

The Price of Pot

The Economic Impact of the Continuation of Marijuana Prohibition

Written and Compiled by

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In 2009 over \$18 billion in taxpayer money was spent on marijuana prohibition. That \$18 billion arrested, prosecuted, and punished 1% of the marijuana users in this country. On top of this substantial expense, the loss of potential revenue to every branch of government is astronomical. In this report I intend to show the most accurate available data, the breakdown of the expenses, and hypothesize the potential impact of policy change.

This report was inspired by the work of Harvard economist Jeffrey A. Miron, “Drug war crimes: the consequences of prohibition” copyright 2004. Since the data he used is about a decade old now, I wanted to see more recent data as well as expand the analysis in some other directions.

Arrests and Use

First, let's look at the number of relevant arrests and the estimated number of marijuana users per state. Table 1 shows the following data:

Arrests – Data sourced from the FBI's 2009 Uniform Crime Report. Note that the State of Florida does not report to the UCR program so the numbers listed are FBI estimates.

Total Drug – Total number of arrests under Part II section 18 Drug Abuse Violations.

Marijuana Sale – Total number of arrests under Part II section 18b - Sale/Manufacturing

Marijuana poss. – Total number of arrests under Part II section 18f – Possession

Marijuana Total – The sum of Marijuana Sale and Marijuana Poss. Above

Usage – Data sourced from Substance Abuse and Mental Health Services Administration. (2010). *State Estimates of Substance Use from the 2007-2008 National Surveys on Drug Use and Health* (Office of Applied Studies, NSDUH Series H-37, HHS Publication No. SMA 10-4472). Rockville, MD. Table 2. Marijuana Use in the Past Year, by Age Group and State: Estimated numbers (in Thousands), Annual Averages Based on 2007 and 2008 NSDUHs.

% Arrested – This is a simple mathematical formula, the total number of people arrested for Marijuana divided by the estimated number of users in the past 12 months. Law enforcement in Nebraska appears to have been the most effective, arresting almost 2% of violators. Nationwide the average percentage of marijuana users arrested is only 1.05%.

If we compare the total number of drug arrests and the total number of arrests for marijuana, we see that marijuana accounts for just over half of all drug arrests. We can also see that 88% of all marijuana arrests are for possession.

It should also be noted that the FBI has released other data showing the total number of drug abuse violations per state, primarily the one located at http://www2.fbi.gov/ucr/cius2009/data/table_69.html. I have been informed by the Criminal Justice Information Services (CJIS) that “The data in Table 69 is limited to those agencies that supplied complete and final data by publication deadlines. The estimated data includes estimations for agencies that did not report at all.” I was assured that the data I was provided was final data.

Tax Dollars Spent

Next, let's look at the tax dollars spent in an attempt to stop marijuana use. Table 2 shows the following data:

2008 Budget – Data sourced from The U.S. Census Bureau, 2008 State & Local Government Finance Summary. The data can be accessed at <http://www.census.gov/govs/estimate/index.html>.

Police – Total dollars listed in state & local government under the category Public safety: Police protection

Corrections – Total dollars listed in state & local government under the category Public safety: correction. Also includes capital outlay expenses

Judicial – Total dollars listed in state & local government under the category Government Administration: Judicial and legal.

Total – The sum of the previous three columns.

Marijuana – The number of dollars spent on marijuana prohibition. This number is arrived at by taking 762,648 marijuana arrests divided by 13,687,241 total arrests to give us 5.57% (sourced from UCR, see above). Multiplying this percentage by the total expenditures gives us a good estimate of the total dollars spent per state. Marijuana prohibition cost taxpayers just over \$11.5 billion in state and local funds.

At the federal level we have an annual budget of \$14.1 billion. Divide that by the 1,520,256 total number of drug arrests for the year and we see that each drug arrest costs the federal government \$9,274.75 in taxpayer money. If we then multiply that dollar amount by the 762,648 marijuana arrests for the year we get a total of \$7,073,372,379.

When we add the state and local annual drug expenditures to that of the federal government we get \$18,639,733,848 tax dollars.

If the federal government decriminalized marijuana today we would never see the full \$18.6 billion reduction. We see some reduction and the option of re-tasking a considerable amount of manpower into areas where there would be a positive impact on our society.

