

DRIVING WHILE INTOXICATED TRACKING SYSTEMS

**Volume 3:
DWI Estimates
for the United States**



**DWI TRACKING SYSTEM
VOLUME 3:**

DWI ESTIMATES
FOR THE UNITED STATES

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I. BACKGROUND

I.A. Project Initiation & Scope

At Traffic Safety Summit II¹, the judges and prosecutors who formed the panel "Group IV," pointed out that appropriate record keeping is vital to the successful functioning of local, state, and national criminal justice systems. They stated that DWI was of most concern to them with regard to traffic safety because, among other reasons, it dominated their dockets and their time. Consequently, most of their discussion concentrated on records and record keeping related to DWI charges and dispositions.

Without DWI tracking systems and data the ability to mount effective prevention, deterrence, and intervention programs is limited. It is impossible for an agency to know the impact of its policies if a tracking system is not available to provide objective feedback. For example, legal sanctions can be mandated by state legislatures, yet it is difficult to assess their impact if appropriate tracking information is not available about certain trends, such as sanction completion and recidivism. Moreover, an effective DWI tracking system can be a key enforcement and management tool that enables a reduction of administrative burden for law enforcement, prosecutors, judges, court dockets, treatment centers, and others impacted by drinking and driving. Greater administrative efficiency can also lead to enhanced record keeping and improved customer service capabilities.

To better deal with DWI offenders, a DWI tracking system can facilitate and enable several core functions to be performed, such as:

- Identification of problem drivers.
- Determination of appropriate and equitable sanctions by prosecutors and judges.
- Effective evaluations of sanctions, penalties, fines, etc.
- Review of results for agency policies and the subsequent actions taken by other agencies.
- Tracking of DWI fines assessed and collected.
- Detection of attempts to circumvent the judicial and corrections systems.

The ability to perform the functions listed above was recognized to be among the critical advantages of a DWI tracking system during Traffic Summit II. Recommendations made by Group IV specified that states should adopt DWI tracking systems that consist of the following features:

¹US Department of Transportation, Traffic Safety Summit, Orlando, FL, June 2-4, 1991.

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- Standard forms and procedures for processing DWI arrests.
- Complete accountability system for DWI arrests.
- Excellent law enforcement, court adjudication and driver licensing data.

The use of standard forms and procedures would enable states to develop similar databases and DWI tracking systems. This could theoretically facilitate interstate cooperation on DWI tracking and provide the basis for national estimates of DWI statistics. These estimates could include statistics, such as:

- Drivers arrested for DWI
- Number of arrestees convicted
- Sentencing frequency of certain sanctions
- Rate of sentence completion
- Number of repeat offenders

The recommendations emphasized the need for data of a quality, scope, and completeness that permits more efficient and effective program management and evaluation, in addition to comprehensive traffic safety research. In addition, the following statistics could be obtained:

- National estimates of the number of drivers experiencing chronic difficulties with alcohol and driving.
- Data necessary for establishing a National Problem Driver File for DWI and DUI.
- Data necessary to perform meta-analyses on the effectiveness of various sanction strategies.
- Data which would provide the basis of formulating National Policy and evaluating it once implemented.

I.B. Feasibility Study

Reviewing the above possibilities and the results of Traffic Safety Summit II, the Department of Transportation, National Highway Traffic Safety Administration (NHTSA) decided to determine if it was possible to obtain DWI data from the available state systems to make estimates of the DWI problem in the United States. To complete the feasibility study, NHTSA contracted a nationwide study in which each state was contacted to determine if it had a DWI tracking system. The following additional information was gathered from those states identified as having a DWI tracking system:

- Hardware platforms; e.g., micro, mini, mainframe, equipment vendors, storage media
- Database management system software; e.g., PC, mainframe, home grown flat file systems, etc.
- Data models used; e.g., relational, hierarchical, network,
- Information sets; e.g., data elements, data definitions, potential invalid data entries, and
- Available statistical reports and analyses

The study identified the following 10 states as reportable having DWI tracking systems with computerized data on arrests, dispositions, fines, sanctions, and completion of sentence:

