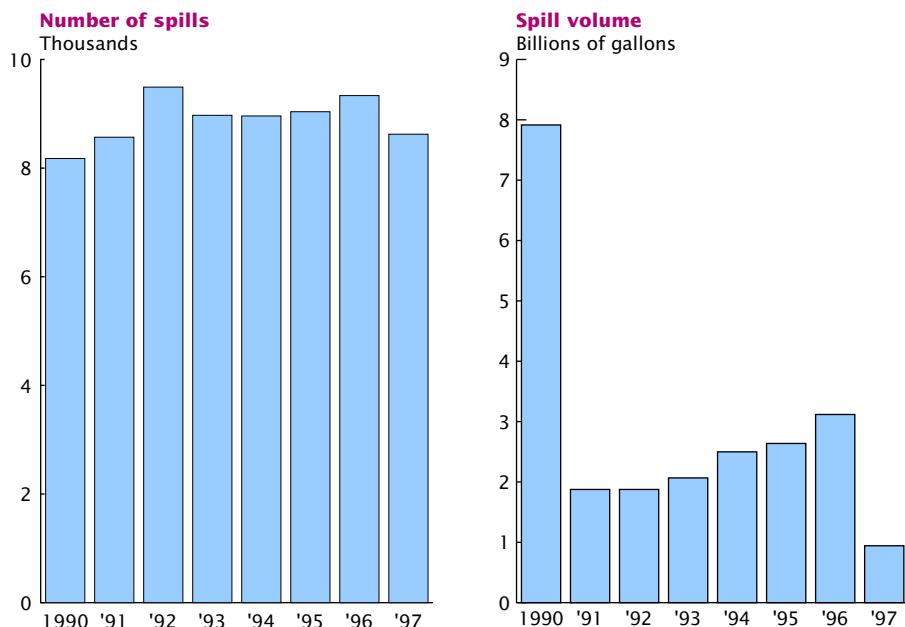
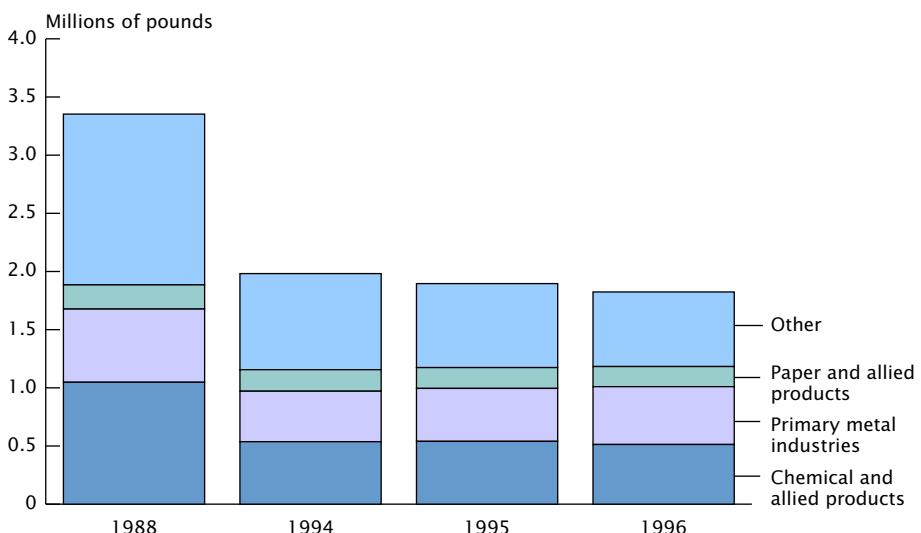


Figure 6.1
Number and Volume of Oil Spills in U.S. Water: 1990 to 1997



Source: Chart prepared by U.S. Census Bureau. For data, see Table 402.

Figure 6.2
Toxic Chemical Releases, by Industry: 1988 to 1996



Source: Chart prepared by U.S. Census Bureau. For data, see Table 412.

Section 6

Geography and Environment

This section presents a variety of information on the physical environment of the United States, starting with basic area measurement data and ending with climatic data for selected weather stations around the country. The subjects covered between those points are mostly concerned with environmental trends but include such related subjects as land use, water consumption, air pollutant emissions, toxic releases, oil spills, hazardous waste sites, municipal waste and recycling, threatened and endangered wildlife, and the environmental industry.

The information in this section is selected from a wide range of Federal agencies that compile the data for various administrative or regulatory purposes, such as the Environmental Protection Agency, U.S. Geological Survey, National Oceanic and Atmospheric Administration, Soil Conservation Service, and General Services Administration. Other agencies include the U.S. Census Bureau, which presents nationwide area measurement information and the Bureau of Economic Analysis, which compiles data on pollution abatement and control expenditures.

Area—For the 1990 census, area measurements were calculated by computer based on the information contained in a single, consistent geographic database, the TIGER™ file (described below), rather than relying on historical, local, and manually calculated information. This especially affects water area figures reported in 1990; these had only included those bodies of water of least 40 acres and those streams with a width of at least one-eighth of a statute mile from 1940 to 1980. Water area figures for 1990 increased because the data reflected all water recorded in the Census Bureau's

geographic database including coastal, Great Lakes, and territorial waters.

Geography—The U.S. Geological Survey conducts investigations, surveys, and research in the fields of geography, geology, topography, geographic information systems, mineralogy, hydrology, and geothermal energy resources as well as natural hazards. In cooperation with state and local agencies, the U.S. Geological Survey prepares and publishes topographic, land use/land cover, geologic, and hydrologic maps and digital data compilations. The U.S. Geological Survey provides United States cartographic data through the Earth Sciences Information Center, water resources data through the National Water Data Exchange (NAWDEX), and a variety of research and Open-File reports which are announced monthly in *New Publications of the U.S. Geological Survey*.

In a joint project with the Census Bureau, the U.S. Geological Survey provided the basic information on geographic features for input into a national geographic and cartographic database prepared by the Census Bureau, called the TIGER™ (Topologically Integrated Geographic Encoding and Referencing) System. Maps prepared by the Census Bureau show the names and boundaries of various types of legal and statistical entities, such as places, county subdivisions, and larger areas and are available as of the specific decennial census. An inventory is available for the 1990 census, both on computer tape and CD-ROM as the *1990 TIGER/GICS (Geographic Identification Code Scheme)* and for the 1992 economic censuses in the *Geographic Reference Manual* (EC97-R-1). The Census Bureau maintains a current inventory of governmental units and their legal boundaries through its Boundary and Annexation

Survey. The TIGER™ System contains information on the legal and statistical entities used by the Census Bureau, as well as on both manmade and natural features, such as streets, roads, railroads, rivers, and lakes; information is available to the public in the form of machine-readable TIGER extract files.

An inventory of the Nation's land resources by type of use/cover was conducted by the Soil Conservation Service in 1982, 1987, and 1992. The results, published in the *1992 National Inventory of Land Resources*, cover all non-Federal land in Puerto Rico, the Virgin Islands, and the United States except Alaska. An update to cover 1997 is expected to be released in late 1999 and early 2000.

Environment—The principal Federal agency responsible for pollution abatement and control activities is the Environmental Protection Agency (EPA). It is responsible for establishing and monitoring national air quality standards, water quality activities, solid and hazardous waste disposal, and control of toxic substances. Many of these series now appear on the EPA web site at the Center for Environmental Information and Statistics and can be accessed at <http://www.epa.gov/ceis/>.

National Ambient Air Quality Standards (NAAQS) for suspended particulate matter, sulfur dioxide, photochemical oxidants, carbon monoxide, and nitrogen dioxide were originally set by the EPA in April 1971. Every 5 years, each of the NAAQS is reviewed and revised if new health or welfare data indicates that a change is necessary. The standard for photochemical oxidants, now called ozone, was revised in February 1979. Also, a new NAAQS for lead was promulgated in October 1978 and for suspended particulate matter in 1987.

Table 404 gives some of the health-related standards for the six air pollutants having NAAQS. Responsibility for demonstrating compliance with or progress toward achieving these standards lies with the state agencies. In 1997, there were 1,734 non-Federal sampling stations for particulates, 658 for sulfur dioxide, 538 for carbon monoxide, 1,019 for ozone, 409 for nitrogen dioxide, and 381 for lead. Data from these state networks are periodically submitted to EPA's National Aerometric Information Retrieval System (AIRS) for summarization in annual reports on the nationwide status and trends in air quality; for details, see *National Air Quality and Emissions Trends Report, 1997*.

Climate—NOAA, through the National Weather Service and the National Environmental Satellite, Data, and Information Service, is responsible for data on climate. NOAA maintains about 11,600 weather stations, of which over 3,000 produce autographic precipitation records, about 600 take hourly readings of a series of weather elements, and the remainder record data once a day. These data are reported monthly in the *Climatological Data* and *Storm Data*, published monthly, and annually in the *Local Climatological Data* (published by location for major cities).

The normal climatological temperatures, precipitation, and degree days listed in this publication are derived for comparative purposes and are averages for the 30-year period, 1961-90. For stations that did not have continuous records for the entire 30 years from the same instrument site, the normals have been adjusted to provide representative values for the current location. The information in all other tables is based on data from the beginning of the record at that location through 1997, except as noted.

No. 393. Land and Water Area of States and Other Entities: 1990

[One square mile=2.59 square kilometers. Excludes territorial water, which was included in the 1993 edition of the *Statistical Abstract*]

State and other area	Total area		Land area		Water area				
	Sq. mi.	Sq. km.			Total		Inland sq. mi.	Coastal sq. mi.	Great Lakes sq. mi.
			Sq. mi.	Sq. km.	Sq. mi.	Sq. km.			
United States . . .	3,717,796	9,629,091	3,536,278	9,158,960	181,518	470,131	78,937	42,528	60,052
Alabama	52,237	135,293	50,750	131,443	1,486	3,850	968	519	-
Alaska	615,230	1,593,444	570,374	1,477,268	44,856	116,177	17,501	27,355	-
Arizona	114,006	295,276	113,642	294,333	364	943	364	-	-
Arkansas	53,182	137,742	52,075	134,875	1,107	2,867	1,107	-	-
California	158,869	411,470	155,973	403,971	2,895	7,499	2,674	222	-
Colorado	104,100	269,618	103,729	268,658	371	960	371	-	-
Connecticut	5,544	14,358	4,845	12,550	698	1,808	161	538	-
Delaware	2,396	6,206	1,955	5,062	442	1,144	71	371	-
District of Columbia	68	177	61	159	7	18	7	-	-
Florida	59,928	155,214	53,937	139,697	5,991	15,517	4,683	1,308	-
Georgia	58,977	152,750	57,919	150,010	1,058	2,740	1,011	47	-
Hawaii	6,459	16,729	6,423	16,636	36	93	36	-	-
Idaho	83,574	216,456	82,751	214,325	823	2,131	823	-	-
Illinois	57,918	150,007	55,593	143,987	2,325	6,021	750	-	1,575
Indiana	36,420	94,328	35,870	92,904	550	1,424	315	-	235
Iowa	56,276	145,754	55,875	144,716	401	1,038	401	-	-
Kansas	82,282	213,110	81,823	211,922	459	1,189	459	-	-
Kentucky	40,411	104,665	39,732	102,907	679	1,759	679	-	-
Louisiana	49,651	128,595	43,566	112,836	6,085	15,759	4,153	1,931	-
Maine	33,741	87,388	30,865	79,939	2,876	7,449	2,263	613	-
Maryland	12,297	31,849	9,775	25,316	2,522	6,533	680	1,842	-
Massachusetts	9,241	23,934	7,838	20,300	1,403	3,634	424	979	-
Michigan	96,705	250,465	56,809	147,136	39,895	103,329	1,704	-	38,192
Minnesota	86,943	225,182	79,617	206,207	7,326	18,975	4,780	-	2,546
Mississippi	48,286	125,060	46,914	121,506	1,372	3,553	781	591	-
Missouri	69,709	180,546	68,898	178,446	811	2,100	811	-	-
Montana	147,046	380,849	145,556	376,991	1,490	3,859	1,490	-	-
Nebraska	77,358	200,358	76,878	199,113	481	1,245	481	-	-
Nevada	110,567	286,367	109,806	284,396	761	1,971	761	-	-
New Hampshire	9,283	24,044	8,969	23,231	314	813	314	-	-
New Jersey	8,215	21,277	7,419	19,215	796	2,062	371	425	-
New Mexico	121,598	314,939	121,364	314,334	234	605	234	-	-
New York	53,989	139,833	47,224	122,310	6,766	17,523	1,888	976	3,901
North Carolina	52,672	136,421	48,718	126,180	3,954	10,241	3,954	-	-
North Dakota	70,704	183,123	68,994	178,695	1,710	4,428	1,710	-	-
Ohio	44,828	116,103	40,953	106,067	3,875	10,036	376	-	3,499
Oklahoma	69,903	181,048	68,679	177,877	1,224	3,171	1,224	-	-
Oregon	97,132	251,571	96,002	248,646	1,129	2,925	1,050	80	-
Pennsylvania	46,058	119,291	44,820	116,083	1,239	3,208	490	-	749
Rhode Island	1,231	3,189	1,045	2,707	186	482	168	18	-
South Carolina	31,189	80,779	30,111	77,988	1,078	2,791	1,006	72	-
South Dakota	77,121	199,744	75,896	196,571	1,225	3,174	1,225	-	-
Tennessee	42,146	109,158	41,219	106,758	926	2,400	926	-	-
Texas	267,277	692,248	261,914	678,358	5,363	13,890	4,959	404	-
Utah	84,904	219,902	82,168	212,815	2,736	7,086	2,736	-	-
Vermont	9,615	24,903	9,249	23,956	366	947	366	-	-
Virginia	42,326	109,625	39,598	102,558	2,729	7,067	1,000	1,728	-
Washington	70,637	182,949	66,581	172,445	4,055	10,503	1,545	2,511	-
West Virginia	24,231	62,759	24,087	62,384	145	375	145	-	-
Wisconsin	65,499	169,643	54,314	140,672	11,186	28,971	1,831	-	9,355
Wyoming	97,818	253,349	97,105	251,501	714	1,848	714	-	-
Other areas:									
Puerto Rico	3,508	9,085	3,427	8,875	81	210	65	16	-
American Samoa	90	233	77	200	13	33	7	6	-
Guam	217	561	210	543	7	18	7	-	-
No. Mariana Islands	189	490	179	464	10	26	2	8	-
Palau	241	624	177	458	64	165	40	24	-
Virgin Islands of the U.S.	171	443	134	346	37	96	17	20	-

- Represents or rounds to zero.

Source: U.S. Census Bureau, 1990 Census of Population and Housing, Series CPH-2; and unpublished data from the TIGER/Geographic Information Control System (TIGER/GICS) computer file. Corrections have been made subsequent to the 1990 Census reports.

No. 394. Total and Federally Owned Land, by State: 1997

[As of end of fiscal year; see text, Section 9, State and Local Government. Total land area figures are not comparable with those in Table 393]

State	Not owned by Federal Government				State	Not owned by Federal Government			
	Total (1,000 acres)	Federal Government (1,000 acres)	Owned by Federal Government (1,000)	Percent		Total (1,000 acres)	Federal Government (1,000 acres)	Owned by Federal Government (1,000)	Percent
United States .	2,271,343	1,708,262	563,081	24.8	Missouri	44,248	42,590	1,658	3.7
Alabama	32,678	31,598	1,080	3.3	Montana	93,271	67,786	25,495	27.3
Alaska	365,482	193,694	171,788	47.0	Nebraska	49,032	48,517	515	1.1
Arizona	72,688	41,351	31,337	43.1	Nevada	70,264	14,183	56,082	79.8
Arkansas	33,599	30,860	2,740	8.2	New Hampshire	5,769	5,035	734	12.7
California	100,207	55,449	44,757	44.7	New Jersey	4,813	4,712	102	2.1
Colorado	66,486	42,357	24,129	36.3	New Mexico	77,766	51,548	26,218	33.7
Connecticut	3,135	3,128	7	0.2	New York	30,681	30,484	197	0.6
Delaware	1,266	1,264	2	0.2	North Carolina	31,403	29,374	2,028	6.5
District of Columbia	39	30	9	23.5	North Dakota	44,452	43,040	1,413	3.2
Florida	34,721	32,077	2,645	7.6	Ohio	26,222	25,942	280	1.1
Georgia	37,295	35,837	1,458	3.9	Oklahoma	44,088	43,410	678	1.5
Hawaii	4,106	3,755	350	8.5	Oregon	61,599	29,789	31,809	51.6
Idaho	52,933	19,941	32,992	62.3	Pennsylvania	28,804	28,182	623	2.2
Illinois	35,795	35,390	405	1.1	Rhode Island	677	674	3	0.5
Indiana	23,158	22,764	394	1.7	South Carolina	19,374	18,140	935	4.8
Iowa	35,860	35,831	30	0.1	South Dakota	48,882	46,304	2,577	5.3
Kansas	52,511	52,161	350	0.7	Tennessee	26,728	25,152	1,576	5.9
Kentucky	25,512	24,430	1,083	4.2	Texas	168,218	166,209	2,008	1.2
Louisiana	28,868	28,123	745	2.6	Utah	52,697	18,799	33,898	64.3
Maine	19,848	19,702	145	0.7	Vermont	5,937	5,560	377	6.3
Maryland	6,319	6,162	157	2.5	Virginia	25,496	23,217	2,279	8.9
Massachusetts	5,035	4,983	52	1.0	Washington	42,694	30,755	11,939	28.0
Michigan	36,492	32,513	3,980	10.9	West Virginia	15,411	14,333	1,077	7.0
Minnesota	51,206	47,137	4,069	7.9	Wisconsin	35,011	33,278	1,733	5.0
Mississippi	30,223	28,946	1,276	4.2	Wyoming	62,343	31,465	30,878	49.5

¹ Excludes trust properties.

Source: U.S. General Services Administration, *Inventory Report on Real Property Owned by the United States Throughout the World*, annual.

