

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 related subjects such 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 (EPA), U.S. Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), Natural Resources Conservation Service (NRCS), and National Atlas® of the United States. New information on the Great Lakes profile and lengths of shorelines, and wildfires by number and by acreage, may be found in Tables 347, 348 and 376.

Area—For the 2000 census and 2008, area measurements were calculated by computer based on the information contained in a single, consistent geographic database, the Topologically Integrated Geographic Encoding & Referencing system (TIGER®) database. The 2008 area measurements may be found in Table 346.

Geography—The USGS 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. The USGS provides United States cartographic data through the Earth Sciences Information Center, water resources data through the *Water Resources of the United States* at <http://water.usgs.gov/pubs/>.

In a joint project with the U.S. Census Bureau, during the 1980s, the USGS provided the basic information on geographic features for input into a national geographic and cartographic database prepared by the Census Bureau, called TIGER® database. Since then, using a variety of sources, the Census Bureau has updated these features and their related attributes (names, descriptions, etc.) and inserted current information on the boundaries, names, and codes of legal and statistical geographic entities. The 2008 area measures, land and water, including their classifications, reflect base feature updates made in the Master Address File (MAF)/TIGER database through May 1, 2008. The boundaries of the states and equivalent areas are as of January 1, 2008. Maps prepared by the Census Bureau using the TIGER® database show the names and boundaries of entities and are available on a current basis.

An inventory of the nation's land resources by type of use/cover was conducted by the National Resources Inventory Conservation Services (NRCS) every 5 years beginning in 1977 through 1997. Beginning with the release of the 2001 estimates, this program shifted to become an annual release of land use data. The most recent survey results, which were published for the year 2003, covered all nonfederal land for the contiguous 48 states.

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 in the Envirofacts portion of the EPA Web site at <http://www.epa.gov/enviro/>.

The Clean Air Act, which was last amended in 1990, requires the EPA to set National Ambient Air Quality Standards

(NAAQS) (40 CFR part 50) for pollutants considered harmful to public health and the environment. The Clean Air Act established two types of national air quality standards. **Primary standards** set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly.

Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops vegetation, and buildings. See <<http://www.epa.gov/air/criteria.html>>.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for six principal pollutants, which are called "criteria" pollutants. These pollutants are: Carbon Monoxide, Lead, Nitrogen Dioxide, Particulate Matter ($PM_{2.5}$ and $_{10}$), Ozone, and Sulfur Dioxide.

NAAQS are periodically reviewed and revised to include any additional or new health or welfare data. Table 361 gives some of the health-related standards for the six air pollutants having NAAQS. Data gathered from 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 "Air Trends" on the EPA Web site at <<http://www.epa.gov/airtrends/index.html>>.

The Toxics Release Inventory (TRI), published by the EPA, is a valuable source of information on approximately 650 chemicals that are being used, manufactured, treated, transported, or released into the environment. Sections 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and 6607 of the Pollution Prevention Act (PPA), mandate that a publicly-accessible toxic chemical database be developed and maintained by EPA. This database, known as the TRI, contains information concerning waste management activities and the release of

toxic chemicals by facilities that manufacture, process, or otherwise use said materials. Data on the release of these chemicals are collected from about 22,000 facilities and facilities added in 1998 that have the equivalent of 10 or more full-time employees and meet the established thresholds for manufacturing, processing, or "other use" of listed chemicals. Facilities must report their releases and other waste management quantities. Since 1994 federal facilities have been required to report their data regardless of industry classification. In May 1997, EPA added seven new industry sectors that reported to the TRI for the first time in July 1999 for the 1998 reporting year. More current information on this program can be found at <<http://www.epa.gov/tri/index.htm>>.

Climate—NOAA, through the National Weather Service and the National Environmental Satellite, Data, and Information Service, is responsible for climate data. 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, 1971–2000. 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 2007.

Table 346. Land and Water Area of States and Other Entities: 2008

[One square mile = 2.59 square kilometers. Table data have been revised. The area measurements were derived from the Census Bureau's Master Address File/ Topologically Integrated Geographic Encoding and Referencing (MAF/TIGER) geographic database. The boundaries of the states and equivalent areas are as of January 1, 2008. The land and water areas, including their classifications, reflect base feature updates made in the MAF/TIGER database through May 1, 2008. These updates show increases in total water area and decreases in land area for nearly every state. For more details, see <<http://www.census.gov/geo/www/tiger/tgrshp2008/tgrshp2008.html>>]