- **California** - Department of Justice records contain DWI arrests that are matched with conviction data at DMV. Those that are not matched are traced back to the Courts and Polices Agencies. IBM Mainframe, SAS PC Print.
- **Florida** - Tracking system for all citations. IBM Mainframe, COBOL software
- **Louisiana** - Tracking system. UNISYS Mainframes, DMS 1100, COBOL
- **Mississippi** - Tracking system for arrests and dispositions. IBM Mainframe, ADABAS, NATURAL
- **New Jersey** - Tracking system for all citations is 60 percent complete. IBM Mainframe, COBOL
- **New Mexico** - At present, 18 percent of the dispositions are not reported. WANG Mainframe, COBOL
- **New York** - Tracking system for all citations. New York City has a separate tracking system, however, this information should be available according to the New York Highway Safety Coordinator's office.
- **Utah** - DWI tracking system. DEC VAC, ADABAS, NATURAL
- **Virginia** - IBM Mainframe, ADABAS, NATURAL
- **Wyoming** - DWI tracking system. Issuance of citation to disposition, began January 1, 1992. IBM Mainframe, ADABASE NATURAL.

The feasibility study found that the relevant profile of the 10 states with tracking systems was well distributed between rural and urban states and probably representative of the United States. The 10 states accounted for 34.22 percent of the national population, 33.66 percent of the licensed drivers, 33.36 percent of the motor vehicle fatalities, and 33.04 percent of alcohol consumption based upon the population age 14 years and older.

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II. DWI ESTIMATES FOR THE UNITED STATES

Having identified the 10 States which represent the nation on relevant variables, NHTSA launched this study (1) to develop estimates of DWI arrests and convictions, and (2) to provide NHTSA with the specifications for a quality state-level DWI tracking system. The results of the first objective are presented in this volume. Volume 1 and 2, of this three-part report, presents the findings of the second objective.

II.A. Methodology

To accomplish the first objective of developing U.S. estimates, data was gathered through a combination of telephone calls and on-site visits. First, it was ascertained from each state whether aggregate data were available. If the aggregate data were not available, it was determined if the key statistical aggregates could be compiled from existing databases. When it was possible to obtain them by the use of existing databases, the extracts from databases were made. Great care was taken to ensure each data item was clearly defined and their limitations were known and reported along with the U.S. estimates.

During this collection process, it was determined that Wyoming's system did not contain sufficient information to be representative of the state. As a consequence of this finding, the state was dropped from the study. Wyoming accounts for only 0.202 percent of the licensed drivers in the United States, or 0.596 percent of the 10 sample states. It was determined that removing this small of a proportion of the sample would have minimal impact upon the estimates.

The original plan intended to gather the data needed to make the following estimates:

- Number of drivers arrested for DWI/DUI by age and gender
- Number of drivers convicted of DWI/DUI
- Number of drivers convicted of DWI/DUI and their resulting sanctions
- Total amount of fine moneys collected from DWI/DUI drivers

However, once the data was gathered from each state, it was found that estimates only on arrests (by age and gender) and convictions (dispositions) could be made. Information on fines (*i.e.*, monetary sanction) was available from six of the nine states, of which five states kept data on "fines assessed" and one on "fines collected. (The available fine data is presented in table 6.)

The lack of sanctions information is consistent with the problems identified by judges and prosecutors at Traffic Safety Summit II. They had pointed out that appropriate record keeping is vital to the successful functioning of local criminal justice systems. Most of their discussions

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concentrated on the need for records and record keeping related to DWI charges, dispositions, and sanctions.

While gathering the data for this report, it was also found that the states also had repeat-offender data and out-of-state driver arrest data. Consequently, this information was gathered, and U.S. estimates were made for these variables.

The estimates were made based upon the total number of licensed drivers. The *1992 Motor Vehicle Crash Data from FARS and GES* provided information on the number of licensed drivers per state. These figures were used in determining that the nine states accounted for 33.65 percent of all licensed drivers.

The aggregated state data is presented in tables 1 through 6 which follow. The U.S. estimates are presented in tables 7 through 11 in Section II.C. of this report. When using these tables, the limitations and notes accompanying each state table should be taken into consideration.