No. 395. Land Cover/Use, by State: 1992

[In millions of acres (1,940.0 represents 1,940,000,000). Excludes Alaska and District of Columbia]

State	Non-Federal				State	Non-Federal					
	Total surface area ¹	Rural land				Total surface area ¹	Rural land				
		Total	Devel- oped ²	Crop land		Total	Devel- oped ²	Total	Crop land		
Total.	1,940.0	1,483.1	92.4	1,390.8	382.3	Montana	94.1	65.7	1.1	64.6	15.0
United States .	1,937.7	1,480.9	91.9	1,389.0	382.0	Nebraska	49.5	48.1	1.3	46.9	19.2
Alabama	33.1	31.2	2.0	29.1	3.1	Nevada	70.8	10.0	0.4	9.6	0.8
Arizona	73.0	42.4	1.4	41.0	1.2	New Hampshire	5.9	5.0	0.6	4.4	0.1
Arkansas	34.0	29.8	1.3	28.5	7.7	New Jersey	5.0	4.5	1.6	3.0	0.6
California	101.6	52.9	5.0	47.9	10.1	New Mexico	77.8	50.2	0.9	49.3	1.9
Colorado	66.6	42.2	1.7	40.5	8.9	New York	31.4	29.8	3.0	26.8	5.6
Connecticut	3.2	3.1	0.8	2.2	0.2	North Carolina	33.7	28.5	3.5	24.9	6.0
Delaware	1.3	1.2	0.2	1.0	North Dakota	45.2	42.2	1.3	40.8	24.7	
Florida	37.5	30.4	4.6	25.8	3.0	Ohio	26.5	25.7	3.6	22.1	11.9
Georgia	37.7	34.6	3.1	31.5	5.2	Oklahoma	44.8	42.4	1.9	40.5	10.1
Hawaii	4.1	3.6	0.2	3.5	0.3	Oregon	62.1	29.2	1.1	28.0	3.8
Idaho	53.5	19.5	0.6	18.9	5.6	Pennsylvania	29.0	27.8	3.4	24.4	5.6
Illinois	36.1	34.8	3.1	31.7	24.1	Rhode Island	0.8	0.7	0.2	0.5	0.0
Indiana	23.2	22.3	2.1	20.2	13.5	South Carolina	19.9	18.0	1.9	16.1	3.0
Iowa	36.0	35.4	1.8	33.6	25.0	South Dakota	49.4	45.5	1.1	44.3	16.4
Kansas	52.7	51.5	2.0	49.5	26.6	Tennessee	27.0	24.7	2.2	22.6	4.9
Kentucky	25.9	24.0	1.7	22.3	5.1	Texas	170.8	163.7	8.2	155.5	28.3
Louisiana	30.6	26.4	1.8	24.6	6.0	Utah	54.3	16.9	0.6	16.3	1.8
Maine	21.3	19.5	0.7	18.8	0.4	Vermont	6.2	5.5	0.3	5.2	0.6
Maryland	6.7	6.0	1.1	4.9	West Virginia	26.1	22.8	2.2	20.6	2.9	
Massachusetts	5.3	4.8	1.3	3.5	Wisconsin	43.6	29.9	1.9	28.1	6.7	
Michigan	37.5	33.0	3.7	29.4	9.0	Wyoming	15.5	14.1	0.7	13.4	0.9
Minnesota	54.0	47.1	2.4	44.7	21.4	Caribbean	35.9	32.7	2.4	30.4	10.8
Mississippi	30.5	28.0	1.3	26.7	5.7		62.6	32.0	0.5	31.5	2.3
Missouri	44.6	41.7	2.3	39.4	13.3		2.3	2.2	0.4	1.8	0.4

¹ Includes water area not shown separately. ² Includes urban and built-up areas in units of 10 acres or greater, and rural transportation.

Source: U.S. Dept. of Agriculture, Soil Conservation Service, and Iowa State University, Statistical Laboratory; *Summary Report, 1992 National Resources Inventory*.

No. 396. Extreme and Mean Elevations, by State and Other Area

[One foot=.305 meter]

State and other area	Highest point			Lowest point			Approximate mean elevation	
	Name	Elevation		Name	Elevation			
		Feet	Meters		Feet	Meters	Feet	Meters
U.S.	Mt. McKinley (AK)	20,320	6,198	Death Valley (CA)	-282	-86	2,500	763
AL	Cheaha Mountain	2,405	733	Gulf of Mexico	(¹)	(¹)	500	153
AK	Mount McKinley	20,320	6,198	Pacific Ocean	(¹)	(¹)	1,900	580
AZ	Humphreys Peak	12,633	3,853	Colorado River	70	21	4,100	1,251
AR	Magazine Mountain	2,753	840	Ouachita River	55	17	650	198
CA	Mount Whitney	14,494	4,419	Death Valley	-282	-86	2,900	885
CO	Mt. Elbert	14,433	4,402	Arkansas River	3,350	1,022	6,800	2,074
CT	Mt. Frissell on South slope Ebright Road, ²	2,380	726	Long Island Sound	(¹)	(¹)	500	153
DE	New Castle County	448	137	Atlantic Ocean	(¹)	(¹)	60	18
DC	Tenleytown at Reno Reservoir	410	125	Potomac River	1	(Z)	150	46
FL	Sec. 30, T6N, R20W, Walton County	345	105	Atlantic Ocean	(¹)	(¹)	100	31
GA	Brassington Bald	4,784	1,459	Atlantic Ocean	(¹)	(¹)	600	183
HI	Puu Wekiu	13,796	4,208	Pacific Ocean	(¹)	(¹)	3,030	924
ID	Borah Peak	12,662	3,862	Snake River	710	217	5,000	1,525
IL	Charles Mound	1,235	377	Mississippi River	279	85	600	183
IN	Franklin Twp., Wayne Co. Sec. 29, T100N, R41W, Osceola County ³	1,257	383	Ohio River	320	98	700	214
IA	Mount Sunflower	1,670	509	Mississippi River	480	146	1,100	336
KS	Black Mountain	4,039	1,232	Verdigris River	679	207	2,000	610
KY	Driskill Mountain	4,139	1,216	Mississippi River	257	78	750	229
LA	Mount Katahdin	535	163	New Orleans	-8	-2	100	31
ME	Mount Washington	5,267	1,606	Atlantic Ocean	(¹)	(¹)	600	183
MD	Backbone Mountain	3,360	1,025	Atlantic Ocean	(¹)	(¹)	350	107
MA	Mount Greylock	3,487	1,064	Atlantic Ocean	(¹)	(¹)	500	153
MI	Mount Arvon	1,979	604	Lake Erie	571	174	900	275
MN	Eagle Mountain, Cook Co	2,301	702	Lake Superior	600	183	1,200	366
MS	Woodall Mountain	806	246	Gulf of Mexico	(¹)	(¹)	300	92
MO	Taum Sauk Mountain	1,772	540	St. Francis River	230	70	800	244
MT	Granite Peak	12,799	3,904	Kootenai River	1,800	549	3,400	1,037
NE	Johnson Twp., Kimball Co	5,424	1,654	Missouri River	840	256	2,600	793
NV	Boundary Peak	13,140	4,007	Colorado River	479	146	5,500	1,678
NH	Mount Washington	6,288	1,918	Atlantic Ocean	(¹)	(¹)	1,000	305
NJ	High Point	1,803	550	Atlantic Ocean	(¹)	(¹)	250	76
NM	Wheeler Peak	13,161	4,014	Red Bluff Reservoir	2,842	867	5,700	1,739
NY	Mount Marcy	5,344	1,630	Atlantic Ocean	(¹)	(¹)	1,000	305
NC	Mount Mitchell	6,684	2,039	Atlantic Ocean	(¹)	(¹)	700	214
ND	White Butte, Slope Co	3,506	1,069	Red River	750	229	1,900	580
OH	Campbell Hill	1,549	472	Ohio River	455	139	850	259
OK	Black Mesa	4,973	1,517	Little River	289	88	1,300	397
OR	Mount Hood	11,239	3,428	Pacific Ocean	(¹)	(¹)	3,300	1,007
PA	Mount Davis	3,213	980	Delaware River	(¹)	(¹)	1,100	336
RI	Jerimoth Hill	812	248	Atlantic Ocean	(¹)	(¹)	200	61
SC	Sassafras Mountain	3,560	1,086	Atlantic Ocean	(¹)	(¹)	350	107
SD	Harney Peak	7,242	2,209	Big Stone Lake	966	295	2,200	671
TN	Clingmans Dome	6,643	2,026	Mississippi River	178	54	900	275
TX	Guadalupe Peak	8,749	2,668	Gulf of Mexico	(¹)	(¹)	1,700	519
UT	Kings Peak	13,528	4,126	Beaverdam Wash	2,000	610	6,100	1,861
VT	Mount Mansfield	4,393	1,340	Lake Champlain	95	29	1,000	305
VA	Mount Rogers	5,729	1,747	Atlantic Ocean	(¹)	(¹)	950	290
WA	Mount Rainier	14,410	4,395	Pacific Ocean	(¹)	(¹)	1,700	519
WV	Spruce Knob	4,861	1,483	Potomac River	240	73	1,500	458
WI	Timms Hill	1,951	595	Lake Michigan	579	177	1,050	320
WY	Gannett Peak	13,804	4,210	Belle Fourche River	3,099	945	6,700	2,044

Z Less than 0.5 meter. ¹ Sea level. ² At DE-PA state line. ³ "Sec." denotes section; "T," township; "R," range; "N," north; and "W," west.

Source: U.S. Geological Survey, for highest and lowest points, *Elevations and Distances in the United States, 1990*; for mean elevations, 1983 edition.

No. 397. Water Areas for Selected Major Bodies of Water: 1990

[Includes only that portion of body of water under the jurisdiction of the United States, excluding Hawaii. One square mile=2.59 square kilometers]

Body of water and state	Area		Body of water and state	Area				
	Sq. mi.	Sq. km.		Sq. mi.	Sq. km.			
Atlantic Coast water bodies:								
Chesapeake Bay (MD-VA)	2,747	7,115	Leech Lake (MN)	162	419			
Pamlico Sound (NC)	1,622	4,200	Lake St. Clair (MI) ¹	161	416			
Long Island Sound (CT-NY)	914	2,368	Eufaula Lake (OK)	157	407			
Delaware Bay (DE-NJ)	614	1,591	Sam Rayburn Reservoir (TX)	150	389			
Cape Cod Bay (MA)	598	1,548	Goose Lake (CA-OR)	147	381			
Albemarle Sound (NC)	492	1,274	Utah Lake (UT)	139	361			
Biscayne Bay (FL)	218	565	Lake Marion (SC)	139	360			
Buzzards Bay (MA)	215	558	Lake Francis Case (SD)	134	346			
Tangier Sound (MD-VA)	172	445	Lake Pend Oreille (ID)	133	343			
Currituck Sound (NC)	116	301	Lake Texoma (OK-TX)	132	342			
Pocomoke Sound (MD-VA)	111	286	Yellowstone Lake (WY)	131	339			
Chincoteague Bay (MD-VA)	105	272	Livingston Reservoir (TX)	127	330			
Great South Bay (NY)	94	243	Franklin D. Roosevelt Lake (WA)	124	322			
Core Sound (NC)	88	229	Moosehead Lake (ME)	116	301			
Gulf Coast water bodies:								
Mississippi Sound (AL-LA-MS)	813	2,105	Clark Hill Lake (GA-SC)	105	272			
Laguna Madre (TX)	733	1,897	Lake Maurepas (LA)	91	235			
Lake Pontchartrain (LA)	631	1,635	Lake Moultrie (SC)	89	230			
Florida Bay (FL)	616	1,596	Lake Winnibigoshish (MN)	87	225			
Bretton Sound (LA)	511	1,323	Hartwell Lake (GA-SC)	86	224			
Mobile Bay (AL)	310	802	Upper Klamath Lake (OR)	85	221			
Lake Borgne (LA-MS)	271	702	Harry S. Truman Reservoir (MO)	84	217			
Matagorda Bay (TX)	253	656	Oneida Lake (NY)	80	207			
Atchafalaya Bay (LA)	245	635	Malheur Lake (OR)	75	195			
Galveston Bay (TX)	236	611	Alaska water bodies:					
Tampa Bay (FL)	212	549	Chatham Strait	1,559	4,039			
Vermilion Bay (LA)	189	489	Prince William Sound	1,382	3,579			
Corpus Christi Bay (TX)	151	392	Clarence Strait	1,199	3,107			
West Cote Blanche Bay (LA)	146	378	Il梁ma Lake	1,022	2,646			
Trinity Bay (TX)	129	335	Frederick Sound	792	2,051			
Choctawhatchee Bay (FL)	122	315	Summer Strait	791	2,048			
San Antonio Bay (TX)	118	306	Stephens Passage	702	1,819			
Timbalier Bay (LA)	112	291	Kvichak Bay	640	1,659			
Charlotte Harbor (FL)	112	291	Montague Strait	463	1,198			
Aransas Bay (TX)	104	268	Becharof Lake	447	1,158			
Apalachicola Bay (FL)	101	262	Icy Strait	436	1,130			
Terrebonne Bay (LA)	99	256	Hotham Inlet	433	1,120			
East Cote Blanche Bay (LA)	94	243	Selawik Lake	403	1,044			
St. George Sound (FL)	93	240	Nushagak Bay	393	1,018			
Sabine Lake (LA-TX)	89	229	Baird Inlet	348	902			
White Lake (LA)	85	221	Pacific Coast water bodies:					
Old Tampa Bay (FL)	83	214	Yakutat Bay	345	894			
Bon Secour Bay (AL)	79	204	Teshekpuk Lake	324	839			
Pine Island Sound (FL)	75	194	Behn Canal	324	839			
Pacific Coast water bodies:						Interior water bodies:		
Puget Sound (WA)	808	2,092	Turnagain Arm	322	834			
San Francisco Bay (CA)	264	684	Kachemak Bay	310	803			
Willapa Bay (WA)	125	325	Glacier Bay	310	803			
Hood Canal (WA)	117	303	Stefansson Sound	301	780			
Interior water bodies:						Pacific Coast water bodies:		
Lake Michigan (IL-IN-MI-WI)	22,342	57,866	Revillagigedo Channel	295	764			
Lake Superior (MI-MN-WI)	20,557	53,243	Kasagualuk Lagoon	293	759			
Lake Huron (MI) ¹	8,800	22,792	Cordova Bay	241	623			
Lake Erie (MI-NY-OH-PA) ¹	5,033	13,036	Sitka Sound	229	593			
Lake Ontario (NY) ¹	3,446	8,926	Naknek Lake	225	582			
Great Salt Lake (UT)	1,836	4,756	Eschscholtz Bay	210	543			
Green Bay (MI-WI)	1,396	3,617	Stepovak Bay	206	534			
Lake Okeechobee (FL)	663	1,717	Keku Strait	206	534			
Lake Sakakawea (ND)	563	1,459	Interior water bodies:					
Lake Oahe (ND-SD)	538	1,394	Port Clarence	187	486			
Lake of the Woods (MN) ¹	462	1,196	Orca Bay	184	476			
Lake Champlain (NY-VT) ¹	414	1,072	Knik Arm	169	437			
Fort Peck Lake (MT)	379	981	Dall Lake	167	433			
Salton Sea (CA)	364	944	Knight Island Passage	167	432			
Toledo Bend Reservoir (LA-TX)	268	694	Scammon Bay	163	423			
Lower Red Lake (MN)	257	666	Port Moller	159	412			
Lake Powell (AZ-UT)	250	649	Ernest Sound	158	410			
Kentucky Lake (KY-TN)	234	605	Spafarief Bay	157	405			
Lake Mead (AZ-NV)	233	603	Pavlov Bay	153	396			
Lake Winnebago (WI)	206	535	Shishmaref Inlet	153	395			
Mille Lacs Lake (MN)	200	518	Smith Bay	140	363			
Flathead Lake (MT)	191	495	Seymour Canal	140	361			
Lake Tahoe (CA-NV)	187	486	Sitkalidak Strait	135	349			
Upper Red Lake (MN)	186	483	Tlevak Strait	135	349			
Pyramid Lake (NV)	170	440	Lake Clark	130	336			
Interior water bodies:						Gulf Coast water bodies:		
¹ Area measurements for Lake Champlain, Lake Erie, Lake Huron, Lake Ontario, Lake St. Clair, Lake Superior, and Lake of the Woods include only those portions under the jurisdiction of the United States.						Pacific Coast water bodies:		
Source: U.S. Census Bureau, unpublished data from the Census TIGER™ database.						Pacific Coast water bodies:		

¹ Area measurements for Lake Champlain, Lake Erie, Lake Huron, Lake Ontario, Lake St. Clair, Lake Superior, and Lake of the Woods include only those portions under the jurisdiction of the United States.

Source: U.S. Census Bureau, unpublished data from the Census TIGER™ database.

No. 398. Flows of Largest U.S. Rivers—Length, Discharge, and Drainage Area

River	Location of mouth	Source stream (name and location)	Length (miles) ¹	Average discharge at mouth (1,000 cubic ft. per second)	Drainage area (1,000 sq. mi.)
Missouri	Missouri	Red Rock Creek, MT	2,540	76.2	529
Mississippi	Louisiana	Mississippi River, MN	2,340	593	1,150
Yukon	Alaska	McNeil River, Canada	1,980	225	328
St. Lawrence	Canada	North River, MN	1,900	348	396
Rio Grande	Mexico-Texas	Rio Grande, CO	1,900	-	336
Arkansas	Arkansas	East Fork Arkansas River, CO	1,460	41	161
Colorado	Mexico	Colorado River, CO	1,450	-	246
Achafalaya ⁶	Louisiana	Tierra Blanca Creek, NM	1,420	58	95.1
Ohio	Illinois-Kentucky	Allegheny River, PA	1,310	281	203
Red	Louisiana	Tierra Blanca Creek, NM	1,290	56	93.2
Brazos	Texas	Blackwater Draw, NM	1,280	-	45.6
Columbia	Oregon-Washington	Columbia River, Canada	1,240	265	5258
Snake	Washington	Snake River, WY	1,040	56.9	108
Platte	Nebraska	Grizzly Creek, CO	990	-	84.9
Pecos	Texas	Pecos River, NM	926	-	44.3
Canadian	Oklahoma	Canadian River, CO	906	-	46.9
Tennessee	Kentucky	Courthouse Creek, NC	886	68	40.9
Colorado (of Texas)	Texas	Colorado River, TX	862	-	42.3
North Canadian	Oklahoma	Corrumpa Creek, NM	800	-	17.6
Mobile	Alabama	Tickanetley Creek, GA	774	67.2	44.6
Kansas	Kansas	Arikaree River, CO	743	-	59.5
Kuskokwim	Alaska	South Fork Kuskokwim River, AK	724	67	48
Yellowstone	North Dakota	North Folk Yellowstone River, WY	692	-	70
Tanana	Alaska	Nabesna River, AK	659	41	44.5
Gila	Arizona	Middle Fork Gila River, NM	649	-	58.2

- Represents zero. ¹ From source to mouth. ² The length from the source of the Missouri River to the Mississippi River and thence to the Gulf of Mexico is about 3,710 miles. ³ Includes about 167,000 cubic ft. per second diverted from the Mississippi into the Atchafalaya River but excludes the flow of the Red River. ⁴ Excludes the drainage areas of the Red and Atchafalaya Rivers. ⁵ Drainage area includes both the United States and Canada. ⁶ In east-central Louisiana, the Red River flows into the Atchafalaya River, a distributary of the Mississippi River. Data on average discharge, length, and drainage area include the Red River, but exclude all water diverted into the Atchafalaya from the Mississippi River.

Source: U.S. Geological Survey, *Largest Rivers in the United States*, Open File Report 87-242, May 1990.