State and other areas	Total area		Land area		Water area					
					Total		Inland (sq. mi.)	Coastal (sq. mi.)	Great Lakes (sq. mi.)	Territorial (sq. mi.)
	Sq. mi.	Sq. km.	Sq. mi.	Sq. km.	Sq. mi.	Sq. km.				
Total	3,805,142	9,855,318	3,535,846	9,157,841	269,296	697,477	86,478	43,201	59,959	76,392
United States	3,795,951	9,831,513	3,531,822	9,147,420	264,129	684,094	86,409	43,185	59,959	74,575
Alabama	52,420	135,768	50,644	131,168	1,776	4,600	1,057	518	(X)	201
Alaska	664,988	1,722,319	570,665	1,478,022	94,323	244,297	20,028	28,162	(X)	46,133
Arizona	113,990	295,235	113,595	294,211	396	1,026	396	—	(X)	—
Arkansas	53,178	137,732	52,030	134,758	1,149	2,976	1,149	—	(X)	—
California	163,694	423,967	155,766	403,434	7,928	20,534	2,842	222	(X)	4,864
Colorado	104,094	269,604	103,641	268,430	454	1,176	454	—	(X)	—
Connecticut	5,544	14,358	4,840	12,536	703	1,821	164	539	(X)	—
Delaware	2,489	6,445	1,949	5,048	539	1,396	74	372	(X)	93
District of Columbia	68	177	61	158	7	18	7	—	(X)	—
Florida	65,758	170,312	53,603	138,832	12,154	31,479	5,373	1,128	(X)	5,653
Georgia	59,425	153,911	57,501	148,928	1,924	4,983	1,420	49	(X)	455
Hawaii	10,926	28,300	6,428	16,649	4,499	11,652	40	—	(X)	4,459
Idaho	83,568	216,442	82,643	214,045	926	2,398	926	—	(X)	—
Illinois	57,916	150,002	55,518	143,792	2,398	6,211	836	—	1,562	—
Indiana	36,417	94,321	35,823	92,782	594	1,538	361	—	233	—
Iowa	56,273	145,746	55,858	144,672	415	1,075	415	—	(X)	—
Kansas	82,278	213,101	81,762	211,764	516	1,336	516	—	(X)	—
Kentucky	40,411	104,665	39,492	102,284	919	2,380	919	—	(X)	—
Louisiana	51,988	134,649	43,199	111,885	8,789	22,764	4,433	1,951	(X)	2,405
Maine	35,384	91,644	30,841	79,878	4,543	11,766	2,282	613	(X)	1,647
Maryland	12,406	32,131	9,705	25,136	2,700	6,993	736	1,854	(X)	111
Massachusetts	10,554	27,336	7,801	20,205	2,754	7,133	461	977	(X)	1,316
Michigan	96,713	250,486	56,528	146,408	40,185	104,079	2,164	—	38,021	—
Minnesota	86,935	225,163	79,607	206,182	7,328	18,980	4,782	—	2,546	—
Mississippi	48,432	125,438	46,920	121,523	1,512	3,916	772	591	(X)	149
Missouri	69,702	180,529	68,716	177,974	987	2,556	987	—	(X)	—
Montana	147,039	380,831	145,541	376,951	1,498	3,880	1,498	—	(X)	—
Nebraska	77,349	200,334	76,825	198,977	524	1,357	524	—	(X)	—
Nevada	110,572	286,382	109,780	284,330	792	2,051	792	—	(X)	—
New Hampshire	9,348	24,210	8,952	23,186	396	1,026	328	—	(X)	68
New Jersey	8,723	22,592	7,354	19,047	1,369	3,546	458	402	(X)	509
New Mexico	121,590	314,919	121,297	314,159	293	759	293	—	(X)	—
New York	54,555	141,298	47,126	122,056	7,429	19,241	1,979	977	3,990	482
North Carolina	53,819	139,391	48,619	125,923	5,200	13,468	4,044	—	(X)	1,157
North Dakota	70,698	183,109	69,001	178,713	1,697	4,395	1,697	—	(X)	—
Ohio	44,825	116,097	40,858	105,822	3,967	10,275	467	—	3,500	—
Oklahoma	69,899	181,038	68,603	177,682	1,296	3,357	1,296	—	(X)	—
Oregon	98,379	254,801	95,985	248,601	2,394	6,200	1,063	74	(X)	1,256
Pennsylvania	46,055	119,281	44,739	115,874	1,316	3,408	567	—	749	—
Rhode Island	1,545	4,001	1,034	2,678	511	1,323	187	9	(X)	315
South Carolina	32,021	82,934	30,070	77,881	1,951	5,053	1,044	74	(X)	832
South Dakota	77,116	199,730	75,811	196,350	1,305	3,380	1,305	—	(X)	—
Tennessee	42,144	109,154	41,235	106,799	910	2,357	910	—	(X)	—
Texas	268,597	695,666	261,226	676,575	7,371	19,091	5,607	406	—	1,358
Utah	84,897	219,883	82,191	212,875	2,706	7,009	2,706	—	(X)	—
Vermont	9,616	24,906	9,217	23,872	400	1,036	400	—	(X)	—
Virginia	42,775	110,787	39,493	102,287	3,282	8,500	1,106	1,729	(X)	447
Washington	71,298	184,661	66,449	172,103	4,849	12,559	1,646	2,537	(X)	666
West Virginia	24,230	62,755	24,038	62,258	192	497	192	—	(X)	—
Wisconsin	65,496	169,636	54,154	140,259	11,342	29,376	1,984	—	9,358	—
Wyoming	97,812	253,334	97,088	251,458	724	1,875	724	—	(X)	—
Puerto Rico	5,325	13,791	3,424	8,868	1,901	4,924	68	16	(X)	1,817
Island Areas:	3,866	10,013	600	1,554	3,266	8,459	(NA)	(NA)	(X)	(NA)
American Samoa	583	1,510	77	199	506	1,311	(NA)	(NA)	(X)	(NA)
Guam	571	1,479	210	544	361	935	(NA)	(NA)	(X)	(NA)
No. Mariana Islands	1,975	5,115	179	464	1,796	4,652	(NA)	(NA)	(X)	(NA)
Virgin Islands of the U.S.	738	1,911	134	347	604	1,564	(NA)	(NA)	(X)	(NA)
U.S. minor outlying islands ¹	16	41	16	41	—	—	(NA)	(NA)	(X)	(NA)

¹ Baker, Howland, and Jarvis Islands; Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Palmyra Atoll, and Wake Island.

Table 347. Great Lakes Profile

[The Great Lakes contain the largest supply of freshwater in the world, holding about 18% of the world's total freshwater and about 90% of the United States total freshwater. The Lakes are a series of five interconnecting large lakes, one small lake, four connecting channels, and the St. Lawrence Seaway. Combined, the lakes cover an area of over 94,000 square miles (245,000 square kilometers) and contain over 5,400 cubic miles (23,000 cubic kilometers) of water]

Characteristics	Unit	Lake Superior	Lake Michigan	Lake Huron	Lake Erie	Lake Ontario
Length	Miles	350	307	206	241	193
Breadth	Miles	160	118	183	57	53
Depth						
Average	Feet	489	279	159	62	283
Maximum	Feet	1,333	923	750	210	802
Volume.	Cubic miles. . .	2,935	1,180	849	116	393
Water Surface Area ¹	Square miles. . .	31,700	22,300	23,000	9,910	7,340
Retention/Replacement Time ²	Years.	191	99	22	2.6	6

¹ Includes both U.S. and Canada surface area.

² The amount of time it takes for lakes to get rid of pollutants.

Source: Department of Commerce, National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, "About Our Great Lakes," June 2004; <<http://www.glerl.noaa.gov/pr/ourlakes/intro.html>>.