It is interesting to note that the Department of Justice, Federal Bureau of Investigation, gathers DWI, and other crime statistics, annually from jurisdictions throughout the United States. These data are then used to produce the FBI's Uniform Crime Report. The FBI's national estimate of DWI arrests, which their procedures and methods produced for 1992, was 1.62 million. Using the data from the 9 states included in this study a 1992 estimate for the U.S. of 1.58 million was obtained. The estimates are relatively close, within about 2.5 percent of one another. While neither is precisely accurate, the estimates do provide sufficiently accurate information to give indications of the extent and nature of the DWI problem in the United States.

II.B. Tables of State Statistics

Table 1
1992 ARRESTS BY AGE

Age	CA	FL ¹	LA ²	MS ³	NJ ⁴	NM ⁵	NY ⁶	UT ⁷	VA ⁸	TOTAL
< 18	1,884	153	702	43	212	1,213	450	8	240	4,905
18-20	16,418	2,079	1,220	1,599	1,753	626	4,230	146	2,557	30,628
21-30	111,148	20,213	6,711	8,378	14,713	8,055	26,112	4,140	14,863	214,333
31-40	77,014	22,082	5,946	8,080	11,392	6,499	18,427	4,171	13,115	166,726
41-50	34,095	10,328	2,818	3,948	5,188	2,756	8,326	2,555	6,006	76,020
51-60	12,087	3,971	1,114	1,513	1,847	898	2,854	600	2,288	27,172
61-70	4,484	1,458	420	583	708	307	1,156	252	843	10,211
71+	1,088	297	105	113	147	58	282	94	195	2,379
unkn	0	0	0	0	7	1	81	4	0	93
TOTAL	258,218	60,581	19,036	24,257	35,967	20,413	61,918	11,970	40,107	532,467

NOTES TO TABLE 1:

1. FL: All data are for 1993. Arrests by age were not available but convictions by age were. The age distribution of arrests shown here is based upon the age distribution of convictions in FL.
2. LA: Arrests by age were not available. Total arrests were distributed based upon the distribution of convictions.
3. MS: Disaggregate data were available only for 1993 arrests. The data for MS in this and the following tables distributes the 1992 totals according to 1993 findings.
4. NJ: The age ranges for NJ did not match the categories shown above for ages 21+. For this population arrests were distributed based upon the six states that did provide the desired ranges.
5. NM: Disaggregate data were available only for in-state drivers. The data in this and the following tables distributes total drivers (in- and out-of-state) according to information on in-state drivers.
6. NY: The NY data in this (and the following tables) were derived from New York's Traffic Safety Law Enforcement and Disposition (TSLED) files. These files omit certain geographic regions of the state. The TSLED data were inflated by a factor of 1.101 to estimate state totals. The factor was calculated from total NY State convictions/TSLED convictions (53,159/48,283).
7. UT: The age ranges provided by UT did not match the desired categories for ages 31+. This group was distributed as described in note 4, above.
8. VA: Data for ages 61 and above were provided in one group and were redistributed here as described in note 4, above.

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Table 2

ARRESTS BY GENDER

State	Male	Female	Total
CA	228,338	29,880	258,218
FL ¹	52,975	7,606	60,581
LA	16,803	2,233	19,036
MS ²	21,596	2,661	24,257
NJ	31,075	4,892	35,967
NM	17,439	2,974	20,413
NY	52,961	8,957	61,918
UT	10,055	1,915	11,970
VA	34,340	5,767	40,107
Total	465,582	66,885	532,467

NOTES TO TABLE 2:

1. FL: Arrests by gender were not available. Total arrests were distributed using the 87% - 13% split calculated from the other states.
2. MS: Arrests by gender were available for MS licensed drivers only. Out-of-state drivers were distributed according to in-state ratios.

Table 3
1992 ARRESTS AND CONVICTIONS

Type	CA ¹	FL ²	LA ^{3,4}	MS	NJ ³	NM	NY	UT ³	VA ³	TOTAL ⁵
Total Arrests	258,218	60,581	19,036	24,257	35,967	20,413	61,918	11,970	40,107	532,467
Dispositions:										
-Guilty	213,184	47,063	14,467	18,194	28,282	15,482	53,159	9,479	32,840	432,150
-Not Guilty		465		1,037		162	123			
-Dismissed	8,267	1,591		21		2,470	5,127			
-Pending/unkn		8,533		5,005		2,299	3,420			
-Noll Pros ²		2,929								
-Non-Alcohol	13,827									
-Other	22,940						89			
Percent Guilty	82.6	77.7	76.0	75.0	78.6	75.8	85.9	79.2	81.9	81.2

