PRELIMINARY ESTIMATES OF WATER USE
IN THE UNITED STATES, 1990

By Wayne B. Solley and Robert R. Pierce

U.S. GEOLOGICAL SURVEY

Open-File Report 92-63

Reston, Virginia
1992

DEPARTMENT OF THE INTERIOR

MANUEL LUJAN, JR., Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

U.S. Geological Survey
Chief Hydrologist
440 National Center
Reston, Virginia 22092

Copies of this report can
be purchased from:

U.S. Geological Survey
Federal Center
Box 25425
Denver, Colorado 80225

CONTENTS

	Page
Introduction	1
Preliminary water-use estimates.....	1

TABLES

	Page
Table 1. Preliminary total offstream water use by State, 1990 ...	2
2. Summary of preliminary total water withdrawals by water-use category and by State, 1990.....	3
3. Preliminary surface-water withdrawals by water-use category and by State, 1990.....	4
4. Preliminary ground-water withdrawals by water-use category and by State, 1990.....	5

PRELIMINARY ESTIMATES OF WATER USE IN THE UNITED STATES, 1990

INTRODUCTION

The purpose of this report is to present a summary of preliminary 1990 water-use estimates by State for the United States, Puerto Rico, the Virgin Islands, and the District of Columbia. Preliminary estimates of water withdrawn from surface- and ground-water sources for offstream water-use categories are presented in this report prior to the publication of final estimates in a U.S. Geological Survey Circular to allow for the timely release of the estimates to the general public. The final estimates might differ from those in this report, based on updates or revisions.

PRELIMINARY WATER-USE ESTIMATES

Water withdrawal in the United States during 1990 is estimated to average 408,000 million gallons per day (Mgal/d) of freshwater and saline water for all offstream uses (table 1)—2 percent more than the 1985 estimate. The offstream water-use categories include public supply, domestic, commercial, irrigation, livestock, industrial, mining, and thermoelectric power. Total surface-water withdrawal during 1990 is estimated to be 327,000 Mgal/d. About 68,200 Mgal/d of surface-water withdrawn was saline. Total ground-water withdrawal is estimated to be 80,600 Mgal/d. About 99 percent of ground-water withdrawn was freshwater. The use of reclaimed sewage is estimated to be 750 Mgal/d during 1990.

The 1990 estimates of total withdrawals and consumptive use are slightly more than the 1985 estimates but substantially less than the 1980 estimates; this is consistent with a general trend indicated by a slackening in the rate of increase of total withdrawals from 1970 to 1975 and again from 1975 to 1980, and a decrease from 1980 to 1985. Public-supply withdrawals during 1990 were 5 percent more than during 1985, and self-supplied withdrawals during 1990 compared to 1985 were as follows: domestic, 2 percent more; commercial, 95 percent more; irrigation, 0.3 percent less; livestock, 0.8 percent more; industrial, 13 percent less; mining, 44 percent more; and thermoelectric power, 4 percent more.

Preliminary total offstream water-use estimates for withdrawals, reclaimed wastewater, conveyance losses, and consumptive use are listed in table 1. A summary of preliminary water withdrawals by water-use category is listed in table 2. Preliminary surface- and ground-water withdrawals by water-use category are listed separately in tables 3 and 4, respectively.

Table 1. Preliminary total offshore water use by State, 1990

[Figures may not add to totals because of independent rounding. Mgal/d = million gallons per day; gal/d = gallons per day]