Table 348. Great Lakes Length of Shoreline in Separate Basin

[In statute miles]

Shorelines	Total	Canada	U.S.	MI	MN	WI	IL	IN	OH	PA	NY
Total	10,368	5,127	5,241	3,288	189	820	63	45	312	51	473
Lake Superior	2,980	1,549	1,431	917	189	325	—	—	—	—	—
St. Marys River	297	206	91	91	—	—	—	—	—	—	—
Lake Michigan	1,661	—	1,661	1,058	—	495	63	45	—	—	—
Lake Huron	3,350	2,416	934	934	—	—	—	—	—	—	—
St Clair River	128	47	81	81	—	—	—	—	—	—	—
Lake St. Clair	160	71	89	89	—	—	—	—	—	—	—
Detroit River	107	43	64	64	—	—	—	—	—	—	—
Lake Erie	860	366	494	54	—	—	—	—	312	51	77
Niagara River	99	34	65	—	—	—	—	—	—	—	65
Lake Ontario	726	395	331	—	—	—	—	—	—	—	331

— Represents zero.

Source: State of Michigan, Department of Environment Quality, "Great Lakes, Shorelines of the Great Lakes"; <http://www.michigan.gov/deq/0,1607,7-135-3313_3677-15959--00.html>.

Table 349. Largest Lakes in the United States

[The list of lakes include manmade lakes and those that are only partially within the United States. For more information on the National Atlas of the United States, see <<http://nationalatlas.gov/partners.html>>]

Lake	Location	Area in Sq. miles	Lake	Location	Area in Sq. miles
Lake Superior	MI-MN-WI-Ontario	31,700	Lake Pontchartrain	Louisiana	631
Lake Huron	MI-Ontario	23,000	Lake Sakakawea ¹	North Dakota	520
Lake Michigan	IL-IN-MI-WI	22,300	Lake Champlain	NY-VT-Quebec	490
Lake Erie	MI-NY-OH-PA-Ontario	9,910	Becharof Lake	Alaska	453
Lake Ontario	NY-Ontario	7,340	Lake St. Clair	MI-Ontario	430
Great Salt Lake	Utah	2,117	Red Lake	Minnesota	427
Lake of the Woods	MN-Manitoba-Ontario	1,485	Selawik Lake	Alaska	404
Iliamna Lake	Alaska	1,014	Fort Peck Lake ¹	Montana	393
Lake Oahe ¹	ND-SD	685	Salton Sea	California	347
Lake Okeechobee	Florida	662	Rainy Lake	MN-Ontario	345

¹ Manmade lakes.

Source: U.S. Geological Survey, 2003, and National Oceanic and Atmospheric Administration, Great Lakes, 2002; The National Atlas of the United States of America; *Lakes*; <http://nationalatlas.gov/articles/mapping/a_general.html>.

Table 350. U.S.–Canada and U.S.–Mexico Border Lengths

[For 2007, there were more than 63 million passenger trips between the United States and Canada each year, and more than 217 million between the United States and Mexico. See Table 1234 for more passenger trip detail. Only those States with international borders are included in the table below. For more information on the National Atlas of the United States, see also <<http://nationalatlas.gov/partners.html>>]

State	Length of international border (statute miles) ¹	State	Length of international border (statute miles) ¹
United States–Canada total	5,525	Ohio	146
Alaska	1,585	Pennsylvania	42
Idaho	45	Vermont	90
Maine	611	Washington	427
Michigan	721		
Minnesota	547	United States–Mexico total	1,933
Montana	545	Arizona	373
New Hampshire	58	California.	140
New York.	445	New Mexico.	180
North Dakota	310	Texas	1,241

¹ Statute mile equals one mile.

Table 351. Coastline and Shoreline of the United States by State

[In statute miles. Each statute mile equals one mile. The term **coastline** is used to describe the general outline of the seacoast. For the table below, United States coastline measurements were made from small-scale maps, and the coastline was generalized. The coastlines of large sounds and bays were included. Measurements were made in 1948. **Shoreline** is the term used to describe a more detailed measure of the seacoast. The tidal shoreline figures in the table below were obtained in 1939–1940 from the largest-scale charts and maps then available. Shoreline of the outer coast, offshore islands, sounds, and bays were included, as well as the tidal portion of rivers and creeks. Only states with a coastline or shoreline are included in the following table. For more information on the National Atlas of the United States, see also <<http://nationalatlas.gov/partners.html>>]

State	General coastline	Tidal shoreline	State	General coastline	Tidal shoreline
United States	12,383	88,633	Mississippi.	44	359
Alabama	53	607	New Hampshire	13	131
Alaska	6,640	33,904	New Jersey	130	1,792
California.	840	3,427	New York	127	1,850
Connecticut	—	618	North Carolina	301	3,375
Delaware.	28	381	Oregon	296	1,410
Florida	1,350	8,426	Pennsylvania	—	89
Georgia	100	2,344	Rhode Island	40	384
Hawaii	750	1,052	South Carolina	187	2,876
Louisiana	397	7,721	Texas	367	3,359
Maine	228	3,478	Virginia	112	3,315
Maryland.	31	3,190	Washington	157	3,026
Massachusetts	192	1,519			

— Represents zero.

Source: National Oceanic Atmospheric Administration, 1975; The National Atlas of the United States, *Coastline and Shoreline*; <http://nationalatlas.gov/articles/mapping/a_general.html>.

