. Available at www.nhtsa.gov/staticfiles/nti/pdf/811727.pdf

NHTSA. (2013b). Model Guideline for State Ignition Interlock Programs. (Report No. DOT HS 811 859). Washington, DC: Author. Available at www.nhtsa.gov/staticfiles/nti/pdf/811859.pdf

NHTSA. (2006-2011). *Fatality Analysis Reporting System (FARS) Encyclopedia*. Washington, DC: Author. Available at www-fars.nhtsa.dot.gov/Crashes/CrashesLocation.aspx

Robertson, R. D., Holmes, E. A., & Vanlaar, W. (2013). *Alcohol Interlock Programs: Data Management System Implementation*. Ottawa: Traffic Injury Research Foundation. Available at http://tirf.ca/publications/PDF_publications/NHTSA_Tech_Assistance_DataManagement_9.pdf

Roth, R. (2006-2013). *Estimates of currently installed interlocks in the U.S.* (Unpublished manuscripts). Santa Fe, NM: Impact DWI, Inc. Available at www.rothinterlock.org/

Traffic Injury Research Foundation. (2013). Alcohol Interlock Curriculum for Practitioners. (Web page). Ottawa: Author. Available at <http://aic.tirf.ca/section1/index.php>

U.S. Census Bureau. (2013). State & County QuickFacts. (Web page). Suitland, MD: Author. Available at <http://quickfacts.census.gov>

Willis, C., Lybrand, S., & Bellamy, N. (2004). Alcohol ignition interlock programmes for reducing drink driving recidivism. *The Cochrane Database of Systematic Reviews*. DOI: 10.1002/14651858.CD004168.pub2

Appendix A. States With Recent Law and Program Changes

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
AZ	5/20/05	Establishes special IID driver licenses	5/1/07 1/1/12 4/17/13	2nd and 3rd offenses require operation of vehicle with device for at least one year. Expands eligibility for special IID restricted license to all DWI suspensions, notation on license, 6 month extension period, license revocation for IID non-compliance. HB 2182 to remove exemptions to comply with Federal Statutory requirements.
AR	12/1/94		3/8/07 3/30/09 2010 6/13	Established the look back period as 5 years. 1st offense DWI allowed IID restricted license, increased suspension time for a 1st offense DWI and reduced ineligibility time for an IID certain DWI offenses. 1st or 2nd offenders may be restricted to an IID vehicle and additional penalties. Act 479 amended hard restriction times for repeat and subsequent offenders. Also allowed court to order IID for additional year.
CA	1986	Pilot program in 4 counties	7/1/09 7/10-12/31/15	Transferred regulatory authority for the administration of mandatory IID programs from the State courts to DMV. All offenders in pilot program required to install an IID.
CO	1995	Pilot program high-BAC and repeat offenders	1996 2001 2007	Established probationary program. Increased IID restriction time for high-BAC and repeat offenders, 1st offenders introduced. Expanded the IID program to include all first-time offenders seeking early license reinstatement; established the current repeat and high-BAC offender requirements and implemented requirements for designated habitual traffic offenders with one alcohol related driving offense to install an IID for 4 years after serving a 1-year suspension and is approved for early reinstatement.

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
GA	1999	Mandatory use of IID as a condition of probation repeat DWI offenders within a 5-year period (Heidi's Law).	4/18/06 7/1/13	The IID Program now administered by the director of the Regulatory Compliance Division of the Department of Driver Services, and any staff the commissioner deems necessary for the efficient operation of the program. HB 407 increased the minimum IID requirement for repeat offenders from 6 months to 1 year.
IL	1/1/05	Repeat offenders may install IID as a condition of RDP. 2007 Monitoring Device Driving Permit (MDDP).	1/1/09	1st offenders may install an IID as a condition of Restricted Driving Permit (RDP).
IA	7/1/95	Requires the IID for temporary restricted licenses (if the BAC was over .10 or if they were involved in an accident.)	7/1/00 7/1/13	Requires the IID for 1 year upon restating from a 2nd offense DWI. SF 386 requires 2nd or subsequent offenders requiring an IID at license reinstatement to maintain the device for a total of 1 year even with a previous temporary restricted license (TRL), closing a loophole which waived the 1-year requirement if the offender had a TRL with an interlock.
KS	1988	Discretionary IID	7/1/2001 7/1/11 7/1/14	IID required for repeat offenders as a condition of license reinstatement. 1st offender requirement (sunset provision ends 6-30-15). New rules and regulations for repository are to be established by this date.
LA	1/1/93	IID restricted license into effect. (Cf. LRS 32:378.2)	2005 8/15/07 9/1/09 8/15/10 8/15/11 6/15/13	IID as a condition of bail (Article 336.2 of the LA Code of Criminal Procedure). Required an installed, functioning, IID for all DWI related restricted licenses effective. LRS 14:98K. Suspension periods for administrative IID sanctions changed. Act 409 required 45-day hard suspension for repeat offenders. Act 192 required electronic reporting. HB 424 amended R.S. 32:667I-to include 2nd and subsequent ALR/implied consent offenders to maintain IID as a condition of reinstatement.

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
MD	1989	IID court discretion for repeat DWI offenders as part of probation.	10-1-11	HB 1276 / SB 803 Drunk Driving Reduction Act: IID-court discretion for 1st and high-BAC of .15+ offenders. High-BAC offenders required to successfully complete the IID program for 1 year, suspended indefinitely until successful completion of the IID program; created criminal sanctions for failure to abide by interlock restrictions; opportunity to enroll in IID program at various times; more drivers required to participate in IID program.
MA	10/28/05	Melanie' Law required IID for hardship license and licenses reinstatement.	n/a	
MI	1999	The IID program was implemented in Michigan in 1999, but no requirement.	10/31/10	High BAC (.17+) after October 31, 2010, in lieu of waiting out a 1-year suspension, after a 45-day hard suspension offenders may apply for a restricted license which requires an IID for a minimum of 1 year.
MO	1995	Court-ordered only. Discretionary for 1st offenders, mandatory for repeat offenders.	2009 2010 8/28/12 10/1/13	Added administrative portion as condition of license reinstatement. Allowed limited driving privileges for repeat offenders through courts after a 45-day hard suspension. Compliance based removal for repeat offenders. 1st offenders may restore license privileges after 15 days of hard suspension if apply for IID for 75 days-any violations result in additional 75-day extension.
NE		Voluntary for all DWI offenders, discretionary for repeat offenders.	1/1/2012 1/18/13	The 1st offender can choose ALR with an immediate required IID for 6 months, or request a hearing but no IID and not eligible for an IID until sentenced by court. Required of all DWI offenders as a condition of license reinstatement. Establishes an indigency fund, extends look back period from 12 to 15 years, establishes ignition interlock permit (IIP), non-compliance violations require 6 month extension. LB 158 emergency clause to adopt MAP 21 1-year IID requirement for repeat offenders. Also removed limitations on driving privileges with IID.

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
NM	6/1/05		1999 2002 2003 2005 2007 2008 2009 2010	1st law-authorized courts to require devices on 2nd and 3rd offenders, required device for any DWI limited license (work, school allowances) Mandatory for all Aggravated and Subsequent DWIs, Indigent Fund Ignition Interlock License Act an alternative to revocation. Mandatory Interlocks for all DWI's: 1yr for 1st; 2 for 2nd; 3 for 3rd; Lifetime for 4+ Drivers from out of State with out of State convictions seeking NM license must do period of interlock. Penalties for Circumvention Attempts The New Mexico Interlock Memorial created a task force this led to the requirement of 6 months tamper-free interlock driving prior to license reinstatement. NMDOT established indigency requirements for interlock orders as well as allowed administrative funding for NMDOT to oversee the program.
NY	1988	Pilot program in 7 of 62 counties.	2003 8/15/10 4/16/13	New laws extended the IID to multiple offenders in 2003 and extended the pilot program to all the counties in the State. "Leandra's law," the 2009 Child Passenger Protection Act, requires courts to order all drivers convicted of misdemeanor and felony drunk driving charges, including 1st offenders, to install and maintain IIDs on any vehicles they own or operate for at least 6 months after their license revocation period at their own expense. Required offenders to install IIDs as a condition of relicensure on any vehicle they own or used to commit the offense, if claim no vehicle, then required to wear continuous alcohol monitoring devices (CAMs). Also allows each alcohol offense to be reviewed individually before issuing a conditional license.
NC	1989	IID laws adopted repeat and high BAC	2000 12/1/08 12/1/11 2012	IID laws formally adopted. North Carolina indigent offender fund created Laura's law-repeat 1-3 years jail; better tracking system. Added two new vendors to list of State approved vendors.

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
OH		Required as a condition of probation or occupational license. 1st and 2nd offenders discretionary limited driving privileges.	2003	3rd offenders mandatory enacted in 2003, effective 2004.
OK	1993	The IID program implemented (regulations were not officially created until the late 1990s).	1996 1997 1999 2003 2005 2010 11/1/11	47 O.S.754.1, 47 O.S.755 47 O.S.6-211 47 O.S.11-902a Fuel Cell only. 47 O.S.6-212.3 Aaron Gilling Act, alcohol evaluation and appropriate treatment was mandated for all DWI offenders. 47 O.S. 11-902 IID required for hardship license for 1st offender. Range of device requirements is 6 months to 8-plus years, dependent upon number of offenses and breath refusals-Erin Swezey Act
OR	1987	Pilot program in 11 counties.	1993 2008 1/1/12	Statewide-interlock required for 6 month or judge may require as diversion. Requirement extended in 2008 from 6 months to 1 year for 1st conviction or 2 years for 2nd or subsequent conviction. Judges required to order the IID as a condition of DWI Diversion Agreement (previously discretionary) when the person has valid driving privileges. Requirement may be up to 1 year; Sober Diversion; 5-year IID requirement for lifetime revocations.
PA	2003	2nd, subsequent offenses: IID is mandatory.	n/a	
TX	1995	IID as a condition of bond, discretionary, mandatory repeats	2005 9/01/11 9/01/11	High BAC .15+ mandatory, SB 880 expands the scope of probation services-allowed to charge a fee; diversion requires IID. SB 953 authorizes the court granting ODL to require an IID.

	Initial Date	Interlock Law	Date Change	Law Revisions or Changes
UT	2001	First program evolved over years as a condition of the courts.	5/1/06 7/1/12	The IID Restricted Driver Law. High BAC (.16+) court-ordered supervised probation and/or electronic home confinement (IRD provision). IID required for 1st offender for 18 months, 2nd or 3rd or refusal-3 years. Also implemented an IID program structure that will license vendors and facilities, create mandatory audits, provide for notification of installations and removals, and establish other program requirements.
VA	1995	IID installed as a condition of VASAP and may be required operate an IID vehicle only.	2009 7/1/12	Discretionary IID for 1st offenders-required for hardship or restricted license, mandatory for 2nd + offenders as a condition of license reinstatement. All offenders require IID for at least 6 months post-conviction.
WA	1987	IID for DUI offenders at court discretion.	1998 2003 2004 2009 2010 2011 1/1/13	Repeat and high BAC .15+ mandatory if refuse breath test Added administrative portion. DOL notifies offender. IID required for all DWI offenders. IID driver license law-allows ability to drive during suspension with IID. IID service center and technician certification, NIST certified testing devices, unified reporting and standardized calibration procedures. Compliance based removal-4 months of no violations before removal. IID requires camera.
WV	7/8/05	Repeat offender must complete the alcohol test and lock program (interlock) for license reinstatement.	6/6/08 2012	High-BAC .15+ offenders required alcohol test and lock program license reinstatement. 1st offenders may participate in the IID program voluntarily. Updated Test & Lock program was passed allowing offenders to obtain an IID-restricted license during any period of license suspension beyond a hard suspension period
WI	2003	Court discretion for repeat offenders.	7-1-10	“Act 100” Mandatory IID order by the court to all repeat DWI, implied consent offenders and 1st DWI offenders with BAC of .15+.

Appendix B. State Profiles

Arizona

Interlock laws and policies

- First offender: required for 12 months; first offenders may be suspended for 45 days. Required for a special restricted license.
 - New legislation (effective 1/1/12) allows for the reduction of the interlock term to 6 months upon completion of a 16-hour alcohol education program and after all statutory requirements have been met. High BAC (.20+): required after a 45-day license suspension for an 18-month period.
 - BAC test refusal: required, 12 months; required for a special restricted license.
- Repeat offender: required for a period of 24 months for second and subsequent offenders before the license can be reinstated; required for a special restricted license.
- The court may require additional interlock time.
- The look-back period is 7 years.
- The law does not appear to allow offender to wait out the interlock requirement before regaining full license privileges.
- Use of an interlock during a license suspension period does not reduce the required interlock time.
- Arizona does not allow pleading DWI to lesser charges.

Program type and administration

Arizona's interlock program is administrative, operated by the Motor Vehicle Department.

Other notable program features and observations

First offenders may be required to serve 10 days in jail, reducible to 1 day if they comply with required alcohol treatment. Repeat offenders may be required to serve 90 days in jail, reducible to 30 days if they comply with required alcohol treatment.

Recent changes

Arizona also extended the time periods when offenders are required to operate only interlock vehicles and implemented license revocation for interlock non-compliance effective January 1, 2012. The last 6 months of the interlock requirement may be permanently suspended, but it is reinstated on any subsequent DWI arrest (not conviction). On April 17, 2013, Arizona passed and signed HB 2182 to remove exemptions to comply with Federal statutory requirements.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	602.91	616.77	628.04	634.32	641.08	646.73	7%
Alcohol fatalities		399	337	262	218	194	215	-46%
DWI arrests	100s	352.51	382.60	397.46	392.60	362.00	377.43	7%
Interlocks in use		3654	7700	6849	15397	18300	17026	366%
Interlock-in-use rates	per 10,000 population	6.06	12.48	10.91	24.27	28.55	26.33	334%
	per 100 DWI arrests	10.37	20.13	17.23	39.22	50.55	45.11	335%
	per DWI fatality	9.16	22.85	26.14	70.63	94.33	79.19	765%

Discussion

The interlock-in-use rates increased substantially in 2009; for example the rate per DWI arrest increased from about 17 percent in 2008 to 39 percent in 2009 and increased further in 2010 and 2011. There is no apparent law or policy change to explain the sharp increase. Because the rates increased in 2009, and the interlocks in use during 2009 would generally correspond to arrests occurring in 2008, any law or policy change likely would have occurred in early 2008.

Arkansas

Interlock laws and policies

- First offender: required for a provisional license.
 - High BAC: no additional requirement
 - BAC test refusal: required for a provisional license on first offense; repeat offenders who refuse are not eligible.
- Repeat offender: required for a provisional license for second and third offenses.
- The Office of Driver Services may require an interlock for 1 year after license suspensions expire. Arkansas statute §5-65-118(a)(1)(A)(ii) the restriction may continue for a period of up to 1 year after the person's license is no longer suspended or restricted under the provisions of §5-65-104. This statute gives the department the authority to continue the interlock for a longer period of time, however, procedurally the interlock restriction is not extended beyond the suspension period.
- Look-back period is 5 years.
- Offenders may wait out the interlock-required period and regain their licenses.
- All offenders are eligible providing they are licensed, they did not refuse BAC test on 2nd or 3rd offense (allowed if refused on 1st offense), there is not another suspension in effect for some other unrelated reason, the intoxication was not drug related, and it is not a 4th or subsequent offense.
- Pleading a DWI to a lesser offense, such as "wet reckless," is prohibited.

Program type and administration

Arkansas' interlock program is administrative, operated by the Office of Driver Services.

Other notable program features and observations

Unless an interlock is ordered by the court, a low-BAC first offender has little incentive to install one since there are no consequences for not installing except license suspension. However if caught driving while suspended, an offender receives 10 days in jail and a fine. Suspension takes place 30 days after arrest even if the offender hasn't yet appeared in court. An Arkansas offender may establish a payment schedule for the reasonable cost of leasing or buying, monitoring and maintaining the ignition interlock.

Recent changes

In 2009 Arkansas encouraged interlocks by increasing license suspension times for first offense DWI but allowing an interlock-restricted license in lieu of all or part of the suspension. A 2nd or 3rd offender could obtain an interlock-restricted license after 45 days' hard suspension.

The 2013 legislative session passed Act 479 which allows an interlock to be available immediately and without additional restrictions (to and from work, interlock provider, education, and drug and alcohol rehab) for offenders with 2nd and 3rd DUI offenses. The previous law required a hard time suspension of 45 days, in which an ignition interlock is not allowed. After the 45-day hard suspension the offender was limited to driving only for the purposes stated above. Act 479 also allows a court to order interlock for an additional year after the offender would otherwise be eligible for full driving privileges.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	282.18	284.87	287.46	289.68	292.28	293.86	4%
Alcohol fatalities		200	181	170	173	173	156	-22%
DWI arrests	100s	93.88	88.92	117.07	101.30	86.16	97.47	4%
Interlocks in use		1250	1697	1366	1704	5880	3952	216%
Interlock-in-use rates	per 10,000 population	4.43	5.96	4.75	5.88	20.12	13.45	204%
	per 100 DWI arrests	13.31	19.08	11.67	16.82	68.25	40.55	205%
	per DWI fatality	6.25	9.38	8.04	9.85	33.99	25.33	305%

Discussion

The 2010 rates are based on State-provided interlock data, which are not available for other years (see Appendix D). Interlock-in-use rates increased substantially in 2010 and 2011 compared to 2009 and earlier. The 2009 and 2010 laws may explain the increase. Completion of a drug or alcohol education or treatment program is required prior to reinstatement for any offender, regardless of whether the offender was issued an interlock or not. Courts might order an offender to have an interlock as a component of treatment or as a pretrial condition.

California

Interlock laws and policies

- First offender: required in four pilot counties (Alameda, Los Angeles, Sacramento, and Tulare), effective July 1, 2010. Outside of these four counties interlocks are at the discretion of the court. First offenders may opt out and wait out a 4-month suspension period.
 - High BAC (.15+): The court is encouraged to order an interlock for first offenders with BACs of .15 or greater.
 - BAC test refusal: The court shall give heightened consideration to those who refused the chemical tests at arrest; 1-year suspension for first offense, 2-year suspension for second offense, 3-year suspension for third and subsequent offenses without interlock installation.
- Repeat offender: may reinstate after a 90-day suspension with proof of enrollment in a DUI program.
- July 1, 2009, SB 1388 transferred regulatory authority for the administration of mandatory interlock programs from the State courts to DMV. This law authorizes DMV to require any driver convicted of driving while suspended or revoked for a prior DUI conviction to install an interlock in any vehicle that the offender owns or operates.
- Multiple offenders in the non-pilot counties who are not required to install an interlock and do not wish to reinstate early can opt to serve their full suspension or revocation period and forego interlock installation.
- The look-back period is 10 years.
- It is possible to plead to a lower charge, such as “wet reckless”; this still counts as a prior offense.