No. 399. U.S. Water Withdrawals and Consumptive Use Per Day, by End Use: 1940 to 1995

[Includes Puerto Rico. Withdrawal signifies water physically withdrawn from a source. Includes fresh and saline water; excludes water used for hydroelectric power]

Year	Total (bil. gal.)	Public supply ²				Industrial and misc. ⁵ (bil. gal.)	Steam electric utilities (bil. gal.)
		Per capita ¹ (gal.)	Irrigation (bil. gal.)	Total (bil. gal.)	Per capita ³ (gal.)		
WITHDRAWALS							
1940	140	1,027	71	10	75	3.1	29
1950	180	1,185	89	14	145	3.6	37
1955	240	1,454	110	17	148	3.6	72
1960	270	1,500	110	21	151	3.6	38
1965	310	1,602	120	24	155	4.0	130
1970	370	1,815	130	27	166	4.5	47
1975	420	1,972	140	29	168	4.9	45
1980	440	1,953	150	34	183	5.6	45
1985	399	1,650	137	38	189	7.8	31
1990	408	1,620	137	41	195	7.9	30
1995	402	1,500	134	43	192	8.9	26
CONSUMPTIVE USE							
1960	61	339	52	3.5	25	2.8	3.0
1965	77	403	66	5.2	34	3.2	3.4
1970	87	427	73	5.9	36	3.4	4.1
1975	96	451	80	6.7	38	3.4	4.2
1980	100	440	83	7.1	38	3.9	5.0
1985	92	380	74	(6)	(6)	9.2	6.1
1990	94	370	76	(6)	(6)	8.9	6.7
1995	100	374	81	(6)	(6)	9.9	4.8

¹ Based on U.S. Census Bureau resident population as of July 1. ² Includes commercial water withdrawals. ³ Based on population served. ⁴ Rural farm and nonfarm household and garden use, and water for farm stock and dairies. ⁵ For 1940 to 1960, includes manufacturing and mineral industries, rural commercial industries, air-conditioning, resorts, hotels, motels, military and other state and Federal agencies, and miscellaneous; thereafter, includes manufacturing, mining and mineral processing, ordnance, construction, and miscellaneous. ⁶ Public supply consumptive use included in end-use categories.

Source: 1940-1960, U.S. Bureau of Domestic Business Development, based principally on committee prints, *Water Resources Activities in the United States*, for the Senate Committee on National Water Resources, U.S. Senate, thereafter, U.S. Geological Survey, *Estimated Use of Water in the United States in 1995*, circular 1200, and previous quinquennial issues.

No. 400. Water Withdrawals and Consumptive Use— States and Other Area: 1995

[In millions of gallons per day, (401,500 represents 401,500,000,000) except as noted. Figures may not add due to rounding. Withdrawal signifies water physically withdrawn from a source. Includes fresh and saline water]

State or other area	Water withdrawn								
	Per capita (gal. per day)		Source		Selected major uses				Consumpti- ve use, fresh water
	Total	fresh	Ground water	Surface water	Irrigation	Public supply ²	Indus- trial	Thermo- electric	
U.S. ²	401,500	1,280	77,500	324,000	134,000	43,600	26,200	190,000	100,000
Alabama	7,100	1,670	445	6,650	139	875	753	5,200	532
Alaska	329	350	132	196	0.6	90	197	30	25
Arizona	6,830	1,620	2,840	3,990	5,670	846	197	62	3,830
Arkansas	8,800	3,540	5,460	3,340	5,940	419	187	1,780	4,140
California	45,900	1,130	14,700	31,300	28,900	5,740	802	9,630	25,500
Colorado	13,800	3,690	2,270	11,600	12,700	732	191	115	5,230
Connecticut	4,450	389	166	4,290	28	448	11	3,940	97
Delaware	1,500	1,050	110	1,390	48	101	64	1,270	71
District of Columbia	10	18	0.5	9.7	-	-	0.5	9.7	15
Florida	18,200	509	4,340	13,800	3,470	2,360	649	11,600	2,780
Georgia	5,820	799	1,190	4,630	722	1,250	676	3,070	1,170
Hawaii	1,930	853	531	1,400	652	218	20	970	542
Idaho	15,100	13,000	2,830	12,300	13,000	254	76	-	4,360
Illinois	19,900	1,680	953	19,000	180	1,950	527	17,100	857
Indiana	9,140	1,570	709	8,430	116	784	2,410	5,690	505
Iowa	3,030	1,070	528	2,510	39	418	301	2,130	290
Kansas	5,240	2,040	3,510	1,720	3,380	384	77	1,260	3,620
Kentucky	4,420	1,150	226	4,190	12	521	375	3,450	318
Louisiana	9,850	2,270	1,350	8,500	769	677	2,580	5,480	1,930
Maine	326	178	80	246	27	135	16	136	48
Maryland	7,730	289	246	7,480	57	907	331	6,360	150
Massachusetts	5,510	189	351	5,160	82	759	88	4,570	180
Michigan	12,100	1,260	862	11,200	227	1,490	1,910	8,370	667
Minnesota	3,390	736	714	2,680	157	573	438	2,090	417
Mississippi	3,200	1,140	2,590	614	1,740	377	294	375	1,570
Missouri	7,030	1,320	891	6,140	567	757	63	5,550	692
Montana	8,860	10,200	217	8,640	8,550	161	80	22	1,960
Nebraska	10,500	6,440	6,200	4,350	7,550	328	175	2,350	7,020
Nevada	2,300	1,480	896	1,400	1,640	479	95	27	1,340
New Hampshire	1,320	388	81	1,240	6.3	130	50	1,110	35
New Jersey	6,110	269	580	5,530	125	1,120	486	4,360	210
New Mexico	3,510	2,080	1,700	1,800	2,990	337	69	55	1,980
New York	16,800	567	1,010	15,800	30	3,140	321	13,100	469
North Carolina	9,290	1,070	535	8,750	239	939	385	7,420	713
North Dakota	1,120	1,750	122	1,000	117	85	17	819	181
Ohio	10,500	944	905	9,620	27	1,560	650	8,190	791
Oklahoma	2,040	543	1,220	822	864	597	285	124	716
Oregon	7,910	2,520	1,050	6,860	6,170	572	379	9.0	3,210
Pennsylvania	9,680	802	860	8,820	16	1,730	1,930	5,930	565
Rhode Island	411	138	27	383	2.3	121	7.3	275	19
South Carolina	6,200	1,690	322	5,880	53	614	703	4,810	321
South Dakota	460	631	187	273	269	97	32	5.3	249
Tennessee	10,100	1,920	435	9,640	24	831	868	8,300	233
Texas	29,600	1,300	8,780	20,800	9,450	3,420	2,920	13,500	10,500
Utah	4,460	2,200	790	3,670	3,530	506	253	48	2,200
Vermont	565	967	50	515	3.9	66	12	452	24
Virginia	8,260	826	358	7,900	30	911	622	6,620	218
Washington	8,860	1,620	1,760	7,100	6,470	1,300	652	376	3,080
West Virginia	4,620	2,530	146	4,470	-	217	1,330	3,010	352
Wisconsin	7,250	1,420	759	6,490	169	692	453	5,820	443
Wyoming	7,060	14,700	335	6,720	6,590	100	118	220	2,800
Puerto Rico	2,840	154	135	2,680	107	443	15	2,260	187
Virgin Islands	202	113	0.7	201	-	7.8	20	173	1.9

- Represents zero. ¹ Water that has been evaporated, transpired, or incorporated into products, plant, or animal tissue and therefore is not available for immediate reuse. ² Includes Puerto Rico and Virgin Islands.

Source: U.S. Geological Survey, *Estimated Use of Water in the United States in 1995*, circular 1200.

No. 401. National Ambient Water Quality in Rivers and Streams—Violation Rate: 1980 to 1995

[In percent.] Violation level based on U.S. Environmental Protection Agency water quality criteria. Violation rate represents the proportion of all measurements of a specific water quality pollutant which exceeds the "violation level" for that pollutant. "Violation" does not necessarily imply a legal violation. Data based on U.S. Geological Survey's National Stream Quality Accounting Network (NASQAN) data system; for details, see source. Years refer to water years. A water year begins in Oct. and ends in Sept. µg=micrograms; mg=milligrams. For metric conversion, see page ix.]

Pollutant	Violation level	1980	1985	1989	1990	1991	1992	1993	1994	1995
Fecal coliform bacteria	Above 200 cells per 100 ml.	31	28	30	26	15	28	31	28	35
Dissolved oxygen	Below 5 mg per liter.	5	3	3	2	2	2	(Z)	2	1
Phosphorus, total, as phosphorous	Above 1.0 mg per liter	4	3	2	3	2	2	2	2	4
Lead, dissolved	Above 50 µg per liter	(Z) 1	(Z) 1	(Z) 1	(Z) 1	(Z) 1	(Z) 1	(NA) (NA)	(NA) (NA)	(NA) (NA)
Cadmium, dissolved	Above 10 µg per liter									

NA Not available. Z Less than one.

Source: U.S. Geological Survey, national-level data, unpublished; state-level data, *Water-Data Report*, annual series prepared in cooperation with the state governments.

No. 402. Oil Spills in U.S. Water—Number and Volume: 1994 to 1997

[Based on reported discharges into U.S. navigable waters, including territorial waters (extending 3 to 12 miles from the coastline), tributaries, the contiguous zone, onto shoreline, or into other waters that threaten the marine environment. Data found in Marine Safety Management System]

Spill characteristic	Number of spills				Spill volume (1,000 gal.)			
	1994	1995	1996	1997	1994	1995	1996	1997
Total	8,960	9,038	9,335	8,624	2,499,273	2,638,229	3,117,831	942,574
Size of spill (gallons):								
1-100	8,440	8,614	8,904	8,299	77,961	48,936	43,434	39,082
101-1,000	371	324	322	243	130,979	115,140	114,831	81,895
1,001-3,000	79	52	57	40	151,756	91,426	102,008	78,117
3,001-5,000	22	19	20	14	88,479	73,598	86,389	58,016
5,001-10,000	23	9	12	15	165,824	63,853	92,163	109,288
10,001-50,000	18	15	15	11	437,238	354,824	351,106	282,176
50,001-100,000	3	2	-	1	290,342	155,950	-	84,000
100,001-1,000,000	4	3	5	1	1,146,694	1,734,502	2,327,900	210,000
1,000,000 and over	-	-	-	-	-	-	-	-
Body of water:								
Atlantic ocean	206	267	119	87	799,549	48,313	27,980	40,875
Pacific ocean	666	648	491	505	128,752	69,053	29,209	32,841
Gulf of Mexico	1,350	1,485	2,403	2,341	205,151	253,040	45,145	105,462
Great Lakes	240	282	228	156	15,984	3,103	3,507	4,311
Lakes	16	26	19	29	318	92	52	210,270
Rivers and canals	1,814	1,849	1,984	1,821	383,171	1,156,002	475,550	182,676
Bays and sounds	1,062	1,109	793	811	72,022	41,004	1,092,207	46,450
Harbors	1,016	1,176	992	858	346,649	148,229	288,252	45,932
Other	2,590	2,196	2,306	2,016	537,677	919,393	1,155,929	273,775
Source:								
Tankship	172	148	122	124	69,694	125,491	219,311	22,429
Tankbarge	393	353	313	252	955,582	1,101,938	1,163,258	165,649
All other vessels	4,681	4,977	5,151	4,971	308,343	396,724	298,451	192,801
Facilities	2,258	586	509	638	677,016	868,900	406,384	204,935
Pipelines	55	30	17	32	62,340	11,894	978,392	224,122
All other nonvessels	796	500	552	486	348,577	77,428	23,527	72,208
Unknown	605	2,444	2,671	1,921	77,721	55,854	28,508	60,430

- Represents or rounds to zero.

Source: U.S. Coast Guard, <<http://www.uscg.mil/hq/g-m/nmc/response/stats/Summary.htm>>; (accessed 15 June 1999).

No. 403. Wastewater Treatment Facilities: 1988 to 1996

[Covers treatment facilities, which are structures designed to treat wastewater, storm water, or combined sewer overflows prior to discharging to the environment. Treatment is accomplished by subjecting the wastewater to a combination of physical, chemical, and/or biological processes that reduce the concentration of contaminants]

Level of treatment	Number of facilities			1996		
	1988	1992	1996	Present design capacity (mgd ²)	Number of persons served	
					Total	Percent of U.S.
Total	15,591	15,613	16,024	42,225	189,710,899	71.8
Nondischarge ¹	1,854	1,981	2,032	1,421	7,660,876	2.9
Less than secondary	1,789	868	176	3,054	17,177,492	6.5
Secondary	8,536	9,086	9,388	17,734	81,944,349	31.0
Greater than secondary	3,412	3,678	4,428	20,016	82,928,182	31.4

¹ Facilities that do not discharge effluent to surface waters.

² Millions of gallons per day.

Source: U.S. Environmental Protection Agency, Office of Wastewater Management, 1996 Clean Water Needs Survey Report to Congress.

No. 404. National Ambient Air Pollutant Concentrations: 1987 to 1997

[Data represent annual composite averages of pollutant based on daily 24-hour averages of monitoring stations, except carbon monoxide is based on the second-highest, nonoverlapping, 8-hour average; ozone, average of the second-highest daily maximum 1-hour value; and lead, quarterly average of ambient lead levels. Based on data from the Aerometric Information Retrieval System. $\mu\text{g}/\text{m}^3$ =micrograms of pollutant per cubic meter of air; ppm=parts per million]

Pollutant	Unit	Monitoring stations, number	Air quality standard ¹	1987	1990	1993	1994	1995	1996	1997
Carbon monoxide.....	ppm.....	368	² 9	6.71	5.8	4.9	5.0	4.5	4.2	3.9
Ozone.....	ppm.....	660	³ .12	0.124	0.112	0.108	0.107	0.112	0.105	0.105
Sulfur dioxide.....	ppm.....	486	.03	0.009	0.008	0.007	0.007	0.006	0.006	0.005
Particulates (PM-10) ⁴	$\mu\text{g}/\text{m}^3$	845	50	(NA)	29.5	26.2	26.2	25.1	24.2	24.0
Nitrogen dioxide.....	ppm.....	224	.053	0.021	0.020	0.019	0.020	0.019	0.018	0.018
Lead.....	$\mu\text{g}/\text{m}^3$	195	⁵ 1.5	0.16	0.09	0.05	0.05	0.04	0.04	0.04

NA Not available. ¹ Refers to the primary National Ambient Air Quality Standard that protects the public health. ² Based on 8-hour standard of 9 ppm. ³ Based on 1-hour standard of .12 ppm. ⁴ The particulates (PM-10) standard replaced the previous standard for total suspended particulates in 1987. ⁵ Based on 3-month standard of 1.5 $\mu\text{g}/\text{m}^3$.

Source: U.S. Environmental Protection Agency, *National Air Quality and Emissions Trends Report*, annual.

No. 405. National Air Pollutant Emissions: 1970 to 1997

[In thousands of tons, except as indicated. PM-10=Particulate matter of less than 10 microns. Methodologies to estimate data for 1970 to 1984 period and 1985 to present emissions differ. Beginning with 1985, the estimates are based on a modified National Acid Precipitation Assessment Program inventory]

Year	PM-10	PM-10, fugitive dust ¹	Sulfur dioxide	Nitrogen dioxides	Volatile organic compounds	Carbon monoxide	Lead
1970	13,190	(NA)	31,161	21,639	30,817	128,761	220,869
1975	7,803	(NA)	28,011	23,151	25,895	115,968	159,659
1980	7,287	(NA)	25,905	24,875	26,167	116,702	74,153
1984	6,220	(NA)	23,470	23,172	25,572	114,262	42,217
1985	4,695	40,889	23,230	23,488	24,227	115,644	22,890
1986	4,553	46,582	22,544	23,329	23,480	110,437	14,763
1987	4,492	38,041	22,308	22,806	23,193	108,879	7,681
1988	5,424	55,851	22,767	24,526	24,167	117,169	7,053
1989	4,590	48,650	22,907	24,057	22,383	104,447	5,468
1990	5,425	24,419	23,678	23,436	20,935	95,794	4,975
1991	5,329	24,122	23,056	23,520	21,063	97,790	4,168
1992	5,515	23,865	22,818	23,789	20,642	94,400	3,808
1993	3,680	24,196	22,476	24,046	20,830	94,526	3,911
1994	5,294	25,461	21,878	24,345	21,465	98,854	4,043
1995	4,306	22,454	19,189	23,768	20,558	89,151	3,924
1996	8,481	24,716	19,812	23,465	19,293	90,929	3,910
1997	8,428	25,153	20,369	23,582	19,214	87,451	3,915

NA Not available. ¹ Sources such as agricultural tilling, construction, mining and quarrying, paved roads, unpaved roads, and wind erosion.

No. 406. Air Pollutant Emissions, by Pollutant and Source: 1997

[In thousands of tons, except as indicated. See headnote, Table 405]

Source	Particulates ¹	Sulfur dioxide	Nitrogen oxides	Volatile organic compounds	Carbon monoxide	Lead
Total	33,581	20,369	23,582	19,214	87,451	3,915
Fuel combustion, stationary sources	1,101	17,259	10,724	860	4,817	496
Electric utilities	290	13,082	6,178	51	406	64
Industrial	314	3,365	3,270	217	1,110	17
Other fuel combustion	497	813	1,276	593	3,301	415
Residential	388	179	858	568	3,042	7
Industrial processes	861	1,664	804	1,527	4,779	2,251
Chemical and allied product manufacture	70	301	167	458	1,287	159
Metals processing	220	552	102	73	2,465	2,038
Petroleum and related industries	41	385	115	538	364	(NA)
Other	530	427	421	458	663	54
Solvent utilization	6	1	3	6,483	6	(NA)
Storage and transport	114	2	6	1,377	26	(NA)
Waste disposal and recycling	296	50	103	449	1,242	646
Highway vehicles	268	320	7,035	5,230	50,257	19
Light-duty gas vehicles and motorcycle	56	129	2,875	2,755	27,036	12
Light-duty trucks	40	96	1,901	1,968	18,364	7
Heavy-duty gas vehicles	9	11	326	268	3,349	-
Diesels	163	84	1,932	239	1,508	(NA)
Off highway ²	466	1,060	4,560	2,430	16,755	503
Miscellaneous ³	30,469	13	346	858	9,568	(NA)

¹ - Represents or rounds to zero. NA Not available. ² Includes emissions from farm tractors and other farm machinery, construction equipment, industrial machinery, recreational marine vessels, and small general utility engines such as lawn mowers. ³ Includes emissions such as from forest fires and other kinds of burning, various agricultural activities, fugitive dust from paved and unpaved roads, and other construction and mining activities, and natural sources.

Source of Tables 405 and 406: U.S. Environmental Protection Agency, *National Air Pollutant Emission Trends, 1900-1997*.