Table 352. 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 sec- ond)	Drainage area (1,000 sq. mi.)
Missouri	Missouri	Red Rock Creek, MT	2,540	76.2	² 529
Mississippi	Louisiana	Mississippi River, MN	³ 2,340	4593	^{2,5} 1,150
Yukon	Alaska	McNeil River, Canada	1,980	225	² 328
St. Lawrence	Canada	North River, MN	1,900	348	² 396
Rio Grande	Mexico-Texas	Rio Grande, CO	1,900	(⁷)	336
Arkansas	Arkansas	East Fork Arkansas River, CO	1,460	41	161
Colorado	Mexico	Colorado River, CO	1,450	(⁷)	246
Atchafalaya ⁶	Louisiana	Tierra Blanca Creek, NM	1,420	58	95.1
Ohio	Illinois-Kentucky	Allegheny River, PA	1,310	281	203
Red ⁶	Louisiana	Tierra Blanca Creek, NM	1,290	56	93.2
Brazos	Texas	Blackwater Draw, NM	1,280	(⁷)	45.6
Columbia	Oregon-Washington	Columbia River, Canada	1,240	265	² 258
Snake	Washington	Snake River, WY	1,040	56.9	108
Platte	Nebraska	Grizzly Creek, CO	990	(⁷)	84.9
Pecos	Texas	Pecos River, NM	926	(⁷)	44.3
Canadian	Oklahoma	Canadian River, CO	906	(⁷)	46.9
Tennessee	Kentucky	Courthouse Creek, NC	886	68	40.9

¹ From source to mouth. ² Drainage area includes both the United States and Canada. ³ 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. ⁴ Includes about 167,000 cubic ft. per second diverted from the Mississippi into the Atchafalaya River but excludes the flow of the Red River. ⁵ Excludes the drainage areas of the Red and Atchafalaya Rivers. 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. ⁷ Less than 15,000 cubic feet per second.

Source: U.S. Geological Survey, "Largest Rivers in the United States";<<http://pubs.usgs.gov/of/1987/ofr87-242/>> (revised May, 1990).

Table 353. Extreme and Mean Elevations by State and Other Areas

[One foot = .305 meter. There are 2,130 square miles of the United States below sea level (Death Valley is the lowest point). There are 20,230 square miles above 10,000 feet (Mount McKinley is the highest point in the United States). (-) Minus sign indicates below sea level]

State and other areas	Highest point				Lowest point				Approximate mean elevation	
	Name	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	2,407	734	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	Arikaree River	3,315	1,011	6,800	2,074		
CT.....	Mt. Frissell on south slope	2,380	726	Long Island Sound	(¹)	(¹)	500	153		
DE.....	Ebright Road ²	448	137	Atlantic Ocean	(¹)	(¹)	60	18		
DC.....	Tenleytown at Reno Reservoir	410	125	Potomac River	1	(Z)	150	46		
FL.....	Britton Hill	345	105	Atlantic Ocean	(¹)	(¹)	100	31		
GA.....	Brassington Bald	4,784	1,459	Atlantic Ocean	(¹)	(¹)	600	183		
HI.....	P'u Wekiu, Mauna Kea	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.....	Hoosier Hill	1,257	383	Ohio River	320	98	700	214		
IA.....	Hawkeye Point	1,670	509	Mississippi River	480	146	1,100	336		
KS.....	Mount Sunflower	4,039	1,232	Verdigris River	679	207	2,000	610		
KY.....	Black Mountain	4,145	1,264	Mississippi River	257	78	750	229		
LA.....	Driskill Mountain	535	163	New Orleans	-8	-2	100	31		
ME.....	Mount Katahdin	5,268	1,607	Atlantic Ocean	(¹)	(¹)	600	183		
MD.....	Hoyle Crest	3,360	1,025	Atlantic Ocean	(¹)	(¹)	350	107		
MA.....	Mount Greylock	3,491	1,065	Atlantic Ocean	(¹)	(¹)	500	153		
MI.....	Mount Arvon	1,979	604	Lake Erie	571	174	900	275		
MN.....	Eagle Mountain	2,301	702	Lake Superior	601	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.....	Panorama Point	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	3,506	1,069	Red River of the North	750	229	1,900	580		
OH.....	Campbell Hill	1,550	473	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	14,411	4,395	Pacific Ocean	(¹)	(¹)	1,700	519		
WV.....	Spruce Knob	4,863	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		
Puerto Rico	Cerro de Punta	4,390	1,339	Atlantic Ocean	(¹)	(¹)	1,800	549		
American Samoa	Lata Mountain	3,160	964	Pacific Ocean	(¹)	(¹)	1,300	397		
Guam	Mount Lamlam	1,332	406	Pacific Ocean	(¹)	(¹)	330	101		
U.S. Virgin Islands	Crown Mountain	1,556	475	Atlantic Ocean	(¹)	(¹)	750	229		

Z Less than 0.5 meter. ¹ Sea level. ² At DE-PA state line.

Source: U.S. Geological Survey, for highest and lowest points, "Elevations and Distances in the United States"; <http://egsc.usgs.gov/lsb/pubs/booklets/elvadist/elvadist.html>; (released 29 April 2005). For mean elevations see, *Elevations and Distances in the United States*, 1983 edition.

Table 354. Land Cover/Use by Type: 1982 to 2003

[In millions of acres (1,937.7 represents 1,937,700,000), except percent. Excludes Alaska, Hawaii, and District of Columbia.
For inventory-specific glossary of key terms, see <<http://www.nrcs.usda.gov/technical/NRI/glossaries.html>>]

Year	Total surface area	Nonfederal rural land						Developed land	Water areas	Federal land
		Rural land, total ¹	Crop-land	Pasture land	Range-land	Forest land	Other rural land			
Land										
1982	1,937.7	1,417.2	420.4	131.4	414.5	402.6	48.3	72.8	48.6	399.1
1992	1,937.6	1,400.2	381.2	125.1	406.6	404.0	49.3	86.5	49.4	401.5
2002	1,937.7	1,378.1	368.4	117.3	405.3	404.9	50.6	107.3	50.4	401.9
2003	1,937.7	1,377.3	367.9	117.0	405.1	405.6	50.2	108.1	50.4	401.9
Percent of total land										
1982	100.0	73.1	21.7	6.8	21.4	20.8	2.5	3.8	2.5	20.6
1992	100.0	72.3	19.7	6.5	21.0	20.9	2.5	4.5	2.5	20.7
2002	100.0	71.1	19.0	6.1	20.9	20.9	2.6	5.5	2.6	20.7
2003	100.0	71.1	19.0	6.0	20.9	20.9	2.6	5.6	2.6	20.7

¹ Includes Conservation Reserve Program land not shown separately.