STATE	POPULATION, in thousands	PER CAPITA USE, fresh water, in gal/d	WITHDRAWALS, in Mgal/d (includes irrigation conveyance losses)									RECLAIMED CONVEYANCE CONSUMPTIVE USE		
			By source and type									WASTE WATER, in Mgal/d	ANCE LOSSES, in Mgal/d	TIVE USE fresh water, in Mgal/d
			Ground water			Surface water			Total					
			Fresh	Saline	Total	Fresh	Saline	Total	Fresh	Saline	Total			
Alabama	4,041	2,000	394	9.1	403	7,680	.0	7,680	8,080	9.1	8,090	.0	.0	454
Alaska	550	517	64	48	112	221	308	529	284	357	641	.0	.1	26
Arizona	3,665	1,790	2,740	.5	2,740	3,830	.6	3,830	6,570	1.2	6,570	183	1,010	4,350
Arkansas	2,353	3,330	4,710	.0	4,710	3,130	.0	3,130	7,840	.0	7,840	.0	368	4,140
California	29,760	1,180	14,600	310	14,900	20,500	11,400	31,900	35,100	11,700	46,800	133	1,560	20,900
Colorado	3,294	3,850	2,770	30	2,800	9,910	.0	9,910	12,700	30	12,700	3.7	2,990	5,250
Connecticut	3,287	325	165	.0	165	902	3,780	4,680	1,070	3,780	4,840	.0	.0	103
Delaware	666	1,540	89	.0	89	939	339	1,280	1,030	339	1,370	.0	.0	59
D.C.	607	15	1.0	.0	1.0	8.0	.0	8.0	9.0	.0	9.0	.0	.0	16
Florida	12,938	582	4,660	.0	4,660	2,870	10,400	13,200	7,530	10,400	17,900	170	64	3,130
Georgia	6,478	816	996	.0	996	4,290	65	4,360	5,290	65	5,350	36	.0	822
Hawaii	1,108	1,070	589	.6	590	600	1,550	2,150	1,190	1,550	2,740	6.2	127	627
Idaho	1,007	19,600	7,590	.0	7,590	12,100	.0	12,100	19,700	.0	19,700	.0	7,160	6,090
Illinois	11,431	1,570	920	25	945	17,100	.0	17,100	18,000	25	18,000	.0	.0	750
Indiana	5,544	1,700	621	.0	621	8,810	.0	8,810	9,430	.0	9,430	.0	.0	451
Iowa	2,777	1,030	495	.0	495	2,370	.0	2,370	2,860	.0	2,860	.0	.0	271
Kansas	2,478	2,460	4,360	.0	4,360	1,720	.0	1,720	6,080	.0	6,080	6.0	146	4,410
Kentucky	3,685	1,170	247	.0	247	4,070	.0	4,070	4,320	.0	4,320	.0	.5	309
Louisiana	4,220	2,200	1,340	.6	1,340	7,950	67	8,010	9,290	67	9,350	.0	90	1,590
Maine	1,228	433	85	.0	85	446	609	1,060	532	609	1,140	.0	.0	51
Maryland	4,781	307	239	.0	239	1,230	4,950	6,180	1,470	4,950	6,420	63	.0	126
Massachusetts	6,016	338	338	.0	338	1,690	3,490	5,180	2,030	3,490	5,520	.0	.0	195
Michigan	9,295	1,250	703	4.6	707	10,900	.0	10,900	11,600	4.6	11,600	.0	.0	738
Minnesota	4,375	748	797	.0	797	2,480	.0	2,480	3,270	.0	3,270	.0	.0	872
Mississippi	2,573	1,290	2,670	.0	2,670	648	316	963	3,320	316	3,640	1.0	188	1,800