Program type and administration

Administrative for first offenders in four pilot counties and for drivers convicted of driving while suspended or revoked for a prior DWI conviction, operated by the Motor Vehicle Department.

Other notable program features and observations

Counties outside the pilot program have more incentive to install an interlock after a required hard suspension period in order to decrease their suspension significantly.

Recent changes

California enacted legislation effective July 1, 2010, requiring the California DMV to conduct a pilot program which requires interlocks for all DWI offenders in four counties. This legislation also allowed repeat offenders throughout the State to obtain restricted driving privileges after hard suspensions (90 days for second offense, 6-month suspension for third or subsequent offense). Formerly, repeat offenders required 1-year suspensions with no provision for early restriction. California transferred regulatory authority for the administration of mandatory interlock programs from the State courts to DMV in 2009. Also effective July 1, 2010, legislation (SB 598) allows a shorter suspension/revocation period for a second or third DUI offender to install an interlock and receive an interlock restricted license after a mandatory suspension/revocation period. In 2012 the pilot interlock program was extended statewide.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	3,602.12	3,625.03	3,660.43	3,696.12	3,733.44	3,768.39	5%
Alcohol fatalities		1,272	1,132	1,025	924	791	774	-39%
DWI arrests	100s	1,972.48	2,038.66	2,148.11	2,085.31	1,952.76	2,041.45	3%
Interlocks in use		4,876	5,204	5,904	7,545	8,223	15,180	211%
Interlock-in-use rates	per 10,000 population	1.35	1.44	1.61	2.04	2.20	4.03	198%
	per 100 DWI arrests	2.47	2.55	2.75	3.62	4.21	7.44	201%
	per DWI fatality	3.83	4.60	5.76	8.17	10.40	19.61	412%

Discussion

The interlock-in-use rates are misleadingly low because of the program differences between the four pilot counties and the rest of the State. Most of the interlocks in use are in the four counties while the DWI arrest data are statewide. The four-county pilot study, which began July 2010, undoubtedly led to the doubling of the statewide rate in 2011.

Colorado

Interlock laws and policies

- First Offender: For violations on or after January 1, 2007, if approved for early reinstatement after serving 30 days hard suspension - 8 month interlock requirement, eligible for early reinstatement after 4 months of compliance.
 - High BAC (>.17): 2 years (for all stops after January 1, 2007), required for all. The last 4 months of the 2-year interlock period must be violation free. If a violation occurs an additional 4 months will be added to the interlock term starting at the date of the violation. Four consecutive violation-free months are required for the interlock to be removed. If an offender has an interlock violation the interlock must stay in place for at least 8 additional months.
 - BAC test refusal: no requirement for first offense.
- Repeat offender: a 2-year interlock requirement within a 5-year look-back period for a second offense and a 2-year interlock requirement with a lifetime look-back for a third offense.
 - BAC test refusal: second refusal, 1-year interlock requirement after serving 1-year revocation and approved for early reinstatement; third or more, 2-year requirement after serving 1-year revocation and approved for early reinstatement.
- Pleading to a lesser charge, such as “wet reckless,” is permitted.
- High-BAC and repeat offenders may not wait out an interlock requirement.

Program type and administration

Colorado has an administrative-based program operated by the Motor Vehicle Department Driver Control Unit with very limited judicial participation. Courts are encouraged to use interlocks as a component of probation.

Other notable program features and observations

The initial interlock program began as a pilot program in 1996 that allowed qualified offenders to receive a probationary license if they installed an interlock. A University of Colorado study evaluated this pilot program and made recommendations to establish the program permanently, remove program responsibility from hearing officers, incentivize participation, and extend the interlock requirement for bad performance. These changes were adopted in 2000 and became effective in 2001. In 2007, after two high-visibility DWI cases occurred in his district, Colorado Rep. Joel Judd introduced new legislation that expanded the State’s interlock program to include all first-time offenders who were seeking early license reinstatement. This legislation established the current repeat and high-BAC offender requirements and implemented requirements for designated habitual traffic offenders with one alcohol related driving offense to install ignition interlocks for 4 years after serving a 1-year suspension and are approved for early reinstatement.

Colorado has a persistent drunk driving fund funded by license reinstatement fees of offenders who committed a DWI offense. OIS system offenders can receive a subsidy of \$50. The offender must remain compliant to receive a monthly per diem; non-compliance will

result in the cessation of indigent funding. Overall a \$400 cap is placed on the amount of assistance that an offender may receive. Tax files are checked for eligibility.

Recent changes

Colorado developed a new electronic Online Information System (OIS) that uploads and transfers interlock certification of installation information, interlock downloads, calibrations, removals, interlock data logs, violations and circumventions. The OIS determines offender eligibility and verifies that offenders are installing at the proper time. The OIS also administers the financial assistance program for indigent offenders. The length of the interlock time is determined by BAC level: less than .17 requires 8 months in the program, more than .17 requires 2 years. In 2010, Colorado encouraged the courts to require interlocks as a condition of bond and/or probation for all alcohol related driving offenses, regardless of the driver’s license status. This component is still too recent to evaluate its contribution to interlocks in use.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	472.04	480.39	488.97	497.23	504.85	511.63	8%
Alcohol fatalities		179	167	176	158	127	161	-10%
DWI arrests	100s	308.62	279.69	281.98	270.43	278.33	283.81	-8%
Interlocks in use		2,755	5,267	6,104	8,775	17,056	17,461	534%
Interlock-in-use rates	per 10,000 population	5.84	10.96	12.48	17.65	33.78	34.13	485%
	per 100 DWI arrests	8.93	18.83	21.65	32.45	61.28	61.52	589%
	per DWI fatality	15.39	31.54	34.68	55.54	134.30	108.45	605%

Discussion

While high interlock-in-use rates are consistent with Colorado’s strong interlock incentive for first-time offenders and requirement for repeat offenders, the reported rates in 2010 and 2011 seem higher than might be expected. In the 2007 first-offender law Colorado changed its focus from repeat to first offenders, based in part on a profile developed in Denver of those incarcerated for impaired driving violations, which likely affected the increased interlock rates in the last few years. The electronic OIC management system is very efficient and includes designated personnel in the DMV. Colorado has designated a Drunk Driver Committee-Interlock Counseling Model to provide continual program assessment.

Florida

Interlock laws and policies

- First offender: if ordered by a judge, though data tabulations suggest no such cases; required for at least 6 months if a minor is present in car or BAC is .15 or higher; required for a hardship license.
 - High BAC (.20+ prior to October 1, 2008, .15+ since then): required for 6 months.
 - BAC test refusal: no requirement, but data suggest some are given judicial orders to install.
- Repeat offender: required for at least 1 year for second conviction, 2 years for a third conviction or a second conviction with a BAC of .15 or more or a minor in the car. An offender with four or more convictions may install an interlock as a condition of a hardship license for at least 5 years only if accepted into the Special Supervision Services program which is a voluntary abstinence program in which offenders are intensely monitored and treatment is required.
- Look-back is 5 years for a second offense, 10 years for a third offense, lifetime for fourth or higher.
- Offenders required to install interlocks must do so and complete their requirement successfully in order to regain unrestricted driving privileges.
- DWI arrests can be pled down to “wet reckless” which does not count as a prior for a subsequent offense and which does not require an interlock.

Program type and administration

Florida’s interlock program is hybrid, operated by the Florida Department of Highway Safety and Motor Vehicles (DHSMV).

Other notable program features and observations

Record keeping is excellent. Data availability is unparalleled. DWI education and treatment providers monitor interlock offenders closely and report violations to the DHSMV to determine violation penalties or treatment enhancement.

Recent changes

In October 2008 Florida changed interlock regulations to require a continuous period of interlock use, longer interlock time for third or subsequent violations of the interlock requirement and provide for substance abuse treatment for some offenders. As of October 1, 2010, offenders convicted of a fourth or subsequent offense can petition for a restricted driving license with an interlock. In July 2013 interlock threshold was lowered from .05 to .025.

Data

The Department of Highway Safety and Motor Vehicles provided extensive data tabulations. Combined with Roth's data on interlocks in use, they provide a complete set of data to calculate interlock-in-use rates.

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1,816.70	1,836.78	1,852.73	1,865.26	1,884.60	1,908.23	5%
Alcohol fatalities		926	917	887	777	660	716	-23%
DWI arrests	100s	635.91	644.10	646.54	630.19	581.74	627.70	-1%
Interlocks in use		5,434	5,950	6,738	7,791	8,514	8,976	65%
Interlock-in-use rates	per 10,000 population	2.99	3.24	3.64	4.18	4.52	4.70	57%
	per 100 DWI arrests	8.55	9.24	10.42	12.36	14.64	14.30	67%
	per DWI fatality	5.87	6.49	7.60	10.03	12.90	12.54	114%

Discussion

Florida's interlock-in-use rates based on total arrests are low, but those figures are deceptive. Relatively few classes of offenders – first offenders with high-BAC and repeat offenders – require interlocks. The highest interlock-in-use rates occurred after the October 2008 law changes. These rates demonstrate a significant success story.

Georgia

Interlock laws and policies

- First offender: no requirement
 - High BAC: no requirement
 - BAC test refusal: no requirement
- Repeat offender: required for repeat offenders within the 5-year look-back period as a condition of probation. Minimum requirement is 1 year as of July 1, 2013.
- Pleading to a lesser offense, such as a “wet reckless,” is not allowed.

Program type and administration

Georgia’s interlock program is administered by the Regulatory Compliance Division of the Georgia Department of Driver Services. Georgia law also permits any additional staff the commissioner deems necessary for the efficient operation of the program to participate in the program’s administration. This allows Georgia judicial and law enforcement agencies to play a large role.

Other notable program features and observations

Unless an interlock is ordered by a judge, first offenders have little incentive to install a device.

Recent changes

July 1, 2013, HB 407 increase the minimum interlock requirement for repeat offenders from 6 months to 1 year.

Data

Computations are based on Roth and estimates of interlocks in use and estimates of DWI arrests. For arrests, 2006 FBI statistics were abnormally low and 2011 values are not available at this time, so averages of the other years were used for these years.

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	915.58	934.10	950.48	96.208	971.47	981.25	7%
Alcohol fatalities		454	445	405	333	298	277	-39%
DWI arrests	100s	268.89	264.42	254.21	269.82	287.12	268.89	0%
Interlocks in use		1,612	1,938	1,919	1,995	2,182	2,308	43%
Interlock-in-use rates	per 10,000 population	1.76	2.07	2.02	2.07	2.25	2.35	34%
	per 100 DWI arrests	6.00	7.33	7.55	7.39	7.60	8.58	43%
	per DWI fatality	3.55	4.36	4.74	5.99	7.32	8.33	135%

Discussion

Georgia’s basic interlock-in-use rates are low, though the install/required rate may be much higher because of the very limited requirements. Interlocks are required only for repeat offenders or at a judge’s discretion, and the minimum interlock period is 6 months. The only consequence for noncompliance or refusal is that the license will remain suspended.

Illinois

Interlock laws and policies

- First offender: the license is suspended for 6 months. As of January 1, 2009, after 30-day license suspension an offender may obtain a restricted driving permit (RDP) under the Monitoring Device Driving Permit (MDDP) program. Previously, first-time DWI offenders were only permitted to use vehicles for employment or educational purposes.
 - High BAC: no requirement
 - BAC test refusal: no requirement, but ALS period is extended to 12 months, with MDDP with interlock available after 30 days.
- Repeat offender: required for a hardship license; required to be installed for 12 months before the license can be reinstated; repeat offense within 10-year period.
- Pleading to a lesser charge is prohibited by statute.

Program type and administration

Illinois' interlock program is hybrid, operated by the Breath Alcohol Ignition Interlock Device (BAIID) Division in the Secretary of State's Office.

Other notable program features and observations

The MDDP program is completely voluntary and enables first-time DWI offenders to obtain a restricted license with an installed interlock in lieu of waiting out the suspension period.

Recent changes

As of January 1, 2009, first offenders must install an interlock as a condition of a restricted driver permit to obtain driving privileges during their license suspension period.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1,264.40	1,269.59	1,274.70	1,279.68	1,284.05	1,285.98	2%
Alcohol fatalities		446	439	356	313	298	278	-38%
DWI arrests	100s	655.92	655.55	636.49	598.57	547.64	618.83	-6%
Interlocks in use		2,731	2,876	3,387	6,500	11,000	9,974	265%
Interlock-in-use rates	per 10,000 population	2.16	2.27	2.66	5.08	8.57	7.76	259%
	per 100 DWI arrests	4.16	4.39	5.32	10.86	20.09	16.12	287%
	per DWI fatality	6.12	6.55	9.51	20.77	36.91	35.88	486%

Discussion

Arrest data are State-provided; FBI data include only two agencies in the State. Interlock-in-use rates increased after the 2009 law change, which made the MDDP interlock option available to first offenders and to repeat offenders who did not refuse to be tested. Offenders may choose not to participate in the MDDP program and wait out their suspension period, therefore retaining a suspended or revoked license for the State mandated period.

Iowa

Interlock laws and policies

- First offender: an interlock is required for a temporary restricted license for first offenders (no DWI license revocations in the previous 12 years) with a BAC over .10, or over .08 and involved in an accident. An offender in a crash or with a BAC over .15 must wait 30 days before requesting a temporary restricted license. The offender may opt to sit out the 180-day license suspension period instead of applying for a temporary restricted license. The same license actions apply post-conviction and pre-conviction interlock time counts toward the post-conviction requirement.
 - High BAC (>.15): an interlock is required for a work permit after a 30-day hard suspension.
 - BAC test refusal: the license suspension is for 1 year. After 90 days from the effective date of the sanction, an offender may apply for a temporary restricted license with an interlock.
- Repeat offender: the license suspension is for 1 year; a temporary restricted license (TRL) with an interlock is available after 45 days of hard suspension (2 years and 90 days for test refusal). Again, the post-conviction license actions are essentially the same, and pre-conviction time with an interlock counts toward the post-conviction requirement. One year of interlock after license reinstatement is required before repeat offenders can reacquire their unrestricted license. Offenders with third offenses have a 6-year license revocation period; they may apply for a temporary restricted license after 1 year; interlocks are then required for the remainder of the revocation periods.
- It is legal to plead a DWI arrest to a lesser offense, such as “wet reckless.”

Program type and administration

Iowa is an administrative State operated by the Department of Motor Vehicles.

Other notable program features and observations

A first-offense restricted license allows an offender to drive only to work, school, doctor, or emergency care. Offenders with two or more offenses are more restricted and are only allowed to drive to work.

Recent changes

Restricted licenses weren't permitted for DWI offenders until July 2010. Now certain offenders as described above may apply for a restricted license with an interlock.

July 1, 2013, SF 386 amends 321J.17, 321.20(1), and 321J.20 (2) this requires second or subsequent offenders requiring interlocks at reinstatement to maintain the devices for 1 year even if they previously had temporary restricted licenses (TRL). Iowa had a loophole that waived the 1-year requirement if the offender had a TRL with interlock installed. When the TRL was over the offender could reinstate without the interlock.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	298.26	299.92	301.67	303.29	305.03	306.41	3%
Alcohol fatalities		119	108	89	98	90	83	-30%
DWI arrests	100s	211.56	209.65	215.92	208.81	200.45	189.21	-11%
Interlocks in use		4,049	5,000	4,618	5,225	5,342	5,491	36%
Interlock-in-use rates	per 10,000 population	13.58	16.67	15.31	17.23	17.51	17.92	32%
	per 100 DWI arrests	19.14	23.85	21.39	25.02	26.65	29.02	52%
	per DWI fatality	34.03	46.30	51.89	53.32	59.36	66.16	94%

Discussion

The interlock-in-use rates seem high when interlocks are required only for first offenders seeking a temporary restricted license and repeat offenders, especially since the temporary restricted license for repeat offenders only became available in July 2010.

Kansas

Interlock laws and policies

- First offender: since July 1, 2011, an interlock is required for 6 months following a 30-day hard suspension; no requirement before that date.
 - High BAC (.15+): required, 1-year interlock after 1-year license suspension.
 - BAC test refusal: no interlock requirement.
- Repeat offender: interlock required for 1 year following 1-year license suspension (with BAC .15+, 2 years suspension and 2-year interlock requirement, after July 1, 2011); lifetime look-back.
- Pleading to a lesser offense is not allowed, nor is simply waiting out the interlock period without installing an interlock.
- A diversion option exists for one time only; there is no interlock requirement; a successful diversion is counted as a prior offense.
- Test refusal produces extended license suspensions: First refusal, 1 year; second refusal, 2 years; third refusal, 3 years; fourth refusal, 10 years; fifth or subsequent refusals, lifetime. As of July 1, 2012, a second refusal is a separate crime.

Program type and administration

The program is hybrid, operated by the Department of Motor Vehicles.

Other notable program features and observations

None.

Recent changes

The first offender requirement went into effect July 1, 2011: 30-day hard suspension followed by 6 months of interlock. If the offender is caught driving without interlock during this period, the interlock period will start over. Any high BAC (.15+) requires 1-year suspension, then 1-year interlock; second offense: 2-year suspension then 2 years interlock. This first-offender requirement will sunset on July 1, 2015. Kansas is creating a new repository which will require district and municipal courts to report filing and disposition of DWI cases directly to the Kansas Bureau of Investigation (KBI). This system will also incorporate electronic reporting. New rules and regulations for this repository are to be established by July 1, 2014.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	276.29	278.38	280.81	283.27	285.88	287.04	4%
Alcohol fatalities		125	109	138	123	168	108	-14%
DWI arrests	100s	112.49	120.80	130.80	132.23	129.69	125.20	11%
Interlocks in use		420	739	861	1919	3500	6379	1419%
Interlock-in-use rates	per 10,000 population	1.52	2.65	3.07	6.77	12.24	22.22	1362%
	per 100 DWI arrests	3.73	6.12	6.58	14.51	26.99	50.95	1265%
	per DWI fatality	3.36	6.78	6.24	15.60	20.83	59.06	1658%

Discussion

The 2011 first-offender requirement is estimated to have increased the interlock-in-use rates substantially in 2011, though complete data are not yet available and the change in law only applied to arrests after July 1. Increases through 2010 must result from program and management changes implemented to increase penetration. Interlocks are required for license restoration; otherwise offenders will be perpetually suspended. This may create incentive to install interlocks.

Louisiana

Interlock laws and policies

Louisiana interlock laws are complex with several conditions regarding suspension times and interlock requirements. For administrative purposes, an offender with a prior alcohol related arrest (a refusal, submittal, DWI or vehicular negligent injury) within 5 years; or an aggravated DWI first offender (a first offender who has caused a crash involving bodily injury or the offender has a minor under the age of 12 in the vehicle) is required to install an interlock as a condition of reinstatement for the length of the suspension or 6 months, whichever is greater. All basic DWI first offense offenders may sit out their suspension or apply for a hardship license with a required interlock. There are several different suspension periods for refusals and submittals of a breath test based on the number of prior offenses, age and BAC level.