Source: U.S. Department of Agriculture, Natural Resources and Conservation Service, *2003 Annual National Resources Inventory*. See also <<http://www.nrcs.usda.gov/technical/NRI>>.

Table 355. Wetlands on Nonfederal Land and Water Areas by Land Cover/Use and Farm Production Region: 2003

[In thousands of acres (110,760 represents 110,760,000). Represents palustrine and estuarine wetlands; see source]

Farm production region ¹	Total	Crop-land ²	Forest land	Range-land	Other rural land	Developed land	Water area
Wetlands, total	110,760	16,730	65,440	7,740	15,800	1,590	3,460
Lake states	22,460	2,710	15,480	—	3,880	160	230
Southeast	22,360	940	16,010	970	3,460	420	560
Delta states.	17,950	3,240	11,020	270	2,730	190	500
Northeast	14,150	1,250	10,890	—	1,550	240	220
Northern plains	7,640	3,020	210	2,870	1,090	80	370
Appalachian	7,460	400	6,080	—	570	110	300
Southern plains	5,590	970	2,350	970	520	230	550
Mountain	4,780	1,570	220	2,010	820	30	130
Corn belt	4,690	1,330	2,440	—	380	100	440
Pacific	3,680	1,300	740	650	800	30	160

— Represents or rounds to zero. ¹ Ten regions established by USDA, Economic Research Service, that group states according to differences in soils, slope of land, climate, distance to market, and storage and marketing facilities. ² Includes pastureland and Conservation Reserve Program (CRP) lands.

Source: U.S. Department of Agriculture, Natural Resources Conservation Service, 2003 Annual National Resources Inventory. See also <<http://www.nrcs.usda.gov/technical/NRI/>>.

Table 356. Land Cover/Use by State: 2003

[In thousands of acres (1,937,664 represents 1,937,664,000), except percent. Excludes Alaska, District of Columbia, Hawaii, and Island Areas]

State	Total surface area	Selected nonfederal rural land, percent of total			State	Total surface area	Selected nonfederal rural land, percent of total		
		Crop-land	Range-land	Forest land			Crop-land	Range-land	Forest land
United States	1,937,664	19.0	20.9	20.9	Nebraska.	49,510	39.5	46.6	1.6
Alabama	33,424	7.5	0.2	64.4	Nevada	70,763	0.9	11.7	0.4
Arizona	72,964	1.3	44.2	5.7	New Hampshire	5,941	2.1	—	65.6
Arkansas	34,037	22.1	0.1	44.1	New Jersey	5,216	10.1	—	30.8
California	101,510	9.3	17.5	13.7	New Mexico	77,823	2.0	51.3	7.0
Colorado	66,625	12.5	37.2	4.9	New York.	31,361	17.1	—	56.1
Connecticut	3,195	5.4	—	53.4	North Carolina	33,709	16.4	—	45.9
Delaware	1,534	29.8	—	22.2	North Dakota	45,251	53.6	24.5	1.0
Florida.	37,534	7.7	7.2	33.9	Ohio	26,445	42.5	—	27.3
Georgia.	37,741	11.0	—	58.0	Oklahoma	44,738	20.1	31.6	16.5
Idaho	53,488	10.2	12.0	7.5	Oregon	62,161	6.0	15.1	20.5
Illinois	36,059	66.5	—	11.0	Pennsylvania	28,995	17.7	—	53.9
Indiana	23,158	57.5	—	16.5	Rhode Island	813	2.5	—	45.9
Iowa	36,017	70.8	—	6.4	South Carolina	19,939	11.9	—	56.0
Kansas	52,661	50.3	30.1	2.9	South Dakota	49,358	34.6	44.7	1.0
Kentucky	25,863	21.2	—	40.6	Tennessee.	26,974	17.6	—	44.3
Louisiana.	31,377	17.3	0.9	42.5	Texas	171,052	14.9	56.2	6.2
Maine	20,966	1.8	—	84.0	Utah	54,339	3.1	19.6	3.5
Maryland	7,870	19.3	—	30.1	Vermont	6,154	9.5	—	67.1
Massachusetts	5,339	4.7	—	49.9	Virginia	27,087	10.6	—	48.7
Michigan	37,349	21.7	—	44.7	Washington	44,035	14.7	13.3	28.9
Minnesota	54,010	39.1	—	30.3	West Virginia	15,508	5.3	—	68.1
Mississippi	30,527	16.3	—	54.9	Wisconsin	35,920	28.7	—	40.4
Missouri.	44,614	30.7	0.2	28.1	Wyoming.	62,603	3.5	44.0	1.5
Montana	94,110	15.4	39.0	5.7					

—Represents zero.

Source: U.S. Department of Agriculture, Natural Resources and Conservation Service, Summary Report, 2003 Annual National Resources Inventory. See also <<http://www.nrcs.usda.gov/technical/NRI/>>.

**Table 357. U.S. Wetland Resources and Deepwater Habitats by Type:
1998 to 2004**

[In thousands of acres (148,618.8 represents 148,618,800). Wetlands and deepwater habitats are defined separately because the term wetland does not include permanent water bodies. Deepwater habitats are permanently flooded land lying below the deepwater boundary of wetlands. Deepwater habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live, whether or not they are attached to the substrate. As in wetlands, the dominant plants are hydrophytes; however, the substrates are considered nonsoil because the water is too deep to support emergent vegetation. In general terms, wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single feature that most wetlands share is soil or substrate that is at least periodically saturated with or covered by water. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For more information on wetlands, see the "Classification of Wetlands and Deepwater Habitats of the United States" at <http://www.fws.gov/wetlands/_documents/gNSDI/ClassificationWetlandsDeepwaterHabitatsUS.pdf>.]