NOTES FOR TABLE 3:

1. CA: Not guilty and dismissed are grouped together under "dismissed." CA DMV files for 1992 show that of the 258,218 arrested: 199,512 were convicted of DUI; 125 dismissed; 9,238 cases were non-alcohol; and 49,343 cases were of unknown resolution. We redistributed the 49,434 unknowns based upon a 1990 study conducted by the CA DMV which followed up on a sample of 1000 unknown cases. For example, the study found that 28% of the cases classified as unknown actually resulted in a DUI conviction. The "other" category includes "failure to appear," "bench warrant arrest," died before trial," etc.
2. FL: *Noll Pros* are cases where the judge decides, for unspecified reasons, not to proceed with the case.
3. LA, NJ, UT, and VA were unable to provide information beyond the number of guilty.
4. LA: Guilty includes 4,398 "DWI Article 894" convictions. These are essentially one-time "expungements" that are retained on DMV files but not made public (e.g., released to insurance companies).
5. Totals were calculated only for "guilty" due to missing data in other categories.

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Table 4
REPEAT OFFENDERS

Offense	CA ¹	FL ¹	LA	MS ²	NJ	NM ³	NY	UT ⁴	VA ⁵	TOTAL
First	144,965	37,650	12,036	14,306		8,195	37,596	4,820	26,967	286,535
Second	46,900	5,648	2,000	3,744		4,924	11,259	1,398	4,796	80,669
Third	14,923	1,882	366	127		1,674	3,312	448	1,077	23,809
Fourth +	6,396	1,883	65	17		689	992	208		10,250
Total	213,184	47,063	14,467	18,194		15,482	53,159	6,874	32,840	401,263
% Repeat	32.0	20.0	16.8	21.4		47.1	29.3	29.9	17.9	28.6
Time period	7 years	10 years	7 years	5 years		6 years	10 years	6 years	10 years	

NOTES FOR TABLE 4:

1. CA and FL provided data from court records of license revocations and other sanctions decreed during the calendar year. They included some cases where the arrest was made in a prior year and exclude some cases where the arrest was made during 1992 but a sanction had not yet been decreed. The totals for these states, therefore, did not equal the "total guilty" reported in Table 3. The figures shown in this table are the total guilty from Table 3, distributed according to the ratios taken from the court records described above.
2. MS: Based upon a distribution of 1993 convicted in-state drivers.
3. NM: Statistics provided by the state excluded some drivers who were convicted more than once in 1992. For example if a driver was convicted three times in 1992 the second conviction was not included. DMV estimates this occurred in around 2,000 cases. These cases were factored back into the table according to the distributions provided by the DMV.
4. UT: The total convictions shown here are for DWI only. The total shown in Table 3 is higher since it includes charges that were reduced to "reckless, alcohol involved."
5. VA: Records are kept by the DMV for 10 years, but the judge may use discretion in convicting as a second, third, or fourth offense. The third offense category includes three or more offenses.

Table 5

OUT-OF-STATE ARRESTS

State	Total Arrests	Out of State Arrests	Percent Arrests Out-of-State
CA	258,218	4,906	1.90%
FL ¹	60,581	6,058	10.00%
LA	19,036	2,400	12.61%
MS ²	24,257	4,693	19.35%
NJ	35,967	5,395	15.00%
NM	20,413	1,302	6.38%
NY	61,918	7,430	12.00%
UT ³	11,970	2,143	17.90%
VA ⁴	40,107	1,163	2.90%
Total	532,467	35,490	6.67%

1. FL: Estimate of 10% provided by Director of FL DUI Programs.
2. MS: The MS Office of Highway Safety estimates this figure based upon arrest statistics collected in counties along the state borders. We were cautioned that this is a very rough estimate.
3. UT: Based on 1993 estimate of 17.9%.
4. VA: Data was provided for out-of-state convictions rather than arrests. We applied this conviction ratio (2.9% of total convictions) to total arrests to estimate out-of-state arrests.