No. 407. Emissions of Greenhouse Gases, by Type and Source: 1990 to 1997

[Emission estimates were mandated by Congress through Section 1605(a) of the Energy Policy Act of 1992 (title XVI). Gases that contain carbon can be measured either in terms of the full molecular weight of the gas or just in terms of their carbon content]

Type and source	Unit	1990	1992	1993	1994	1995	1996	1997
Carbon dioxide:								
Carbon content, total ¹	Mil. metric tons ..	1,355.9	1,360.6	1,393.6	1,413.8	1,428.1	1,478.8	1,500.8
Energy sources	Mil. metric tons ..	1,346.1	1,352.1	1,379.8	1,398.4	1,411.7	1,460.6	1,479.6
Methane:								
Gas, total ¹	Mil. metric tons ..	30.20	30.41	29.68	29.91	30.02	29.15	29.11
Energy sources	Mil. metric tons ..	10.79	10.83	10.11	10.13	10.36	9.89	9.99
Landfills	Mil. metric tons ..	11.11	10.89	10.82	10.75	10.66	10.54	10.38
Agricultural sources	Mil. metric tons ..	8.18	8.56	8.62	8.90	8.86	8.59	8.60
Nitrous oxide, total	1,000 metric tons ..	964	1,008	1,022	1,080	1,037	1,021	1,011
Agriculture	1,000 metric tons ..	646	670	706	650	635	642	
Energy sources	1,000 metric tons ..	208	228	237	252	265	260	264
Industrial sources	1,000 metric tons ..	94	93	98	103	104	107	87
Nitrogen oxide, total ¹	Mil. metric tons ..	21.55	21.87	22.18	22.55	21.68	21.26	(NA)
Energy related	Mil. metric tons ..	20.41	20.86	21.20	21.41	20.68	20.24	(NA)
Stationary source fuel combustion	Mil. metric tons ..	9.85	9.89	10.05	9.97	9.79	9.49	(NA)
Transportation	Mil. metric tons ..	10.55	10.98	11.14	11.45	10.88	10.75	(NA)
Nonmethane volatile organic compounds:								
(VOCs), total ¹	Mil. metric tons ..	18.92	18.68	18.85	19.46	18.59	17.23	(NA)
Energy related	Mil. metric tons ..	8.90	8.83	8.77	9.07	8.35	8.16	(NA)
Transportation	Mil. metric tons ..	8.00	7.82	7.88	8.18	7.38	7.19	(NA)
Industrial processes	Mil. metric tons ..	8.18	8.50	8.65	8.79	8.81	8.21	(NA)
Solid waste disposal	Mil. metric tons ..	0.89	0.92	0.95	0.95	0.97	0.39	(NA)
Carbon monoxide, total	Mil. metric tons ..	87.44	86.16	86.32	90.29	81.26	80.43	(NA)
Energy related	Mil. metric tons ..	71.96	74.61	74.61	76.27	69.61	68.71	(NA)
Transportation	Mil. metric tons ..	67.10	69.16	69.67	71.40	64.36	63.45	(NA)
Chlorofluorocarbons (CFCs) gases ²	1,000 metric tons ..	193	143	141	104	97	63	46
Hydrofluorocarbons	1,000 metric tons ..	7	4	7	9	13	18	22
Hydrochlorofluorocarbons (HCFCs) gases	1,000 metric tons ..	80	84	82	93	107	119	133
Other chemicals:								
Carbon tetrachloride	1,000 metric tons ..	32	22	19	16	5	(NA)	(NA)
Methyl chloroform	1,000 metric tons ..	158	108	93	77	46	4	(NA)
Sulfur hexafluoride	1,000 metric tons ..	1	1	1	1	1	1	1

NA Not available. ¹ Includes minor sources not shown separately. ² Covers principally CFC-11, CFC-12, and CFC-113.

³ Covers principally HCFC-22.

Source: U.S. Energy Information Administration, *Emissions of Greenhouse Gases in the United States*, annual.

No. 408. Municipal Solid Waste Generation, Recovery, and Disposal: 1980 to 1997

[In millions of tons (151.5 represents 151,500,000), except as indicated. Covers post-consumer residential and commercial solid wastes which comprise the major portion of typical municipal collections. Excludes mining, agricultural and industrial processing, demolition and construction wastes, sewage sludge, and junked autos and obsolete equipment wastes. Based on material-flows estimating procedure and wet weight as generated]

Item and material	1980	1990	1991	1992	1993	1994	1995	1996	1997
Waste generated	151.5	205.2	204.6	208.9	211.8	214.2	211.4	209.2	217.0
Per person per day (lb.)	3.7	4.5	4.4	4.5	4.5	4.5	4.4	4.3	4.4
Materials recovered	14.5	33.6	37.0	40.6	43.8	50.8	55.0	57.4	60.8
Per person per day (lb.)	0.35	0.7	0.8	0.9	0.9	1.1	1.1	1.2	1.2
Combustion for energy recovery	2.7	29.7	30.1	30.5	30.9	31.2	34.5	36.1	36.7
Per person per day (lb.)	0.06	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Combustion without energy recovery	11.0	2.2	2.2	2.2	1.6	1.3	1.0	(NA)	(NA)
Per person per day (lb.)	0.27	0.05	0.05	0.05	0.03	0.03	0.02	(NA)	(NA)
Landfill, other disposal	123.3	139.7	135.3	135.7	135.5	130.9	120.8	115.7	119.5
Per person per day (lb.)	2.97	3.1	2.9	2.9	2.9	2.8	2.5	2.4	2.4
Percent distribution of generation:									
Paper and paperboard	36.1	35.4	34.7	35.5	36.6	37.7	38.6	38.1	38.6
Glass	9.9	6.4	6.2	6.3	6.4	6.2	6.1	5.9	5.5
Metals	9.6	8.1	8.1	7.7	7.5	7.6	7.5	7.7	7.7
Plastics	5.2	8.3	8.7	8.8	9.0	9.0	8.9	9.4	9.9
Rubber and leather	2.8	2.8	2.9	2.8	2.7	2.9	2.9	3.0	3.0
Textiles	1.7	2.8	3.0	3.2	3.2	3.4	3.5	3.7	3.8
Wood	4.4	6.0	6.2	5.9	5.8	5.3	4.9	5.2	5.3
Food wastes	8.7	10.1	10.2	10.1	10.0	10.0	10.3	10.4	10.1
Yard wastes	18.2	17.1	17.1	16.8	15.7	14.7	14.0	13.3	12.8
Other wastes	3.4	3.0	3.1	2.9	3.0	3.2	3.3	3.3	3.3

NA Not available.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1998*. Prepared for the U.S. Environmental Protection Agency.

No. 409. Generation and Recovery of Selected Materials in Municipal Solid Waste: 1980 to 1997

[In millions of tons (151.5 represents 151,500,000), except as indicated. Covers post-consumer residential and commercial solid wastes which comprise the major portion of typical municipal collections. Excludes mining, agricultural and industrial processing, demolition and construction wastes, sewage sludge, and junked autos and obsolete equipment wastes. Based on material-flows estimating procedure and wet weight as generated]

Item and material	1980	1990	1991	1992	1993	1994	1995	1996	1997
Waste generated, total	151.5	205.2	204.6	208.9	211.8	214.2	211.4	209.2	217.0
Paper and paperboard	54.7	72.7	71.0	74.3	77.4	80.8	81.7	79.7	83.8
Ferrous metals	11.6	12.6	12.7	12.1	11.9	11.8	11.6	11.8	12.3
Aluminum	1.8	2.8	2.8	2.9	2.9	3.0	3.0	3.0	3.0
Other nonferrous metals	1.1	1.1	1.1	1.1	1.1	1.4	1.3	1.3	1.3
Glass	15.0	13.1	12.6	13.1	13.6	13.4	12.8	12.3	12.0
Plastics	7.9	17.1	17.7	18.4	19.0	19.3	18.9	19.8	21.5
Yard waste	27.5	35.0	35.0	35.0	33.3	31.5	29.7	27.9	27.7
Other wastes	31.9	50.7	51.7	52.1	52.5	53.1	52.4	53.5	55.3
Materials recovered, total	14.5	33.6	37.0	40.6	43.8	50.8	55.0	57.4	60.8
Paper and paperboard	11.9	20.2	22.5	24.5	25.5	29.5	32.7	33.2	34.9
Ferrous metals	0.4	2.6	3.1	3.4	3.9	4.0	4.1	4.4	4.7
Aluminum	0.3	1.0	1.0	1.1	1.0	1.2	1.0	1.0	1.1
Other nonferrous metals	0.5	0.7	0.7	0.7	0.7	1.0	0.8	0.8	0.8
Glass	0.8	2.6	2.6	2.9	3.0	3.1	3.1	3.2	2.9
Plastics	-	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.1
Yard waste	-	4.2	4.8	5.4	6.9	8.0	9.0	10.4	11.5
Other wastes	0.6	1.8	1.9	2.0	2.1	3.1	3.2	3.3	3.8
Percent of generation recovered, total	9.6	16.4	18.1	19.4	20.7	23.7	26.0	27.4	28.0
Paper and paperboard	21.8	27.8	31.7	33.0	32.9	36.5	40.0	41.6	41.7
Ferrous metals	3.4	20.4	24.1	27.7	32.8	33.9	35.5	37.2	38.4
Aluminum	16.7	35.9	35.5	38.7	35.7	37.8	34.6	34.3	35.1
Other nonferrous metals	45.5	66.4	65.5	63.4	63.1	73.3	64.3	66.7	65.4
Glass	5.3	20.0	20.3	22.0	22.1	23.3	24.5	25.8	24.3
Plastics	-	2.2	2.5	3.3	3.5	4.9	5.2	5.4	5.2
Yard waste	-	12.0	13.7	15.4	20.8	25.4	30.3	37.2	41.4
Other wastes	1.9	3.6	3.7	3.9	4.0	5.9	6.1	6.2	6.8

- Represents zero.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1998*. Prepared for the U.S. Environmental Protection Agency.

No. 410. Curbside Recycling Programs—Number and Population Served, by Region: 1995 and 1996

[For composition of regions, see map, inside front cover]

Region	Number of programs		Population served ¹			
			Total (1,000)		Percent	
	1995	1996	1995	1996	1995	1996
Total	7,375	8,817	121,335	134,630	46	51
Northeast	2,210	3,427	37,256	43,052	72	83
South	1,281	1,318	31,521	32,798	34	35
Midwest	2,985	3,198	25,487	27,454	41	44
West	899	874	27,071	31,326	49	55

¹ Calculated using population of states reporting data.

Source: Franklin Associates, Ltd., Prairie Village, KS, *Characterization of Municipal Solid Waste in the United States: 1998*. Prepared for the U.S. Environmental Protection Agency. Also in *Biocycle Magazine*.

No. 411. Toxic Chemical Releases and Transfers, by Media: 1988 to 1996

[In thousands of pounds (3,352,959 represents 3,352,959,000), except as indicated. Based on reports filed as required by section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA, or Title III of the Superfund Amendments and Reauthorization Act of 1986), Public Law 99-499. Owners and operators of facilities that are classified within Standard Classification Code groups 20 through 39, have 10 or more full-time employees, and that manufacture, process, or otherwise uses any listed toxic chemical in quantities greater than the established threshold in the course of a calendar year are covered and required to report]

Media	Core chemicals ¹				Expanded chemical list ²	
	1988	1994	1995	1996	1995	1996
Total facilities reporting	20,436	20,946	20,356	19,726	22,378	21,626
Total releases	3,352,959	1,982,786	1,895,290	1,823,765	2,530,786	2,433,507
On-site releases	2,966,497	1,723,558	1,639,512	1,558,759	2,250,353	2,138,770
Total air emissions	2,180,862	1,280,286	1,191,260	1,095,413	1,567,430	1,452,090
Fugitive air	680,929	351,433	304,738	276,183	388,750	355,272
Point source air	1,499,933	928,853	886,522	819,230	1,178,680	1,096,818
Surface water	164,551	39,795	35,919	45,144	159,768	173,288
Underground injection	161,969	114,136	139,908	118,222	240,175	204,329
Releases to land	459,114	289,341	272,425	299,980	282,979	309,063
Off-site releases	386,462	259,228	255,778	265,006	280,433	294,736
Total transfers off-site for further waste management	(NA)	3,046,596	3,056,371	2,933,850	3,289,504	3,156,867
Transfers to recycling	(NA)	2,200,760	2,173,559	2,094,268	2,237,557	2,150,594
Transfers to energy recovery	(NA)	459,576	488,955	446,488	517,242	477,057
Transfers to treatment	369,204	221,230	236,497	248,020	286,937	290,097
Transfers to POTWs ³	254,808	159,935	155,174	141,995	245,374	235,814
Other off-site transfers	43,279	5,094	2,187	3,079	2,394	3,306
Other on-site waste management	(NA)	14,222,807	13,682,935	14,041,722	21,483,644	17,744,197
Recycled on-site	(NA)	6,518,368	6,139,070	6,209,510	11,530,186	7,842,595
Energy recovery on-site	(NA)	3,138,177	2,688,189	2,585,786	2,837,074	2,761,739
Treated on-site	(NA)	4,566,261	4,855,676	5,246,426	7,116,384	7,139,862

NA Not available. ¹ Excludes chemicals removed from the list, those added in 1990, 1991, 1994, and 1995, and aluminum oxide, ammonia, hydrochloric acid, and sulfuric acid. Chemicals covered for all reporting years. ² The Environmental Protection Agency added 286 chemicals and chemical categories to the EPCRA section list of 313 list of toxic chemicals. ³ POTW (Publicly Owned Treatment Work) is a wastewater treatment facility that is owned by a state or municipality.

Source: U.S. Environmental Protection Agency, 1996 Toxics Release Inventory.

No. 412. Toxic Chemical Releases, by Industry: 1988 to 1996

[In thousands of pounds (3,352,959 represents 3,352,959,000). Based on reports filed as required by section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA, or Title III of the Superfund Amendments and Reauthorization Act of 1986), Public Law 99-499. Owners and operators of facilities that are classified within Standard Classification Code groups 20 through 39, have 10 or more full-time employees, and that manufacture, process, or otherwise uses any listed toxic chemical in quantities greater than the established threshold in the course of a calendar year are covered and required to report]

Industry	1987 SIC ¹ code	Core chemicals ²				Expanded chemical list ³	
		1988	1994	1995	1996	1995	1996
Total	(X)	3,352,959	1,982,786	1,895,290	1,823,765	2,530,786	2,433,507
Food and kindred products	20	8,378	6,014	5,120	5,121	86,467	83,303
Tobacco products	21	342	135	95	73	2,034	4,153
Textile mill products	22	35,798	16,346	15,656	15,280	18,501	17,328
Apparel and other textile products	23	1,026	1,381	1,260	1,742	1,287	1,865
Lumber and wood products	24	32,982	32,986	30,435	27,117	34,835	36,243
Furniture and fixtures	25	62,363	52,135	41,530	35,652	41,780	35,877
Paper and allied products	26	207,603	185,334	178,775	172,799	238,317	227,563
Printing and publishing	27	61,188	34,387	30,896	28,270	31,156	28,466
Chemical and allied products	28	1,047,782	537,483	539,600	513,043	844,232	785,178
Petroleum and coal products	29	72,781	46,877	42,593	43,077	64,141	68,887
Rubber and misc. plastic products	30	158,314	125,462	114,765	105,358	127,168	116,409
Leather and leather products	31	13,024	5,104	4,026	3,814	4,476	4,242
Stone, clay, glass products	32	40,539	17,359	19,053	23,264	32,324	38,740
Primary metal industries	33	629,354	433,886	455,029	496,663	524,041	564,535
Fabricated metals products	34	160,370	99,572	90,441	77,611	97,039	90,254
Industrial machinery and equipment	35	69,747	27,120	22,852	19,162	26,203	22,061
Electronic, electric equipment	36	132,719	36,672	31,457	33,753	40,456	41,765
Transportation equipment	37	208,392	128,139	114,746	105,232	121,155	111,353
Instruments and related products	38	58,085	14,328	12,955	10,359	17,859	15,350
Miscellaneous	39	32,593	15,350	13,286	9,843	13,869	10,270
Multiple codes	20-39	308,351	149,011	122,437	91,158	152,531	120,779
No codes	20-39	11,229	17,704	8,281	5,377	10,918	8,885

X Not applicable. ¹ Standard Industrial Classification, see text, Section 13, Labor Force. ² Chemicals covered for all reporting years. ³ The Environmental Protection Agency added 286 chemicals and chemical categories to the EPCRA section list of 313 list of toxic chemicals.

Source: U.S. Environmental Protection Agency, 1996 Toxics Release Inventory.

No. 413. Toxic Releases, by State: 1988 to 1996

[In thousands of pounds (3,352,959 represents 3,352,959,000). Excludes delisted chemicals, chemicals added in 1990, 1991, 1994, and 1995, and aluminum oxide, ammonia, hydrochloric acid, and sulfuric acid. See headnote, Table 412.]

State and outlying area	Core chemicals				State and outlying area	Core chemicals			
	1988	1994	1995	1996		1988	1994	1995	1996
Total . . .	3,352,959	1,982,786	1,895,290	1,823,765	MT	35,630	46,460	42,644	47,204
U.S. total . .	3,337,537	1,971,577	1,885,211	1,815,062	NE	16,936	13,735	11,171	8,881
AL	109,690	96,649	100,495	89,469	NH	2,352	3,209	3,369	3,294
AK	3,715	1,095	2,164	1,684	NJ	13,866	2,395	1,940	1,750
AZ	66,236	30,775	33,875	46,258	NY	45,018	14,025	12,399	10,645
AR	41,078	29,329	24,495	22,915	NM	30,386	17,230	17,946	18,339
CA	109,318	42,362	36,146	30,989	NC	99,656	37,902	30,361	26,028
CO	15,736	4,081	3,489	3,690	ND	132,027	80,753	72,493	67,973
CT	37,800	11,219	8,644	6,388	OH	202,152	116,096	122,236	115,228
DE	8,635	4,096	2,902	1,986	OK	32,895	15,344	15,995	15,216
DC	1	56	57	9	OR	21,562	18,011	18,449	24,647
FL	61,527	71,434	52,111	46,914	PA	134,852	95,110	95,914	90,529
GA	86,767	43,827	39,792	38,468	RI	7,713	6,789	3,017	2,452
HI	848	531	562	448	SC	66,070	47,640	48,112	47,374
ID	7,349	9,149	10,081	10,753	SD	2,393	2,108	1,872	1,364
IL	134,594	89,071	82,882	76,549	TN	126,484	104,915	94,684	88,191
IN	184,554	82,653	88,801	91,419	TX	318,632	199,765	205,724	187,485
IA	43,028	22,728	21,124	17,500	UT	123,836	67,175	69,144	73,876
KS	30,301	17,408	17,612	17,570	VT	1,734	632	544	294
KY	66,444	32,512	30,570	30,941	VA	112,329	43,829	40,613	40,555
LA	250,845	114,824	122,286	129,789	WA	28,273	20,770	22,336	21,890
ME	15,356	6,879	6,594	5,273	WV	39,416	20,852	19,679	17,445
MD	20,037	11,451	11,858	9,381	WI	60,707	39,397	32,875	31,566
MA	31,879	9,950	8,351	8,951	WY	16,741	880	1,144	1,356
MI	132,693	103,055	85,889	78,426	Guam	-	-	3	3
MN	55,948	20,826	18,338	15,846	Puerto Rico	12,829	9,693	8,840	7,468
MS	59,600	42,834	39,671	39,321	Virgin Island	2,593	1,516	1,236	1,232
MO	90,704	56,772	50,552	49,770					

- Represents zero.

Source: U.S. Environmental Protection Agency, 1996 Toxics Release Inventory.

No. 414. Hazardous Waste Sites on the National Priority List, by State: 1998

[Includes both proposed and final sites listed on the National Priorities List for the Superfund program as authorized by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 and the Superfund Amendments and Reauthorization Act of 1986.]