Missouri	5,117	1,150	727	.1	728	5,150	1,060	6,200	5,870	1,060	6,930	.0	.0	529
Montana	799	11,600	205	13	218	9,100	.0	9,100	9,300	13	9,320	.0	4,620	2,090
Nebraska	1,578	5,660	4,790	4.7	4,800	4,150	.0	4,150	8,940	4.7	8,940	.0	2,160	4,230
Nevada	1,202	2,780	1,060	12	1,070	2,280	.0	2,280	3,340	12	3,350	11	615	1,690
New Hampshire	1,109	378	64	.0	64	356	894	1,250	420	894	1,310	.0	.0	26
New Jersey	7,730	287	566	.2	566	1,650	10,600	12,200	2,220	10,600	12,800	.0	.0	211
New Mexico	1,515	2,300	1,760	.0	1,760	1,720	.0	1,720	3,480	.0	3,480	.0	590	2,060
New York	17,990	583	839	1.5	840	9,650	8,490	18,100	10,500	8,490	19,000	.0	.0	562
North Carolina	6,629	1,350	435	.0	435	8,500	5.5	8,510	8,940	5.5	8,940	17	.0	390
North Dakota	639	4,190	141	.0	141	2,540	.0	2,540	2,680	.0	2,680	.0	5.9	228
Ohio	10,847	1,080	904	.0	904	10,800	.0	10,800	11,700	.0	11,700	.0	.1	901
Oklahoma	3,146	452	662	243	905	760	.0	760	1,420	243	1,670	.0	5.4	659
Oregon	2,842	2,970	767	.0	767	7,660	.0	7,660	8,430	.0	8,430	12	1,270	3,160
Pennsylvania	11,882	827	1,020	.0	1,020	8,810	.0	8,810	9,830	.0	9,830	.0	.0	581
Rhode Island	1,003	132	25	.0	25	108	393	501	133	393	526	.0	.0	18
South Carolina	3,487	1,720	282	.0	282	5,720	.0	5,720	6,000	.0	6,000	14	.0	293
South Dakota	696	851	251	.0	251	341	.0	341	592	.0	592	.0	62	345
Tennessee	4,877	1,880	503	.0	503	8,690	.0	8,690	9,190	.0	9,190	.7	.0	252
Texas	16,986	1,180	7,380	492	7,880	12,700	4,610	17,300	20,100	5,100	25,200	56	660	9,020
Utah	1,723	2,540	964	7.2	971	3,410	93	3,510	4,380	100	4,480	39	624	2,230
Vermont	563	1,120	45	.0	45	587	.0	587	632	.0	632	.0	.0	29
Virginia	6,187	762	443	.0	443	4,270	2,150	6,420	4,710	2,150	6,860	.0	3.6	224
Washington	4,867	1,630	1,450	.0	1,450	6,460	36	6,490	7,910	36	7,940	.0	997	2,830
West Virginia	1,793	2,560	728	.0	728	3,860	.0	3,860	4,580	.0	4,580	.0	.0	509
Wisconsin	4,892	1,330	681	.0	681	5,830	.0	5,830	6,510	.0	6,510	.0	.0	461
Wyoming	454	16,700	384	19	403	7,200	.0	7,200	7,580	19	7,600	.0	2,150	2,730
Puerto Rico	3,522	163	157	.0	157	419	2,470	2,880	576	2,470	3,040	.0	17	199
Virgin Islands	102	91	1.9	1.2	3.1	7.4	153	160	9.3	154	164	.0	.0	1.5
Total	252,336	1,340	79,400	1,220	80,600	259,000	68,200	327,000	339,000	69,400	408,000	750	27,500	94,000