Submittal of a Breath Test	Suspension/interlock (device) period
1st offense 21 years old +; BAC .08-.19	90-day suspension/6 months interlock*
1st offense < 21years old; BAC .02-.19	180 days suspension/180 days interlock*
1st offense Any age; BAC .2 +	730 days suspension/730 days interlock*
2nd offense 21 years old+ BAC .08-.19	365 days suspension/365 days interlock
2nd offense 21 years old +; BAC .20 +	1,460 days suspension/1,460 days interlock
3rd offense 21 years old + BAC .08 +	365 days suspension/365 days interlock

Refusal of a Breath Test (no look back period, no age requirement)	Refusal of a Breath Test Prior to 9/1/09 (any age)	Refusal of a Breath Test After 9/1/09 (any age)
1st offense	180 days suspension 180 days interlock*	365 days suspension 365 days interlock*
2nd offense	545 days suspension 545 days interlock	730 days suspension 730 days interlock
3rd offense after 9/1/09	545 days suspension 545 days interlock	730 days suspension 730 days interlock
1st offense with a fatality or serious bodily injury	545 days suspension 545 days interlock	365 days suspension 365 days interlock
2nd offense with a fatality	no law prior to 9/1/09	730 days suspension 730 days interlock

*device is required only if ordered as a condition of reinstatement

Once an offender is convicted, suspension and interlock times vary depending on the number of prior offenses and their BACs within a 10-year period. Age and refusal or submittal to a breath test are no longer factors. An interlock is required for a hardship license to regain driving privileges during the suspension period.

Offense/BAC	Suspension/interlock (interlock device) requirement with hardship license or condition of reinstatement
1st offense; BAC .08-.19	365-day suspension, interlock required for hardship license.
2nd offense; BAC .08-.19	730-day suspension, required to serve 45-day hard suspension before eligible for a hardship license, hardship license requires interlock
3rd & subsequent offense; BAC .08-.19	1,095-day suspension, required to serve 1 year hard suspension before eligible for a hardship license, hardship license requires interlock
1st offense ; BAC .2 +	2 years suspension, can sit out 1st year and obtain a non-interlock hardship for 2nd year, or immediately request hardship license with interlock.
2nd offense BAC .2 +	4 years suspension, required to serve 45-day hard suspension before eligible for a hardship for the remainder of the first 3 years, on the 4th year can have a non-interlock hardship license.

Program type and administration

Louisiana has a two track system where interlock requirements can be imposed as a restriction on a hardship license, as a condition of license reinstatement, as a condition of pre-trial bail by order of the court, or required in a prosecutor's pre-trial diversion program. The criminal track (judicial) may require an interlock for those convicted of DWI. The civil track (administrative) governed by the Louisiana Office of Motor Vehicles imposes a license suspension and issues all hardship licenses.

Other notable program features and observations

Interlocks are being used in DWI courts as part of sobriety courts, pre-trial diversion and intervention programs; currently this is the only real monitoring effort.

Recent changes

As of August 15, 2007, suspension periods were extended and interlock requirements were introduced. On September 1, 2009 suspension periods for administrative interlock sanctions changed again (see above). Prior to August 15, 2011, interlock vendors were reporting offender data by paper and only twice a year. As of August 15, 2011 interlock vendors are required to report data to the OMV electronically every 60 days.

In the 2013 legislative session HB# 424 amended R.S. 32:667I-to clarify that offenders arrested for a second or subsequent DWI must obtain and maintain an interlock as a condition of reinstatement, less any time during the course of suspension served with an interlock restricted hardship license. The Louisiana Supreme Court had recently limited applications of R.S.32:667i to convictions for DWI only. This restores the original legislative intent where any second or subsequent offender whether suspended under implied consent provisions or convicted for DWI must have an interlock on his vehicle for the length of suspension or as a condition of reinstatement.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	430.27	437.56	443.56	449.17	454.41	457.48	6%
Alcohol fatalities		371	375	339	290	225	226	-39%
DWI arrests	100s	258.65	254.76	247.35	319.24	310.04	314.64	172%
Interlocks in use		1613	2111	3085	4124	4806	5337	231%
Interlock-in-use rates	per 10,000 population	3.75	4.82	6.96	9.18	10.58	11.67	211%
	per 100 DWI arrests	6.24	8.29	12.47	12.92	15.50	16.96	172%
	per DWI fatality	4.35	5.63	9.10	14.22	21.36	23.62	443%

Discussion

The FBI arrest data are substantially under-reported, so the interlock-in-use rates based on State-reported arrest totals are more accurate. Interlock-in-use rates increased each year after the 2007 interlock requirement, even with minimal monitoring, perhaps in response to the 2007 law change. However the rates seem low for Louisiana's requirements and incentives. The estimated 2011 Interlock-in-use rate increases may be an artifact of the new electronic reporting requirement.

Maryland

Interlock laws and policies

- First offender: only if ordered by a judge.
 - High BAC (.15+): required for 1 year. High-BAC drivers are suspended indefinitely until successful completion of the interlock program.
 - BAC test refusal: no requirement
- Repeat offender: required if two offenses in 5 years or three offenses lifetime under the Ignition Interlock Program. The interlock requirement is for 3 to 12 months. A person who is subject to license suspension via the point system for a DWI conviction may be issued a restricted license by participating in the Ignition Interlock Program. A person who is subject to license revocation following a DUI conviction may have the license suspended in lieu of revocation by participating in the same program. The suspension or restricted license periods imposed are the same as for DUI.
- Pleading to a lesser charge, “wet reckless,” is possible.
- Maryland has probation before judgment (PBJ) diversion option, which has treatment requirements but no interlock. PBJ can be chosen once. It does not count as a prior offense for the purposes of determining subsequent repeat offenses.
- Maryland has two separate offenses, DWI (driving while impaired), applicable for BACs of .07, and DUI (driving under the influence), for BACs of .08 and above. Interlocks are not required for DWI; the descriptions above apply to DUI.

Program type and administration

Maryland has a hybrid program operated by the Motor Vehicle Department.

Other notable program features and observations

Probation monitors offenders. If offenders violate or refuse then they get jail time which could be a deterrent. If someone drops out of the interlock program and then decides to return to it they must start all over again, with no credit for their previous interlock time.

Recent changes

On October 1, 2011, HB 1276/SB 803 Drunk Driving Reduction Act extended interlock requirements. Previously, if a driver had registered a BAC between .08-.15, the driver was only eligible for an interlock only if the license is required for employment, alcohol treatment, obtaining health care, or attending school. The 2011 extension allowed the courts to offer an interlock license to all drivers with a BAC between .08-.15. This eliminated an incentive to refuse a BAC test by creating parity with individuals who refuse the test, who are offered suspension or 1 year of interlock. This bill also created a separate criminal charge for drivers who are in the interlock program and who operate a motor vehicle that is not equipped with an interlock.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	562.74	565.34	568.50	573.04	578.80	583.96	4%
Alcohol fatalities		189	178	145	165	154	162	-14%
DWI arrests	100s	252.45	251.29	249.09	243.80	244.22	247.10	-2%
Interlocks in use		4006	4905	5966	6400	9600	9000	125%
Interlock-in-use rates	per 10,000 population	7.12	8.68	10.49	11.17	16.59	15.41	116%
	per 100 DWI arrests	15.87	19.52	23.95	26.25	39.31	36.42	130%
	per DWI fatality	21.20	27.56	41.14	38.79	62.34	55.56	162%

Discussion

Maryland's interlock-in-use rates appear high for a State with no first offender requirement, with PBJ, and with relatively short interlock installation periods. If offenders violate or refuse then they get jail time, which could be a deterrent. With the new changes in the law Maryland is looking to increase interlock-in-use rates.

Massachusetts

Interlock laws and policies

- First offender: no requirement.
- Repeat offender: required as a condition of a hardship license for two or more offenses within a lifetime; hardship license can be for up to 1 year (second offense, after 1 year hard suspension); up to 6 years (3rd offense, after 2 years hard suspension); or up to 5 years (4th offense, after 5 years hard suspension). There is an additional 2-year interlock requirement after reinstatement of full license.
- High BAC: no requirement.
- BAC test refusal: no requirement.
- Offenders can plead to a lesser “wet reckless” charge, which has no interlock requirements.

Program type and administration

The Massachusetts program is hybrid, operated by the Registry of Motor Vehicles.

Other notable program features and observations

None.

Recent changes

None.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	641.01	643.16	646.90	651.76	656.33	660.70	3%
Alcohol fatalities		144	155	120	106	115	114	-21%
DWI arrests	100s	83.59	117.46	129.41	123.69	116.34	114.10	36%
Interlocks in use		223	952	2186	2488	4601	4872	2085%
Interlock-in-use rates	per 10,000 population	0.35	1.48	3.38	3.82	7.01	7.37	2020%
	per 100 DWI arrests	2.67	8.10	16.89	20.11	39.55	42.70	1501%
	per DWI fatality	1.55	6.14	18.22	23.47	40.01	42.74	2660%

Discussion

These interlock-in-use rates seems very high for the current law which affects only repeat offenders, especially with little or no monitoring of offenders except by vendors. However, since each repeat offender has an interlock requirement of at least 2 years which may extend, with a hardship license, up to 3 years or more, the interlock-in-use rates based on installations, rather than interlocks in use, would be half or less of the rates shown in the table above. These values may be consistent with a credible proportion of repeat offenders among all DWI offenders; even so, the 2010 and 2011 rates appear high. The applicable DWI law is known as “Melanie’s Law,,” which was passed in October 2005 and has applied throughout the reporting period. There is no obvious explanation for the substantial interlock-in-use rate increases in 2010.

Michigan

Interlock laws and policies

- First offender: no requirement.
 - High BAC (.17+): up to October 31, 2010, no requirement; after October 31, 2010, in lieu of waiting out a 1-year suspension, after a 45-day hard suspension offenders may apply for a restricted license which requires an interlock for a minimum of 1 year.
 - BAC test refusal: no requirement.
- Repeat offender: for offenders with two or more offenses within 7 years, or three or more within 10 years, there is a mandatory 1-year license suspension. After 45 days of mandatory license suspension, offenders may apply for a restricted license which requires an interlock.
- Offenders who receive a restricted license are required to install an interlock and successfully complete the interlock period before regaining an unrestricted licensure.
- After October 31, 2010, offenders who have installed interlocks must keep them in place for at least 1 year. At the end of the required period, they must apply to the Secretary of State for license restoration; the license is not automatically restored.
- Drivers who would qualify for a restricted license with an interlock requirement may instead wait out their original full suspension period and regain their licenses.
- DWI arrests can be pled to lesser charges.

Program type and administration

Michigan has an administrative-based interlock program that is run primarily through the Michigan Department of State Driver's License Appeal Division (DLAD).

Other notable program features and observations

Michigan offenders can only be charged \$1 per day to cover maintenance fees if their previous year's State income falls within the State's published poverty guidelines.

Recent changes

Michigan is in the process of linking adjudication, crash reporting, and emergency response data. Until October 31, 2010, there was no interlock requirement; after October 31, 2010, in lieu of waiting out a 1-year suspension after a 45-day hard suspension offenders may apply for a restricted license which requires an interlock for a minimum of 1 year.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1003.61	1000.13	994.69	990.16	987.77	987.68	-2%
Alcohol fatalities		335	304	284	243	230	255	-24%
DWI arrests	100s	445.53	405.84	355.34	389.41	348.82	388.99	-13%
Interlocks in use		4000	4825	3994	4038	4974	5249	31%
Interlock-in-use rates	per 10,000 population	3.99	4.82	4.02	4.08	5.04	5.31	33%
	per 100 DWI arrests	8.98	11.89	11.24	10.37	14.26	13.49	50%
	per DWI fatality	11.94	15.87	14.06	16.62	21.63	20.58	72%

Discussion

Some courts appear not to have ordered interlocks for offenders who claim to be unable to afford the interlock fees. The courts do not have the authority to remove driving privileges. DWI offenders must enter a mandatory treatment program, even if the court orders an interlock, and need to appear before an administrative hearing officer to restore their license. One analyst is responsible for the entire interlock system. The interlock-in-use rates are low, though. Offenders may avoid an interlock by waiting out their suspension period, but those who do choose an interlock must keep it in place for at least a year and (after 10/31/10) must apply to restore their license. Interlock violations either extend the minimum required interlock period or cause the restricted license to be revoked and the original suspension or revocation period to start again. The 2010 first-offender high-BAC requirement may have increased the rate slightly.

Missouri

Interlock laws and policies

- First offender: only if ordered by the court or the DMV.
 - High BAC: only if ordered by the court or the DMV.
 - BAC test refusal: only if ordered by the court or the DMV.
- Repeat offender: required as a condition of relicensing for a second offense within 5 years or a third offense lifetime. The interlock use requirement is 6 months.
- It is possible to plead a DWI arrest to a lesser charge, such as “wet reckless.”

Program type and administration

The interlock program began as a judicial program in 1995. An administrative portion was added in 2009. The interlock program is now operated by both the Department of Motor Vehicles and the courts.

Other notable program features and observations

None.

Recent changes

In 2010 legislation was passed to allow limited driving privileges for repeat offenders through the courts after a 45-day hard suspension. Other legislation required fingerprinting and background checks of these offenders to determine eligibility for the restricted license. Limited driving privileges were to be granted only if the offender’s record was violation and conviction free for a certain time period dependent upon the level of offense. Based on a study showing this law was confusing and difficult to implement and track, major revisions are being considered.

On August 28, 2012 a law requiring compliance based removal was passed. Repeat offenders will be required to have an interlock for 6 months. During this time, if the offender violates the interlock requirement, their interlock period will be extended for an additional 6 months from the date of the violation. The 6 month extension can only be applied once.

This bill also added language to allow first offenders to restore license privileges after 15 days of hard suspension if they apply for a restricted license with an interlock for 75 days. If a first offender violates during this 75-day period, the interlock term will be extended for an additional 75 days. This extension will be repeated indefinitely until the offender completes 75 days of violation-free interlock driving. This law will be effective October 1, 2013.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	584.27	588.76	592.39	596.11	599.61	600.90	3%
Alcohol fatalities		258	333	314	302	258	258	0%
DWI arrests	100s	394.38	399.81	395.64	393.97	356.95	386.37	-2%
Interlocks in use		1852	3020	2743	4649	4693	6179	234%
Interlock-in-use rates	per 10,000 population	3.17	5.13	4.63	7.80	7.83	10.28	224%
	per 100 DWI arrests	4.70	7.55	6.93	11.80	13.15	15.99	241%
	per DWI fatality	7.18	9.07	8.74	15.39	18.19	23.95	234%

Discussion

The administrative component added in 2009 may have brought more uniformity to the program and increased the interlock-in-use rates modestly. However, the only consequence for not installing an interlock was no legal licensure. Missouri recently improved its driver license record system by adding new components to capture information regarding interlocks and also changed its reinstatement requirements. This may enable more efficient monitoring which may increase the interlock-in-use rates further.

Nebraska

Interlock laws and policies

- First offender: required as a condition of license reinstatement.
 - High BAC: .15, “enhanced”; required as a condition of reinstatement.
 - BAC test refusal: no additional interlock requirement.
- Repeat offender: required
- Pleading to lesser charges, such as “wet reckless,” is allowed.
- The look-back period was 12 years prior to 1/1/2012, 15 years thereafter.

Program type and administration

Nebraska has a hybrid program operated by the Department of Motor Vehicles.

Other notable program features and observations

Nebraska requires an interlock for all restricted licenses as a condition of probation under judicial discretion.

Recent changes

As of January 1, 2012, interlocks are required for all DWI offenders as a condition of license reinstatement. First offenders can voluntarily choose administrative license revocation (ALR) with an immediate interlock for 6 months or request an ALR hearing but forfeit their voluntary pretrial interlock and not be eligible for an interlock until sentenced by the court. The new law also establishes an indigence fund, extends the look-back period from 12 to 15 years, establishes an ignition interlock permit, and establishes a required 6-month interlock period extension for non-compliance violations.

January 18, 2013 the legislature passed LB 158 which carried an emergency clause and is now in effect to adopt the part of MAP-21 that required 1 year of interlock installation for repeat offenders. This bill also removed the limitations on driving privileges for those who are driving with an ignition interlock permit, since those were not required by MAP-21.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	177.27	178.34	179.64	181.27	182.97	184.22	4%
Alcohol fatalities		71	77	53	68	51	45	-37%
DWI arrests	100s	134.21	134.37	136.60	133.99	123.99	120.34	-10%
Interlocks in use		286	500	1030	1136	1800	3100	984%
Interlock-in-use rates	per 10,000 population	1.61	2.80	5.73	6.27	9.84	16.83	943%
	per 100 DWI arrests	2.13	3.72	7.54	8.48	14.52	25.76	1109%
	per DWI fatality	4.03	6.49	19.43	16.71	35.29	68.89	1610%

Discussion

The low interlock-in-use rates seem accurate since first offender interlocks were required only for the short-term hardship licenses and repeat offender interlocks had to be ordered by the court. The rate should increase once the new law is in effect and more judges require interlocks. The sharp increase in rates from 2007 to 2011 is hard to explain.

New Mexico

Interlock laws and policies

- First offender: interlock required as a condition of probation, 1 year.
 - High BAC: no additional requirement.
 - BAC test refusal: no additional requirement.
- Repeat offender: required as a condition of probation, 2 years (second offender), 3 years (third offender), and lifetime (fourth or more offender).
- The judicial look-back period is 5 years, but MVD will use a lifetime look-back period to determine the length of the administrative license revocation period, during which a special license and interlock are required for legal driving.
- The interlock requirement cannot be “waited out.” At a minimum, there must be 6 months of interlock violation-free performance before full driving privileges can be restored.
- A DWI arrest cannot be pled down to a lesser, non-DWI charge.

Program type and administration

New Mexico has an administrative program operated by the New Mexico Department of Transportation’s Traffic Safety Bureau.

Other notable program features and observations

New Mexico law also requires juvenile offenders to obtain an interlock for 1 year after a conviction for a DWI offense relating to drugs or alcohol.

New Mexico established an indigent fund in 2010 governed by the Traffic Safety Bureau funded through a \$300,000 annual appropriation from the State’s liquor excise tax and a \$100-per-year fee collected by the service centers for each center’s non-indigent installations. The indigent fund participant is responsible for all charges associated with the installation, servicing, and removal of the interlock. The vendor reduces the standard fees according to supportive documentation with the application and then seeks reimbursement from the State indigent fund.