State and outlying area	Percent distribution				State and outlying area	Percent distribution					
	Total sites	Rank	Federal	Non-Federal		Total sites	Rank	Federal	Non-Federal		
Total	1,258	(X)	(X)	161	1,097	Montana	9	42	0.7	-	9
United States . .	1,245	(X)	100.0	160	1,085	Nebraska	10	38	0.8	1	9
Alabama	12	32	1.0	3	9	Nevada	1	49	0.1	-	1
Alaska	7	43	0.6	6	1	New Hampshire	18	20	1.4	1	17
Arizona	10	39	0.8	3	7	New Jersey	111	1	8.9	6	105
Arkansas	11	36	0.9	-	11	New Mexico	11	34	0.9	1	10
California	96	3	7.7	23	73	New York	84	4	6.7	4	80
Colorado	17	22	1.4	3	14	North Carolina	24	17	1.9	2	22
Connecticut	14	29	1.1	1	13	North Dakota	-	50	0.0	-	-
Delaware	17	23	1.4	1	16	Ohio	36	10	2.9	5	31
District of Columbia	1	(X)	0.1	1	-	Oklahoma	12	30	1.0	1	11
Florida	53	6	4.3	6	47	Oregon	11	35	0.9	2	9
Georgia	16	25	1.3	2	14	Pennsylvania	100	2	8.0	6	94
Hawaii	4	45	0.3	3	1	Rhode Island	12	31	1.0	2	10
Idaho	9	41	0.7	2	7	South Carolina	25	16	2.0	2	23
Illinois	43	8	3.5	4	39	South Dakota	2	48	0.2	1	1
Indiana	30	13	2.4	-	30	Tennessee	15	28	1.2	4	11
Iowa	17	21	1.4	1	16	Texas	32	11	2.6	4	28
Kansas	11	37	0.9	2	9	Utah	16	24	1.3	4	12
Kentucky	16	26	1.3	1	15	Vermont	9	40	0.7	-	9
Louisiana	15	27	1.2	1	14	Virginia	27	15	2.2	9	18
Maine	12	33	1.0	3	9	Washington	47	7	3.8	14	33
Maryland	18	19	1.4	8	10	West Virginia	7	44	0.6	2	5
Massachusetts	31	12	2.5	8	23	Wisconsin	40	9	3.2	-	40
Michigan	71	5	5.7	1	70	Wyoming	3	46	0.2	1	2
Minnesota	27	14	2.2	2	25	Guam	2	(X)	(X)	1	1
Mississippi	3	47	0.2	-	3	Puerto Rico	9	(X)	(X)	-	9
Missouri	22	18	1.8	3	19	Virgin Islands	2	(X)	(X)	-	2

- Represents zero. X Not applicable.

Source: U.S. Environmental Protection Agency, Supplementary Materials: National Priorities List, Proposed Rule, December 1998.

No. 415. Environmental Industry—Revenues and Employment, by Industry Segment: 1980 to 1998

[59.0 represents \$59,000,000,000. Covers approximately 59,000 private and public companies engaged in environmental activities]

Industry segment	Revenue (bil. dol.)					Employment (1,000)				
	1980	1990	1995	1997	1998	1980	1990	1995	1997	1998
Industry total	59.0	150.3	179.5	186.1	191.5	462.5	1,174.3	1,327.0	1,348.0	(NA)
Analytical services ¹	0.4	1.5	1.2	1.1	1.1	6.0	20.2	14.1	12.7	(NA)
Wastewater treatment works ²	10.9	20.4	23.4	24.4	25.3	53.9	95.0	101.5	104.8	(NA)
Solid waste management ³	11.2	26.1	32.5	34.9	35.9	83.2	209.5	243.4	249.9	(NA)
Hazardous waste management ⁴	0.6	6.3	6.2	5.8	5.7	6.8	56.9	52.5	49.4	(NA)
Remediation/industrial services	2.4	11.1	11.1	11.2	11.4	6.9	107.2	98.1	96.0	(NA)
Consulting & engineering	1.7	12.5	15.5	15.3	15.2	20.5	144.2	180.2	174.4	(NA)
Water equipment & chemicals	6.9	13.5	16.5	18.2	19.1	62.4	97.9	110.2	117.0	(NA)
Instrument manufacturing	0.2	2.0	3.0	3.3	3.4	2.5	18.8	26.2	28.7	(NA)
Air pollution control equipment ⁵	3.3	13.1	14.8	15.7	16.2	28.3	82.7	107.2	111.2	(NA)
Waste management equipment ⁶	3.5	8.7	9.9	9.8	10.0	41.9	88.8	93.8	94.2	(NA)
Process & prevention technology	0.1	0.4	0.8	0.9	1.0	2.1	8.9	19.5	21.2	(NA)
Water utilities ⁷	11.9	19.8	25.3	27.6	28.5	76.9	104.7	118.2	121.3	(NA)
Resource recovery ⁸	4.4	13.1	16.9	15.3	15.9	48.7	118.4	136.0	141.2	(NA)
Environmental energy sources ⁹	1.5	1.8	2.4	2.7	2.9	22.4	21.1	26.1	26.4	(NA)

NA Not available. ¹ Covers environmental laboratory testing and services. ² Mostly revenues collected by municipal entities. ³ Covers such activities as collection, transportation, transfer stations, disposal, landfill ownership, and management for solid waste. ⁴ Transportation and disposal of hazardous, medical, and nuclear waste. ⁵ Includes stationary and mobile sources. ⁶ Includes vehicles, containers, liners, processing, and remediation equipment. ⁷ Revenues generated from the sale of water. ⁸ Revenues generated from the sale of recovered metals, paper, plastic, etc. ⁹ Includes solar, wind, geothermal, and conservation devices.

Source: Environmental Business International, Inc., San Diego, CA, *Environmental Business Journal*, monthly (copyright).

No. 416. Threatened and Endangered Wildlife and Plant Species—Number: 1999

[As of April. Endangered species: One in danger of becoming extinct throughout all or a significant part of its natural range. Threatened species: One likely to become endangered in the foreseeable future]

Item	Mammals	Birds	Reptiles	Amphibians	Fishes	Snails	Clams	Crustaceans	Insects	Arachnids	Plants
Total listings	336	274	114	26	121	29	71	20	41	5	706
Endangered species, total	312	253	79	17	80	19	63	17	32	5	569
United States	61	75	14	9	69	18	61	17	28	5	568
Foreign	251	178	65	8	11	1	2	-	4	-	1
Threatened species, total	24	21	35	9	41	10	8	3	9	-	137
United States	8	15	21	8	41	10	8	3	9	-	135
Foreign	16	6	14	1	-	-	-	-	-	-	2

- Represents zero. ¹ Species outside United States and outlying areas as determined by Fish and Wildlife Service.

Source: U.S. Fish and Wildlife Service, *Endangered Species Technical Bulletin*, quarterly.

No. 417. Tornadoes, Floods, Tropical Storms, and Lightning: 1987 to 1997

Item	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Tornadoes, number ¹	656	702	856	1,133	1,132	1,298	1,176	1,082	1,235	1,170	1,148
Tornado days	151	156	160	181	179	195	186	199	178	196	196
Lives lost, total	59	32	50	53	39	39	33	69	30	25	67
Most in a single tornado	30	5	21	29	17	12	7	22	6	5	27
Floods and flash floods:											
Lives lost	70	31	85	142	61	62	103	91	80	131	117
North Atlantic tropical storms and hurricanes ²	7	12	11	14	8	7	8	7	19	13	7
Number of hurricanes reaching U.S. mainland	1	1	3	-	1	1	1	-	2	2	1
Total direct deaths from tropical storms and hurricanes	3	550	84	123	17	28	273	1,175	121	138	4
Direct deaths on U.S. mainland	-	6	56	10	17	26	9	38	29	33	4
Property loss in U.S.	8	59	7,670	57	1,500	26,500	57	973	3,729	3,600	100
Lightning:											
Deaths	86	69	67	74	73	41	43	74	85	52	42
Injuries	364	311	322	252	432	292	295	577	510	309	306

- Represents zero. ¹ A violent, rotating column of air descending from a cumulonimbus cloud in the form of a tubular- or funnel-shaped cloud, usually characterized by movements along a narrow path and wind speeds from 100 to over 300 miles per hour. Also known as a "twister" or "waterspout." ² Source: National Hurricane Center, Coral Gables, FL, unpublished data. Tropical storms have maximum winds of 39 to 73 miles per hour; hurricanes have maximum winds of 74 miles per hour or higher.

Source: Except as noted, U.S. National Oceanic and Atmospheric Administration, *Storm Data*, monthly.

No. 418. Major U.S. Weather Disasters: 1980 to Early 1999

[1.3 represents \$1,300,000,000. Covers only weather related disasters costing \$1 billion or more]

Event	Description	Time period	Estimated cost	
			(bil. dol.)	Deaths
Arkansas-Tennessee tornadoes	Two outbreaks of tornadoes in 6-day period	January 1999	1.3	31
Texas flooding	Severe flooding in southeast Texas from two heavy rain events with 10-20 in. totals	Oct.-Nov. 1998	1.0	31
Hurricane Georges	Category 2 hurricane in Puerto Rico, Florida Keys, and Gulf coasts of LA, MS, AL, and FL	Sept. 1998	3-4	16
Hurricane Bonnie	Category 3 hurricane in eastern NC and VA	August 1998	1.0	2
Hurricane Southern drought/heat wave	Severe drought and heat wave from TX/OK eastward to the Carolinas	Summer 1998	6.0	200
Southeast severe weather	Tornadoes and flooding related to strong El Nino in the southeast	Winter/ spring 1998	1.0	Over 130
Northeast ice storm	Intense ice storm hits ME, NH, VT, and NY	January 1998	1.4	16
Northern plains flooding	Severe flooding in Dakotas and Minnesota due to heavy spring snowmelt	April-May 1997	2.0	11
MS and OH valleys flooding and tornadoes	Tornadoes and severe flooding hit the states of AR, MO, MS, TN, IL, IN, KY, OH, and WV	March 1997	1.0	67
West Coast flooding	Flooding from rains and snowmelt in CA, WA, OR, ID, NV, & MT	Dec. 1996- Jan. 1997	2-3	36
Hurricane Fran.	Category 3 hurricane in NC and VA	Sept. 1996	5.0	37
Southern Plains severe drought.	Drought in agricultural areas of TX & OK	Fall 1995- summer 1996	Over \$4	(NA)
Pacific Northwest severe flooding	Flooding from heavy rain & snowmelt in OR, WA, ID, and MT	Feb. 1996	1.0	9
Blizzard of '96 followed by flooding	Heavy snowstorm followed by severe flooding in Appalachians, Mid-Atlantic, and Northeast	Jan. 1996	3.0	187
Hurricane Opal	Category 3 hurricane in FL, AL, parts of GA, TN, & Carolinas	Oct. 1995	Over 3	27
Hurricane Marilyn.	Category 2 hurricane in Virgin Islands	Sept. 1995	2.1	13
TX/OK/LA/MS severe weather and flooding	Flooding, hail, & tornadoes across TX, OK, parts of LA, MS, Dallas & New Orleans hardest hit	May 1995	5-6	32
California flooding.	Flooding from frequent winter storms across much of CA	Jan.-Mar. 1995	3.0	27
Western fire season	Severe fire season in western states due to dry weather	Summer-fall 1994	1.0	(NA)
Texas flooding	Flooding from torrential rain & thunderstorms across southeast TX	Oct. 1994	1.0	19
Tropical Storm Alberto	Flooding due to 10 to 25 inch rain across GA, AL, part of FL	July 1994	1.0	32
Southeast ice storm	Intense ice storm in pts of TX, OK, AR, LA, MS, AL, TN, GA, SC, NC, & VA	Feb. 1994	3.0	9
California wildfires	Out-of-control wildfires over southern CA	Fall 1993	1.0	4
Midwest flooding	Extreme flooding across central U.S.	Summer 1993	15-20	48
Drought/heat wave	Extreme drought/heatwave across southeastern U.S.	Summer 1993	1.0	(NA)
Storm/blizzard	"Storm of the Century" hits entire eastern seaboard	Mar. 1993	3-6	270
Nor'easter of 1992	Slow-moving storm batters northeast U.S. coast, New England hardest hit	Dec. 1992	1-2	19
Hurricane Iniki	Category 4 hurricane hit Hawaiian island of Kauai	Sept. 1992	1.8	7
Hurricane Andrew.	Category 4 hurricane hit FL & LA	Aug. 1992	27.0	58
Oakland firestorm.	Oakland, CA firestorm due to low humidity & high winds	Oct. 1991	1.5	25
Hurricane Bob	Category 2 hurricane—mainly coastal NC, Long Island, & New England	Aug. 1991	1.5	18
TX/OK/LA/AR flooding.	Torrential rains cause flooding along Trinity, Red, and Arkansas rivers	May 1990	1.0	
Hurricane Hugo	Category 4 hurricane hit Puerto Rico & Virgin Islands, devastated NC & SC	Sept. 1989	Over 9	86
Drought/heat wave	Drought/heatwave over central & eastern U.S.	Summer 1988	40.0	5,000- 10,000
Hurricane Juan	Category 1 hurricane, flooding most severe problem, hit LA and southeast U.S.	Oct.-Nov. 1985	1.5	63
Hurricane Elena	Category 3 hurricane across FL to LA	Aug.-Sept. 1985	1.3	4
Florida freeze	Severe freeze central/northern FL, damage to citrus industry	Jan. 1985	1.2	-
Florida freeze	Severe freeze central/northern FL, damage to citrus industry	Dec. 1983	2.0	-
Hurricane Alicia	Category 3 hurricane across TX	Aug. 1983	3.0	21
Drought/heat wave	Drought/heatwave over central & eastern U.S.	June-Sept. 1980	20.0	10,000

- Represents zero. NA Not available or not reported.

Source: U.S. National Oceanic and Atmospheric Administration, National Climatic Data Center. "Billion Dollar U.S. Weather Disaster, 1980-1999," and release date: April 7, 1999; <<http://www.ncdc.noaa.gov/ol/reports/billionz.html>>.

No. 419. Highest and Lowest Temperatures, by State Through 1997

State	Highest temperatures			Lowest temperatures		
	Station	Temper- ature (F)	Date	Station	Temper- ature (F)	Date
U.S.	Greenland Ranch, CA . . .	134	Jul. 10, 1913	Prospect Creek, AK . . .	-80	Jan. 23, 1971
AL	Centerville	112	Sep. 5, 1925	New Market	-27	Jan. 30, 1966
AK	Fort Yukon	100	Jun. 27, 1915	Prospect Creek	-80	Jan. 23, 1971
AZ	Lake Havasu City	128	Jun. 29, 1994	Hawley Lake	-40	Jan. 7, 1971
AR	Ozark	120	Aug. 10, 1936	Pond	-29	Feb. 13, 1905
CA	Greenland Ranch	134	Jul. 10, 1913	Boca	-45	Jan. 20, 1937
CO	Bennett	118	Jul. 11, 1888	Maybell	-61	Feb. 1, 1985
CT	Danbury	106	Jul. 15, 1995	Falls Village	-32	Feb. 16, 1943
DE	Millsboro	110	Jul. 21, 1930	Millsboro	-17	Jan. 17, 1893
FL	Monticello	109	Jun. 29, 1931	Tallahassee	-2	Feb. 13, 1899
GA	Louisville	112	Jul. 24, 1952	CCC Camp F-16	-17	Jan. 27, 1940
HI	Pahala	100	Apr. 27, 1931	Mauna Kea Obs. 111.2	12	May 17, 1979
ID	Orofino	118	Jul. 28, 1934	Island Park Dam	-60	Jan. 18, 1943
IL	East St. Louis	117	Jul. 14, 1954	Elizabeth	-35	¹ Feb. 3, 1996
IN	Collegeville	116	Jul. 14, 1936	New Whiteland	-36	Jan. 19, 1994
IA	Keokuk	118	Jul. 20, 1934	Elkader	-47	¹ Feb. 3, 1996
KS	Alton (near)	121	¹ Jul. 24, 1936	Lebanon	-40	Feb. 13, 1905
KY	Greensburg	114	Jul. 28, 1930	Shelbyville	-37	Jan. 19, 1994
LA	Plain Dealing	114	Aug. 10, 1936	Minden	-16	Feb. 13, 1899
ME	North Bridgton	105	¹ Jul. 10, 1911	Van Buren	-48	Jan. 19, 1925
MD	Cumberland & Frederick	109	¹ Jul. 10, 1936	Oakland	-40	Jan. 13, 1912
MA	New Bedford & Chester	107	Aug. 2, 1975	Chester	-35	Jan. 12, 1981
MI	Mio	112	Jul. 13, 1936	Vanderbilt	-51	Feb. 9, 1934
MN	Moorhead	114	¹ Jul. 6, 1936	Tower	-60	Feb. 2, 1996
MS	Holly Springs	115	Jul. 29, 1930	Corinth	-19	Jan. 30, 1966
MO	Warsaw & Union	118	¹ Jul. 14, 1954	Warsaw	-40	Feb. 13, 1905
MT	Medicine Lake	117	Jul. 5, 1937	Rogers Pass	-70	Jan. 20, 1954
NE	Minden	118	¹ Jul. 24, 1936	Camp Clarke	-47	Feb. 12, 1899
NV	Laughlin	125	Jun. 29, 1994	San Jacinto	-50	Jan. 8, 1937
NH	Nashua	106	Jul. 4, 1911	Pittsburg	-46	Jan. 28, 1925
NJ	Rumyon	110	Jul. 10, 1936	River Vale	-34	Jan. 5, 1904
NM	Waste Isolat Pilot Plt	122	Jun. 27, 1994	Gavilan	-50	Feb. 1, 1951
NY	Troy	108	Jul. 22, 1926	Old Forge	-52	¹ Feb. 18, 1979
NC	Fayetteville	110	Aug. 21, 1983	Mt. Mitchell	-34	Jan. 21, 1985
ND	Steele	121	¹ Jul. 6, 1936	Parshall	-60	Feb. 15, 1936
OH	Galipolis (near)	113	¹ Jul. 21, 1934	Milligan	-39	Feb. 10, 1899
OK	Tipton	120	¹ Jun. 27, 1994	Watts	-27	¹ Jan. 18, 1930
OR	Pendleton	119	Aug. 10, 1898	Seneca	-54	¹ Feb. 10, 1933
PA	Phoenixville	111	¹ Jul. 10, 1936	Smethport	-42	Jan. 5, 1904
RI	Providence	104	Aug. 2, 1975	Kingston	-23	Jan. 11, 1942
SC	Camden	111	¹ Jun. 28, 1954	Caesars Head	-19	Jan. 21, 1985
SD	Gannvalley	120	Jul. 5, 1936	McIntosh	-58	Feb. 17, 1936
TN	Perryville	113	¹ Aug. 9, 1930	Mountain City	-32	Dec. 30, 1917
TX	Seymour	120	Aug. 12, 1936	Seminole	-23	¹ Feb. 8, 1933
UT	Saint George	117	Jul. 5, 1985	Peter's Sink	-69	Feb. 1, 1985
VT	Vernon	105	Jul. 4, 1911	Bloomfield	-50	Dec. 30, 1933
VA	Balcony Falls	110	Jul. 15, 1954	Mtn. Lake Bio. Stn.	-30	Jan. 22, 1985
WA	Ice Harbor Dam	118	¹ Aug. 5, 1961	Mazama & Winthrop	-48	Dec. 30, 1968
WV	Martinsburg	112	¹ Jul. 10, 1936	Lewisburg	-37	Dec. 30, 1917
WI	Wisconsin Dells	114	Jul. 13, 1936	Danbury	-54	Jan. 24, 1922
WY	Basin	114	Jul. 12, 1900	Riverside R.S.	-66	Feb. 9, 1933

¹ Also on earlier dates at the same or other places.