Wetland or deepwater category	Estimated area, 1998	Estimated area, 2004	Change, 1998 to 2004
All wetlands and deepwater habitats, total	148,618.8	149,058.5	439.7
All deepwater habitats, total	41,046.6	41,304.5	247.9
Lacustrine ¹	16,610.5	16,773.4	162.9
Riverine ²	6,765.5	6,813.3	47.7
Estuarine Subtidal ³	17,680.5	17,717.8	37.3
All wetlands, total	107,562.3	107,754.0	191.8
Intertidal wetlands ⁴	5,328.7	5,300.3	-28.4
Marine intertidal	130.4	128.6	-1.9
Estuarine intertidal nonvegetated	594.1	600.0	5.9
Estuarine intertidal vegetated	4,604.2	4,571.7	-32.4
Freshwater wetlands	102,233.6	102,453.8	220.2
Freshwater nonvegetated	5,918.7	6,633.9	715.3
Freshwater vegetated ⁵	96,414.9	95,819.8	-495.1
Freshwater emergent ⁶	26,289.6	26,147.0	-142.6
Freshwater forested ⁶	51,483.1	52,031.4	548.2
Freshwater shrub ⁷	18,542.2	17,641.4	-900.8

¹ The lacustrine system includes deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent coverage; (3) total area exceeds 20 acres (8 hectares). ² The riverine system includes deepwater habitats contained within a channel, with the exception of habitats with water containing ocean derived salts in excess of 0.5 parts per thousand.

³ The estuarine system consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. Subtidal is where the substrate is continuously submerged by marine or estuarine waters. ⁴ Intertidal is where the substrate is exposed and flooded by tides. Intertidal includes the splash zone of coastal waters. ⁵ Emergent wetlands are characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.

⁶ Forested wetlands are characterized by woody vegetation that is 20 feet tall or taller. ⁷ Shrub wetlands include areas dominated by woody vegetation less than 20 feet tall. The species include true shrubs, young trees, and trees or shrubs that are small or stunted because of environmental conditions.

Source: U.S. Fish and Wildlife Service, *Status and Trends of Wetlands in the Conterminous United States, 1998 to 2004*, December 2005. See also <http://www.fws.gov/wetlands/_documents/gSandt/NationalReports/statustrendswetlandsconterminousUS1998to2004.pdf>.

Table 358. U.S. Water Withdrawals Per Day by End Use: 1940 to 2000

[(140 represents 140,000,000,000). Includes the District of Columbia, Puerto Rico and U.S. Virgin Islands. Withdrawal signifies water physically withdrawn from a source. Includes fresh and saline water; excludes water used for hydroelectric power]

Year	Total (bil. gal.)	Per capita ¹ (gal.)	Irrigation (bil. gal.)	Public supply (bil. gal.) ²	Rural (bil. gal.) ³	Industrial and misc. ⁴ (bil. gal.)	Steam electric utilities (bil. gal.)
1940	140	1,027	71	10	3.1	29	23
1950	180	1,185	89	14	3.6	37	40
1955	240	1,454	110	17	3.6	39	72
1960	270	1,500	110	21	3.6	38	100
1965	310	1,602	120	24	4.0	46	130
1970	370	1,815	130	27	4.5	47	170
1975	420	1,972	140	29	4.9	45	200
1980	440	1,953	150	34	5.6	45	210
1985	399	1,650	137	38	7.8	31	187
1990	408	1,620	137	41	7.9	30	195
1995	402	1,500	134	40	8.9	29	190
2000	408	1,430	137	43	9.2	23	196

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

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 2000*, circular 1268. See also <<http://pubs.usgs.gov/circ/2004/circ1268/>> (released 12 March 2004).

Table 359. Oil Spills in U.S. Water—Number and Volume: 2000 to 2008

[These summary statistics are based on reported discharges of oil and petroleum based products 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. Spills associated with Hurricanes Katrina and Rita have been excluded]

Spill characteristic	Number of spills				Spill volume (gallons)			
	2000	2005	2007	2008	2000	2005	2007	2008
Total	8,354	4,073	4,032	3,586	1,431,370	2,364,169	654,143	759,689
Size of spill (gallons):								
1 to 100	8,058	3,857	3,827	3,429	39,355	33,041	30,539	25,098
101 to 1,000	219	166	168	130	78,779	62,357	58,639	51,733
1,001 to 3,000	37	26	18	11	67,529	46,019	36,380	20,170
3,001 to 5,000	12	9	8	7	45,512	36,803	32,609	26,596
5,001 to 10,000	16	7	6	3	112,415	58,453	45,800	21,800
10,001 to 50,000	6	5	2	3	108,400	106,870	52,122	61,000
50,001 to 100,000	4	1	2	1	266,380	84,000	104,053	82,274
100,001 to 1,000,000.	2	1	1	2	713,000	110,000	294,000	471,018
1,000,000 and over	—	1	—	—	—	1,826,626	—	—
Source:								
Tankship	111	40	42	35	608,176	2,975	4,056	1,337
Tankbarge	229	130	118	110	133,540	2,006,774	4,537	286,654
All other vessels	5,220	1,789	1,930	1,622	291,927	115,906	175,667	261,799
Facilities	1,054	996	1,063	1,023	311,604	92,399	138,223	163,999
Pipelines	25	20	25	18	17,021	111,253	294,874	14,494
All other nonvessels	566	264	333	312	45,136	13,422	26,144	22,510
Unknown	1,149	834	521	466	23,966	21,440	10,642	8,896

— Represents zero.

Source: U.S. Coast Guard, *Pollution Incidents In and Around U.S. Waters, A Spill/Release Compendium: 1969–2004, 2004–2008: U.S. Coast Guard Marine Information for Safety and Law Enforcement (MISLE) System* based on an April 2009 data extraction. Data are unpublished. See also <<http://homeport.uscg.mil/mycg/portal/ep/home.do>>.