Recent changes

New Mexico is currently implementing the Ignition Interlock Data Analysis Project which will establish a statewide depository for all interlock data. The New Mexico Interlock Memorial created a task force in 2009. This led to the requirement of 6 months tamper-free interlock driving prior to license reinstatement. In 2010 NMDOT established indigency requirements for interlock orders as well as allowed administrative funding for NMDOT to oversee the program.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	196.21	199.01	201.07	203.68	206.48	207.87	6%
Alcohol fatalities		136	132	105	112	111	105	-23%
DWI arrests	100s	185.66	199.02	197.84	189.79	165.63	139.43	-25%
Interlocks in use		6311	7437	8955	8625	12064	13500	114%
Interlock-in-use rates	per 10,000 population	32.16	37.37	44.54	42.35	58.43	64.95	102%
	per 100 DWI arrests	33.99	37.37	45.26	45.44	72.84	96.82	185%
	per DWI fatality	46.40	56.34	85.29	77.01	108.68	128.57	177%

Discussion

New Mexico has led the way in implementing a comprehensive interlock program and improving it regularly. The interlock-in-use rates are high, though perhaps not as high as these estimates suggest. “Installations” may be overstated, possibly based on confusion between “interlocks in use” and “installations”; evidence is that repeat offenders must have the interlocks installed for 2, 3, or even 4 years, which should make installations lag behind interlocks in use more than shown in the table. New Mexico requires an interlock for all offenders. Sanctions are both administrative and judicial, as a condition of probation. Probation officers may monitor compliance more carefully and violations may result in jail time. All offender laws have been in place since 2005 with constant “revisiting” and strengthening of the effectiveness of the laws and program by a task force created in 2009, consistent with the gradual increase in interlock use rates over the years.

New York

Interlock laws and policies

- First offender: prior to Leandra's Law (8/15/2010), at court's discretion; under Leandra's law, requires courts to order all drivers convicted of misdemeanor and felony drunk driving charges, to install and maintain an interlock on any vehicles they own or operate for at least 6 months after their license revocation period at their own expense with conditional license.
 - High BAC: above .18, converts DWI to Aggravated DWI which, for first offenders, extends the revocation period from 12 to 18 months but does not change the 6-month post-suspension interlock requirement.
 - BAC test refusal: same effect as high BAC.
- Repeat offender: required, with conditional license, during any part of the revocation, suspension, or probation period; post-suspension, minimum of 6 months for second offenders, 5 years for third offenders.
- Post-suspension interlock periods required; they may not be waived out.
- The look-back period is 10 years.
- Pleading to lesser charges is not allowed.

Program type and administration

The New York State interlock program is judicial. It was designed by the State's Division of Criminal Justice Services – Office of Probation and Correctional Alternatives (OPCA) and primarily operates at the county level.

Other notable program features and observations

Ninety-nine percent of offenders receive some kind of alcohol treatment. New York's Office of Probation and Correctional Alternatives (OPCA) established a \$3 million grant administered through the New York State Governor's Traffic Safety Committee to distribute to counties based on the number of DWI convictions and conditions imposed for installation of ignition interlocks.

Recent changes

New interlock Negative Event/Failed Tests Reports (by vendor & county) were implemented May 2012.

April 16th, 2013 S.1941 two senate bills were passed. One requires offenders to install interlocks on any vehicle they own or used to commit the DWI offense. This bill will close loopholes where offenders previously could the registration out of their name to avoid installing and interlock. If an offender claims they do not own a car, or show cause for not installing an interlock the offender would then be required to wear a continuous alcohol monitoring device (CAM). These requirements are a condition of relicensure. The second bill sponsored by Senator Fuschillo (S.742) requires each alcohol offense case be reviewed individually before being issued a conditional driver's license.

One major change will be implemented tentatively August 1, 2013. The interlock Classification System will be changing and all units (those installed after 08/01/13) will require a camera.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1910.46	1913.23	1921.24	1930.70	1939.92	1950.16	2%
Alcohol fatalities		433	377	346	318	364	315	-27%
DWI arrests	100s	577.65	588.25	583.69	575.07	544.86	500.43	-13%
Interlocks in use		702	1544	1276	1762	2500	5000	612%
Interlock-in-use rates	per 10,000 population	0.37	0.81	0.66	0.91	1.29	2.56	598%
	per 100 DWI arrests	1.22	2.62	2.19	3.06	4.59	9.99	722%
	per DWI fatality	1.62	4.10	3.69	5.54	6.87	15.87	879%

Discussion

New York's Leandra's law requires an interlock for all offenders as of August 15, 2010. Prior to that, interlocks were required only for repeat offenders which likely explains the low Interlock rate up through 2010. Offenders who do not install the required interlock cannot get their license privileges restored.

There have been various legislative proposals (Senator Fuschillo) to address some of the limitations of "Leandra's Law" (Chapter 496 of the Laws of 2009), in an attempt to increase the installation rate of interlock's in New York State directed at addressing operator avoidance in complying with the law by "waiting-out" the mandatory 6-month minimum installation period required by law. Specifically, the proposal is to increase the interlock period of installation to run concurrent with the period of Probation Supervision or Conditional Discharge (Judge Robert Maccarone 2013).

North Carolina

Interlock laws and policies

- First offender: interlock required for hardship license.
 - High BAC (.15+): interlock required for a period of 1 year.
 - BAC test refusal: no requirement.
- Repeat offender: interlock required; there is a 1-year interlock requirement if the repeat offense came with a 1-year revocation period, a 3-year interlock requirement if the repeat offense came with a 4-year revocation period (second or higher offense; prior within 3 years), and a 7-year interlock requirement if the repeat offense (third or higher; at least one prior within 5 years) came with a lifetime revocation. The requirement takes effect when driving privileges have been restored.
- It does not appear that the offender can simply wait out the interlock period and regain unrestricted driving privileges.
- It is possible to plead to a lesser offense, such as “wet reckless”; this still counts as a prior offense for repeat violation calculation.
- Sentencing, in general, has complex guidelines based on aggravating factors, gross aggravating factors, and mitigating factors.

Program type and administration

The program is administrative, operated by the Department of Motor Vehicles.

Other notable program features and observations

The North Carolina indigent offender fund was created on December 1, 2008. It is funded by 50 percent of the DWI offender fees and is used for the installation and removal of interlocks. If the court determines that a convicted offender is unable to pay for the installation of an interlock system, the court may order that the costs will be paid out of the indigent fund, provided the offender agrees to pay the required costs for monitoring the system.

Recent changes

2012 increased number of approved vendors in the State; added SmartStart and ACS to their list of approved vendors.

North Carolina indigent offender fund was created on Dec. 1, 2008, and it is sustained by receiving 50 percent of the offender fee to be used for the installation and removal of interlocks. If the court determines that the convicted person is unable to pay for the installation of an ignition interlock system, the court may order that the costs will be paid out of the Ignition Interlock Device Fund, provided the person agrees to pay the required costs for monitoring the system.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	891.73	911.80	930.94	944.96	955.90	965.11	8%
Alcohol fatalities		421	497	423	358	388	365	-13%
DWI arrests	100s	506.74	503.60	495.99	502.61	509.07	503.60	-1%
Interlocks in use		6034	7685	8003	8303	8500	8761	45%
Interlock-in-use rates	per 10,000 population	6.77	8.43	8.60	8.79	8.89	9.08	34%
	per 100 DWI arrests	11.91	15.26	16.14	16.52	16.70	17.40	46%
	per DWI fatality	14.33	15.46	18.92	23.19	21.91	24.00	67%

Discussion

These rates seem low. However, North Carolina is currently unable to track how many first offenders are required to have an interlock because interlocks only are required for high-BAC offenders and hardship licenses.

Ohio

Interlock laws and policies

- First offender: only if ordered by the court.
 - High BAC: same.
 - BAC test refusal: same.
- Repeat offender: required for fourth offense.
- Any offenders who have chosen to get limited driving privileges during their suspension period must use interlocks as a condition of the restricted occupational license.
- Courts may order an interlock for any offender as a condition of probation.
- It is possible to plead to a lesser offense, such as “wet reckless;” this still counts as a prior offense for repeat violation calculation.

Program type and administration

Ohio’s program is judicial, operated by the courts and probation.

Other notable program features and observations

There is no statewide program administration or monitoring. An offender person may be required to use an interlock when operating under an occupational license.

Recent changes

None.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1148.12	1150.05	1151.54	1152.89	1153.83	1154.10	1%
Alcohol fatalities		386	389	351	325	341	316	-18%
DWI arrests	100s	189.60	191.55	190.88	189.93	362.59	224.91	19%
Interlocks in use		2260	3105	2580	2974	4217	6741	198%
Interlock-in-use rates	per 10,000 population	1.97	2.70	2.24	2.58	3.65	5.84	197%
	per 100 DWI arrests	11.92	16.21	13.52	15.66	11.63	29.97	151%
	per DWI fatality	5.85	7.98	7.35	9.15	12.37	21.33	264%

Discussion

Ohio does not have a statewide interlock program – interlocks are ordered only by individual judges – though any offenders who want limited driving privileges during their suspension period must have an interlock. An interlock is required only for fourth offenses as a condition of probation. FBI arrest numbers appear to be under-reported, so actual interlock-in-use rates probably are lower than the calculated 12-16 percent. Arrests records were not available but 42,896 DWI convictions were reported in 2010. At the end of May 2011 there were 6,741 orders for interlock installations. There is no apparent reason for the increase in interlocks in use in 2010 and 2011.

Oklahoma

Interlock laws and policies

- First offender: interlock required if an offender obtains a hardship license during 180-day revocation; any interlock time during the revocation counts against the 6 months interlock required after the revocation period. Prior to 11/1/11, interlocks were required only by court option.
 - High BAC (.15+): required for 1 and a half years following a mandatory 180-day revocation before full driving privileges are reinstated.
 - BAC test refusal: same as basic DUI.
- Repeat offender: second offenders require 12 months full license revocation, with the option of a hardship license with an interlock, followed by an interlock requirement for 4 years after reinstatement. Third offenders require a 3-year full license revocation period, again with the option of a hardship license with an interlock, then an additional 5 years with an interlock upon reinstatement.
- Look-back period is 10 years.
- It is possible to plead a DWI arrest to a lower charge such as “wet reckless.”

Program type and administration

Hybrid; Oklahoma has both an administrative and court-based interlock program for offenders which is operated by the Board of Tests for Alcohol and Drug Influence (BOT) as an independent entity of the Department of Public Safety’s (DPS) general operating budget.

Other notable program features and observations

Oklahoma established the use of fuel cell interlocks in 2003. Oklahoma BOT collects a \$10 Installation Decal fee for each certified installation which is paid for by offenders.

Recent changes

As of November 2011, with the Erin Swezey Act, the bulleted regulations listed above became effective.

In 2010, with the Aaron Gilling Act, alcohol evaluation and appropriate treatment was mandated for all DUI offenders.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	359.41	363.44	366.90	371.76	375.95	378.42	5%
Alcohol fatalities		199	223	242	229	220	220	11%
DWI arrests	100s	159.36	182.29	189.80	189.96	174.46	179.17	12%
Interlocks in use		1709	2200	1722	1635	6000	4500	163%
Interlock-in-use rates	per 10,000 population	4.76	6.05	4.69	4.40	15.96	11.89	150%
	per 100 DWI arrests	10.72	12.07	9.07	8.61	34.39	25.12	134%
	per DWI fatality	8.59	9.87	7.12	7.14	27.27	20.45	138%

Discussion

Oklahoma's interlocks in use and interlock-in-use rates vacillate. In part, this is due to an unusually high 2010 value for interlocks in use, based on a count provided by the State to Roth rather than his other estimates based on vendor data. There is little incentive for first offenders to install when they can opt to sit out a 180-day license revocation. Oklahoma requires an interlock for high-BAC and repeat offenders and recently (November 2011) increased the amount of time the interlock is required as a condition of a modified license, or if refusal of breath test. These changes would not be reflected in the 2011 rates. The 2010 law change affected alcohol screening and treatment but is not likely to affect interlock installations. It is not clear what produced the substantial increase in interlocks use in 2010 and decrease in 2011. A physical decal process registers and tracks installations but there is no monitoring of those who do not install.

Oregon

Interlock laws and policies

- Judicial or Administratively Mandated:
 - 1st offense – 1-year interlock (Diversion, Judicial with exception of hardship)
 - 2nd offense – 1st conviction 1-year interlock (administration 1-year suspension)
 - 3rd offense – 2nd conviction 2-year interlock (administration 3-year suspension)
 - 4th offense – 5-year interlock (administrative life time suspension/revocation)
- Implied Consent Suspensions:
 - 90 days 30-day hard suspension with hardship
 - 1 year 90-day hard suspension with hardship
 - 3 year 90-day hard suspension with hardship (no hardship if a breath refusal)
- Interlock required for all hardship licenses. Look-back period is 10 years, but a prior offense within 5 years extends the suspension for second offenders to 3 years.
- Offenders required to get an interlock must do so in order to regain an unrestricted license; it is not possible to just wait out the interlock period.
- It is not possible to plead a DWI charge to a lesser offense.
- Oregon's diversion program is frequently chosen by first offenders; it lasts 1 year, has an interlock requirement if the offender drives during the year

Program type and administration

Oregon has a hybrid interlock program operated by the DMV upon DWI conviction and a judicial component where the judge may order an interlock as a condition of a DWI Diversion Agreement.

Other notable program features and observations

Indigent funding is available. The costs are paid from the Intoxicated Driver Program Fund. Oregon DMV may waive, in whole or in part, or defer the offender's responsibility to pay all or part of the costs if the offender meets the standards for indigence adopted by the Federal Government for purposes of the food stamp program. To request a fee waiver, proof of indigence must be provided to a service provider who is contracted with the Addictions and Mental Health Division (AMHD). Service providers are contracted with AMHD. Interlock fees and other negotiated costs are paid from the Intoxicated Driver Program Fund.

Recent changes

Oregon changed its law effective January 1, 2012, to require anyone convicted of DWI to install an interlock when the driving privileges are restored. With Oregon's previous law the first conviction was generally the second arrest due to diversion; the 2012 new legislation establishes the requirement for first offenders. Interlock and suspension times were increased in 2008.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	367.09	372.24	376.87	380.86	383.82	386.82	5%
Alcohol fatalities		148	148	137	115	71	97	-34%
DWI arrests	100s	25,091	25,618	24,811	21,443	24,241	24,241	-3%
Interlocks in use		2,012	2,302	2,570	2,957	3,499	3,715	85%
Interlock-in-use rates	per 10,000 population	5.48	6.18	6.82	7.76	9.12	9.60	75%
	per 100 DWI arrests	8.02	8.99	10.36	13.79	14.43	15.33	91%
	per DWI fatality	13.59	15.55	18.76	25.71	49.28	38.30	182%

Discussion

Oregon's interlock-in-use rates appear accurate. The January 2012 requirement for all offenders to install an interlock should increase the rates substantially. Interlock and suspension times were increased in 2008. Prior to this people could sit out a 6-month suspension; now the requirement is 2 years. This could explain the increase in interlock-in-use rates in 2009 and 2010. The FBI arrest data are under-reported, so State data are used. Oregon reported about 25,000 arrests/year, of which about 10,000 are convicted and approximately 3,200 to 3,400 have interlocks installed. The low conviction rate is likely due to the very popular diversion program. Currently there is no monitoring. Only interlock installations are reported to the State. Lane County is the only county where judges seem to be ordering interlock with any regularity.

Pennsylvania

Interlock laws and policies

- First offender: no requirement.
 - High BAC: no requirement, but three levels of BAC affect other penalties: .08 to .099, .10 to .159, and .16+.
 - BAC test refusal: no requirement.
- Repeat offender: required for 1 year after the suspension period (12 or 18 months).
- Offenders may not wait out the interlock requirement period. One interlock violation extends the interlock period by 1 additional year; a second interlock violation causes the interlock to be removed and extends the license suspension period by a year.
- The look-back period is 10 years.
- First offenders can avoid most penalties through Accelerated Rehabilitative Disposition (ARD). This requires a 2-year supervision period, with a license suspension of zero, 30, or 60 days depending on the BAC. It can be used only once. It is counted as a prior offense for subsequent DWIs.
- Pleading to lower charges, such as “wet reckless,” is prohibited.

Program type and administration

Pennsylvania’s program is administrative, operated by Department of Motor Vehicles.

Other notable program features and observations

None.

Recent changes

None.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	1,251.08	1,256.39	1,261.23	1,266.69	1,271.13	1,274.39	2%
Alcohol fatalities		492	504	499	399	433	407	-17%
DWI arrests	100s	505.87	547.75	564.46	524.27	521.26	532.72	5%
Interlocks in use		2,875	4,254	4,336	5,122	5,722	6,331	120%
Interlock-in-use rates	per 10,000 population	2.30	3.39	3.44	4.04	4.50	4.97	116%
	per 100 DWI arrests	5.68	7.77	7.68	9.77	10.98	11.88	109%
	per DWI fatality	5.84	8.44	8.69	12.84	13.21	15.56	166%

Discussion

Basic interlock-in-use rates are low, around 10 percent, because first offenders have no interlock requirement or incentive. For repeat offenders, who in Pennsylvania make up one-third of the arrests, interlock-in-use rates are much higher. It seems likely that a significant number of drivers convicted of a repeat DWI offense are driving without valid licenses.

Texas

Interlock laws and policies

- First offender: interlock only if ordered by a judge.
 - High BAC (>.15): required as a condition of probation (community supervision) for 1 year following the end of the license suspension.
 - BAC test refusal: no requirement.
- Repeat offender: required as a condition of bond, a condition of probation (community supervision) following conviction which, for third and subsequent offenders, can be up to 10 years, as a condition of an occupational license, or as a condition of the “5-year rule” (2nd or subsequent DWI committed within 5 years of the date of the most recent DWI conviction).
- There is a 10-year look-back period (and, if there is one prior within 10 years, a lifetime look-back for additional priors).
- Pleading to a lesser offense, such as “wet reckless,” is prohibited.

Program type and administration

Texas has a judicial-based interlock program for offenders that is administered by the Texas Department of Public Safety and operates primarily at the county level.

Other notable program features and observations

The Texas Center for the Judiciary is a 501(c)(3) nonprofit corporation established in 1973 to provide education to Texas judges. Since its creation, the Texas Center has served as the primary source of judicial education for all appellate, district court, statutory county court, probate, associate and retired and former judges covered by the Rules of Judicial Education. The Texas Center for the Judiciary has been exemplary in educating not only Texas State judges but judges nationwide on how interlocks can be used as an effective tool in sentencing DWI offenders.

Texas offenders who are unable to pay can make an arrangement with the courts for an adjusted payment/fee schedule not to exceed twice the period of the court's order.

Recent changes

SB880 (effective September 1, 2011) expanded the scope of services probation may provide to include the supervision of any persons released on bail or in pre-trial diversion programs who are ordered to use an interlock, subject to an occupational driver's license or otherwise ordered by a court to submit county supervision. This bill also authorized community supervision to assess a reasonable monthly administrative fee of not less than \$25 nor more than \$60.