Source: U.S. National Oceanic and Atmospheric Administration, <<http://www.ncdc.noaa.gov/ol/climate/>> (accessed May 11, 1999).

**No. 420. Normal Daily Mean, Maximum, and Minimum Temperatures—
Selected Cities**

[In Fahrenheit degrees. Airport data except as noted. Based on standard 30-year period, 1961 through 1990]

State	Station	Daily mean temperature			Daily maximum temperature			Daily minimum temperature		
		Jan.	July	Annual average	Jan.	July	Annual average	Jan.	July	Annual average
AL	Mobile	49.9	82.3	67.5	59.7	91.3	77.4	40.0	73.2	57.4
AK	Juneau	24.2	56.0	40.6	29.4	63.9	46.9	19.0	48.1	34.1
AZ	Phoenix	53.6	93.5	72.6	65.9	105.9	85.9	41.2	81.0	59.3
AR	Little Rock	39.1	81.9	61.8	49.0	92.4	72.5	29.1	71.5	51.0
CA	Los Angeles	56.8	69.1	63.0	65.7	75.3	70.4	47.8	62.8	55.5
	Sacramento	45.2	75.7	60.8	52.7	93.2	73.5	37.7	58.1	48.1
	San Diego	57.4	71.0	64.2	65.9	76.2	70.8	48.9	65.7	57.6
	San Francisco	48.7	62.7	57.1	55.6	71.6	65.2	41.8	53.9	49.0
CO	Denver	29.7	73.5	50.3	43.2	88.2	64.2	16.1	58.6	36.2
CT	Hartford	24.6	73.7	49.9	33.2	85.0	60.2	15.8	62.2	39.5
DE	Wilmington	30.6	76.4	54.2	38.7	85.6	63.6	22.4	67.1	44.8
DC	Washington	34.6	80.0	58.0	42.3	88.5	66.9	26.8	71.4	49.2
FL	Jacksonville	52.4	81.6	68.0	64.2	91.4	78.9	40.5	71.9	57.1
	Miami	67.2	82.6	75.9	75.2	89.0	82.8	59.2	76.2	69.0
GA	Atlanta	41.0	78.8	61.3	50.4	88.0	71.2	31.5	69.5	51.3
HI	Honolulu	72.9	80.5	77.2	80.1	87.5	84.4	65.6	73.5	70.0
ID	Boise	29.0	74.0	50.9	36.4	90.2	62.8	21.6	57.7	39.1
IL	Chicago	21.0	73.2	49.0	29.0	83.7	58.6	12.9	62.6	39.5
	Peoria	21.6	75.5	50.7	29.9	85.7	60.4	13.2	65.4	41.0
IN	Indianapolis	25.5	75.4	52.3	33.7	85.5	62.1	17.2	65.2	42.4
IA	Des Moines	19.4	76.6	49.9	28.1	86.7	59.8	10.7	66.5	40.0
KS	Wichita	29.5	81.4	56.2	39.8	92.8	67.4	19.2	69.9	45.0
KY	Louisville	31.7	77.2	56.1	40.3	87.0	66.0	23.2	67.3	46.0
LA	New Orleans	51.3	81.9	68.1	60.8	90.6	77.6	41.8	73.1	58.5
ME	Portland	20.8	68.6	45.4	30.3	78.8	54.9	11.4	58.3	35.8
MD	Baltimore	31.8	77.0	55.1	40.2	87.2	65.0	23.4	66.8	45.2
MA	Boston	28.6	73.5	51.3	35.7	81.8	59.0	21.6	65.1	43.6
MI	Detroit	22.9	72.3	48.6	30.3	83.3	58.1	15.6	61.3	39.0
	Sault Ste. Marie	12.9	63.8	39.7	21.1	76.3	49.6	4.6	51.3	29.8
MN	Duluth	7.0	66.1	38.5	16.2	77.1	47.9	-2.2	55.1	29.0
	Minneapolis-St. Paul	11.8	73.6	44.9	20.7	84.0	54.3	2.8	63.1	35.3
MS	Jackson	44.1	81.5	64.2	55.6	92.4	76.4	32.7	70.5	52.0
MO	Kansas City	25.7	78.5	53.6	34.7	88.7	63.6	16.7	68.2	43.7
	St. Louis	29.3	79.8	56.1	37.7	89.3	65.4	20.8	70.4	46.7
MT	Great Falls	21.2	68.2	44.8	30.6	83.3	56.4	11.6	53.2	33.1
NE	Omaha	21.1	76.9	50.6	31.3	87.9	61.5	10.9	65.9	39.5
NV	Reno	32.9	71.6	50.8	45.1	91.9	66.8	20.7	51.3	34.7
NH	Concord	18.6	69.5	45.1	29.8	82.4	57.0	7.4	56.5	33.1
NJ	Atlantic City	30.9	74.7	53.0	40.4	84.5	63.2	21.4	64.8	42.8
NM	Albuquerque	34.2	78.5	56.2	46.8	92.5	70.1	21.7	64.4	42.2
NY	Albany	20.6	71.8	47.4	30.2	84.0	58.1	11.0	59.6	36.6
	Buffalo	23.6	71.1	47.7	30.2	80.2	55.8	17.0	61.9	39.5
	New York ⁱ	31.5	76.8	54.7	37.6	85.2	62.3	25.3	68.4	47.1
NC	Charlotte	39.3	79.3	60.1	49.0	88.9	70.4	29.6	69.6	49.7
	Raleigh	38.9	78.1	59.3	48.9	88.0	70.1	28.8	68.1	48.4
ND	Bismarck	9.2	70.4	41.6	20.2	84.4	53.8	-1.7	56.4	29.4
OH	Cincinnati	28.1	75.1	53.2	36.6	85.5	63.2	19.5	64.8	43.2
	Cleveland	24.8	71.9	49.6	31.9	82.4	58.7	17.6	61.4	40.5
OK	Columbus	26.4	73.2	51.4	34.1	83.7	61.2	18.5	62.7	41.6
OR	Oklahoma City	35.9	82.0	60.0	46.7	93.4	71.1	25.2	70.6	48.8
PA	Portland	39.6	68.2	53.6	45.4	79.9	62.6	33.7	56.5	44.5
	Philadelphia	30.4	76.7	54.3	37.9	86.1	63.4	22.8	67.2	45.1
	Pittsburgh	26.1	72.1	50.3	33.7	82.6	59.9	18.5	61.6	40.7
RI	Providence	27.9	72.7	50.4	36.6	82.1	59.8	19.1	63.2	41.0
SC	Columbia	43.8	80.8	63.1	55.3	91.6	75.1	32.1	70.0	50.9
SD	Sioux Falls	13.8	74.3	45.5	24.3	86.3	56.8	3.3	62.3	34.2
TN	Memphis	39.7	82.6	62.3	48.5	92.3	72.1	30.9	72.9	52.4
	Nashville	36.2	79.3	59.1	45.9	89.5	69.8	26.5	68.9	48.4
TX	Dallas-Fort Worth	43.4	85.3	65.4	54.1	96.5	76.3	32.7	74.1	54.6
	El Paso	42.8	82.3	63.2	56.1	96.1	77.5	29.4	68.4	49.0
	Houston	50.4	82.6	67.9	61.0	92.7	78.6	39.7	72.4	57.3
UT	Salt Lake City	27.9	77.9	52.0	36.4	92.2	63.6	19.3	63.7	40.3
VT	Burlington	16.3	70.5	44.6	25.1	81.2	54.0	7.5	59.7	35.2
VA	Norfolk	39.1	78.2	59.2	47.3	86.4	67.8	30.9	70.0	50.6
	Richmond	35.7	78.0	57.7	45.7	88.4	68.8	25.7	67.5	46.6
WA	Seattle-Tacoma	40.1	65.2	52.0	45.0	75.2	59.4	35.2	55.2	44.6
	Spokane	27.1	68.8	47.3	33.2	83.1	57.5	20.8	54.4	36.9
WV	Charleston	32.1	75.1	55.0	41.2	85.7	65.8	23.0	64.4	44.2
WI	Milwaukee	18.9	70.9	46.1	26.1	79.9	54.3	11.6	62.0	37.9
WY	Cheyenne	26.5	68.4	45.6	37.7	82.2	58.0	15.2	54.6	33.2
PR	San Juan	77.0	82.6	80.2	83.2	88.5	86.4	70.8	76.8	74.0

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Climatology of the United States*, No. 81.

No. 421. Highest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 1997]

State	Station	Length of record (yr.)	Temperature of Record (°F)												
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	56	84	82	90	94	100	102	104	102	99	93	87	81	104
AK	Juneau	53	57	57	59	72	82	86	90	83	73	61	56	54	90
AZ	Phoenix	60	88	92	100	105	113	122	121	116	118	107	93	88	122
AR	Little Rock	56	83	85	91	95	98	105	112	108	106	97	86	80	112
CA	Los Angeles	62	88	92	95	102	97	104	97	98	110	106	101	94	110
	Sacramento	47	70	76	88	95	105	115	114	110	108	101	87	72	115
	San Diego	57	88	90	93	98	96	101	95	98	111	107	97	88	111
CO	San Francisco	70	72	78	85	92	97	106	105	100	103	99	85	75	106
CT	Denver	61	73	76	84	90	96	104	104	101	97	89	79	75	104
DE	Hartford	43	65	73	87	96	99	100	102	101	99	91	81	74	102
DC	Wilmington	50	75	78	86	94	96	100	102	101	100	91	85	74	102
	Washington	56	79	82	89	95	99	101	104	105	101	94	86	75	105
FL	Jacksonville	56	85	88	91	95	100	103	105	102	100	96	88	84	105
	Miami	55	88	89	92	96	96	98	98	98	97	95	89	87	98
GA	Atlanta	49	79	80	89	93	95	101	105	102	98	95	84	79	105
HI	Honolulu	28	88	88	88	91	93	92	94	93	95	94	93	89	95
ID	Boise	58	63	71	81	92	98	109	111	110	102	94	74	65	111
IL	Chicago	39	65	71	88	91	93	104	104	101	99	91	78	71	104
	Peoria	58	70	72	86	92	93	105	103	103	100	90	81	71	105
IN	Indianapolis	58	71	74	85	89	93	102	104	102	100	90	81	74	104
IA	Des Moines	58	65	73	91	93	98	103	105	108	101	95	76	69	108
KS	Wichita	45	75	87	89	96	100	110	113	110	107	95	85	83	113
KY	Louisville	50	77	77	86	91	95	102	105	101	104	92	84	76	105
LA	New Orleans	51	83	85	89	92	96	100	101	102	101	92	87	84	102
ME	Portland	57	64	64	86	85	94	98	99	103	95	88	74	69	103
MD	Baltimore	47	75	79	87	94	98	101	104	105	100	92	83	77	105
MA	Boston	46	66	70	81	94	95	100	102	102	100	90	79	73	102
MI	Detroit	39	62	65	81	89	93	104	102	100	98	91	77	68	104
MN	Sault Ste. Marie	57	45	47	75	85	89	93	97	98	95	80	67	60	98
	Duluth	56	52	55	78	88	90	94	97	97	95	86	70	55	97
	Minneapolis-St. Paul	59	58	60	83	95	96	102	105	102	98	90	75	63	105
MS	Jackson	34	82	85	89	94	99	105	106	102	104	95	88	84	106
MO	Kansas City	25	69	77	86	93	92	105	107	109	102	92	82	70	109
	St. Louis	40	76	85	89	93	94	102	107	107	104	94	85	76	107
MT	Great Falls	60	67	70	78	89	93	101	105	106	98	91	76	69	106
NE	Omaha	61	69	78	89	97	99	105	114	110	104	96	80	72	114
NV	Reno	56	70	75	83	89	96	103	104	105	101	91	77	70	105
NH	Concord	56	68	67	85	95	97	98	102	101	98	90	80	68	102
NJ	Atlantic City	54	78	75	87	94	99	106	104	102	99	90	84	75	106
NM	Albuquerque	58	69	76	85	89	98	107	105	101	100	91	77	72	107
NY	Albany	51	65	68	86	92	94	99	100	99	99	89	82	71	100
	Buffalo	54	72	70	81	94	90	96	97	99	98	87	80	74	99
	New York ¹	129	72	75	86	96	99	101	106	104	102	94	84	72	106
NC	Charlotte	58	78	81	90	93	100	103	103	103	104	98	85	77	104
	Raleigh	53	79	84	92	95	97	104	105	105	104	98	88	79	105
ND	Bismarck	58	62	69	81	93	98	107	109	109	105	95	75	65	109
OH	Cincinnati	36	69	73	84	89	93	102	103	102	98	88	81	75	103
	Cleveland	56	73	70	83	88	92	104	103	102	101	90	82	77	104
	Columbus	58	74	73	85	89	94	102	100	101	100	90	80	76	102
OK	Oklahoma City	44	80	92	93	100	104	105	110	110	102	96	87	86	110
OR	Portland	57	63	71	80	87	100	100	107	107	105	92	73	65	107
PA	Philadelphia	56	74	74	87	94	97	100	104	101	100	96	81	72	104
	Pittsburgh	45	69	73	82	89	91	98	103	100	97	87	82	74	103
RI	Providence	44	69	72	80	98	95	97	102	104	100	86	78	70	104
SC	Columbia	50	84	84	91	94	101	107	107	107	101	101	90	83	107
SD	Sioux Falls	52	66	70	87	94	100	110	108	108	104	94	76	61	110
TN	Memphis	56	78	81	85	94	99	104	108	105	103	95	85	81	108
	Nashville	58	78	84	86	91	97	106	107	104	105	94	84	79	107
TX	Dallas-Fort Worth	44	88	95	96	95	103	113	110	108	106	102	89	88	113
	El Paso	58	80	83	89	98	104	114	112	108	104	96	87	80	114
	Houston	28	84	91	91	95	99	103	104	107	102	96	89	85	107
UT	Salt Lake City	69	62	69	78	86	95	104	107	106	100	89	75	69	107
VT	Burlington	54	66	62	84	91	93	100	100	101	94	85	75	65	101
VA	Norfolk	49	78	82	88	97	100	101	103	104	99	95	86	80	104
	Richmond	68	80	83	93	96	100	104	105	102	103	99	86	80	105
WA	Seattle-Tacoma	53	64	70	75	85	93	96	100	99	98	98	74	64	100
	Spokane	50	59	63	71	90	96	101	103	108	102	98	86	67	108
WV	Charleston	50	79	78	89	94	93	98	104	101	102	92	85	80	104
WI	Milwaukee	57	62	65	82	91	93	101	103	103	103	98	89	77	103
WY	Cheyenne	62	66	71	74	83	90	100	100	96	95	83	73	69	100
PR	San Juan	43	92	96	96	97	96	97	95	97	97	98	96	94	98

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, Comparative Climatic Data, annual.

No. 422. Lowest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 1997]

State	Station	Length of record (yr.)	Lowest Temperature of Record (°F)												Annual
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
AL	Mobile	56	3	11	21	32	43	49	60	59	42	30	22	8	3
AK	Juneau	53	-22	-22	-15	6	25	31	36	27	23	11	-5	-21	-22
AZ	Phoenix	60	17	22	25	32	40	50	61	60	47	34	25	22	17
AR	Little Rock	56	-4	-5	11	28	40	46	54	52	37	29	17	-1	-5
CA	Los Angeles	62	23	32	34	39	43	48	49	51	47	41	34	32	23
	Sacramento	47	23	23	26	32	36	41	48	49	43	36	26	18	18
	San Diego	57	29	36	39	41	48	51	55	57	51	43	38	34	29
	San Francisco	70	24	25	30	31	36	41	43	42	38	34	25	20	20
CO	Denver	61	-25	-30	-11	-2	22	30	43	41	17	3	-8	-25	-30
CT	Hartford	43	-26	-21	-6	9	28	37	44	36	30	17	1	-14	-26
DE	Wilmington	50	-14	-6	2	18	30	41	48	43	36	24	14	-7	-14
DC	Washington	56	-5	4	11	24	34	47	54	49	39	29	16	1	-5
FL	Jacksonville	56	7	19	23	34	45	47	61	63	48	36	21	11	7
	Miami	55	30	32	32	46	53	60	69	68	68	51	39	30	30
GA	Atlanta	49	-8	5	10	26	37	46	53	55	36	28	3	-	-8
HI	Honolulu	28	53	53	55	57	60	65	66	67	66	61	57	54	53
ID	Boise	58	-17	-15	6	19	22	31	35	34	23	11	-3	-25	-25
IL	Chicago	39	-27	-19	-8	7	24	36	40	41	28	17	1	-25	-27
	Peoria	58	-25	-19	-10	14	25	39	47	41	26	19	-2	-23	-25
IN	Indianapolis	58	-27	-21	-7	16	28	37	44	41	28	17	-2	-23	-27
IA	Des Moines	58	-24	-26	-22	9	30	38	47	40	26	14	-4	-22	-26
KS	Wichita	45	-12	-21	-2	15	31	43	51	48	31	18	1	-16	-21
KY	Louisville	50	-22	-19	-1	22	31	42	50	46	33	23	-1	-15	-22
LA	New Orleans	51	14	16	25	32	41	50	60	60	42	35	24	11	11
ME	Portland	57	-26	-39	-21	8	23	33	40	33	23	15	3	-21	-39
MD	Baltimore	47	-7	-3	6	20	32	40	50	45	35	25	13	-	-7
MA	Boston	46	-12	-4	6	16	34	45	50	47	38	28	15	-7	-12
MI	Detroit	39	-21	-15	-4	10	25	36	41	38	29	17	9	-10	-21
MN	Sault Ste. Marie	57	-36	-35	-24	-2	18	26	36	29	25	16	-10	-31	-36
	Duluth	56	-39	-39	-29	-5	17	27	35	32	22	8	-23	-34	-39
	Minneapolis-St. Paul	59	-34	-32	-32	2	18	34	43	39	26	13	-17	-29	-34
MS	Jackson	34	2	10	15	27	38	47	51	55	35	26	17	4	2
MO	Kansas City	25	-17	-19	-10	12	30	42	51	43	31	17	1	-23	-23
	St. Louis	52	-13	-17	-3	18	30	42	44	44	31	18	4	-16	-17
MT	Great Falls	60	-37	-35	-29	-6	15	31	40	30	20	-11	-25	-43	-43
NE	Omaha	61	-23	-21	-16	5	27	38	44	43	25	13	-9	-23	-23
NV	Reno	56	-16	-16	-2	13	18	25	33	24	20	8	1	-16	-16
NH	Concord	56	-33	-37	-16	8	21	30	35	29	21	10	-5	-22	-37
NJ	Atlantic City	54	-10	-11	5	12	25	37	42	40	32	20	10	-7	-11
NM	Albuquerque	58	-17	-5	8	19	28	40	52	50	37	21	-7	-17	-17
NY	Albany	51	-28	-21	-21	10	26	36	40	34	24	16	5	-22	-28
	Buffalo	54	-16	-20	-7	12	26	35	43	38	32	20	9	-10	-20
	New York 1	129	-6	-5	3	12	32	44	52	50	39	28	5	-13	-15
NC	Charlotte	58	-5	-5	4	24	32	45	53	53	39	24	11	2	-5
	Raleigh	53	-9	-11	23	31	38	48	46	46	37	19	11	4	-9
ND	Bismarck	58	-44	-43	-31	-12	15	30	35	33	11	-10	-30	-43	-44
OH	Cincinnati	36	-25	-11	-11	15	27	39	47	43	31	16	1	-20	-25
	Cleveland	56	-20	-15	-5	10	25	31	41	38	32	19	3	-15	-20
	Columbus	58	-22	-13	-6	14	25	35	43	39	31	20	5	-17	-22
OK	Oklahoma City	44	-4	-3	3	20	37	47	53	51	36	16	11	-8	-8
OR	Portland	57	-2	-3	19	29	29	39	43	44	34	26	13	6	-3
PA	Philadelphia	56	-7	-4	7	19	28	44	51	44	35	25	15	1	-7
	Pittsburgh	45	-22	-12	-1	14	26	34	42	39	31	16	-1	-12	-22
RI	Providence	44	-13	-7	1	14	29	41	48	40	33	20	6	-10	-13
SC	Columbia	50	-1	5	4	26	34	44	54	53	40	23	12	4	-1
SD	Sioux Falls	52	-36	-31	-23	5	17	33	38	34	22	9	-17	-28	-36
TN	Memphis	56	-4	-11	12	29	38	48	52	48	36	25	9	-13	-13
	Nashville	58	-17	-13	2	23	34	42	51	47	36	26	-1	-10	-17
TX	Dallas-Fort Worth	44	4	7	15	29	41	51	59	56	43	29	20	-1	-1
	El Paso	58	-8	8	14	23	31	46	57	56	41	25	1	5	-8
	Houston	28	12	20	22	31	44	52	62	60	48	29	19	7	7
UT	Salt Lake City	69	-22	-30	-2	14	25	35	40	37	27	16	-14	-21	-30
VT	Burlington	54	-30	-30	-20	2	24	33	39	35	25	15	-2	-26	-30
VA	Norfolk	49	-3	8	18	28	36	45	54	49	45	27	20	7	-3
	Richmond	68	-12	-10	11	23	31	40	51	46	35	21	10	-1	-12
WA	Seattle-Tacoma	53	-1	11	29	28	38	43	44	35	28	6	6	-6	-
	Spokane	50	-22	-24	-7	17	24	33	37	35	24	10	-21	-25	-25
WV	Charleston	50	-16	-12	-	19	26	33	46	41	34	17	6	-12	-16
WI	Milwaukee	57	-26	-26	-10	12	21	33	40	44	28	18	-5	-20	-26
WY	Cheyenne	62	-29	-34	-21	-8	16	25	38	36	8	-1	-16	-28	-34
PR	San Juan	43	61	62	60	64	66	69	69	70	69	67	66	63	60