Table 2. Summary of preliminary total water withdrawals by water-use category and by State, 1990

[Figures may not add to totals because of independent rounding. All values in million gallons per day]

STATE	PUBLIC SUPPLY	DOMESTIC	COMMER- CIAL	IRRIGATION	LIVESTOCK	INDUSTRIAL		MINING		THERMOELECTRIC		TOTAL	
	Fresh	Fresh	Fresh	Fresh	Fresh	Fresh	Saline	Fresh	Saline	Fresh	Saline	Fresh	Saline
Alabama.....	707	28	3.5	94	141	784	.0	11	9.1	6,310	.0	8,080	9.1
Alaska.....	92	6.9	18	.6	.6	111	.0	25	357	31	.0	284	357
Arizona.....	707	32	18	5,300	89	163	.0	156	.7	103	.4	6,570	1.2
Arkansas.....	309	51	222	5,250	189	177	.0	2.5	.0	1,640	.0	7,840	.0
California.....	5,830	318	234	27,900	411	129	25	20	310	246	11,400	35,100	11,700
Colorado.....	650	19	8.6	11,600	162	118	.0	54	30	114	.0	12,700	30
Connecticut.....	374	46	18	15	1.5	80	68	2.2	.0	530	3,710	1,070	3,780
Delaware.....	85	11	1.8	32	2.4	65	6.0	.0	.0	831	333	1,030	339
D.C.....	0	.0	.0	.0	.0	.5	.0	.5	.0	8.0	.0	9.0	.0
Florida.....	1,930	299	52	3,730	78	403	56	315	.0	732	10,300	7,530	10,400
Georgia.....	963	100	42	441	46	657	33	12	.0	3,030	33	5,290	65
Hawaii.....	238	9.9	40	755	7.2	43	.6	1.4	.0	95	1,550	1,190	1,550
Idaho.....	201	48	16	18,700	560	196	.0	8.4	.0	6.1	.0	19,700	.0
Illinois.....	1,860	115	173	78	63	464	.0	69	25	15,200	.0	18,000	25
Indiana.....	604	118	63	51	46	2,480	.0	97	.0	5,960	.0	9,430	.0
Iowa.....	322	45	27	23	121	219	.0	34	.0	2,070	.0	2,860	.0
Kansas.....	373	25	6.2	4,190	114	53	.0	26	.0	1,300	.0	6,080	.0
Kentucky.....	427	56	13	12	33	313	.0	18	.0	3,440	.0	4,320	.0
Louisiana.....	619	50	13	708	551	2,360	67	37	.0	4,950	.0	9,290	67
Maine.....	106	49	34	1.8	1.7	254	.0	3.7	.0	82	609	532	609
Maryland.....	798	70	26	29	27	70	379	28	21	421	4,550	1,470	4,950
Massachusetts.....	714	37	74	100	1.7	87	.0	5.0	.0	1,010	3,490	2,030	3,490
Michigan.....	1,400	123	35	240	29	1,680	3.7	55	.9	8,060	.0	11,600	4.6
Minnesota.....	515	168	71	195	67	154	.0	220	.0	1,880	.0	3,270	.0