Return on Investment

So, let's take a look at what that \$18.6 billion dollars has bought us...other than a 1% arrest rate.

Table 3 looks at a report published by the DEA showing the number of plants eradicated and seized under their Domestic Cannabis Eradication/Suppression Program. This is sourced from the Sourcebook of Criminal Justice Statistics Online table 4.38.2009 <http://www.albany.edu/sourcebook/csv/t4382009.csv>. This table shows 10,394,642 cultivated marijuana plants were eradicated in 2009. This number is somewhat questionable because in the footnotes of the online table the DEA says that their number of outdoor operations' plants (9,980,038) eradicated "May include tended ditchweed, a type of marijuana that grows wild." First, there would be no reason to tend ditchweed. Ditchweed contains almost no THC and has no value as a black market drug. Before 2007, the DEA published the number of ditch weed plants they cultivated in a separate column on their table 4.38 reports. In 2005 98.11% of the plants they destroyed were classified as ditchweed. In 2006 that percentage had fallen to 94.13%. In September 2006 NORML Executive Director Allen St. Pierre wrote an article "98 Percent Of All Domestically Eradicated Marijuana Is "Ditchweed," DEA Admits" available from http://norml.org/index.cfm?Group_ID=7033. Mysteriously the ditchweed statistics disappeared the following year. I have attempted to contact the DEA repeatedly to obtain more details on the federal drug seizures (FDSS database) but as of this publishing I have received no response. When President Obama said he was striving for a new level of governmental transparency I didn't expect that to mean that some branches would pretend they are invisible but that's what my experience has been like attempting to collect data from the DEA.

Though there are some questions as to the breakdown of the published numbers, let's take the DEA at face value and assume that their report is accurate. Let's assume that they either don't spend taxpayer money to pull weeds anymore (or at least don't report it to the tax payers) and that they really destroyed over 10 million plants in 2009 with retail value.

Potential Revenue

Let's look at some potential revenue numbers. Table 4 shows the results of some simple calculations assuming that the yearly arrests and seizures are an accurate representation of all marijuana users in 2009.

Est ttl lbs – The estimated total number of pounds of marijuana produced/sold/used per state. This is the number of pounds of processed marijuana seized by the DEA (table 3, last column) in 2009 divided by the percentage of users arrested.

Est ttl plants – The estimated total number of marijuana plants seized by the DEA in 2009 divided by the percentage of users arrested.

Est ttl value – The estimated total value of pounds of processed marijuana plus the estimated total value of the plants seized. I used the standard law enforcement rate of \$1000 per pound and used a rate of ½ pound of production per plant. As actual street value of marijuana can range as high as \$6000 per pound and some plants can produce over a pound of product, I consider the numbers I used extremely conservative.

Est sales tx – Using the estimated total value above times the state sales tax rate. This does not include any additional tax that some states attach to goods like alcohol and tobacco or local (county, city, etc.) taxes.

The federal government brought in over \$22.6 billion in excise tax from alcohol and tobacco in 2009 and if legalized we should expect marijuana to add to this number significantly.