Table 360. Hazardous Waste Generated, Shipped, and Received by State and Other Area: 2007

[In thousands of tons (46,693.3 represents 46,693,300). Covers hazardous waste regulated under the Resource Conservation and Recovery Act (RCRA) of 1976 as amended. For exclusions of data from the 2007 National Biennial RCRA Hazardous Waste Report, see the section of the report titled "The Data Presented in This National Biennial Report"]

State and other area	Generated	Shipped	Received	State and other area	Generated	Shipped	Received
Total	46,693.3	7,165.4	7,199.2	Nebraska	38.7	39.9	32.4
United States.	46,629.9	7,119.3	7,196.5	Nevada	10.0	14.5	112.7
Alabama	416.9	206.1	136.9	New Hampshire	5.4	5.4	—
Alaska	2.5	2.1	0.1	New Jersey	596.1	596.8	220.8
Arizona	56.7	54.1	46.5	New Mexico	944.6	6.2	4.8
Arkansas	495.8	324.4	358.5	New York	1,267.6	274.6	201.0
California	608.7	643.1	491.0	North Carolina	96.0	102.7	18.6
Colorado	54.9	40.0	34.4	North Dakota	538.6	1.2	0.3
Connecticut	32.5	40.3	42.2	Ohio	1,608.2	713.9	804.0
Delaware	19.7	19.4	0.1	Oklahoma	134.4	42.3	69.2
District of Columbia	0.8	0.8	—	Oregon	75.0	64.2	65.1
Florida	152.7	55.8	23.7	Pennsylvania	388.8	295.7	460.9
Georgia	102.6	53.2	5.7	Rhode Island	4.6	9.4	6.4
Hawaii	1.2	1.2	0.2	South Carolina	151.4	189.2	187.8
Idaho	5.6	8.1	456.6	South Dakota	0.8	0.9	0.1
Illinois	1,122.9	235.9	420.4	Tennessee	1,079.1	56.9	31.0
Indiana	958.0	404.8	510.0	Texas	13,272.3	810.7	493.9
Iowa	49.0	48.8	0.4	Utah	82.8	88.6	134.8
Kansas	292.7	121.0	221.2	Vermont	3.0	2.5	0.3
Kentucky	139.9	167.6	75.1	Virginia	94.9	83.8	18.0
Louisiana	15,892.6	474.1	352.3	Washington	147.2	65.7	40.8
Maine	5.3	5.1	0.6	West Virginia	76.6	49.5	13.5
Maryland	43.6	46.8	43.2	Wisconsin	310.3	155.6	55.4
Massachusetts	248.3	60.9	94.3	Wyoming	4.0	4.0	—
Michigan	2,397.4	277.1	430.3	Guam	0.1	0.1	0.6
Minnesota	101.7	57.4	249.7	Navajo Nation	0.4	0.4	—
Mississippi	2,239.7	21.5	55.7	Puerto Rico	60.0	42.8	2.7
Missouri	228.1	66.4	175.7	Trust Territories	—	—	—
Montana	29.5	9.4	—	Virgin Islands	3.2	3.1	—

— Represents or rounds to zero.

Source: U.S. Environmental Protection Agency, *The National Biennial RCRA Hazardous Waste Report* (Based on 2007 Data), series EPA530-R-03-007. See also <<http://www.epa.gov/epawaste/inforesources/data/biennialreport/index.htm>>.

**Table 361. National Ambient Air Pollutant Concentrations by Type of Pollutant:
2001 to 2007**

[Data represent annual composite averages of pollutant based on daily 24-hour averages of monitoring stations, except carbon monoxide which is based on the second-highest, nonoverlapping, 8-hour average; ozone, the fourth-highest maximum 8-hour value; and lead, the maximum quarterly average of ambient lead levels. Based on data from the Air Quality 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	2001	2002	2003	2004	2005	2006	2007
Carbon monoxide.....	ppm	322	² 9	3.3	2.9	2.7	2.5	2.3	2.2	2.0
Ozone	ppm	1,013	³ 0.075	0.081	0.085	0.080	0.074	0.079	0.077	0.077
Sulfur dioxide	ppm	406	⁴ 0.03	0.0046	0.0043	0.0043	0.0041	0.0041	0.0037	0.0035
Particulates (PM-10)	$\mu\text{g}/\text{m}^3$	734	⁵ 150	86.5	86.8	84.4	69.6	65.2	75.6	68.5
Fine particulates (PM2.5) annual average	$\mu\text{g}/\text{m}^3$	725	⁶ 15	13.2	12.7	12.3	11.9	12.9	11.6	11.9
Fine particulates (PM2.5) daily average.....	$\mu\text{g}/\text{m}^3$	725	⁷ 35	34.1	32.9	30.8	30.5	33.5	28.7	30.9
Nitrogen dioxide.....	ppm	313	⁸ 0.053	0.015	0.015	0.014	0.013	0.013	0.013	0.012
Lead	$\mu\text{g}/\text{m}^3$	103	⁹ 0.15	0.35	0.17	0.17	0.21	0.16	0.14	0.155

¹ Refers to the primary National Ambient Air Quality Standard. ² Based on 8-hour standard of 9 ppm. ³ Based on annual standard of 0.03 ppm.

⁴ Based on 8-hour standard of 0.075 ppm. On March 12, 2008, EPA revised the level of the primary and secondary 8-hour ozone standards to 0.075 ppm.

⁵ Based on 24-hour (daily) standard of 150 $\mu\text{g}/\text{m}^3$. The particulates (PM-10) standard replaced the previous standard for total suspended particulates in 1987. In 2006, EPA revoked the annual PM-10 standard.

⁶ Based on annual standard of 15 $\mu\text{g}/\text{m}^3$. The PM-2.5 national monitoring network was deployed in 1999. National trend data prior to that time is not available.

⁷ Based on daily standard of 35 $\mu\text{g}/\text{m}^3$. The PM-2.5 national monitoring network was deployed in 1999. National trend data prior to that time is not available.

⁸ Based on annual standard of 0.053 ppm.

⁹ Based on 3-month standard of 1.5 $\mu\text{g}/\text{m}^3$.

Source: U.S. Environmental Protection Agency, *Latest Findings on National Air Quality—Status and Trends through 2007*, released November 2008; <<http://www.epa.gov/air/airtrends/2008/index.html>>.