- Represents zero. ¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, Comparative Climatic Data, annual.

No. 423. Normal Monthly and Annual Precipitation—Selected Cities

[In inches. Airport data, except as noted. Based on standard 30-year period, 1961 through 1990]

State	Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	
AL	Mobile	4.76	5.46	6.41	4.48	5.74	5.04	6.85	6.96	5.91	2.94	4.10	5.31	63.96	
AK	Juneau	4.54	3.75	3.28	2.77	3.42	3.15	4.16	5.32	6.73	7.84	4.91	4.44	54.31	
AZ	Phoenix	0.67	0.68	0.88	0.22	0.12	0.13	0.83	0.96	0.86	0.65	0.66	1.00	7.66	
AR	Little Rock	3.42	3.61	4.91	5.49	5.17	3.57	3.60	3.26	4.05	3.75	5.20	4.83	50.86	
CA	Los Angeles	2.40	2.51	1.98	0.72	0.14	0.03	0.01	0.15	0.31	0.34	1.76	1.66	12.01	
	Sacramento	3.73	2.87	2.57	1.16	0.27	0.12	0.05	0.07	0.37	1.08	2.72	2.51	17.52	
	San Diego	1.80	1.53	1.77	0.79	0.19	0.07	0.02	0.10	0.24	0.37	1.45	1.57	9.90	
	San Francisco	4.35	3.17	3.06	1.37	0.19	0.11	0.03	0.05	0.20	1.22	2.86	3.09	19.70	
CO	Denver	0.50	0.57	1.28	1.71	2.40	1.79	1.91	1.51	1.24	0.98	0.87	0.64	15.40	
CT	Hartford	3.41	3.23	3.63	3.85	4.12	3.75	3.19	3.65	3.79	3.57	4.04	3.91	44.14	
DE	Wilmington	3.03	2.91	3.43	3.39	3.84	3.55	4.23	3.40	3.43	2.88	3.27	3.48	40.84	
DC	Washington	2.72	2.71	3.17	2.71	3.66	3.38	3.80	3.91	3.31	3.02	3.12	3.12	38.63	
FL	Jacksonville	3.31	3.93	3.68	2.77	3.55	5.69	5.60	7.93	7.05	2.90	2.19	2.72	51.32	
	Miami	2.01	2.08	2.39	2.85	6.21	9.33	5.70	7.58	7.63	5.64	2.66	1.83	55.91	
GA	Atlanta	4.75	4.81	5.77	4.26	4.29	3.56	5.01	3.66	3.42	3.05	3.86	4.33	50.77	
HI	Honolulu	3.55	2.21	2.20	1.54	1.13	0.50	0.59	0.44	0.78	2.28	3.00	3.80	22.02	
ID	Boise	1.45	1.07	1.29	1.24	1.08	0.81	0.35	0.43	0.80	0.75	1.48	1.36	12.11	
IL	Chicago	1.53	1.36	2.69	3.64	3.32	3.78	3.66	4.22	3.82	2.41	2.92	2.47	35.82	
	Peoria	1.51	1.42	2.91	3.77	3.70	3.99	4.20	3.10	3.87	2.65	2.69	2.44	36.25	
IN	Indianapolis	2.32	2.46	3.79	3.70	4.00	3.49	4.47	3.64	2.87	2.63	3.23	3.34	39.94	
IA	Des Moines	0.96	1.11	2.33	3.36	3.66	4.46	3.78	4.20	3.53	2.62	1.79	1.32	33.12	
KS	Wichita	0.79	0.96	2.43	2.38	3.81	4.31	3.13	3.02	3.49	2.22	1.59	1.20	29.33	
KY	Louisville	2.86	3.30	4.66	4.23	4.62	3.46	4.51	3.54	3.16	2.71	3.70	3.64	44.39	
LA	New Orleans	5.05	6.01	4.90	4.50	4.56	5.84	6.12	6.17	5.51	3.05	4.42	5.75	61.88	
ME	Portland	3.53	3.33	3.67	4.08	3.62	3.44	3.09	2.87	3.09	3.90	5.17	4.55	44.34	
MD	Baltimore	3.05	3.12	3.38	3.09	3.72	3.67	3.69	3.92	3.41	2.98	3.32	3.41	40.76	
MA	Boston	3.59	3.62	3.69	3.60	3.25	3.09	2.84	3.24	3.06	3.30	4.22	4.01	41.51	
MI	Detroit	1.76	1.74	2.55	2.95	2.92	3.61	3.18	3.43	2.89	2.10	2.67	2.82	32.62	
MN	Sault Ste. Marie	2.42	1.74	2.30	2.35	2.71	3.14	2.71	3.61	3.69	3.23	3.45	2.88	34.23	
MT	Duluth	1.22	0.80	1.91	2.25	3.03	3.82	3.61	3.99	2.49	1.80	1.24	30.00		
	Minneapolis-St. Paul	0.95	0.88	1.94	2.42	3.39	4.05	3.53	3.62	2.72	2.19	1.55	1.08	28.32	
MS	Jackson	5.24	4.70	5.82	5.57	5.05	3.18	4.51	3.77	3.55	3.26	4.81	5.91	55.37	
MO	Kansas City	1.09	1.10	2.51	3.12	5.04	4.72	4.38	4.01	4.86	3.29	1.92	1.58	37.62	
	St. Louis	1.81	2.12	3.58	3.50	3.97	3.72	3.85	2.85	3.12	2.68	3.28	3.03	37.51	
MT	Great Falls	0.91	0.57	1.10	1.41	2.52	2.39	1.24	1.54	1.24	0.78	0.66	0.85	15.21	
NE	Omaha	0.74	0.77	2.04	2.06	4.52	3.87	3.51	3.24	3.72	2.28	1.49	1.02	29.86	
NV	Reno	1.07	0.99	0.71	0.38	0.69	0.46	0.28	0.32	0.39	0.87	0.99	0.73		
NH	Concord	2.51	2.53	2.72	2.91	3.14	3.15	3.23	3.32	2.81	3.23	3.66	3.16	36.37	
NJ	Atlantic City	3.46	3.06	3.62	3.56	3.33	2.64	3.83	4.14	2.93	2.82	3.58	3.32	40.29	
NM	Albuquerque	0.44	0.46	0.54	0.52	0.50	0.59	1.37	1.64	1.00	0.89	0.43	0.50	8.88	
NY	Albany	2.36	2.27	2.93	2.99	3.41	3.62	3.18	3.47	2.95	2.83	3.23	2.93	36.17	
	Buffalo	2.70	2.31	2.68	2.87	3.14	3.65	3.08	4.17	3.49	3.09	3.83	3.67	38.58	
NC	New York ¹	3.42	3.27	4.08	4.20	4.42	3.67	4.35	4.01	3.89	3.56	4.47	3.91	47.25	
	Charlotte	3.71	3.84	4.43	2.68	3.82	3.39	3.92	3.73	3.50	3.36	3.23	3.48	43.09	
ND	Raleigh	3.48	3.69	3.77	2.59	3.92	3.68	4.01	4.02	3.19	2.86	2.98	3.24	41.43	
	Bismarck	0.45	0.43	0.77	1.67	2.18	2.72	2.14	1.72	1.49	0.90	0.49	0.51	15.47	
OH	Cincinnati	2.59	2.69	4.24	3.75	4.28	3.84	4.24	3.35	2.88	2.86	3.46	3.15	41.33	
	Cleveland	2.04	2.19	2.91	3.14	3.49	3.70	3.52	3.40	3.44	2.54	3.17	3.09	36.63	
OK	Columbus	2.18	2.24	3.27	3.21	3.93	4.04	4.31	4.31	3.72	2.96	2.15	3.22	2.86	38.09
OR	Oklahoma City	1.13	1.56	2.71	2.77	5.22	4.31	2.61	2.60	3.84	3.23	1.98	1.40	33.36	
PA	Portland	5.35	3.85	3.56	2.39	2.06	1.48	0.63	1.09	1.75	2.67	5.34	6.13	36.30	
	Philadelphia	3.21	2.79	3.46	3.62	3.75	3.74	4.28	3.80	3.42	2.62	3.34	3.38	41.41	
RI	Pittsburgh	2.54	2.39	3.41	3.15	3.59	3.71	3.75	3.21	2.97	2.36	2.85	2.92	36.85	
SC	Providence	3.88	3.61	4.05	4.11	3.76	3.33	3.18	3.63	3.48	3.69	4.43	4.38	45.53	
SD	Columbia	4.42	4.12	4.82	3.28	3.68	4.80	5.50	6.09	3.67	3.04	2.90	3.59	49.91	
TN	Sioux Falls	0.51	0.64	1.64	2.52	3.03	3.40	2.68	2.85	3.02	1.78	1.09	0.70	23.86	
	Memphis	3.73	4.35	4.51	5.46	4.98	3.57	3.79	3.43	3.53	3.01	5.10	5.74	52.10	
	Nashville	3.58	3.81	4.85	4.37	4.88	3.57	3.97	3.46	3.46	2.62	4.12	4.61	47.30	
TX	Dallas-Fort Worth	1.83	2.18	2.77	3.50	4.88	2.98	2.31	2.21	3.39	3.52	2.29	1.84	33.70	
	El Paso	0.40	0.41	0.29	0.20	0.25	0.67	1.54	1.58	1.70	0.76	0.44	0.57	8.81	
UT	Houston	3.29	2.96	2.92	3.21	5.24	4.96	3.60	3.49	4.89	4.27	3.79	3.45	46.07	
VT	Salt Lake City	1.11	1.23	1.91	2.12	1.80	0.93	0.81	0.86	1.28	1.44	1.29	1.40	16.18	
VA	Burlington	1.82	1.63	2.23	2.76	3.12	3.47	3.65	4.06	3.30	2.88	3.13	2.42	34.47	
	Norfolk	3.78	3.47	3.70	3.06	3.81	3.82	5.06	4.81	3.90	3.15	2.85	3.23	44.64	
WA	Seattle-Tacoma	5.38	3.99	3.54	2.33	1.70	1.50	0.76	1.14	1.88	3.23	5.83	5.91	37.19	
	Spokane	1.98	1.49	1.49	1.18	1.41	1.26	0.67	0.72	0.73	0.99	2.15	2.42	16.49	
WV	Charleston	2.91	3.04	3.63	3.31	3.94	3.59	4.99	4.01	3.24	2.89	3.59	3.39	42.53	
WI	Milwaukee	1.60	1.45	2.67	3.50	2.84	3.24	3.47	3.53	3.38	2.41	2.51	2.33	32.93	
WY	Cheyenne	0.40	0.39	1.03	1.37	2.39	2.08	2.09	1.69	1.27	0.74	0.53	0.42	14.40	
PR	San Juan	2.81	2.15	2.35	3.76	5.93	4.00	4.37	5.32	5.28	5.71	5.94	4.72	52.34	

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Climatology of the United States*, No. 81.

**No. 424. Average Number of Days With Precipitation of .01 Inch or More—
Selected Cities**

[Airport data, except as noted. For period of record through 1997]

State	Station	Length of record (yr.)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	56	11	10	10	8	9	11	16	14	10	6	8	10	122
AK	Juneau	53	18	17	18	17	17	16	17	18	20	24	20	21	222
AZ	Phoenix	58	4	4	4	2	1	1	4	5	3	3	3	4	36
AR	Little Rock	55	10	9	10	10	10	8	8	7	7	7	8	9	105
CA	Los Angeles	62	6	6	6	3	1	-	1	*	1	2	3	5	35
	Sacramento	58	10	9	9	5	3	1	*	*	1	3	7	9	57
	San Diego	57	7	6	7	4	2	1	*	-	1	2	4	6	42
	San Francisco	70	11	10	10	6	3	1	*	*	1	4	7	10	62
CO	Denver	61	6	6	9	9	11	9	9	9	6	5	6	5	89
CT	Hartford	43	11	10	12	11	12	11	10	10	10	9	9	11	128
DE	Wilmington	50	11	9	11	11	11	10	9	9	8	8	10	10	117
DC	Washington	56	10	9	11	10	11	9	10	9	8	7	9	9	113
FL	Jacksonville	56	8	8	8	6	8	13	15	15	13	9	7	8	117
	Miami	55	7	6	6	6	10	15	16	17	17	14	8	7	131
GA	Atlanta	63	12	10	11	9	9	10	12	10	8	7	9	10	115
HI	Honolulu	48	10	9	9	9	7	6	7	6	7	9	9	10	98
ID	Boise	58	12	10	10	8	8	6	2	3	4	6	10	11	90
IL	Chicago	39	11	9	12	13	11	10	10	9	9	9	11	11	126
	Peoria	58	9	8	11	12	11	10	9	8	9	8	9	10	114
IN	Indianapolis	58	12	10	13	12	12	10	10	9	8	8	10	12	126
IA	Des Moines	58	8	7	10	11	11	11	9	9	9	8	7	8	108
KS	Wichita	44	5	5	8	8	11	9	8	8	8	6	5	6	86
KY	Louisville	50	11	10	13	12	12	10	10	8	8	8	10	11	124
LA	New Orleans	49	10	9	9	7	8	11	14	13	10	6	7	10	115
ME	Portland	57	11	10	12	12	13	11	10	9	9	9	12	12	129
MD	Baltimore	47	11	9	11	11	11	9	9	9	8	8	9	10	114
MA	Boston	46	12	10	12	11	12	11	9	10	9	9	11	12	127
MI	Detroit	39	13	11	13	13	11	10	10	9	10	10	12	13	136
	Sault Ste. Marie	56	19	15	13	13	11	11	10	11	13	14	17	19	166
MN	Duluth	56	12	9	11	11	12	13	12	11	12	10	11	12	134
	Minneapolis-St. Paul	59	9	7	10	10	11	12	10	10	10	10	8	9	115
MS	Jackson	34	11	9	10	8	9	8	10	10	10	8	7	8	109
MO	Kansas City	25	7	7	10	11	12	10	9	9	8	8	7	8	105
	St. Louis	40	9	8	11	11	11	9	9	8	8	8	10	9	111
MT	Great Falls	60	9	8	9	9	12	12	8	8	7	6	7	8	101
NE	Omaha	61	6	7	9	10	12	10	9	9	8	6	6	7	99
NV	Reno	55	6	6	6	4	4	3	2	2	2	3	5	6	51
NH	Concord	56	11	10	11	12	12	11	10	10	9	9	11	11	126
NJ	Atlantic City	54	11	10	11	11	10	9	9	9	8	7	9	10	113
NM	Albuquerque	58	4	4	5	3	5	4	9	10	6	5	4	4	61
NY	Albany	51	12	11	12	12	13	11	10	10	10	11	12	12	135
	Buffalo	54	20	17	16	14	13	11	10	10	10	11	12	16	19
	New York	128	11	10	11	11	11	10	11	10	10	8	8	9	10
NC	Charlotte	58	10	10	11	9	10	10	11	10	7	7	8	9	112
	Raleigh	53	10	10	10	9	10	9	11	10	8	7	8	9	113
ND	Bismarck	58	8	7	8	8	10	11	9	8	7	6	7	8	96
OH	Cincinnati	50	12	11	13	13	12	11	10	9	8	8	11	12	130
	Cleveland	56	16	14	15	14	13	11	10	10	10	11	15	16	156
OK	Columbus	58	13	11	14	13	13	11	11	9	8	9	12	13	137
OR	Oklahoma City	58	5	6	7	8	10	9	6	7	7	6	5	6	83
PA	Portland	57	18	16	17	15	12	9	4	5	8	12	18	19	152
	Philadelphia	57	11	9	11	11	11	10	9	9	8	8	10	10	117
	Pittsburgh	45	16	14	16	14	13	12	11	10	10	10	10	13	153
RI	Providence	44	11	10	12	11	11	11	9	9	9	9	11	12	125
SC	Columbia	50	10	10	10	8	9	10	12	11	8	6	7	9	110
SD	Sioux Falls	52	6	7	9	9	11	11	10	9	8	6	7	6	98
TN	Memphis	47	10	9	11	10	9	9	9	7	7	6	9	10	107
	Nashville	56	11	10	12	11	11	10	10	9	8	7	10	11	119
TX	Dallas-Fort Worth	44	7	7	7	8	9	7	5	5	7	6	6	6	79
	El Paso	58	4	3	2	2	2	3	8	8	6	4	3	4	49
	Houston	28	11	9	9	7	9	9	9	9	9	8	8	9	106
UT	Salt Lake City	69	10	9	10	10	8	5	5	6	5	6	8	9	91
VT	Burlington	54	14	12	13	13	14	12	12	12	12	12	14	15	155
VA	Norfolk	49	11	10	11	10	10	9	11	10	10	8	8	9	116
	Richmond	60	10	9	11	9	11	9	11	9	8	7	8	9	113
WA	Seattle-Tacoma	53	18	15	17	14	11	9	5	6	9	13	18	19	155
	Spokane	50	14	11	11	9	9	8	5	5	6	8	13	15	113
WV	Charleston	50	15	14	15	14	13	12	13	11	9	9	12	14	152
WI	Milwaukee	57	11	9	12	12	12	11	10	9	9	9	11	11	125
WY	Cheyenne	62	6	6	9	10	12	11	11	10	8	6	6	6	101
PR	San Juan	42	17	13	13	13	16	15	19	18	17	17	19	19	196

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual.