SB 953 (effective September 1, 2011) amended Chapter 521 of the Transportation Code (occupational drivers' licenses ODL) and authorized the court granting ODL to require an interlock, and periodic testing for alcohol and controlled substances, to order the offender receiving ODL to submit to supervision by community supervision, to order a monthly administration fee of not less than \$25, nor more than \$60, to order supervision to continue until the end of the period of suspension of the person's driver's license, including any extensions of that period and to modify or terminate supervision before the end of the license period for good cause.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	2,335.96	2,383.20	2,430.90	2,480.18	2,524.27	2,563.18	10%
Alcohol fatalities		1400	1333	1310	1253	1259	1213	-13%
DWI arrests	100s	881.65	882.36	900.66	938.56	935.33	907.71	3%
Interlocks in use		8,582	17,000	1,4935	1,7025	31,150	33,064	285%
Interlock-in-use rates	per 10,000 population	3.67	7.13	6.14	6.86	12.34	12.90	251%
	per 100 DWI arrests	9.73	19.27	16.58	18.14	33.30	36.43	274%
	per DWI fatality	6.13	12.75	11.40	13.59	24.74	27.26	345%

Discussion

The interlock-in-use rates seem somewhat high in recent years, considering that first offenders obtain interlocks only when ordered by the court. Rates are based on FBI arrest tallies and Roth interlocks in use, supplemented by State data.

Interlocks may be ordered at the judge's discretion for first offenders – sometimes judges use it as a pretrial condition of bond (with jail for bond violators) or as a condition of probation (with probation revoked for violators) where the offender would be monitored. Interlocks are required for high-BAC (condition of probation – monitored) and repeat offenders. The interlock requirement is linked to the driver license and checked on an individual basis. The law allows the courts not to order an interlock if they believe that is in the offender's best interest. Urban areas were the first to comply with these interlock requirements, followed by suburbs (18 counties over 250,000 population), and finally rural areas. As of September 1, 2011, the probation department may monitor any interlock offender's compliance, and may charge a fee. Previously the vendor sent compliance records to the court reporter. The interlock-in-use rates are expected to increase over the next few years as probation takes over monitoring and more courts start ordering interlocks.

Utah

Interlock laws and policies

- First offender: only if ordered by a judge.
 - High BAC (.16+): supervised probation, treatment, and an interlock and/or electronic home confinement are required (called the IRD provision).
 - BAC test refusal: no requirement.
- Repeat offender: required for 3 years for a second or third DWI offense within 10 years. The licensing agency or court may order an additional 90 days, 180 days, 1 or 2 years.
- Pleading to lesser offense, such as “wet reckless,” is possible.

Program type and administration

Until summer 2012 there was no statewide program administration in Utah other than a notification process that an offender is interlock restricted. Only the Utah Driver's License Division has the authority to place a restriction on the offender's electronic driving record.

Other notable program features and observations

Offenders are monitored if a court orders the interlock and chooses to take action on violations. For a third or subsequent offense within 10 years, if serious bodily injury occurred or the offender has any prior felony DWI conviction or automobile homicide conviction, Utah law requires up to a 5-year prison term or 1,500 hours jail (62.5 days). The offender may be required to install an interlock for 6 years.

Recent changes

Effective July 1, 2012, an offender who is ignition interlock restricted shall have their driving privilege suspended until they have had ignition interlocks device installed in their vehicle and paid a license reinstatement fee to the Driver License Division. If the ignition interlock is removed prior to the ending date of the ignition interlock restriction period, the driver license will be re-suspended until an ignition interlock is installed and an additional license reinstatement fee is paid.

- First offender: required for a conviction on a driving under the influence (DUI) – (UCA 41-6a-502) State issued. 18 month interlock.
 - High BAC (.16+): court-ordered-supervised probation, treatment, and an interlock and/or electronic home confinement are required (called the Utah's Ignition Interlock Restricted Driver IRD provision).
 - BAC test refusal: (UCA 41-6a-518.2) 3-year interlock requirement.
- Repeat offender: required for 3 years for a second or third DWI offense within 10 years. The licensing agency or court may order an additional 90 days, 180 days, 1 or 2 years.

In July 2012, Utah also implemented an interlock program structure that will license vendors and facilities, create mandatory audits, provide for electronic notification of installations and removals, and establish other program requirements. Courts have a new reporting system which is uploaded to the Driver's License Division nightly.

In March 2013, Utah added if an offender can electronically verify that they do not have a vehicle registered in their name then the offender doesn't have to pay the suspension fee or penalty for not installing an interlock.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	252.55	259.77	266.30	272.34	277.51	281.43	11%
Alcohol fatalities		53	56	49	41	44	53	0
DWI arrests	100s	154.22	154.22	152.97	156.83	152.85	154.22	0%
Interlocks in use		1,111	1,186	1,311	1,497	1,950	2,550	130%
Interlock-in-use rates	per 10,000 population	4.40	4.57	4.92	5.50	7.03	9.06	106%
	per 100 DWI arrests	7.20	7.69	8.57	9.55	12.76	16.53	130%
	per DWI fatality	20.96	21.18	26.76	36.51	44.32	48.11	130%

Discussion

Utah's interlock-in-use rates seem high with no first offender requirement or incentive. However, because interlock periods were 3 years for repeat offenders, much longer than in most other States, the "interlocks in use" figures are about three times higher than the numbers of offenders installing interlocks.

This is consistent with the fact that, prior to July 2012, there was no coordinated statewide interlock program. Vendors weren't licensed or registered; the interlock order was put on the license file only. There was no enforcement. Interlocks are required as a condition of probation upon discretion of the courts for first offenders. By law probation may track all offenders who have been ordered to install and interlock, however this may vary by county. Interlocks are ordered for high-BAC offenders, and required for 3 years from conviction for repeat offenders. Courts weren't ordering interlocks. Perhaps the July 2012 changes will increase interlock-in-use rates.

Virginia

Interlock laws and policies

- First offender: required for hardship/restricted license; as of July 2012, also required post-conviction for at least 6 months.
 - High BAC (.15+): required as a condition of a restricted license or license restoration.
 - BAC test refusal: same as basic DWI.
- Repeat offender: required as a condition of a restricted license or license restoration for repeat offenses within 10 years.
- It is not clear how long the interlocks must remain installed.
- Pleading to lesser charge, such as “wet reckless,” is permitted.

Program type and administration

Virginia’s program is hybrid, administered by the Commission on Virginia Alcohol Safety Action Program (VASAP) as a condition of probation.

Other notable program features and observations

Enrollment into an Alcohol Safety Action Program (ASAP) is required for enrollment into the Virginia interlock program. The Virginia Insurance Commission has authorized insurance carriers in Virginia to offer discounted assigned risk insurance premiums for persons participating in the interlock program. There also is an indigent program that allows courts to waive some or all of the program costs. In addition, courts can suspend or reduce any fines imposed. Virginia law also allows the waiver, suspension or reduction of some or all of the program costs by the court ordering the interlock.

Recent changes

In 2009, interlocks were required for repeat offenders as a condition of license reinstatement. In July 2012, the interlock requirement was extended to all first offenders with a restricted license for at least 6 months.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	767.37	775.10	783.35	792.59	802.51	810.44	6%
Alcohol fatalities		298	303	276	243	211	224	-25%
DWI arrests	100s	214.22	241.70	277.32	348.29	355.80	331.30	55%
Interlocks in use		3,593	4,306	4,253	4,641	4,200	3,841	7%
Interlock-in-use rates	per 10,000 population	4.68	5.56	5.43	5.86	5.23	4.74	1%
	per 100 DWI arrests	16.77	17.82	15.34	13.33	11.80	11.59	-31%
	per DWI fatality	12.06	14.21	15.41	19.10	19.91	17.15	42%

Discussion

Virginia's program has been in place since 1995 and had recent modifications in 2009 and 2012. Probation does the monitoring as a condition of relicensing. Interlocks are only required for relicensing of repeat offenders, effective in 2009, but this did not appear to affect the interlock-in-use rates. In fact the interlock-in-use rate per arrest estimate dropped. VASAP has their data management system tied to the DMV system electronically in real time, which makes monitoring easier. This program is completely offender funded so offenders who claim they can't afford it may not be ordered to have the interlock. There is also limited treatment access in rural areas.

Washington

Interlock laws and policies

- First offender, basic offense (2004-2006): required, 1 year.
 - High BAC (.15+) (2004-2006): no additional requirement.
 - BAC test refusal (2004-2006): no additional requirement.
- Repeat offender: required, 5 years for second offense, 10 years for third and subsequent offenses.
- Deferred prosecution: interlock requirements the same as the offense being deferred, as part of 2-year treatment and monitoring program followed by 3 years of probation.
- Reduced charges: no interlock requirement for first offenders, 6 months requirement for repeat offenders.
- Until 2011, offenders could wait out their interlock-required period and regain unrestricted licensing privileges without ever installing; since 2011 this is no longer the case.
- Look-back period is 7 years.
- Pleading of DWI arrest charges to Negligent Operation–First Degree (“wet neg”) is possible and frequent.

Program type and administration

The program is hybrid; the Washington State Patrol has full authority over field monitoring. Interlocks are administratively required or court mandated.

Other notable program features and observations

Since 2009, offenders may install an interlock after arrest in lieu of an administrative license suspension. Starting in 2011 the interlock requirement will not be removed without certification from the interlock vendor indicating continuous compliance for the final 4 months.

Washington DOL allows offenders to apply for indigency. To qualify, offenders must be indigent as defined in RCW 10.101.010 and have an income below the Washington State poverty cut-off level. If an offender is approved to receive financial assistance, the offender will need to reapply every year. If denied they may reapply in 6 months.

Recent changes

In 2010 Washington implemented interlock service center and technician certifications, unified reporting, and standardized calibration procedures. In 2011 Washington added compliance-based removal requiring 4 months with no violations and eliminated the possibility of waiting out the interlock period. A change on January 1, 2013, required a camera device to be installed for all offenders.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	637.08	646.16	656.22	666.74	674.36	682.33	7%
Alcohol fatalities		221	195	183	207	170	156	-29%
DWI arrests	100s	420.29	415.69	394.45	410.06	381.91	404.48	-4%
Interlocks in use		8,833	9792	9997	14,974	14,117	20,000	126%
Interlock-in-use rates	per 10,000 population	13.86	15.15	15.23	22.46	20.93	29.31	111%
	per 100 DWI arrests	21.02	23.56	25.34	36.52	36.96	49.45	135%
	per DWI fatality	39.97	50.22	54.63	72.34	83.04	128.21	221%

Data are from a variety of sources. Interlocks in use are from Roth. Installations are based on data from the Department of Licensing (DOL) provided for this project. DWI arrests are State-provided totals. Interlocks required is based on 75 percent of total convictions, based on tabulations from the DOL database showing that first offender-reduced charges, the only conviction category that does not require an interlock, make up 25 percent of all convictions.

Discussion

Washington's program requirements and administration produce high interlock-in-use rates, reaching an estimated 72 percent of all required offenders. A judicial interlock program started in 1987 allowed the courts to require interlocks for offenders. An administrative component, where interlocks can be both court-ordered and administratively required, was added in 2003. Tracking of interlock requirements and vendor information transferred from the courts to Department of Licensing in 2003. Since 2004 an interlock is required for all offenders except first offenders who plead to lesser charges ("wet neg" in Washington terms). In 2009, offenders were allowed and encouraged to install interlocks immediately after arrest to allow them to continue driving and to make them early converts to using interlocks and more likely to continue using interlocks as required post-conviction. The number of installations went up significantly in 2009. Compliance-based removal was enacted in 2011.

The laws have changed several times over the years, including statewide compliance regulations for vendors, service centers, technicians and interlocks, standardized calibration procedures, and unified reporting procedures, all of which may have contributed to the increasing Interlock rate. The State patrol has full authority over monitoring in-the-field compliance with the interlock program (one leader). Legislative interlock workgroups meet yearly to discuss how to enhance the effectiveness of the interlock program.

West Virginia

Interlock laws and policies

- First offender: only if ordered by a judge, required for shorter revocation periods.
 - High BAC (>.15): required for 9 months following a 45-day license suspension.
 - BAC test refusal: required.
- Repeat offender: required – 1-year suspension followed by 1-year interlock.
- Look-back period is 10 years.
- It is not possible to wait out the interlock-required period; the interlock must be installed and used properly for license restoration.
- It may be possible to plead a DWI charge to a lesser offense, such as “wet reckless.”

Program type and administration

West Virginia’s interlock program is administrative, operated by the DMV.

Other notable program features and observations

West Virginia requires a 1-year suspension and 1-year interlock use for each DWI offense for repeat offenders. This requirement is extended for an additional 2 months for each DWI involving child endangerment, an additional 1 year for each DWI involving bodily injury, and an addition 2 years for each DWI involving a death.

Recent changes

In June of 2008, interlocks were required for high-BAC (.15+) offenders as a condition of license reinstatement and first offenders were allowed to participate in the interlock program voluntarily to reduce the revocation period. Jail time was also established for offenders if convicted of driving under revocation (30 days to 6 months).

In 2012, a law for an updated Test & Lock program was passed. It allows offenders to obtain an interlock-restricted license during any period of license suspension beyond a hard suspension period. Interlock periods are complex; they range from a minimum of 125 days to 2 years plus 1 additional year for each prior offense beyond one.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	182.79	183.41	184.03	184.78	185.40	185.49	1%
Alcohol fatalities		105	138	126	112	88	90	-14%
DWI arrests	100s	40.28	63.27	44.29	47.80	49.22	48.97	22%
Interlocks in use		701	1,252	1,095	1,503	2,112	2,686	283%
Interlock-in-use rates	per 10,000 population	3.83	6.83	5.95	8.13	11.39	14.48	278%
	per 100 DWI arrests	17.40	19.79	24.72	31.44	42.91	54.85	215%
	per DWI fatality	6.68	9.07	8.69	13.42	24.00	29.84	347%

Discussion

West Virginia's Interlock-in-use rates have increased yearly, especially since the changes in 2008. The rates seem high for a program that does not require first offenders to install interlocks. The State reported about 10,000 revocations/year and 5,500 convictions as of October 2011. Two-thirds of these are full convictions and one-third are guilty pleas entered for the Test and Lock program.

Wisconsin

Interlock laws and policies

- First offender: no requirement for basic DWI.
 - High BAC (.15+): required as a condition of a restricted license or license restoration, minimum 6 months.
 - BAC test refusal: required as a condition of a restricted license or license restoration.
- Repeat offender: required, minimum 1 year.
- Look-back period is 10 years for a second offense, lifetime for third or more.
- It may be possible to plead a DWI charge to a lesser offense, such as “wet reckless.”

Program type and administration

Wisconsin’s program is judicial, operating primarily on a local or county level. All court orders requiring the installation and use of an interlock are reported by the clerk of court to the DMV.

Other notable program features and observations

None.

Recent changes

As of July 1, 2010, courts were required to order an interlock for a minimum of 1 year for all repeat DWI offenders, implied consent refusals, and high-BAC first-time offenders. Interlocks are required for every vehicle owned by or registered to the offender, unless the vehicle is specifically exempted by the court. The restriction begins when the offender is issued an occupational license or reinstates operating privilege. The offender can no longer "wait out" the suspension period. Courts may order the interlock restriction to begin immediately. Failure to install, removal, disconnection, tampering or circumvention violations result in a 6-month extension of interlock.

The minimum waiting period for occupational license eligibility was reduced to 45 days, for second or subsequent OWIs. The reinstatement fee for alcohol related offenses also increased from \$60 to \$200.

Data

	Units	2006	2007	2008	2009	2010	2011	% Change
Population	10,000s	557.77	561.08	564.10	566.93	568.96	570.98	2%
Alcohol fatalities		307	314	205	209	205	196	-36%
DWI arrests	100s	411.05	413.08	405.49	382.15	402.94	402.94	-2%
Interlocks in use		832	998	967	945	1,195	7,824	840%
Interlock-in-use rates	per 10,000 population	1.49	1.78	1.71	1.67	2.10	13.70	819%
	per 100 DWI arrests	2.02	2.42	2.38	2.47	2.97	19.42	859%
	per DWI fatality	2.71	3.18	4.72	4.52	5.83	39.92	1373%

Discussion

The July 2010 law (“Act 100”) required courts to order interlocks for all repeat offenders, refusals, and high-BAC (.15+) offenders and also established an indigency fund. This may explain the increased interlock-in-use rates for 2011. Perhaps more judges are ordering interlocks with the new law, but Wisconsin officials reported judges are only ordering interlocks for about half of the required offenses.