Mississippi.....	320	33	16	1,880	411	269	.0	3.4	.0	386	316	3,320	316
Missouri.....	677	62	22	371	55	85	.0	25	.1	4,580	1,060	5,870	1,060
Montana.....	135	16	.0	9,000	52	57	.0	6.2	13	33	.0	9,300	13
Nebraska.....	301	47	.2	6,100	139	41	.0	131	4.7	2,180	.0	8,940	4.7
Nevada.....	385	9.8	23	2,820	5.6	10	.0	49	12	34	.0	3,340	12
New Hampshire.....	95	27	.6	.9	1.0	37	.0	2.8	.0	255	894	420	894
New Jersey.....	1,040	68	17	58	2.1	326	1,020	110	.0	599	9,550	2,220	10,600
New Mexico.....	273	24	17	3,010	22	6.3	.0	80	.0	50	.0	3,480	.0
New York.....	2,910	120	61	54	26	274	.0	45	16	6,990	8,470	10,500	8,490
North Carolina.....	805	103	17	114	201	390	5.5	96	.0	7,210	.0	8,940	5.5
North Dakota.....	76	12	.1	164	24	8.8	.0	3.7	.0	2,390	.0	2,680	.0
Ohio.....	1,300	134	36	15	34	354	.0	243	.0	9,550	.0	11,700	.0
Oklahoma.....	515	41	6.3	601	131	35	.0	2.8	243	89	.0	1,420	243
Oregon.....	470	64	711	6,860	21	284	.0	1.5	.0	15	.0	8,430	.0
Pennsylvania.....	1,730	141	24	14	53	1,870	.0	252	.0	5,750	.0	9,830	.0
Rhode Island.....	102	4.9	5.6	2.1	.3	12	.0	6.8	.0	.0	393	133	393
South Carolina.....	352	103	2.1	55	25	632	.0	12	.0	4,820	.0	6,000	.0
South Dakota.....	76	8.8	17	392	43	15	.0	38	.0	3.2	.0	592	.0
Tennessee.....	695	59	55	38	49	882	.0	90	.0	7,320	.0	9,190	.0
Texas.....	3,090	93	62	8,490	228	884	1,460	139	491	7,130	3,150	20,100	5,100
Utah.....	508	6.1	4.2	3,590	34	106	2.3	41	98	87	.0	4,380	100
Vermont.....	39	17	3.8	.5	6.1	44	.0	3.7	.0	519	.0	632	.0
Virginia.....	709	113	35	36	29	495	66	91	.0	3,210	2,080	4,710	2,150
Washington.....	875	104	27	6,030	30	501	36	3.0	.0	334	.0	7,910	36
West Virginia.....	160	49	3.1	.0	4.8	132	.0	527	.0	3,710	.0	4,580	.0
Wisconsin.....	595	90	11	151	99	468	.0	.2	.0	5,100	.0	6,510	.0
Wyoming.....	88	8.5	1.6	7,160	27	16	.0	101	19	184	.0	7,580	19
Puerto Rico.....	404	6.7	.1	140	8.3	11	.0	2.6	.0	2.6	2,470	576	2,470
Virgin Islands.....	6.4	1.6	.7	.0	.5	.1	51	.0	.0	.0	103	9.3	154
Total.....	38,500	3,390	2,390	137,000	4,500	19,300	3,270	3,310	1,650	131,000	64,500	339,000	69,400