Table 1 – Arrests and Usage

State	Arrests				Usage	
	Total drug	Marijuana Sale	Marijuana Poss.	Marijuana Total	Marajuana prev. 12	% Arrested
Alaska	2,060	147	1,266	1,413	232,000	0.546%
Alabama	17,068	331	8,970	9,301	881,000	1.018%
Arkansas	12,338	760	5,823	6,583	717,000	0.812%
Arizona	35,387	1,593	20,362	21,955	1,535,000	1.327%
California	252,288	15,030	62,998	78,028	9,924,000	0.635%
Colorado	17,276	594	10,564	11,158	1,577,000	0.670%
Connecticut	17,747	938	8,193	9,131	953,000	0.860%
D.C.	123	4	93	97	0	0.000%
Delaware	5,770	742	2,652	3,394	242,000	1.096%
Florida	146,056	8,763	66,601	75,364	4,270,000	1.560%
Georgia	45,771	3,529	24,302	27,831	2,271,000	1.070%
Hawaii	2,806	192	1,453	1,645	317,000	0.458%
Iowa	8,664	429	5,748	6,177	441,000	1.303%
Idaho	5,879	342	3,231	3,573	325,000	0.994%
Illinois	43,518	49	401	450	2,984,000	0.013%
Indiana	24,944	1,878	11,978	13,856	1,535,000	0.780%
Kansas	6,981	1,440	3,127	4,567	584,000	0.535%
Kentucky	21,546	1,735	9,476	11,211	986,000	0.961%
Louisiana	27,765	1,842	13,914	15,756	911,000	1.527%
Massachusetts	12,477	1,440	1,276	2,716	1,935,000	0.066%
Maryland	51,828	2,758	23,573	26,331	1,386,000	1.701%
Maine	5,900	571	2,855	3,426	394,000	0.725%
Michigan	35,248	3,785	16,891	20,676	2,773,000	0.609%
Minnesota	17,300	3,893	7,444	11,337	1,411,000	0.528%
Missouri	36,936	1,847	20,599	22,446	1,322,000	1.558%
Mississippi	15,003	596	7,001	7,597	487,000	1.438%
Montana	1,571	70	1,116	1,186	286,000	0.390%
Nebraska	10,085	422	7,052	7,474	367,000	1.922%
North Carolina	39,219	2,942	21,951	24,893	2,185,000	1.005%
North Dakota	1,907	209	1,084	1,293	132,000	0.821%
New Hampshire	4,046	472	2,434	2,906	466,000	0.522%
New Jersey	53,400	3,846	22,421	26,267	1,748,000	1.283%
New Mexico	7,740	351	2,367	2,718	475,000	0.498%
Nevada	17,240	1,074	8,708	9,782	649,000	1.342%
New York	61,964	1,016	40,319	41,335	5,416,000	0.744%
Ohio	35,134	1,472	17,285	18,757	2,790,000	0.620%
Oklahoma	20,979	1,259	11,459	12,718	704,000	1.628%
Oregon	16,522	700	9,004	9,704	1,286,000	0.700%
Pennsylvania	54,401	5,077	20,501	25,578	2,535,000	0.809%
Rhode Island	4,265	264	2,438	2,702	408,000	0.598%
South Carolina	28,855	1,920	15,025	16,945	893,000	1.683%
South Dakota	3,210	110	2,063	2,173	155,000	1.331%
Tennessee	41,434	3,750	17,851	21,601	1,495,000	1.194%
Texas	146,103	1,936	74,706	76,642	4,191,000	1.783%
Utah	11,307	374	4,369	4,743	411,000	1.063%
Virginia	33,022	2,210	17,639	19,849	1,791,000	0.985%
Vermont	1,446	83	820	903	240,000	0.342%
Washington	21,622	1,284	11,159	12,443	1,902,000	0.587%
Wisconsin	25,284	2,453	15,429	17,882	1,440,000	1.071%
West Virginia	8,014	500	3,605	4,105	385,000	0.936%
Wyoming	2,807	147	1,883	2,030	121,000	1.556%
Totals	1,520,256	89,169	673,479	762,648	72,864,000	1.05%