Appendix C. Data Availability by State, Type, and Year

State	DWI Arrests			Convictions		Interlocks		Interlocks in Use			Interlock Use			Treatment			
	FBI	State	break	Total	break	Order	break	Roth	State	break	Installs	Complete	break	Order	Done	Fail	
AZ	6-10							6-11									
AR	6-10	10/R	SR	10/R	SR	SR	SR	6-11	10	X	X	SR	X				
CA	6-10	6-9	X	6-9	6-9	10	X	6-11	11	X	X		X				
CO	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	
FL	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	
GA	6-10	X	X	SR	SR	X	X	6-11	11		X	X				X	
IL	6-10	6-10	6-10	6-10	6-10	X	X	6-11	7-11	X							
IA	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	10	X			SR		
KS	6-10			6-10	6-10	6-10		6-11									
LA	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	X	X	X
MD	6-10	7-10						6-11									
MA	6-10							6-11									
MI	6-10							6-11									
MO	6-10	6-11	6-11	6-11	7-11	6-11	6-11	6-11	6-11	6-11	11						
NE	6-10	6-11	6-11	6-11	6-11	9-10	X	6-11	11		X		X				
NM	6-10	6-11	6-11	6-11	6-11			6-11	6-11								
NY	6-10	6-11	6-11	6-11	6-11	11		6-11	11		11						
NC	6-10	X	X	9-10		SR	X	6-11	6-10	6-10	6-11		X				
OH	6-10	X	X	10-11	X	11/R	X	6-11	X	X	X		X				
OK	6-10	X	X					6-11	X	X	X	X					
OR	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	
PA	6-10	6-10	x	7-10	7-10	6-10	6-10	6-11	6-10	6-10	11						
TX	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	X	X	X
UT	6-10	8-10	10	8-10	8-10	8-10		6-11	X	X	X	X	X	8-10	X	X	
VA	6-10	9-11	9-11	9-11	9-11	9-11	9-11	6-11	9-11	X							
WA	6-11	6-11	6-11	6-11	6-11	6-11		6-11	6-11				X				
WV	6-10			7-10		6-10	6-10	6-11	6-10	6-10		7-11	7-10				
WI	6-10			11	11			6-11									
Total	28	18	15	22	18	17	10	28	20	10	10	6	6	4	3	3	

SR: data available only by special request

break: breakout of any sort

X: no data or unable to provide

blank: no response to request for data

Case study States

Appendix D. Data Provided by State, Type, and Year

State	DWI Arrests			Convictions		Interlocks		Interlocks in Use			Interlock Use			Treatment		
	FBI	State	break	Total	break	Order	break	Roth	State	break	Installs	Complete	break	Order	Done	Fail
AZ	6-10							6-11								
AR	6-10	10						6-11	10							
CA	6-10	6-9						6-11								
CO	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11
FL	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11
GA	6-10							6-11								
IL	6-10	7-10						6-11	8-10							
IA	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11								
KS	6-10							6-11								
LA	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11			
MD	6-10	7-10						6-11								
MA	6-10							6-11								
MI	6-10							6-11								
MO	6-10	6-11	6-11	7-11	7-11	6-11	6-11	6-11	6-11	6-11						
NE	6-10	6-11	6-11	6-11	6-11			6-11								
NM	6-10	6-11	6-11	6-11		6-11		6-11	6-11		6-11					
NY	6-10	6-11	6-11	6-11	6-11			6-11			11					
NC	6-10							6-11								
OH	6-10							6-11								
OK	6-10							6-11								
OR	6-10	6-09	6-11	6-11	6-11	6-11	6-11	6-11	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11
PA	6-10	6-10		7-10	7-10	6-10	6-10	6-11	6-10		6-10					
TX	6-10	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11	6-11			
UT	6-10							6-11								
VA	6-10	9-11	9-11	9-11	9-11			6-11	11							
WA	6-10	6-10	6-11	6-09	6-09	6-09	6-09	6-11			6-11					
WV	6-10					6-11	6-11	6-11			7-11		11			
WI	6-10							6-11								
Total	28	17	12	13	12	11	10	28	11	6	10	5	6	3	3	3

break: breakout of any sort

Appendix E. State Interlock Program Features

State	Look-Back Period	Number of Vendors /Local or Statewide	Fail-Install Compliance Regulations	Tamper or Circumvent Compliance Regulations	Risk Assessment Screening Required	Treatment Required
Arizona	7 years	10 statewide	suspend license	extend interlock period	all	court
Arkansas	5 years	5 statewide.		remove interlock, suspend license	all	all
California	10 years	9 statewide	suspend license	remove interlock, suspend license	all	all in 4 counties, court elsewhere
Colorado	2 in 5 years or 3 in lifetime	5 statewide	suspend license	remove interlock, suspend license	all	repeat and high BAC
Florida	lifetime	2 divided-north and south		remove interlock, suspend license	all	third offenders; court
Georgia	5 years	8 statewide	suspend license	remove interlock, suspend license	all	
Illinois	10 years	7 statewide	suspend license		all	court
Iowa	12 years	4 statewide	suspend license	remove interlock, suspend license	all	all
Kansas	lifetime	6 statewide	suspend license	remove interlock, suspend license	all	third offenders
Louisiana	5 years	6 statewide	suspend license	remove interlock, suspend license	all	third offenders, court
Maryland	2 in 5 years or 3 in lifetime	5 statewide	suspend license	remove interlock, suspend license	all	all
Massachusetts	lifetime	5 statewide	suspend license	remove interlock, suspend license	all	repeat offenders
Michigan	2 in 7 years or 3 in 10 years	4 statewide	suspend license	remove interlock, suspend license		
Missouri	2 in 5 years or 3 in lifetime	6 statewide			all	
Nebraska	15 years	8 statewide	suspend license	remove interlock, suspend license		Court

New Mexico	5 years	7 statewide	suspend license	remove interlock, suspend license		
New York	5 years	7 regional	suspend license	remove interlock, suspend license		court
North Carolina	3 years or 3 in 10 years	1 statewide	suspend license	remove interlock, suspend license	all	all
Ohio	5 years	9 statewide	suspend license		all	court
Oklahoma	10 years	5 statewide	suspend license	remove interlock, suspend license	all	court
Oregon	15 years	12 county based	suspend license	remove interlock, suspend license	all	court
Pennsylvania	10 years	8 8 statewide, 2 regional	suspend license	remove interlock, suspend license	all	
Texas	10 years	6 county based	suspend license	discretion of the court	second & third offenders	forth and subsequent; court
Utah	10 years	5 statewide			all	court
Virginia	5 years	4 statewide	suspend license	remove interlock, suspend license	all	all
Washington	7 years	6 statewide	suspend license	remove interlock, suspend license	all	offenders in DWI courts; court
West Virginia	10 years	1 statewide	suspend license		all	all
Wisconsin	5 years	3 statewide	criminal charge	remove interlock, suspend license		

Appendix F. State Interlock Use 2006-2011

2006 State	Population (10,000)	DWI fatalities	DWI arrests (100)	In Use	In Use/ 10k Pop	In Use/ DWI arrest (100)	In Use/ DWI fatal
AZ	602.91	399	352.51	3,654	6.06	10.37	9.16
AR	282.18	200	93.88	1,250	4.43	13.31	6.25
CA	3,602.12	1272	1,972.48	4,876	1.35	2.47	3.83
CO	472.04	179	308.62	2,755	5.84	8.93	15.39
FL	1,816.70	926	635.91	5,434	2.99	8.55	5.87
GA	915.58	454	268.89	1,612	1.76	6.00	3.55
IL	1,264.40	446	655.92	2,731	2.16	4.16	6.12
IA	298.26	119	211.56	4,049	13.58	19.14	34.03
KS	276.29	125	112.49	420	1.52	3.73	3.36
LA	430.27	371	258.65	1,613	3.75	6.24	4.35
MD	562.74	189	252.45	4,006	7.12	15.87	21.20
MA	641.01	144	83.59	223	0.35	2.67	1.55
MI	1,003.61	335	445.53	4,000	3.99	8.98	11.94
MO	584.27	258	394.38	1,852	3.17	4.70	7.18
NE	177.27	71	134.21	286	1.61	2.13	4.03
NM	196.21	136	185.66	6,311	32.16	33.99	46.40
NY	1,910.46	433	577.65	702	0.37	1.22	1.62
NC	891.73	421	506.74	6,034	6.77	11.91	14.33
OH	1,148.12	386	189.60	2,260	1.97	11.92	5.85
OK	359.41	199	159.36	1,709	4.76	10.72	8.59
OR	367.09	148	250.91	2,012	5.48	8.02	13.59
PA	1,251.08	492	505.87	2,875	2.30	5.68	5.84
TX	2,335.96	1400	881.65	8,582	3.67	9.73	6.13
UT	252.55	53	154.22	1,111	4.40	7.20	20.96
VA	767.37	298	214.22	3,593	4.68	16.77	12.06
WA	637.08	221	420.29	8,833	13.86	21.02	39.97
WV	182.79	105	40.28	701	3.83	17.40	6.68
WI	557.77	307	411.05	832	1.49	2.02	2.71

2007	Population	DWI fatalities	DWI arrests	In Use	In Use/	In Use/	In Use/
State	(10,000)		(100)		10k Pop	DWI arrest (100)	DWI fatal
AZ	616.77	337	382.60	7,700	12.48	20.13	22.85
AR	284.87	181	88.92	1,697	5.96	19.08	9.38
CA	3,625.03	1,132	2038.66	5,204	1.44	2.55	4.60
CO	480.39	167	279.69	5,267	10.96	18.83	31.54
FL	1,836.78	917	644.10	5,950	3.24	9.24	6.49
GA	935.00	445	264.42	1,938	2.07	7.33	4.36
IL	1,269.59	439	655.55	2,876	2.27	4.39	6.55
IA	299.92	108	209.65	5,000	16.67	23.85	46.30
KS	278.38	109	120.80	739	2.65	6.12	6.78
LA	437.56	375	254.76	2,111	4.82	8.29	5.63
MD	565.34	178	251.29	4,905	8.68	19.52	27.56
MA	643.16	155	117.46	952	1.48	8.10	6.14
MI	1,000.13	304	405.84	4,825	4.82	11.89	15.87
MO	588.76	333	399.81	3,020	5.13	7.55	9.07
NE	178.34	77	134.37	500	2.80	3.72	6.49
NM	199.01	132	199.02	7,437	37.37	37.37	56.34
NY	1,913.23	377	588.25	1,544	0.81	2.62	4.10
NC	911.80	497	503.60	7,685	8.43	15.26	15.46
OH	1,150.05	389	191.55	3,105	2.70	16.21	7.98
OK	363.43	223	182.29	2,200	6.05	12.07	9.87
OR	372.24	148	256.18	2,302	6.18	8.99	15.55
PA	1,256.39	504	547.75	4,254	3.39	7.77	8.44
TX	2,383.20	1,333	882.36	17,000	7.13	19.27	12.75
UT	259.77	56	154.22	1,186	4.57	7.69	21.18
VA	775.10	303	241.70	4,306	5.56	17.82	14.21
WA	646.16	195	415.69	9,792	15.15	23.56	50.22
WV	183.41	138	63.27	1,252	6.83	19.79	9.07
WI	561.08	314	413.08	998	1.78	2.42	3.18

2008	Population	DWI fatalities	DWI arrests	In Use	In Use/	In Use/	In Use/
State	(10,000)		(100)		10k Pop	DWI arrest (100)	DWI fatal
AZ	628.04	262	397.46	6,849	10.91	17.23	26.14
AR	287.46	170	117.07	1,366	4.75	11.67	8.04
CA	3,660.43	1025	2148.11	5,904	1.61	2.75	5.76
CO	488.97	176	281.98	6,104	12.48	21.65	34.68
FL	1,852.73	887	646.54	6,738	3.64	10.42	7.60
GA	950.48	405	254.21	1,919	2.02	7.55	4.74
IL	1,274.70	356	636.49	3,387	2.66	5.32	9.51
IA	301.67	89	215.92	4,618	15.31	21.39	51.89
KS	280.81	138	130.8	861	3.07	6.58	6.24
LA	443.56	339	247.35	3,085	6.96	12.47	9.10
MD	568.50	145	249.09	5,966	10.49	23.95	41.14
MA	646.90	120	129.41	2,186	3.38	16.89	18.22
MI	994.69	284	355.34	3,994	4.02	11.24	14.06
MO	592.39	314	395.64	2,743	4.63	6.93	8.74
NE	179.64	53	136.6	1,030	5.73	7.54	19.43
NM	201.07	105	197.84	8,955	44.54	45.26	85.29
NY	1,921.24	346	583.69	1,276	0.66	2.19	3.69
NC	930.94	423	495.99	8,003	8.60	16.14	18.92
OH	1,151.54	351	190.88	2,580	2.24	13.52	7.35
OK	366.90	242	189.8	1,722	4.69	9.07	7.12
OR	376.87	137	248.11	2,570	6.82	10.36	18.76
PA	1,261.23	499	564.46	4,336	3.44	7.68	8.69
TX	2,430.90	1310	900.66	14,935	6.14	16.58	11.40
UT	266.30	49	152.97	1,311	4.92	8.57	26.76
VA	783.35	276	277.32	4,253	5.43	15.34	15.41
WA	656.22	183	394.45	9,997	15.23	25.34	54.63
WV	184.03	126	44.29	1,095	5.95	24.72	8.69
WI	564.10	205	405.49	967	1.71	2.38	4.72

2009	Population	DWI fatalities	DWI arrests	In Use	In Use/	In Use/	In Use/
State	(10,000)		(100)		10k Pop	DWI arrest (100)	DWI fatal
AZ	634.32	218	392.60	15,397	24.27	39.22	70.63
AR	289.68	173	101.30	1,704	5.88	16.82	9.85
CA	3,696.12	924	2085.31	7,545	2.04	3.62	8.17
CO	497.22	158	270.43	8,775	17.65	32.45	55.54
FL	1,865.26	777	630.19	7,791	4.18	12.36	10.03
GA	962.08	333	269.82	1,995	2.07	7.39	5.99
IL	1,279.68	313	598.57	6,500	5.08	10.86	20.77
IA	303.29	98	208.81	5,225	17.23	25.02	53.32
KS	283.27	123	132.23	1,919	6.77	14.51	15.60
LA	449.16	290	319.24	4,124	9.18	12.92	14.22
MD	573.04	165	243.80	6,400	11.17	26.25	38.79
MA	651.76	106	123.69	2,488	3.82	20.11	23.47
MI	990.16	243	389.41	4,038	4.08	10.37	16.62
MO	596.11	302	393.97	4,649	7.80	11.80	15.39
NE	181.27	68	133.99	1,136	6.27	8.48	16.71
NM	203.68	112	189.79	8,625	42.35	45.44	77.01
NY	1,930.71	318	575.07	1,762	0.91	3.06	5.54
NC	944.96	358	502.61	8,303	8.79	16.52	23.19
OH	1,152.89	325	189.93	2,974	2.58	15.66	9.15
OK	371.76	229	189.96	1,635	4.40	8.61	7.14
OR	380.86	115	214.43	2,957	7.76	13.79	25.71
PA	1,266.69	399	524.27	5,122	4.04	9.77	12.84
TX	2,480.18	1,253	938.56	17,025	6.86	18.14	13.59
UT	272.34	41	156.83	1,497	5.50	9.55	36.51
VA	792.59	243	348.29	4,641	5.86	13.33	19.10
WA	666.74	207	410.06	14,974	22.46	36.52	72.34
WV	184.78	112	47.80	1,503	8.13	31.44	13.42
WI	566.93	209	382.15	945	1.67	2.47	4.52

2010	Population	DWI fatalities	DWI arrests	In Use	In Use/	In Use/	In Use/
State	(10,000)		(100)		10k Pop	DWI arrest (100)	DWI fatal
AZ	641.08	194	362.00	18,300	28.55	50.55	94.33
AR	292.28	173	86.16	5,880	20.12	68.25	33.99
CA	3,733.44	791	1952.76	8,223	2.20	4.21	10.40
CO	504.85	127	278.33	17,056	33.78	61.28	134.30
FL	1,884.60	660	581.74	8,514	4.52	14.64	12.90
GA	971.47	298	287.12	2,182	2.25	7.60	7.32
IL	1,284.05	298	547.64	11,000	8.57	20.09	36.91
IA	305.03	90	200.45	5,342	17.51	26.65	59.36
KS	285.88	168	129.69	3,500	12.24	26.99	20.83
LA	454.41	225	310.04	4,806	10.58	15.50	21.36
MD	578.80	154	244.22	9,600	16.59	39.31	62.34
MA	656.33	115	116.34	4,601	7.01	39.55	40.01
MI	987.77	230	348.82	4,974	5.04	14.26	21.63
MO	599.61	258	356.95	4,693	7.83	13.15	18.19
NE	182.97	51	123.99	1,800	9.84	14.52	35.29
NM	206.48	111	165.63	12,064	58.43	72.84	108.68
NY	1,939.92	364	544.86	2,500	1.29	4.59	6.87
NC	955.90	388	509.07	8,500	8.89	16.70	21.91
OH	1,153.83	341	362.59	4,217	3.65	11.63	12.37
OK	375.95	220	174.46	6,000	15.96	34.39	27.27
OR	383.82	71	242.41	3,499	9.12	14.43	49.28
PA	1,271.13	433	521.26	5,722	4.50	10.98	13.21
TX	2,524.27	1259	935.33	31,150	12.34	33.30	24.74
UT	277.51	44	152.85	1,950	7.03	12.76	44.32
VA	802.51	211	355.80	4,200	5.23	11.80	19.91
WA	674.36	170	381.91	14,117	20.93	36.96	83.04
WV	185.40	88	49.22	2,112	11.39	42.91	24.00
WI	568.96	205	402.94	1,195	2.10	2.97	5.83

2011	Population	DWI fatalities	DWI arrests	In Use	In Use/	In Use/	In Use/
State	(10,000)		(100)		10k Pop	DWI arrest (100)	DWI fatal
AZ	646.73	215	377.43	17,026	26.33	45.11	79.19
AR	293.86	156	97.47	3,952	13.45	40.55	25.33
CA	3,768.39	774	2041.45	15,180	4.03	7.44	19.61
CO	511.63	161	283.81	17,461	34.13	61.52	108.45
FL	1,908.23	716	627.7	8,976	4.70	14.30	12.54
GA	981.25	277	268.89	2,308	2.35	8.58	8.33
IL	1,285.98	278	618.83	9,974	7.76	16.12	35.88
IA	306.41	83	189.21	5,491	17.92	29.02	66.16
KS	287.04	108	125.2	6,379	22.22	50.95	59.06
LA	457.48	226	314.64	5,337	11.67	16.96	23.62
MD	583.96	162	247.1	9,000	15.41	36.42	55.56
MA	660.70	114	114.1	4,872	7.37	42.70	42.74
MI	987.68	255	388.99	5,249	5.31	13.49	20.58
MO	600.90	258	386.37	6,179	10.28	15.99	23.95
NE	184.22	45	120.34	3,100	16.83	25.76	68.89
NM	207.87	105	139.43	13,500	64.95	96.82	128.57
NY	1,950.16	315	500.43	5,000	2.56	9.99	15.87
NC	965.11	365	503.6	8,761	9.08	17.40	24.00
OH	1,154.10	316	224.91	6,741	5.84	29.97	21.33
OK	378.42	220	179.17	4,500	11.89	25.12	20.45
OR	386.82	97	242.41	3,715	9.60	15.33	38.30
PA	1,274.39	407	532.72	6,331	4.97	11.88	15.56
TX	2,563.18	1213	907.71	33,064	12.90	36.43	27.26
UT	281.43	53	154.22	2,550	9.06	16.53	48.11
VA	810.44	224	331.3	3,841	4.74	11.59	17.15
WA	682.33	156	404.48	20,000	29.31	49.45	128.21
WV	185.49	90	48.97	2,686	14.48	54.85	29.84
WI	570.98	196	402.94	7,824	13.70	19.42	39.92

Appendix G. Interlocks in Use by State 2006-2011

State	2006	2007	2008	2009	2010	2011	% Change
Arizona	3,654	7,700	6,849	15,397	18,300	17,026	366%
Arkansas	1,250	1,697	1,366	1,704	5,880	3,952	216%
California	4,876	5,204	5,904	7,545	8,223	15,180	211%
Colorado	2,755	5,267	6,104	8,775	17,056	17,461	534%
Florida	5,434	5,950	6,738	7,791	8,514	8,976	65%
Georgia	1,612	1,938	1,919	1,995	2,182	2,308	43%
Illinois	2,731	2,876	3,387	6,500	11,000	9,974	265%
Iowa	4,049	5,000	4,618	5,225	5,342	5,491	36%
Kansas	420	739	861	1,919	3,500	6,379	1419%
Louisiana	1,613	2,111	3,085	4,124	4,806	5,337	231%
Maryland	4,006	4,905	5,966	6,400	9,600	9,000	125%
Massachusetts	223	952	2,186	2,488	4,601	4,872	2085%
Michigan	4,000	4,825	3,994	4,038	4,974	5,249	31%
Missouri	1,852	3,020	2,743	4,649	4,693	6,179	234%
Nebraska	286	500	1,030	1,136	1,800	3,100	984%
New Mexico	6,311	7,437	8,955	8,625	12,064	13,500	114%
New York	702	1,544	1,276	1,762	2,500	5,000	612%
North Carolina	6,034	7,685	8,003	8,303	8,500	8,761	45%
Ohio	2,260	3,105	2,580	2,974	4,217	6,741	198%
Oklahoma	1,709	2,200	1,722	1,635	6,000	4,500	163%
Oregon	2,012	2,302	2,570	2,957	3,499	3,715	85%
Pennsylvania	2,875	4,254	4,336	5,122	5,722	6,331	120%
Texas	8,582	17,000	14,935	17,025	31,150	33,064	285%
Utah	1,111	1,186	1,311	1,497	1,950	2,550	130%
Virginia	3,593	4,306	4,253	4,641	4,200	3,841	7%
Washington	8,833	9,792	9,997	14,974	14,117	20,000	126%
West Virginia	701	1,252	1,095	1,503	2,112	2,686	283%
Wisconsin	832	998	967	945	1,195	7,824	840%