Table 3. Preliminary surface-water withdrawals by water-use category and by State, 1990

[Figures may not add to totals because of independent rounding. All values in million gallons per day]

STATE	PUBLIC SUPPLY	DOMESTIC	COMMER- CIAL	IRRIGATION	LIVESTOCK	INDUSTRIAL		MINING		THERMOELECTRIC		TOTAL	
	Fresh	Fresh	Fresh	Fresh	Fresh	Fresh	Saline	Fresh	Saline	Fresh	Saline	Fresh	Saline
Alabama	483	.0	.3	62	69	753	.0	7.0	.0	6,310	.0	7,680	.0
Alaska	58	.7	9.0	.5	.5	106	.0	20	308	26	.0	221	308
Arizona	305	.3	.0	3,250	64	124	.0	29	.2	61	.4	3,830	.6
Arkansas	190	.0	207	949	64	78	.0	.7	.0	1,640	.0	3,130	.0
California	2,560	106	177	17,200	206	3.4	25	7.0	.4	241	11,400	20,500	11,400
Colorado	567	.0	.9	9,000	140	85	.0	26	.0	94	.0	9,910	.0
Connecticut	301	.0	.6	6.5	.4	61	68	1.8	.0	530	3,710	902	3,780
Delaware	52	.0	.0	9.5	.3	47	6.0	.0	.0	830	333	939	339
D.C.	.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	.0	8.0	.0
Florida	226	.0	1.5	1,780	9.6	121	56	17	.0	709	10,300	2,870	10,400
Georgia	730	.0	12	178	36	311	33	2.9	.0	3,020	33	4,290	65
Hawaii	17	1.4	.6	555	3.8	23	.0	.0	.0	.0	1,550	600	1,550
Idaho	28	.0	.0	12,100	.0	26	.0	7.8	.0	.0	.0	12,100	.0
Illinois	1,420	.0	119	3.7	2.2	309	.0	61	.0	15,200	.0	17,100	.0
Indiana	330	.0	31	31	20	2,350	.0	88	.0	5,950	.0	8,810	.0
Iowa	88	.0	8.0	1.4	30	148	.0	33	.0	2,060	.0	2,370	.0
Kansas	197	.0	.0	199	31	3.8	.0	.9	.0	1,290	.0	1,720	.0
Kentucky	372	5.5	9.2	11	31	220	.0	13	.0	3,410	.0	4,070	.0
Louisiana	344	.0	.9	256	329	2,070	67	36	.0	4,910	.0	7,950	67
Maine	86	.0	30	1.6	1.1	244	.0	2.9	.0	81	609	446	609
Maryland	722	.0	6.4	10	14	50	379	7.5	21	419	4,550	1,230	4,950
Massachusetts	535	.0	18	100	.4	22	.0	5.0	.0	1,010	3,490	1,690	3,490
Michigan	1,140	.1	27	135	10	1,510	.0	46	.0	8,050	.0	10,900	.0
Minnesota	225	.0	16	38	10	89	.0	217	.0	1,880	.0	2,480	.0
Mississippi	38	.0	.0	130	12	126	.0	.5	.0	342	316	648	316
Missouri	493	.0	.0	36	41	32	.0	.1	.0	4,540	1,060	5,150	1,060
Montana	83	.8	.0	8,910	36	27	.0	3.6	.0	33	.0	9,100	.0
Nebraska	66	.0	.0	1,740	31	2.4	.0	130	.0	2,180	.0	4,150	.0
Nevada	281	.2	16	1,950	4.6	.8	.0	3.5	.0	22	.0	2,280	.0
New Hampshire	61	.0	.2	.8	.3	37	.0	2.7	.0	254	894	356	894
New Jersey	643	.0	1.4	36	.0	273	1,020	103	.0	597	9,550	1,650	10,600
New Mexico	32	.0	1.2	1,640	3.6	1.7	.0	2.4	.0	40	.0	1,720	.0
New York	2,360	.0	32	26	10	189	.0	34	15	6,990	8,470	9,650	8,490
North Carolina	668	.0	.0	102	165	328	5.5	28	.0	7,210	.0	8,500	5.5
North Dakota	45	.0	.0	86	11	6.6	.0	.7	.0	2,390	.0	2,540	.0
Ohio	904	2.7	11	11	26	230	.0	40	.0	9,540	.0	10,800	.0
Oklahoma	435	.0	1.5	108	96	32	.0	.5	.0	88	.0	760	.0
Oregon	365	7.6	704	6,300	18	254	.0	.6	.0	15	.0	7,660	.0
Pennsylvania	1,300	.0	10	11	6.9	1,690	.0	41	.0	5,750	.0	8,810	.0
Rhode Island	88	.0	1.3	1.8	.2	9.1	.0	6.8	.0	.0	393	108	393
South Carolina	273	.0	.0	25	12	585	.0	3.6	.0	4,820	.0	5,720	.0
South Dakota	24	.0	4.6	251	26	10	.0	23	.0	2.8	.0	341	.0
Tennessee	426	.0	.0	23	21	813	.0	82	.0	7,320	.0	8,690	.0
Texas	1,830	.0	11	2,900	135	741	1,460	46	.0	7,070	3,150	12,700	4,610
Utah	203	1.4	.0	3,080	7.0	29	.0	3.6	93	87	.0	3,410	93
Vermont	19	.0	1.0	.5	1.5	43	.0	3.4	.0	518	.0	587	.0
Virginia	640	.0	8.3	28	21	300	66	68	.0	3,210	2,080	4,270	2,150
Washington	441	.0	.4	5,280	8.4	397	36	.6	.0	330	.0	6,460	36
West Virginia	118	1.0	.6	.0	3.6	26	.0	.0	.0	3,710	.0	3,860	.0
Wisconsin	301	.0	.0	1.8	25	409	.0	.0	.0	5,090	.0	5,830	.0
Wyoming	47	.4	.7	6,920	13	9.9	.0	26	.0	183	.0	7,200	.0
Puerto Rico	325	3.2	.0	87	3.5	.0	.0	.7	.0	.0	2,470	419	2,470
Virgin Islands	5.4	1.4	.3	.0	.2	.0	50	.0	.0	.0	103	7.4	153
Total	23,500	132	1,480	85,500	1,810	15,400	3,260	1,280	438	130,000	64,500	259,000	68,200