No. 425. Snow and Ice Pellets—Selected Cities

[In inches. Airport data, except as noted. For period of record through 1997. T denotes trace]

State	Station	Length of record (yr.)	Length of record (yr.)												
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	55	0.1	0.1	0.1	T	T	-	T	-	-	-	T	0.1	0.4
AK	Juneau	53	25.9	19.4	15.2	3.3	-	T	-	-	T	1	12.5	22.3	99.6
AZ	Phoenix	60	T	-	T	T	-	-	-	-	T	-	-	T	
AR	Little Rock	55	2.4	1.5	0.5	T	T	-	-	-	-	T	0.2	0.6	5.2
CA	Los Angeles	62	T	T	T	-	-	-	-	-	-	-	T	T	
	Sacramento	49	T	T	T	-	T	-	-	-	-	-	T	T	
	San Diego	57	T	-	T	-	-	-	-	-	-	-	T	T	
	San Francisco	69	-	T	T	-	-	-	-	-	-	-	-	T	
CO	Denver	61	8.1	7.5	12.5	8.9	1.6	-	T	T	1.6	3.7	9.1	7.3	60.3
CT	Hartford	42	13	12	10	1.5	-	T	-	-	0.1	2.1	10.3	49.0	
DE	Wilmington	49	6.8	6.1	3.3	0.2	T	T	T	-	0.1	0.9	3.3	20.7	
DC	Washington	54	5.5	5.4	2.2	T	T	-	T	T	-	0.8	2.8	16.7	
FL	Jacksonville	56	T	-	-	T	-	T	T	-	-	-	-	T	
	Miami	55	-	-	-	-	-	-	-	-	-	-	-	-	
GA	Atlanta	62	0.9	0.5	0.4	T	-	-	-	-	-	T	-	0.2	2.0
HI	Honolulu	51	-	-	-	-	-	-	-	-	-	-	-	-	
ID	Boise	58	6.5	3.7	1.6	0.6	0.1	T	T	T	-	0.1	2.3	5.8	20.7
IL	Chicago	38	10.7	8.2	6.6	1.6	0.1	T	T	T	T	0.4	1.9	8.3	37.8
	Peoria	54	6.6	5.4	3.9	0.8	-	-	T	-	T	0.1	2	5.9	24.7
IN	Indianapolis	66	6.7	5.7	3.4	0.5	-	T	-	T	-	0.2	1.9	5.1	23.5
IA	Des Moines	57	8.3	7.2	6	1.8	-	T	T	-	T	0.3	3.1	6.7	33.4
KS	Wichita	44	4.4	4.1	2.5	0.2	T	T	T	T	T	-	1.3	3.2	15.7
KY	Louisville	50	5.4	4.3	3.3	0.1	T	T	T	-	0.1	1	2.1	16.3	
LA	New Orleans	50	-	0.1	T	T	-	-	-	-	-	T	0.1	0.2	
ME	Portland	57	19.6	17.2	13	3.1	0.2	-	-	-	T	0.2	3.3	14.7	71.3
MD	Baltimore	47	6.3	6.8	3.8	0.1	T	-	T	-	-	1	3.2	21.2	
MA	Boston	61	12.8	11.8	8	0.9	-	-	-	T	-	1.3	7.6	42.4	
MI	Detroit	39	10.4	9.2	6.9	1.7	T	-	-	T	0.2	2.9	9.9	41.2	
MN	Sault Ste. Marie	55	29	18.4	14.7	5.8	0.5	T	T	T	0.1	2.4	15.8	31.1	117.8
	Duluth	54	17.7	11.5	13.6	6.7	0.7	-	T	T	0.1	1.5	12.9	15.7	80.4
	Minneapolis-St. Paul	59	10	8.3	10.6	2.8	0.1	T	T	T	0.1	0.5	8	9.5	49.8
MS	Jackson	34	0.5	0.2	0.2	-	-	-	-	-	-	-	0.1	1.0	
MO	Kansas City	63	5.8	4.5	3.4	0.8	T	T	-	T	0.1	1.2	4.4	20.2	
	St. Louis	61	5.4	4.5	4	0.5	-	T	T	-	T	1.4	3.8	19.6	
MT	Great Falls	60	9.6	8.4	10.5	7.3	1.7	0.3	T	0.1	1.5	3.4	7.4	8.3	58.5
NE	Omaha	62	7.3	6.6	6.3	1	0.1	T	T	-	T	0.3	2.6	5.6	29.8
NV	Reno	54	5.8	5.2	4.3	1.2	0.8	-	-	-	-	0.3	2.4	4.3	24.3
NH	Concord	56	18	14.6	11.2	2.5	0.1	T	-	-	T	0.1	4.1	13.8	64.4
NJ	Atlantic City	51	5	5.3	2.5	0.3	T	T	-	-	T	0.4	2.2	15.7	
NM	Albuquerque	58	2.5	2.1	1.8	0.6	-	T	T	T	T	0.1	1.2	2.6	10.9
NY	Albany	51	16.5	14.3	11.5	2.6	0.1	T	T	-	T	0.2	4.3	14.8	64.3
	Buffalo	54	23.9	18.3	11.7	3.2	0.2	T	T	T	T	0.3	11.4	23	92.0
	New York 1	129	7.6	8.7	5.1	0.9	T	-	T	-	-	-	0.9	5.4	28.6
NC	Charlotte	58	2	1.6	1.2	-	T	-	-	-	-	T	0.1	0.5	5.4
	Raleigh	53	2.3	2.5	1.3	-	T	T	-	-	-	0.1	0.8	7.0	
ND	Bismarck	58	7.7	6.9	8.7	4	0.9	T	T	T	0.2	1.8	6.8	7	44.0
OH	Cincinnati	50	7.3	5.4	4.4	0.5	-	T	T	-	-	0.3	2	3.7	23.6
	Cleveland	56	13.2	12.2	10.5	2.4	0.1	T	T	-	T	0.6	5.4	11.9	56.3
	Columbus	50	8.8	6.2	4.6	0.9	-	T	T	-	T	0.1	2.2	5.4	28.2
OK	Oklahoma City	58	3.1	2.4	1.5	T	T	T	T	T	T	-	0.5	1.8	9.3
OR	Portland	55	3.2	1.1	0.4	T	-	T	-	T	T	-	0.4	1.4	6.5
PA	Philadelphia	55	6.1	6.6	3.7	0.3	T	T	-	-	-	-	0.7	3.2	20.6
	Pittsburgh	45	11.9	9.3	8.8	1.7	0.1	T	T	T	T	0.4	3.5	8.3	44.0
RI	Providence	44	10.1	10	7.5	0.7	0.2	-	-	-	-	0.1	1.1	6.8	36.5
SC	Columbia	50	0.4	0.8	0.2	T	-	-	-	T	-	-	T	0.3	1.7
SD	Sioux Falls	52	6.7	8.2	9.2	2.8	T	T	T	-	-	0.8	5.6	7.2	40.5
TN	Memphis	47	2.2	1.4	0.8	T	T	T	-	-	-	T	0.1	0.6	5.1
	Nashville	56	3.7	3	1.5	-	T	-	T	-	-	0.4	1.4	10.0	
TX	Dallas-Fort Worth	43	1.1	0.9	0.2	T	T	-	-	-	T	0.1	0.2	2.5	
	El Paso	57	1.3	0.8	0.4	0.3	T	T	T	-	T	-	0.9	1.6	5.3
	Houston	63	0.2	0.2	-	T	T	T	-	-	-	T	T	0.4	
UT	Salt Lake City	69	13.9	9.7	9.3	4.9	0.6	T	T	T	0.1	1.3	6.9	11.8	58.5
VT	Burlington	54	19.1	16.7	13	4.2	0.2	-	T	-	-	0.2	6.9	18.3	78.6
VA	Norfolk	48	2.8	3	1	-	T	T	-	T	-	-	0.9	7.7	
	Richmond	60	4.8	4	2.4	0.1	T	-	-	-	-	T	0.4	2	13.7
WA	Seattle-Tacoma	52	4.9	1.6	1.3	0.1	T	-	T	-	-	T	1.1	2.4	11.4
	Spokane	50	15.7	7.6	3.9	0.6	0.1	T	-	T	0.4	6.4	14.7	49.4	
WV	Charleston	49	11.1	8.7	5.4	0.9	-	T	T	T	0.2	2.4	5.3	34.0	
WI	Milwaukee	57	13.5	9.8	8.4	1.8	0.1	T	T	T	0.2	3.2	10.3	47.3	
WY	Cheyenne	62	6.7	6.3	12	9.2	3.2	0.2	T	T	0.9	3.8	7.2	6.2	55.7
PR	San Juan	42	-	-	-	-	-	-	-	T	-	-	-	T	

- Represents zero or rounds to zero.

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, Comparative Climatic Data, annual.

No. 426. Sunshine, Average Wind Speed, Heating and Cooling Degree Days, and Average Relative Humidity—Selected Cities

[Airport data, except as noted. For period of record through 1997, except as noted. M=morning. A=afternoon]

State	Station	Average percentage of possible sunshine ¹		Average wind speed (m.p.h.)						Average relative humidity (percent)									
				Length of record (yr.)			Length of record (yr.)			Heating degree days		Cooling degree days		Length of record (yr.)		Annual		Jan.	
		Length of record (yr.)	An- nual	An- nual	Jan.	July	An- nual	Jan.	July	days	days	M	A	M	A	M	A	M	A
AL	Mobile	47	60	49	8.9	10.2	6.9	1,702	2,627	35	87	59	82	62	90	62			
AK	Juneau	47	23	52	8.3	9.0	7.5	8,897	-	31	80	69	79	76	78	66			
AZ	Phoenix	57	81	52	6.2	5.3	7.1	1,350	4,162	37	50	23	65	32	43	20			
AR	Little Rock	35	60	55	7.8	8.4	6.7	3,155	2,005	36	83	57	80	62	86	55			
CA	Los Angeles	60	72	49	7.5	6.7	7.9	1,458	727	38	78	65	71	60	86	68			
	Sacramento	49	73	47	7.9	7.2	8.9	2,749	1,237	35	81	45	90	70	75	28			
	San Diego	55	72	57	7.0	6.0	7.5	1,256	984	37	77	63	71	57	82	66			
	San Francisco	68	71	70	10.6	7.2	13.6	3,016	145	38	84	62	86	67	86	59			
CO	Denver	61	67	47	8.6	8.6	8.3	6,020	679	35	67	40	63	49	68	34			
CT	Hartford	41	52	43	8.4	9.0	7.3	6,151	677	38	77	52	72	56	79	51			
DE	Wilmington	47	55	49	9.0	9.8	7.8	4,937	1,046	50	78	55	75	60	80	54			
DC	Washington	48	55	49	9.4	10.0	8.3	4,047	1,549	37	75	53	70	56	77	53			
FL	Jacksonville	47	61	48	7.9	8.1	7.0	1,434	2,551	61	88	56	87	58	89	58			
	Miami	46	68	48	9.2	9.5	7.9	200	4,198	33	84	61	84	59	84	63			
GA	Atlanta	61	59	59	9.1	10.4	7.7	2,991	1,667	37	82	56	78	59	88	59			
HI	Honolulu	47	74	48	11.3	9.5	13.1	-	4,474	28	72	56	81	61	68	51			
ID	Boise	56	58	58	8.7	8.0	8.4	5,861	754	58	69	43	80	71	54	22			
IL	Chicago	37	52	39	10.4	11.7	8.4	6,536	752	39	80	61	77	69	82	58			
	Peoria	52	53	54	9.9	11.1	7.8	6,148	982	38	83	63	80	70	87	61			
IN	Indianapolis	64	51	49	9.6	10.9	7.5	5,615	1,014	38	84	62	81	71	87	60			
IA	Des Moines	46	55	48	10.7	11.5	8.9	6,497	1,036	36	80	61	77	68	83	58			
KS	Wichita	39	62	44	12.2	12.0	11.3	4,791	1,628	44	80	56	79	63	79	50			
KY	Louisville	47	53	50	8.3	9.5	6.8	4,514	1,288	37	81	58	77	65	85	58			
LA	New Orleans	47	60	49	8.1	9.3	6.1	1,513	2,655	49	88	64	85	67	91	66			
ME	Portland	54	55	57	8.7	9.1	7.6	3,738	268	57	79	59	76	61	80	59			
MD	Baltimore	45	58	47	9.0	9.7	7.8	4,707	1,137	44	77	54	72	57	80	53			
MA	Boston	60	55	40	12.5	13.8	11.0	5,641	678	33	72	58	68	58	74	56			
MI	Detroit	37	49	39	10.3	12.0	8.5	6,569	626	39	81	60	80	70	82	54			
	Sault Ste. Marie	54	43	56	9.2	9.6	7.8	9,316	131	56	85	67	81	74	89	62			
MN	Duluth	47	49	48	11.0	11.6	9.4	9,818	180	36	81	64	77	70	85	60			
	Minneapolis-St. Paul	57	54	59	10.5	10.5	9.4	7,981	682	38	79	61	75	67	81	56			
MS	Jackson	30	59	34	7.2	8.4	5.6	2,467	2,215	34	91	59	86	65	94	61			
MO	Kansas City	23	59	25	10.7	11.3	9.3	5,393	1,288	25	81	61	77	65	85	59			
MT	St. Louis	47	55	48	9.7	10.6	8.0	4,758	1,534	37	82	60	81	67	84	57			
	Great Falls	57	51	56	12.6	15.0	10.0	7,741	388	36	67	45	66	61	71	51			
NE	Omaha	49	59	61	10.5	10.9	8.8	6,300	1,072	33	81	60	78	66	85	60			
NV	Reno	53	69	55	6.6	5.6	7.2	5,674	508	34	69	31	79	51	61	18			
NH	Concord	54	55	55	6.7	7.3	5.7	7,554	328	32	81	54	76	59	84	51			
NJ	Atlantic City	37	56	39	9.9	10.9	8.3	5,169	826	33	82	56	78	63	83	58			
NM	Albuquerque	56	76	58	8.9	8.0	8.9	4,425	1,244	37	59	29	68	40	59	27			
NY	Albany	57	49	59	8.9	9.8	7.5	6,894	507	32	80	57	78	63	81	55			
	Buffalo	52	43	58	11.9	14.1	10.3	6,747	477	37	80	62	79	72	78	55			
	New York ²	42	64	60	9.3	10.7	7.6	4,805	1,096	63	72	56	68	60	75	55			
NC	Charlotte	49	58	48	7.4	7.8	6.6	3,341	1,582	37	82	53	78	56	86	56			
	Raleigh	47	59	48	7.7	8.5	6.7	3,457	1,417	33	85	54	79	55	89	58			
ND	Bismarck	56	55	58	10.2	10.0	9.2	8,968	488	38	81	58	75	69	84	49			
OH	Cincinnati	44	49	50	9.0	10.6	7.2	5,248	996	35	82	60	79	68	85	57			
	Cleveland	54	45	56	10.5	12.2	8.6	6,201	621	37	80	62	78	70	81	57			
	Columbus	46	48	48	8.3	9.8	6.5	5,708	797	38	80	59	77	68	84	56			
OK	Oklahoma City	44	64	49	12.3	12.6	10.9	3,659	1,859	32	80	56	78	60	80	51			
OR	Portland	47	39	49	7.9	10.0	7.6	4,522	371	57	85	59	85	75	82	45			
PA	Philadelphia	55	56	45	9.1	10.6	7.3	4,954	1,101	38	76	55	73	59	74	54			
	Pittsburgh	43	44	42	8.3	8.9	7.3	5,968	654	37	79	57	76	66	83	54			
RI	Providence	19	58	48	8.6	9.1	7.8	5,884	606	34	75	55	71	56	77	56			
SC	Columbia	48	60	49	6.8	7.2	6.3	2,649	1,966	31	87	51	82	54	89	54			
SD	Sioux Falls	50	57	49	11.1	11.0	9.8	7,809	744	34	82	62	78	69	84	56			
TN	Memphis	43	59	49	8.8	10.0	7.5	3,082	2,118	58	81	58	78	64	84	58			
	Nashville	54	57	56	8.0	9.1	6.5	3,729	1,616	32	84	58	79	64	89	58			
TX	Dallas-Fort Worth	42	64	44	10.7	11.0	9.8	2,407	2,603	34	82	57	80	61	81	50			
	El Paso	53	80	55	8.8	8.3	8.3	2,708	2,094	37	56	27	65	35	61	29			
	Houston	26	56	28	7.8	8.2	6.9	1,599	2,700	28	90	61	85	65	93	59			
UT	Salt Lake City	69	62	68	8.8	7.5	9.5	5,765	1,047	38	67	43	79	69	82	22			
VT	Burlington	52	44	54	9.0	9.8	8.0	7,771	388	32	77	59	73	64	78	53			
VA	Norfolk	47	58	49	10.6	11.5	8.9	3,495	1,422	49	78	57	75	59	82	56			
	Richmond	50	56	49	7.7	8.1	6.9	3,963	1,348	63	83	53	80	57	85	56			
WA	Seattle-Tacoma ³	51	38	49	9.0	9.6	8.3	4,908	190	38	83	62	81	74	81	49			
	Spokane	48	48	50	8.9	8.8	8.6	6,842	398	38	78	52	85	79	64	28			
WV	Charleston	47	48	50	6.0	7.2	4.8	4,646	1,031	50	83	56	78	63	90	59			
WI	Milwaukee	55	52	57	11.5	12.6	9.7	7,324	479	37	80	65	76	69	82	62			
WY	Cheyenne	60	64	40	12.9	15.3	10.4	7,326	285	38	65	45	57	50	70	38			
PR	San Juan	40	76	42	8.4	8.4	9.7	-	5,558	42	79	65	82	64	79	67			

- Represents zero. ¹ Percent of days that are either clear or partly cloudy. ² Airport data for sunshine. ³ Does not represent airport data.

Source: U.S. National Oceanic and Atmospheric Administration, Comparative Climatic Data, annual.