Appendix H. Interlocks in Use per 10k Population, by State (2006-2011)

State	2006	2007	2008	2009	2010	2011	% Change
Arizona	6.06	12.48	10.91	24.27	28.55	26.33	334%
Arkansas	4.43	5.96	4.75	5.88	20.12	13.45	204%
California	1.35	1.44	1.61	2.04	2.20	4.03	198%
Colorado	5.84	10.96	12.48	17.65	33.78	34.13	485%
Florida	2.99	3.24	3.64	4.18	4.52	4.70	57%
Georgia	1.76	2.07	2.02	2.07	2.25	2.35	34%
Illinois	2.16	2.27	2.66	5.08	8.57	7.76	259%
Iowa	13.58	16.67	15.31	17.23	17.51	17.92	32%
Kansas	1.52	2.65	3.07	6.77	12.24	22.22	1362%
Louisiana	3.75	4.82	6.96	9.18	10.58	11.67	211%
Maryland	7.12	8.68	10.49	11.17	16.59	15.41	116%
Massachusetts	0.35	1.48	3.38	3.82	7.01	7.37	2020%
Michigan	3.99	4.82	4.02	4.08	5.04	5.31	33%
Missouri	3.17	5.13	4.63	7.80	7.83	10.28	224%
Nebraska	1.61	2.80	5.73	6.27	9.84	16.83	943%
New Mexico	32.16	37.37	44.54	42.35	58.43	64.95	102%
New York	0.37	0.81	0.66	0.91	1.29	2.56	598%
North Carolina	6.77	8.43	8.60	8.79	8.89	9.08	34%
Ohio	1.97	2.70	2.24	2.58	3.65	5.84	197%
Oklahoma	4.76	6.05	4.69	4.40	15.96	11.89	150%
Oregon	5.48	6.18	6.82	7.76	9.12	9.60	75%
Pennsylvania	2.30	3.39	3.44	4.04	4.50	4.97	116%
Texas	3.67	7.13	6.14	6.86	12.34	12.90	251%
Utah	4.40	4.57	4.92	5.50	7.03	9.06	106%
Virginia	4.68	5.56	5.43	5.86	5.23	4.74	1%
Washington	13.86	15.15	15.23	22.46	20.93	29.31	111%
West Virginia	3.83	6.83	5.95	8.13	11.39	14.48	278%
Wisconsin	1.49	1.78	1.71	1.67	2.10	13.70	819%

Appendix I. Interlocks in Use per 100 DWI Arrests, by State (2006-2011)

State	2006	2007	2008	2009	2010	2011[^]
Arizona	10	20	17	39	51	48
Arkansas	13	19	12	17	68	51
California	2	3	3	4	4	15
Colorado	9	19	22	32	61	64
Florida	9	9	10	12	15	21
Georgia	6	7	8	7	8	7
Illinois	4	4	5	11	20	276
Iowa	19	24	21	25	27	46
Kansas	4	6	7	15	27	56
Louisiana	6	8	12	13	16	89
Maryland	16	20	24	26	39	52
Massachusetts	3	8	17	20	40	49
Michigan	9	12	11	10	14	18
Missouri	5	8	7	12	13	21
Nebraska	2	4	8	8	15	26
New Mexico	34	37	45	45	73	118
New York	1	3	2	3	5	14
North Carolina	12	15	16	17	17	16
Ohio	12	16	14	16	12	19
Oklahoma	11	12	9	9	34	31
Oregon	8	9	10	14	14	25
Pennsylvania	6	8	8	10	11	13
Texas	10	19	17	18	33	39
Utah	7	8	9	10	13	80
Virginia	17	18	15	13	12	13
Washington	21	24	25	37	37	180
West Virginia	17	20	25	31	43	50
Wisconsin	2	2	2	2	3	27
[^] FBI data						

Appendix J. Interlocks in Use per DWI Fatality, by State (2006-2011)

State	2006	2007	2008	2009	2010	2011	Pct Change
Arizona	9.16	22.85	26.14	70.63	94.33	79.19	765%
Arkansas	6.25	9.38	8.04	9.85	33.99	25.33	305%
California	3.83	4.60	5.76	8.17	10.40	19.61	412%
Colorado	15.39	31.54	34.68	55.54	134.30	108.45	605%
Florida	5.87	6.49	7.60	10.03	12.90	12.54	114%
Georgia	3.55	4.36	4.74	5.99	7.32	8.33	135%
Illinois	6.12	6.55	9.51	20.77	36.91	35.88	486%
Iowa	34.03	46.30	51.89	53.32	59.36	66.16	94%
Kansas	3.36	6.78	6.24	15.60	20.83	59.06	1658%
Louisiana	4.35	5.63	9.10	14.22	21.36	23.62	443%
Maryland	21.20	27.56	41.14	38.79	62.34	55.56	162%
Massachusetts	1.55	6.14	18.22	23.47	40.01	42.74	2660%
Michigan	11.94	15.87	14.06	16.62	21.63	20.58	72%
Missouri	7.18	9.07	8.74	15.39	18.19	23.95	234%
Nebraska	4.03	6.49	19.43	16.71	35.29	68.89	1610%
New Mexico	46.40	56.34	85.29	77.01	108.68	128.57	177%
New York	1.62	4.10	3.69	5.54	6.87	15.87	879%
North Carolina	14.33	15.46	18.92	23.19	21.91	24.00	67%
Ohio	5.85	7.98	7.35	9.15	12.37	21.33	264%
Oklahoma	8.59	9.87	7.12	7.14	27.27	20.45	138%
Oregon	13.59	15.55	18.76	25.71	49.28	38.30	182%
Pennsylvania	5.84	8.44	8.69	12.84	13.21	15.56	166%
Texas	6.13	12.75	11.40	13.59	24.74	27.26	345%
Utah	20.96	21.18	26.76	36.51	44.32	48.11	130%
Virginia	12.06	14.21	15.41	19.10	19.91	17.15	42%
Washington	39.97	50.22	54.63	72.34	83.04	128.21	221%
West Virginia	6.68	9.07	8.69	13.42	24.00	29.84	347%
Wisconsin	2.71	3.18	4.72	4.52	5.83	39.92	1373%

Appendix K. Estimates of Currently Installed Ignition Interlocks by State 2006-2012

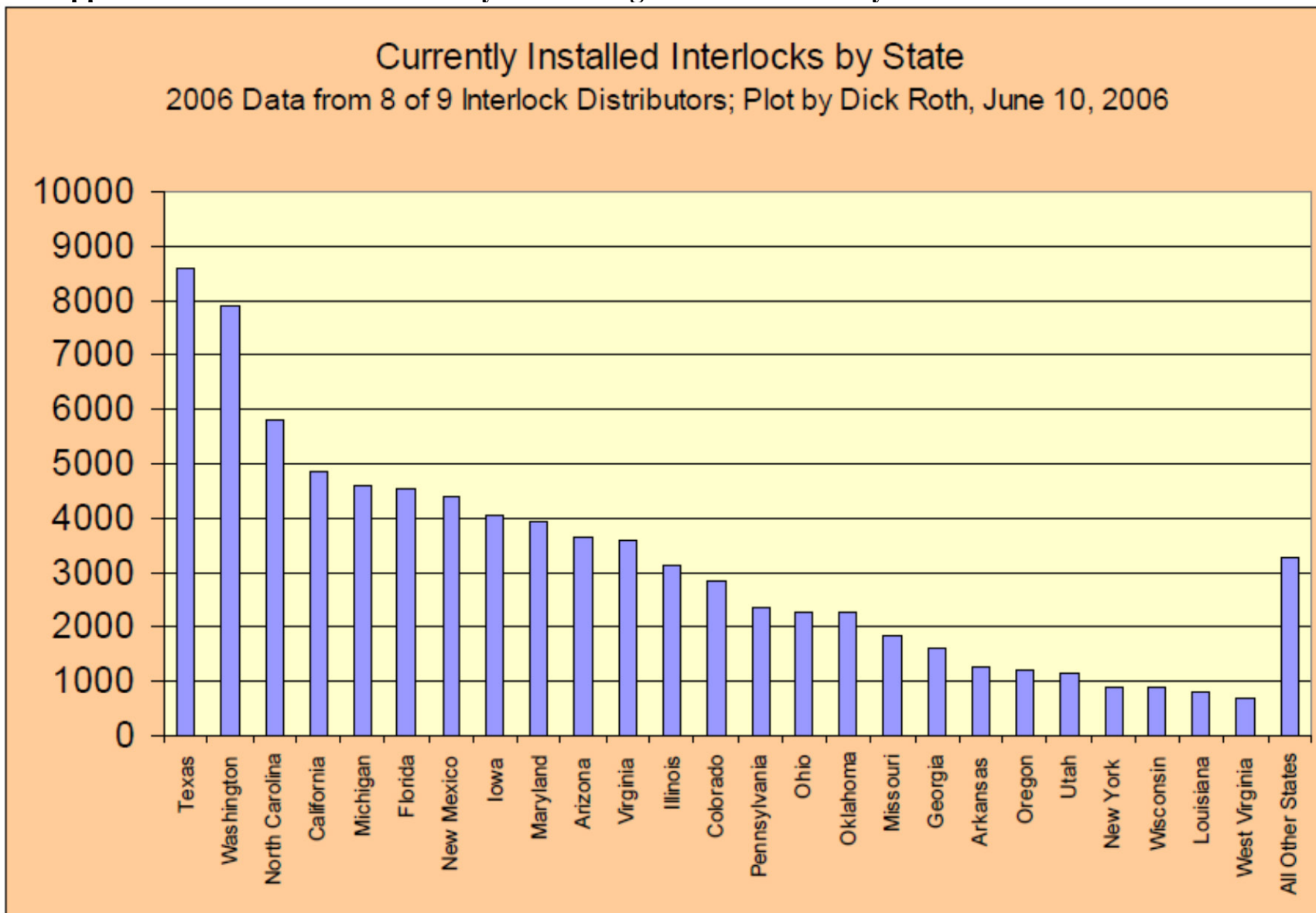


Figure 1

Currently Installed Interlocks by State Surveys of Interlock Providers and State Officials by Dick Roth, November 20, 2007