Table 2 – State and Local Expenditures

	2008 Budget				Marijuana
	Police	Corrections	Judicial	Total	
Alaska	\$261,948,000	\$252,381,000	\$212,477,000	\$726,806,000	\$40,483,094
Alabama	\$1,043,603,000	\$721,472,000	\$412,093,000	\$2,177,168,000	\$121,268,258
Arkansas	\$493,380,000	\$554,226,000	\$210,703,000	\$1,258,309,000	\$70,087,811
Arizona	\$2,155,452,000	\$1,679,350,000	\$1,006,883,000	\$4,841,685,000	\$269,681,855
California	\$14,891,583,000	\$14,043,481,000	\$9,279,442,000	\$38,214,506,000	\$2,128,547,984
Colorado	\$1,452,309,000	\$1,210,342,000	\$515,703,000	\$3,178,354,000	\$177,034,318
Connecticut	\$995,853,000	\$717,440,000	\$662,569,000	\$2,375,862,000	\$132,335,513
D.C.	\$590,886,000	\$297,911,000	\$107,871,000	\$996,668,000	\$55,514,408
Delaware	\$289,346,000	\$283,440,000	\$155,018,000	\$727,804,000	\$40,538,683
Florida	\$6,735,778,000	\$5,072,958,000	\$2,306,719,000	\$14,115,455,000	\$786,230,844
Georgia	\$2,293,294,000	\$2,433,181,000	\$1,017,621,000	\$5,744,096,000	\$319,946,147
Hawaii	\$334,966,000	\$228,856,000	\$322,709,000	\$886,531,000	\$49,379,777
Iowa	\$613,904,000	\$487,489,000	\$333,307,000	\$1,434,700,000	\$79,912,790
Idaho	\$320,762,000	\$331,772,000	\$169,506,000	\$822,040,000	\$45,787,628
Illinois	\$4,241,765,000	\$2,094,210,000	\$1,314,529,000	\$7,650,504,000	\$426,133,073
Indiana	\$1,222,786,000	\$1,099,932,000	\$519,146,000	\$2,841,864,000	\$158,291,825
Kansas	\$684,262,000	\$476,350,000	\$274,507,000	\$1,435,119,000	\$79,936,128
Kentucky	\$702,333,000	\$747,519,000	\$435,693,000	\$1,885,545,000	\$105,024,857
Louisiana	\$1,327,216,000	\$1,332,015,000	\$616,849,000	\$3,276,080,000	\$182,477,656
Massachusetts	\$1,843,032,000	\$1,429,122,000	\$967,610,000	\$4,239,764,000	\$236,154,855
Maryland	\$1,841,718,000	\$1,727,912,000	\$776,567,000	\$4,346,197,000	\$242,083,173
Maine	\$233,315,000	\$225,982,000	\$111,440,000	\$570,737,000	\$31,790,051
Michigan	\$2,425,437,000	\$2,472,029,000	\$1,089,619,000	\$5,987,085,000	\$333,480,635
Minnesota	\$1,526,835,000	\$1,025,670,000	\$658,145,000	\$3,210,650,000	\$178,833,205
Missouri	\$1,631,533,000	\$983,164,000	\$488,136,000	\$3,102,833,000	\$172,827,798
Mississippi	\$601,030,000	\$517,204,000	\$220,089,000	\$1,338,323,000	\$74,544,591
Montana	\$225,741,000	\$200,436,000	\$128,793,000	\$554,970,000	\$30,911,829
Nebraska	\$527,567,000	\$327,717,000	\$164,326,000	\$1,019,610,000	\$56,792,277
North Carolina	\$2,217,306,000	\$1,939,034,000	\$677,257,000	\$4,833,597,000	\$269,231,353
North Dakota	\$119,513,000	\$87,781,000	\$60,558,000	\$267,852,000	\$14,919,356
New Hampshire	\$316,600,000	\$171,155,000	\$131,287,000	\$619,042,000	\$34,480,639
New Jersey	\$3,086,622,000	\$2,091,028,000	\$1,447,736,000	\$6,625,386,000	\$369,034,000
New Mexico	\$602,850,000	\$565,385,000	\$311,325,000	\$1,479,560,000	\$82,411,492
Nevada	\$1,078,729,000	\$876,890,000	\$438,847,000	\$2,394,466,000	\$133,371,756
New York	\$8,163,867,000	\$6,253,164,000	\$3,816,229,000	\$18,233,260,000	\$1,015,592,582
Ohio	\$3,156,921,000	\$2,036,727,000	\$1,685,203,000	\$6,878,851,000	\$383,152,001
Oklahoma	\$763,404,000	\$732,771,000	\$307,227,000	\$1,803,402,000	\$100,449,491
Oregon	\$1,009,390,000	\$1,058,906,000	\$415,332,000	\$2,483,628,000	\$138,338,080
Pennsylvania	\$2,840,097,000	\$3,203,912,000	\$1,550,413,000	\$7,594,422,000	\$423,009,305
Rhode Island	\$317,153,000	\$241,831,000	\$119,063,000	\$678,047,000	\$37,767,218
South Carolina	\$980,250,000	\$776,806,000	\$318,537,000	\$2,075,593,000	\$115,610,530
South Dakota	\$140,856,000	\$163,140,000	\$66,819,000	\$370,815,000	\$20,654,396
Tennessee	\$1,474,125,000	\$1,007,989,000	\$592,639,000	\$3,074,753,000	\$171,263,742
Texas	\$5,625,989,000	\$5,458,633,000	\$2,175,375,000	\$13,259,997,000	\$738,581,833
Utah	\$640,018,000	\$519,929,000	\$321,243,000	\$1,481,190,000	\$82,502,283
Virginia	\$2,011,493,000	\$2,157,715,000	\$792,519,000	\$4,961,727,000	\$276,368,194
Vermont	\$140,883,000	\$119,676,000	\$70,640,000	\$331,199,000	\$18,447,784
Washington	\$1,447,510,000	\$1,934,907,000	\$802,759,000	\$4,185,176,000	\$233,114,303
Wisconsin	\$1,552,013,000	\$1,496,479,000	\$589,121,000	\$3,637,613,000	\$202,615,044
West Virginia	\$313,123,000	\$276,157,000	\$183,803,000	\$773,083,000	\$43,060,723
Wyoming	\$170,135,000	\$310,490,000	\$98,900,000	\$579,525,000	\$32,279,543
Total	\$89,676,481,000	\$76,454,066,000	\$41,450,902,000	\$207,581,449,000	\$11,562,286,709