Table 4. Preliminary ground-water withdrawals by water-use category and by State, 1990

[Figures may not add to totals because of independent rounding. All values in million gallons per day]

STATE	PUBLIC SUPPLY	DOMESTIC	COMMER- CIAL	IRRIGATION	LIVESTOCK	INDUSTRIAL		MINING		THERMO- ELECTRIC	TOTAL	
	Fresh	Fresh	Fresh	Fresh	Fresh	Fresh	Saline	Fresh	Saline	Fresh	Fresh	Saline
Alabama	224	28	3.1	33	72	31	.0	4.0	9.1	.0	394	9.1
Alaska	34	6.2	8.7	.1	.1	5.2	.0	4.3	48	4.7	64	48
Arizona	401	32	18	2,060	26	39	.0	127	.5	42	2,740	.5
Arkansas	119	51	14	4,300	125	99	.0	1.8	.0	2.4	4,710	.0
California	3,260	212	57	10,700	205	125	.0	13	310	4.6	14,600	310
Colorado	83	19	7.7	2,560	22	33	.0	28	30	21	2,770	30
Connecticut	73	46	18	8.2	1.1	19	.0	.4	.0	.2	165	.0
Delaware	33	11	1.8	23	2.1	18	.0	.0	.0	.5	89	.0
D.C.	.0	.0	.0	.0	.0	.5	.0	.5	.0	.0	1.0	.0
Florida	1,700	299	50	1,940	69	282	.0	299	.0	23	4,660	.0
Georgia	234	100	30	263	9.9	346	.0	8.7	.0	5.2	996	.0
Hawaii	221	8.5	39	200	3.4	20	.6	1.4	.0	95	589	.6
Idaho	173	48	16	6,620	560	170	.0	.6	.0	6.1	7,590	.0
Illinois	444	115	54	75	61	155	.0	7.6	25	9.0	920	25
Indiana	274	118	33	20	26	129	.0	9.5	.0	12	621	.0
Iowa	234	45	19	21	91	71	.0	.7	.0	12	495	.0
Kansas	176	25	6.2	3,990	83	50	.0	25	.0	13	4,360	.0
Kentucky	55	50	4.2	.5	1.6	93	.0	5.2	.0	38	247	.0
Louisiana	275	50	12	451	222	289	.6	.4	.0	40	1,340	.6
Maine	21	49	3.6	.2	.6	9.8	.0	.7	.0	1.4	85	.0
Maryland	76	70	19	19	12	20	.0	21	.0	1.8	239	.0
Massachusetts	179	37	55	.0	1.4	65	.0	.0	.0	.5	338	.0
Michigan	261	123	8.1	105	19	175	3.7	8.8	.9	2.8	703	4.6
Minnesota	290	168	56	157	57	65	.0	2.4	.0	2.4	797	.0
Mississippi	282	33	16	1,750	399	144	.0	2.9	.0	43	2,670	.0
Missouri	185	62	22	335	14	53	.0	25	.1	32	727	.1
Montana	51	15	.0	90	16	30	.0	2.6	13	.0	205	13
Nebraska	235	47	.2	4,360	108	39	.0	1.2	4.7	6.0	4,790	4.7
Nevada	104	9.6	7.1	871	1.0	9.4	.0	45	12	12	1,060	12
New Hampshire	34	27	.4	.1	.8	.3	.0	.1	.0	.8	64	.0
New Jersey	396	68	15	22	2.1	53	.2	7.8	.0	1.6	566	.2
New Mexico	241	24	16	1,370	18	4.6	.0	77	.0	9.9	1,760	.0
New York	550	120	29	28	15	85	.0	11	1.5	.0	839	1.5
North Carolina	137	103	17	12	36	63	.0	68	.0	.0	435	.0
North Dakota	32	12	.1	78	13	2.1	.0	3.0	.0	.1	141	.0
Ohio	396	131	25	4.7	7.8	123	.0	203	.0	13	904	.0
Oklahoma	80	41	4.8	493	35	3.3	.0	2.2	243	1.8	662	243
Oregon	105	57	7.3	563	3.2	31	.0	1.0	.0	.0	767	.0
Pennsylvania	427	141	14	3.5	46	180	.0	211	.0	.0	1,020	.0
Rhode Island	13	4.9	4.2	.3	.1	2.5	.0	.0	.0	.0	25	.0
South Carolina	79	103	2.1	30	12	47	.0	8.0	.0	1.4	282	.0
South Dakota	52	8.8	12	141	17	5.0	.0	15	.0	.4	251	.0
Tennessee	269	59	55	15	29	69	.0	8.2	.0	.0	503	.0
Texas	1,270	93	51	5,590	93	143	1.1	93	491	54	7,380	492
Utah	305	4.6	4.2	508	27	77	2.3	37	5.0	.0	964	7.2
Vermont	19	17	2.8	.0	4.6	1.0	.0	.3	.0	.4	45	.0
Virginia	69	113	27	7.9	8.5	195	.0	23	.0	.4	443	.0
Washington	434	104	27	754	22	104	.0	2.4	.0	4.0	1,450	.0
West Virginia	43	48	2.5	.0	1.3	106	.0	527	.0	.4	728	.0
Wisconsin	294	90	11	150	74	58	.0	.2	.0	2.4	681	.0
Wyoming	41	8.1	.9	237	14	6.0	.0	75	19	1.0	384	19
Puerto Rico	80	3.5	.1	54	4.8	11	.0	1.9	.0	2.6	157	.0
Virgin Islands	1.0	.2	.4	.0	.3	.1	1.2	.0	.0	.0	1.9	1.2
Total	15,100	3,260	908	51,000	2,690	3,950	9.7	2,020	1,210	525	79,400	1,220