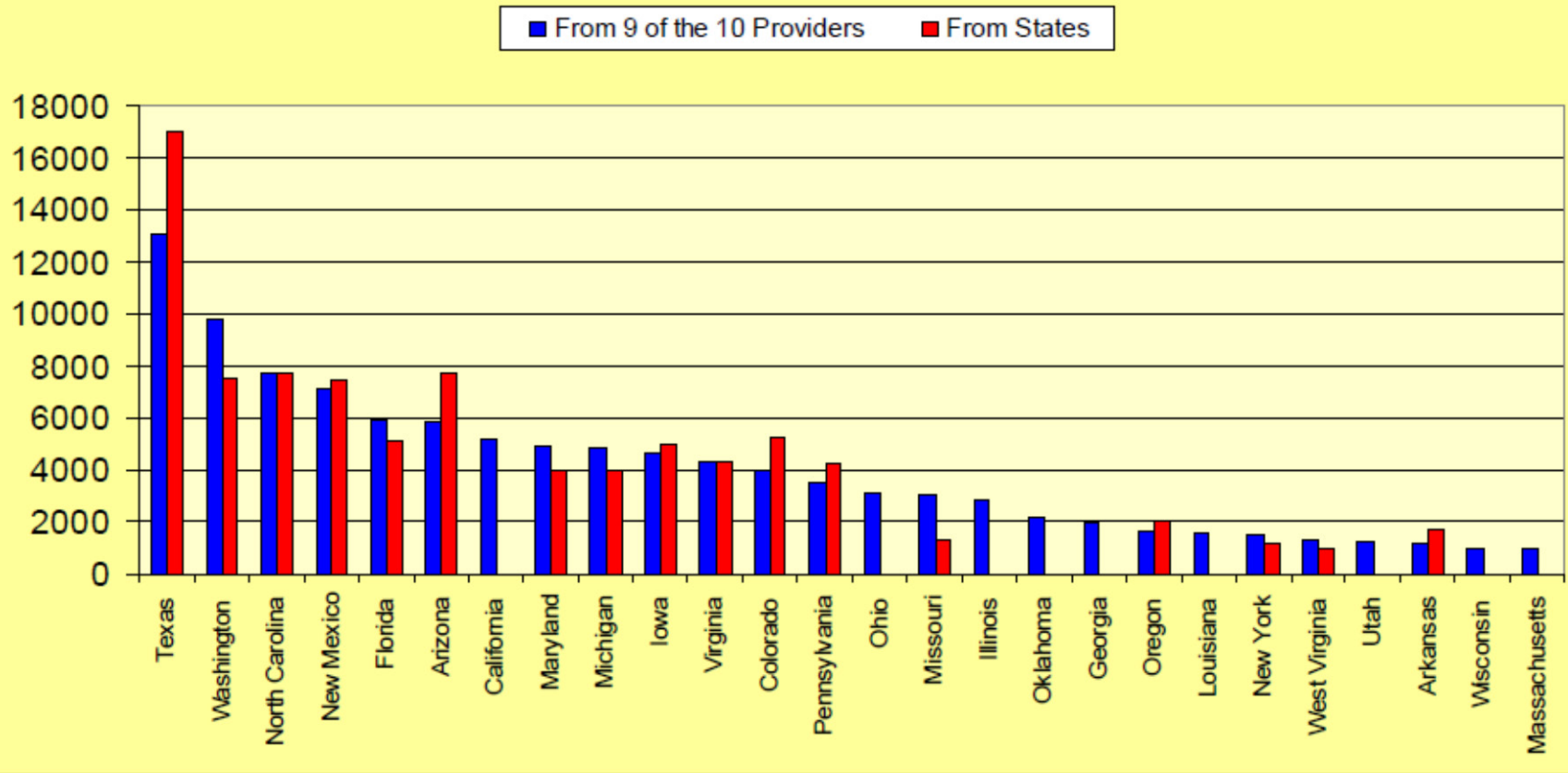


Figure 1

Currently Installed Interlocks by State

Data From 9/10 Providers; Plot by Richard Roth; August 2008

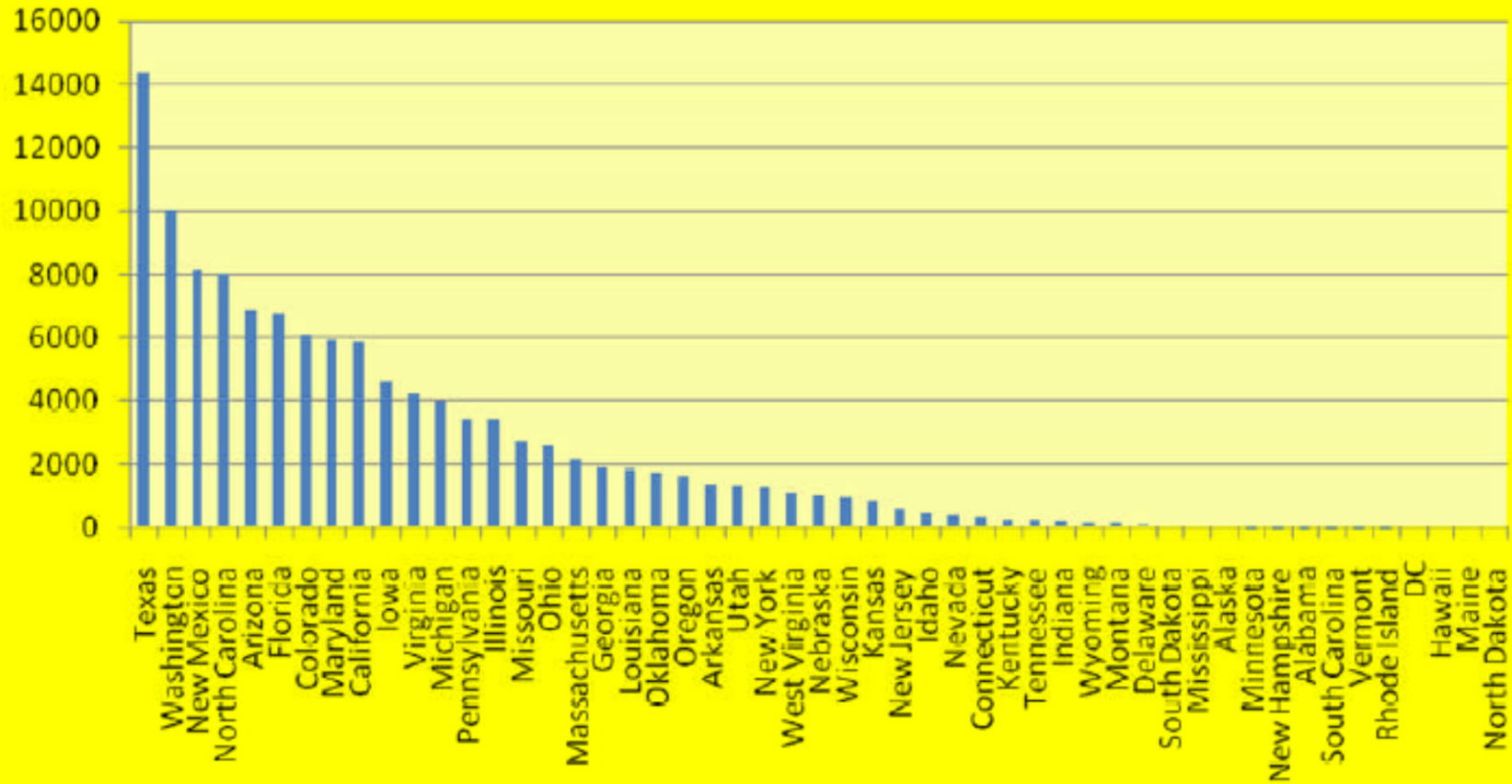


Figure 1

Currently Installed Interlocks by State

Data from 9 of 10 providers; Plot by Richard Roth, PhD; August 2009

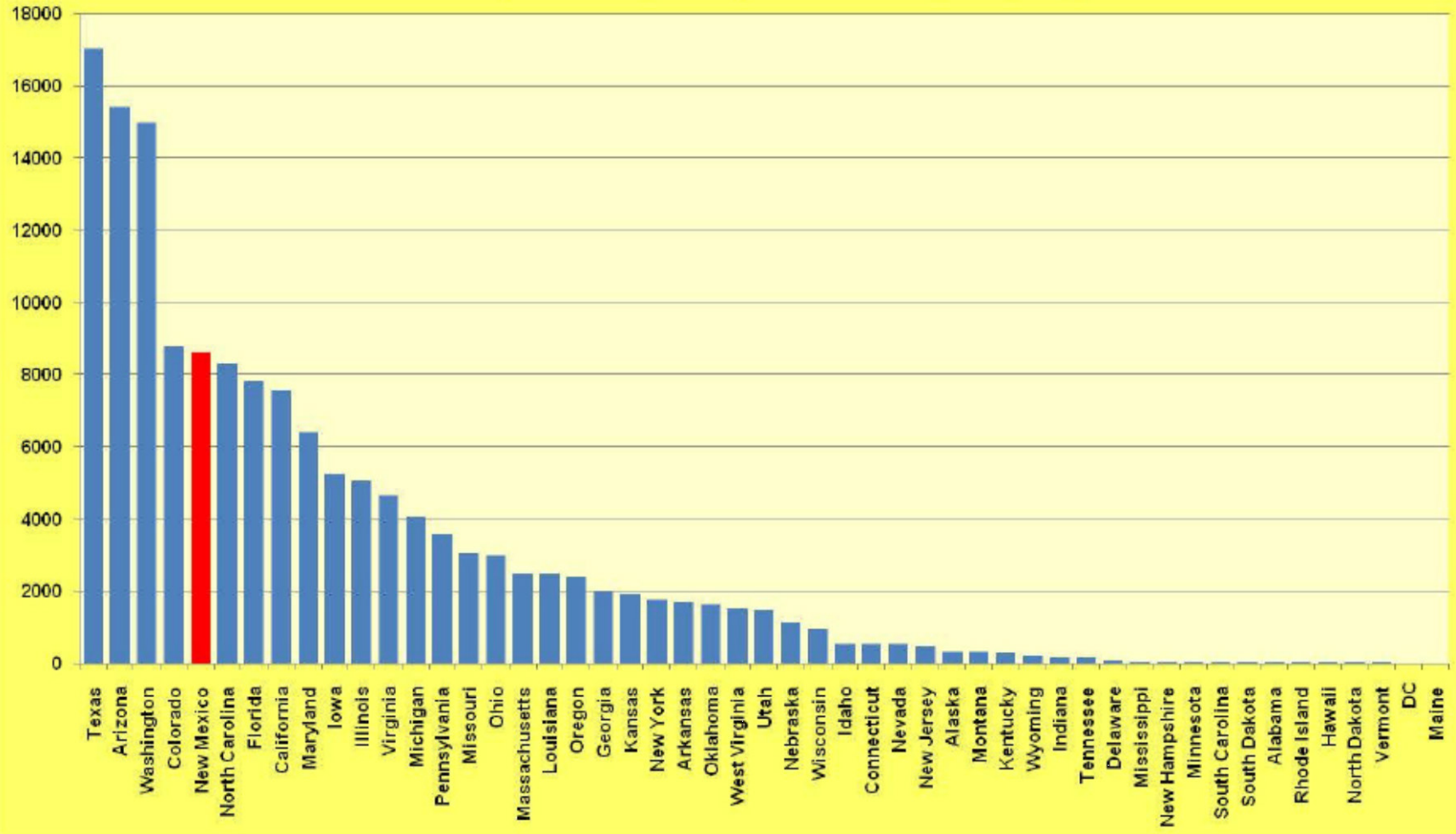
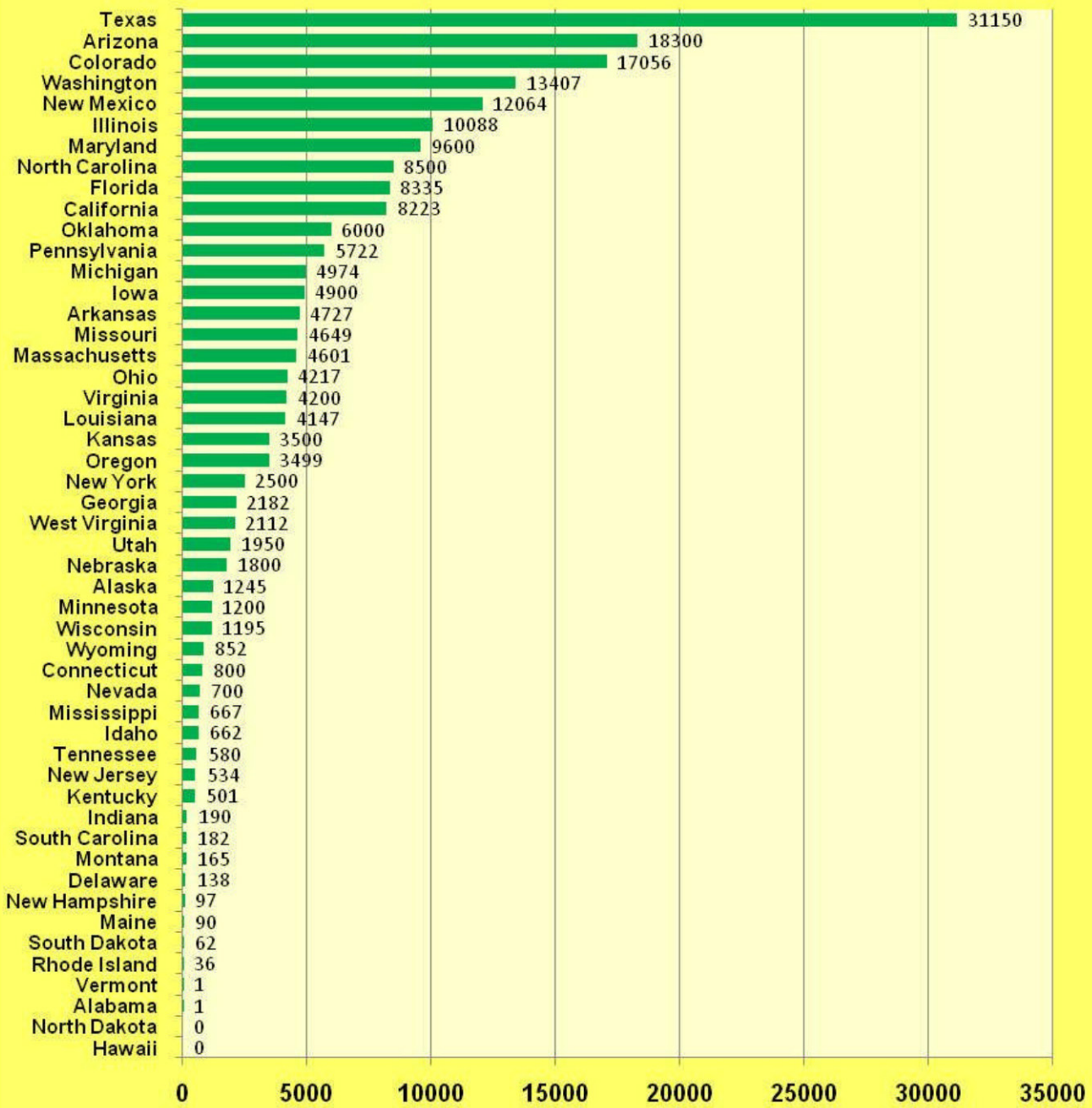


Figure 2

Currently Installed Ignition Interlocks by State



Roth 10/16/10

2010

Figure 2 Currently Installed Interlocks by State

July 2011 Survey

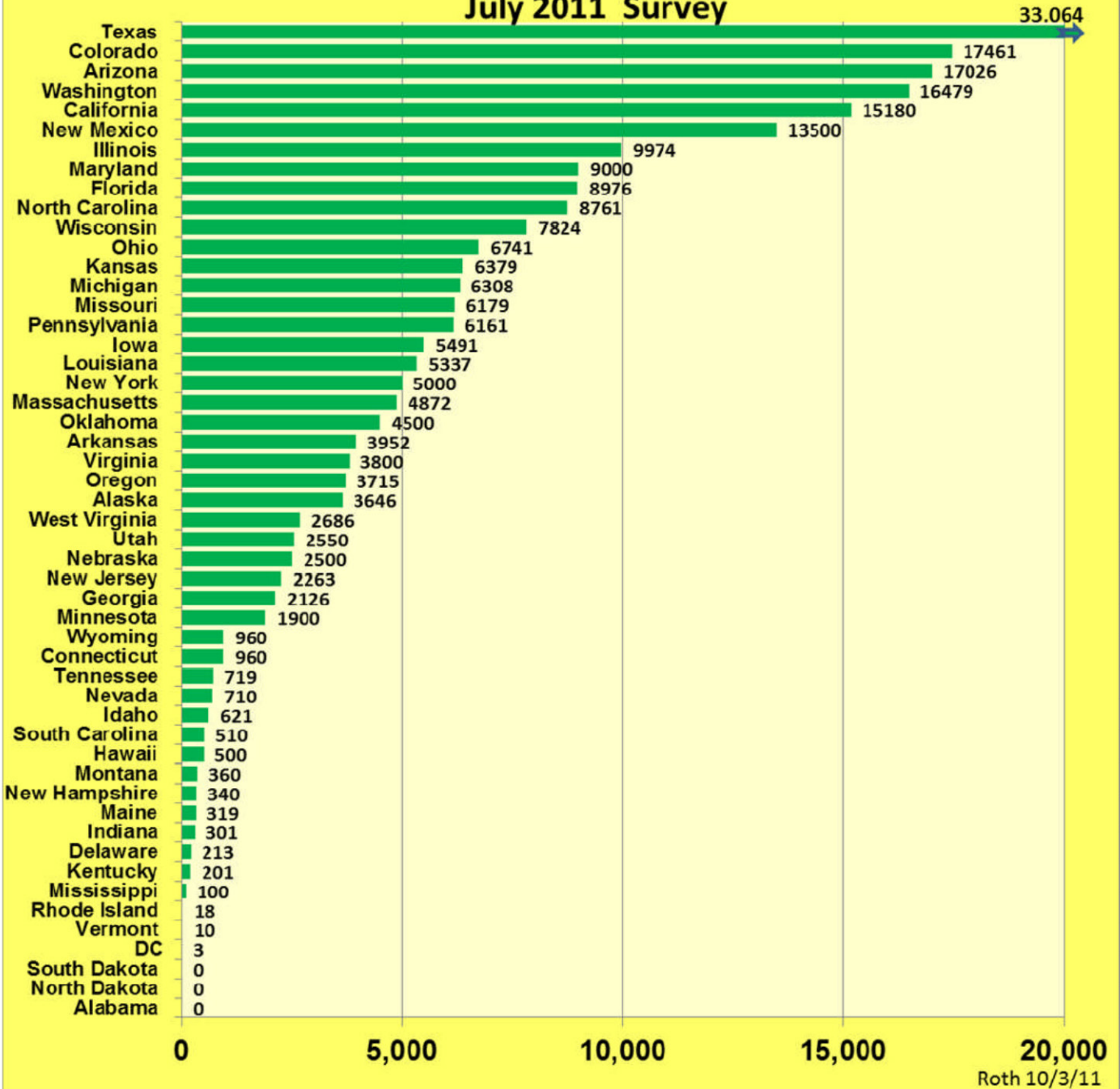
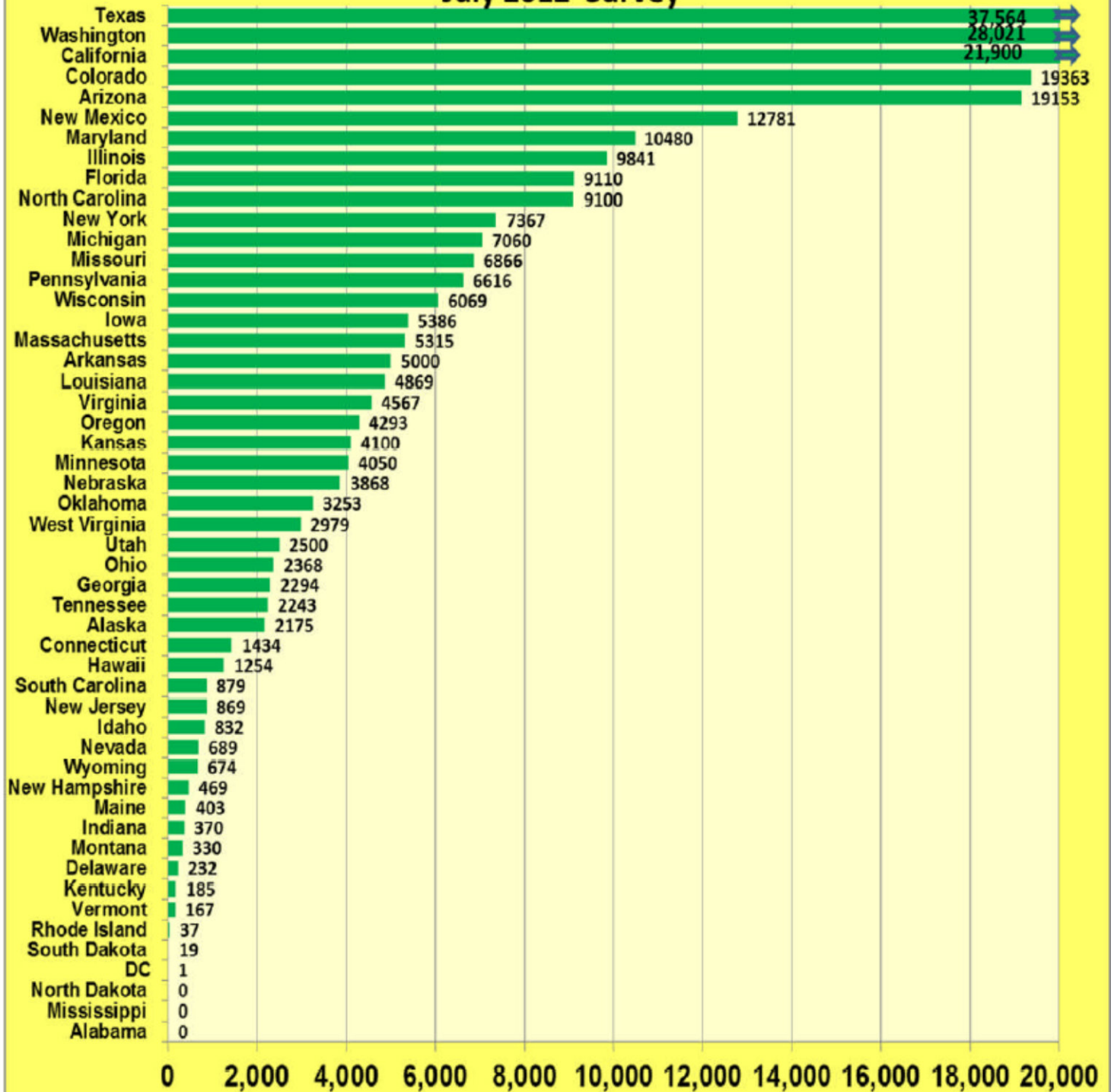


Figure 2 Currently Installed Interlocks by State

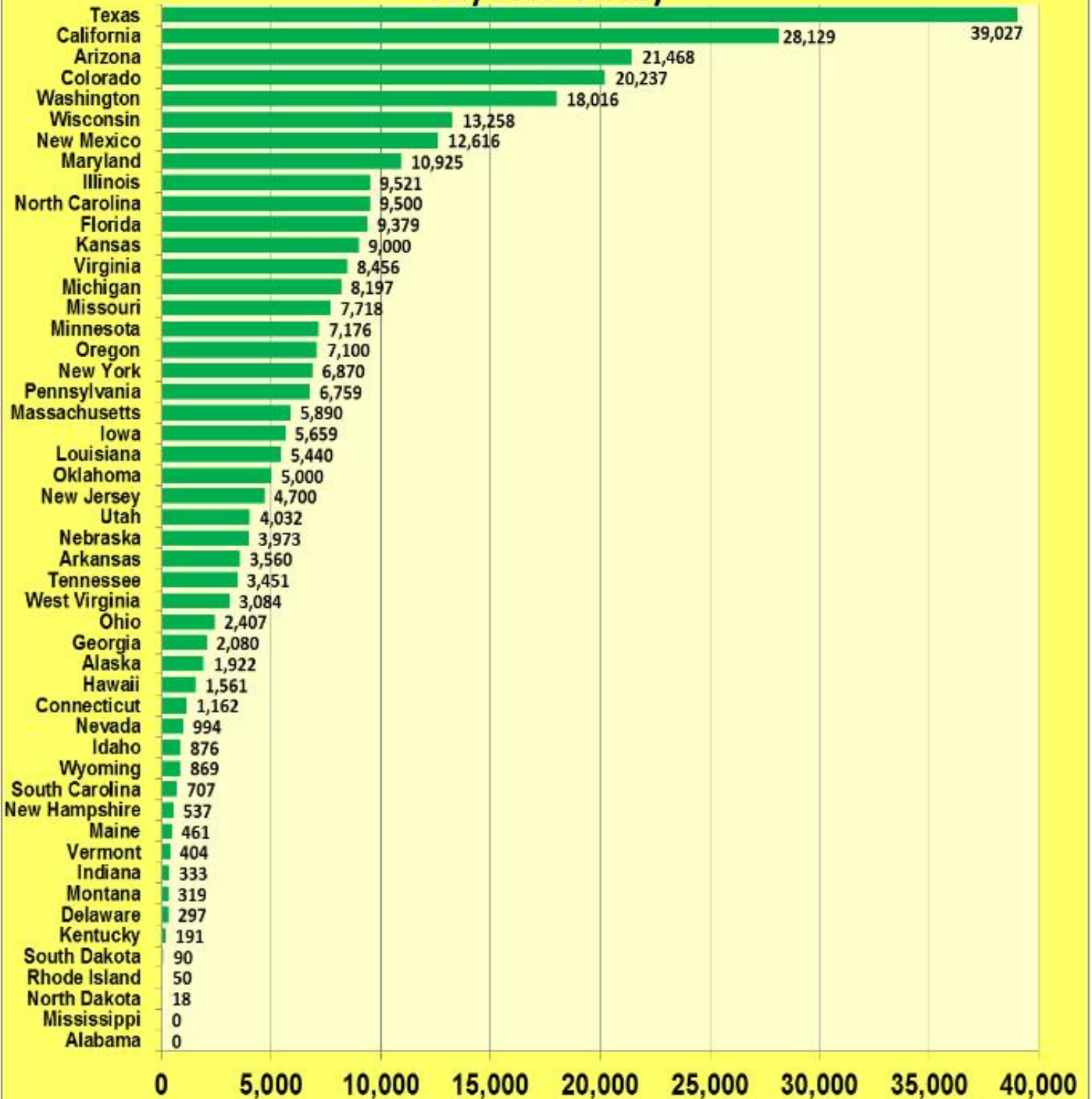
July 2012 Survey



Roth 8/24/12

Figure 2 Currently Installed Interlocks by State

July 2013 Survey



Roth 12/17/13

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