Table 3 – DEA Seizures

	ttl plants	Outdoor Operations		Indoor Operations		pounds
		plots	plants	grows	plants	
Alabama	60,304	414	59,137	19	1,167	10
Alaska	4,612	4	19	72	4,593	101
Arizona	10,204	22	5,201	69	5,003	360
Arkansas	6,104	114	4,606	20	1,498	67
California	7,519,580	1,996	7,365,760	850	153,820	31,692
Colorado	29,890	28	29,655	7	235	62
Connecticut	1,859	26	836	14	1,023	499
Delaware	576	23	435	7	141	280
Florida	65,448	295	10,070	863	55,378	3,594
Georgia	49,716	300	43,880	29	5,836	181
Hawaii	51,532	869	47,159	34	4,373	377
Idaho	77,748	66	77,384	15	364	214
Illinois	10,056	261	7,029	55	3,027	918
Indiana	37,242	675	24,501	223	12,741	246
Iowa	3,540	5	1,922	4	1,618	20
Kansas	25,784	29	24,478	29	1,306	51
Kentucky	333,236	5,380	330,699	59	2,537	1,600
Louisiana	5,450	124	2,199	53	3,251	29
Maine	11,398	268	6,417	211	4,981	170
Maryland	3,680	53	829	77	2,851	134
Massachusetts	4,144	86	1,704	11	2,440	13
Michigan	42,329	989	31,055	195	11,274	265
Minnesota	10,797	18	1,034	46	9,763	2,110
Mississippi	1,215	78	591	16	624	23
Missouri	20,146	143	16,421	75	3,725	216
Montana	602	4	64	15	538	40
Nebraska	1,895	24	1,419	9	476	1
Nevada	15,116	8	2,556	134	12,560	2,482
New Hampshire	1,405	33	643	13	762	22
New Jersey	3,941	44	1,394	41	2,547	114
New Mexico	1,094	0	1,094	0	0	0
New York	15,559	286	12,200	76	3,359	491
North Carolina	67,294	495	64,555	49	2,739	0
North Dakota	0	0	0	0	0	0
Ohio	48,051	1,258	34,646	190	13,405	376
Oklahoma	66,000	145	65,444	13	556	38
Oregon	257,850	276	237,909	267	19,941	1,891
Pennsylvania	18,232	512	8,675	155	9,557	554
Rhode Island	0	0	0	0	0	0
South Carolina	23,031	128	22,678	24	353	95
South Dakota	87	0	0	0	87	0
Tennessee	447,167	3,525	446,256	5	911	454
Texas	65,033	42	59,061	26	5,972	243
Utah	83,981	47	83,864	2	117	0
Vermont	1,877	57	1,036	15	841	643
Virginia	18,583	312	13,227	97	5,356	1,021
Washington	608,923	253	573,792	231	35,131	1,718
West Virginia	224,130	540	222,756	52	1,374	21
Wisconsin	37,613	122	33,748	190	3,865	407
Wyoming	588	0	0	9	588	0
Total	10,394,642	20,377	9,980,038	4,666	414,604	53,843