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Table 6

DWI FINES ASSESSED / COLLECTED

State	Total Fines	Average Fine
CA ¹	na	\$880 (assessed)
FL	na	na
LA	na	na
MS ²	\$8,396,974	\$461 (collected)
NJ	na	na
NM	\$3,048,464	na (assessed)
NY ³	\$19,093,754	\$307 (assessed)
UT	na	\$736 (assessed)
VA	na	\$325 (assessed)
Average ⁴		\$705 (assessed)

NOTES TO TABLE 6:

1. CA: Average fine assessed from a 1988 Special Report.
2. MS: For 1993. Includes \$6,757,175 in fine revenues and \$1,639,799 in additional assessments such as EMS and crime lab fees.
3. NY: Total fine is "Stop-DWI" income for 1992. Average fine is from TSLED data.
4. Weighted using 1992 Guilty Convictions for the five States having available assessment data.

II.C. Tables of Estimates for the U.S.

Table 7

1992 ARRESTS BY AGE - ESTIMATES FOR THE U.S.

Age	State Total	Estimates for the U.S.
<18	4,905	14,575
19-20	30,628	91,011
21-30	214,333	636,887
31-40	166,726	495,423
41-50	76,020	225,892
51-60	27,172	80,741
61-70	10,211	30,342
71+	2,379	7,069
unkn	93	276
Total	532,467	1,582,216

Table 8

1992 ARRESTS BY GENDER - ESTIMATES FOR THE U.S.

Gender	State Total	Estimates for the U.S.
Male	465,582	1,383,468
Female	66,885	198,748
Total	532,467	1,582,216

Table 9

1992 ARRESTS AND CONVICTIONS - ESTIMATES FOR THE U.S.

Type	State Total	Estimates for the
Total Arrests	532,467	1,582,216
Guilty	432,150	1,284,126

DWI ESTIMATES FOR THE UNITED STATES**Table 10****1992 REPEAT OFFENDERS - ESTIMATE FOR THE U.S.**

Offense	State Total	Estimates for the U.S.	Percent of Total
First	286535	1129833	71.4%
Second	80669	318085	20.1%
Third	23809	93881	5.9%
Fourth +	10250	40417	2.6%
Total	401263	1582216	100.0%

Table 11**1992 OUT-OF-STATE ARRESTS - ESTIMATES FOR THE U.S.**

Type	State Total	Estimates for the U.S.
Total Arrests	532,467	1,582,216
Out-of-State Arrests	35,490	105,458
Percent Out-of-State	6.67%	6.67%

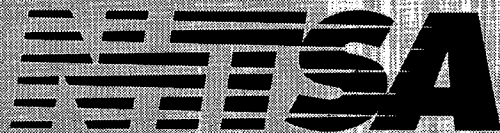
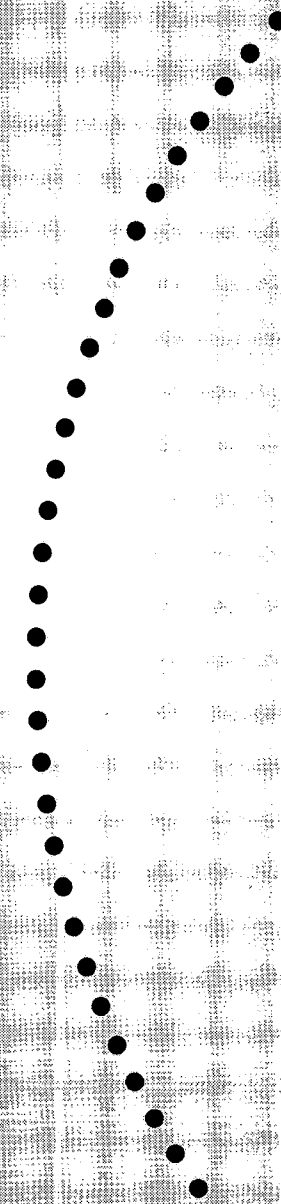
Table 12**1992 DWI FINES ASSESSED - ESTIMATES FOR THE U.S.**

Average Assessed Fine ¹	Estimate of Total U.S. Guilty Convictions ²	Estimate of Total Fine Amount for All U.S. Guilty Convictions	Estimate of Fine Amount Collected for All U.S. Fines ³
\$705	1,284,126	\$905,308,830	\$724,247,064

NOTES TO TABLE 12:

1. Based upon available data from five states (Table 6).
2. Estimate source is Table 9.
3. Based upon a collection rate of 80 percent.

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