Table 4 – Estimated Revenue

	est ttl lbs	est ttl plants	est ttl value	est sales tx
Alaska	18,508.69	845,169	\$441,093,207	\$0
Alabama	972.16	5,922,834	\$2,962,389,331	\$118,495,573
Arkansas	8,182.87	751,600	\$383,982,974	\$23,038,978
Arizona	26,778.79	769,234	\$411,395,721	\$27,152,118
California	4,960,711.06	1,184,550,492	\$597,235,957,259	\$49,271,966,474
Colorado	9,193.40	4,461,996	\$2,240,191,597	\$64,965,556
Connecticut	57,544.09	216,237	\$165,662,418	\$9,939,745
Delaware	25,270.53	52,561	\$51,551,071	\$0
Florida	226,828.67	4,196,078	\$2,324,867,435	\$139,492,046
Georgia	16,733.29	4,645,915	\$2,339,690,986	\$93,587,639
Hawaii	81,872.83	11,242,701	\$5,703,223,138	\$228,128,926
Iowa	1,514.45	271,597	\$137,312,985	\$8,238,779
Idaho	21,311.84	7,820,520	\$3,931,571,825	\$235,894,309
Illinois	6,830,284.00	74,830,683	\$44,245,625,641	\$2,765,351,603
Indiana	31,279.30	4,772,622	\$2,417,590,450	\$169,231,332
Kansas	9,473.78	4,815,432	\$2,417,189,806	\$128,111,060
Kentucky	164,883.75	34,673,986	\$17,501,876,995	\$1,050,112,620
Louisiana	1,869.74	356,831	\$180,285,360	\$7,211,414
Massachusetts	19,700.95	6,284,201	\$3,161,801,263	\$197,612,579
Maryland	7,744.67	216,370	\$115,929,462	\$6,955,768
Maine	23,290.60	1,572,964	\$809,772,557	\$40,488,628
Michigan	43,240.12	6,949,163	\$3,517,821,762	\$211,069,306
Minnesota	397,837.61	2,046,557	\$1,421,115,887	\$97,701,717
Missouri	13,646.42	1,292,927	\$660,110,132	\$27,889,653
Mississippi	1,576.91	84,517	\$43,835,520	\$3,068,486
Montana	10,210.90	154,276	\$87,348,889	\$0
Nebraska	51.04	98,620	\$49,360,812	\$2,714,845
North Carolina	0.00	6,698,437	\$3,349,218,487	\$192,580,063
New Hampshire	4,190.00	268,993	\$138,686,710	\$0
New Jersey	8,773.74	307,251	\$162,399,090	\$11,367,936
New Mexico	0.00	219,540	\$109,769,751	\$5,625,700
Nevada	182,499.40	1,126,583	\$745,790,853	\$51,086,673
New York	65,464.41	2,090,021	\$1,110,474,748	\$44,418,990
Ohio	60,314.77	7,755,990	\$3,938,309,855	\$216,607,042
Oklahoma	2,296.58	4,054,804	\$2,029,698,626	\$91,336,438
Oregon	268,191.85	36,827,532	\$18,681,957,956	\$0
Pennsylvania	67,949.49	2,254,432	\$1,195,165,721	\$71,709,943
South Carolina	5,551.26	1,368,831	\$689,966,664	\$41,398,000
South Dakota	0.00	6,537	\$3,268,299	\$130,732
Tennessee	37,567.96	37,449,704	\$18,762,419,929	\$1,313,369,395
Texas	13,389.28	3,648,346	\$1,837,562,056	\$114,847,628
Utah	0.00	7,900,250	\$3,950,124,857	\$187,630,931
Virginia	102,647.63	1,886,850	\$1,046,072,798	\$41,842,912
Vermont	187,552.12	549,366	\$462,235,049	\$27,734,103
Washington	291,107.16	103,788,112	\$52,185,163,351	\$3,392,035,618
Wisconsin	37,578.61	3,510,449	\$1,792,803,189	\$89,640,159
West Virginia	2,221.72	23,936,214	\$11,970,328,515	\$718,219,711
Wyoming	0.00	37,784	\$18,892,193	\$755,688
Total	14,347,808.41	1,609,582,110	\$819,138,863,178	\$61,540,756,816