Table 362. Selected National Air Pollutant Emissions: 1970 to 2007

[In thousands of tons (4,320 represents 4,320,000), except as indicated. Particulate Matter (PM-10 is equal to or less than ten microns in diameter; PM-2.5 is equal to or less than 2.5 microns effective diameter. The methodology used to estimate emission data for 1970 thru 1984 and for 1985 thru the current year is different. Beginning with 1985, the methodology for more recent years is described in the document available at <<http://www.epa.gov/ttn/chief/net/2005inventory.html>>]

Year	Ammonia	Carbon monoxide	Nitrogen oxide	PM-10	PM-10 ¹	PM-2.5	PM-2.5 ¹	Sulfur dioxide	Volatile organic compounds
1970	(NA)	204,042	26,882	13,022	13,022	(NA)	(NA)	31,218	34,659
1980	(NA)	185,408	27,080	7,013	7,013	(NA)	(NA)	25,926	31,107
1990	4,320	154,188	25,527	27,753	27,753	7,560	7,560	23,077	24,108
1995	4,659	126,778	24,955	25,820	25,820	6,929	6,929	18,619	22,042
2000	4,907	114,465	22,599	23,748	22,962	7,287	6,503	16,348	17,511
2003	4,136	106,244	20,327	21,313	18,426	5,564	3,095	14,756	20,769
2004	4,138	101,433	19,521	21,298	18,420	5,551	3,089	14,737	20,373
2005	4,143	96,619	18,711	21,285	18,416	5,536	3,082	14,714	19,976
2006	4,135	92,128	17,694	19,326	16,406	5,491	2,998	13,513	19,159
2007	4,131	88,254	17,025	17,374	14,455	5,450	2,958	12,925	18,423

NA Not available. ¹ Without condensibles.

Source: U.S. Environmental Protection Agency, *National Emissions Inventory (NEI) Air Pollution Emissions Trends Data, 1970–2002*; <<http://www.epa.gov/ttn/chief/trends/index.html#tables>>; *Air and Radiation; Air Trends*; <<http://www.epa.gov/airtrends/index.html>>.

Table 363. Selected Air Pollutant Emissions by Pollutant and Source: 2007

[In thousands of tons, except as indicated (4,131 represents 4,131,000. See headnote, Table 362)]

Source	Ammonia	Carbon monoxide	Nitrogen oxide	PM-10	PM-2.5	Sulfur dioxide	Volatile organic compounds
Total emissions	4,131	88,254	17,025	17,374	5,450	12,925	18,423
Fuel combustion, stationary sources	65	5,304	6,000	1,359	1,034	11,255	1,626
Electric utilities	32	689	3,331	565	442	8,973	49
Industrial	16	1,253	1,941	329	172	1,705	141
Other fuel combustion	17	3,362	728	465	420	577	1,436
Industrial processes	215	3,828	1,034	1,459	745	1,057	7,262
Chemical and allied product manufacturing	23	284	70	40	30	258	238
Metals processing	3	986	69	79	52	213	46
Petroleum and related industries	3	356	346	23	17	232	580
Other	159	489	413	963	349	323	414
Solvent utilization	—	2	7	8	7	—	4,249
Storage and transport	1	118	19	58	22	5	1,354
Waste disposal and recycling	26	1,593	110	288	268	26	381
Highway vehicles	307	41,610	5,563	172	114	91	3,602
Off highway ¹	3	18,762	4,164	297	276	396	2,650
Miscellaneous ²	3,541	18,750	264	14,087	3,281	126	3283

— Rounds to zero. ¹ 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. ² 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: U.S. Environmental Protection Agency, *National Emissions Inventory (NEI) Air Pollution Emissions Trends Data; 1970–2002*; <<http://www.epa.gov/ttn/chief/trends/index.html#tables>>; *Air and Radiation; Air Trends*; <<http://www.epa.gov/airtrends/index.html>>.

Table 364. Emissions of Greenhouse Gases by Type and Source: 1990 to 2007

[In millions of metric tons (6,241.8 represents 6,241,800,000). Metric ton = 2,200 lbs. Emission estimates were mandated by Congress through Section 1605(a) of the Energy Policy Act of 1992 (Title XVI). Data shown below, by type and source, are measured in terms of their carbon dioxide equivalent]

Type and source	1990	2000	2003	2004	2005	2006	2007 ¹
CARBON DIOXIDE EQUIVALENT							
Total emissions	6,241.8	7,075.0	7,098.8	7,230.1	7,256.9	7,179.7	7,282.4
Carbon dioxide, total.....	5,021.4	5,892.6	5,938.7	6,023.9	6,032.3	5,945.8	6,021.8
From energy use by sector							
Residential	961.7	1,181.6	1,224.6	1,220.7	1,254.9	1,197.9	1,249.5
Commercial	787.5	1,015.2	1,027.1	1,042.3	1,060.2	1,043.0	1,087.4
Industrial	1,686.9	1,786.4	1,719.1	1,744.2	1,672.3	1,652.4	1,639.7
Transportation	1,582.6	1,872.6	1,897.2	1,958.9	1,988.0	2,013.4	2,014.4
Adjustments to energy ²	-82.4	-60.9	-28.3	-44.3	-46.5	-66.8	-74.2
Adjusted energy subtotal	4,936.3	5,794.8	5,839.7	5,921.9	5,928.9	5,839.9	5,916.7
Other sources	85.1	97.8	98.9	102.0	103.4	105.9	105.1
Methane	782.1	685.7	676.5	679.7	679.4	686.9	699.9
Energy sources	299.5	280.2	276.7	281.3	277.8	280.8	287.0
Agricultural sources.....	199.0	206.8	207.6	207.5	210.4	212.7	214.5
Waste management	280.6	195.5	189.3	188.0	188.6	190.8	195.7
Industrial processes	2.9	3.2	2.9	3.0	2.7	2.7	2.6
Nitrous oxide	336.0	344.6	334.6	361.5	370.8	375.7	383.9
Agricultural sources.....	251.2	254.1	250.1	275.4	281.2	285.5	292.4
Energy use	51.1	67.9	64.8	66.3	69.4	69.9	71.1
Industrial processes	28.8	16.7	13.7	13.7	14.0	14.0	14.0
Waste management	4.9	5.9	6.0	6.1	6.2	6.3	6.4
High-GWP gases ³	102.4	152.1	149.0	165.0	174.5	171.3	176.9

¹ 2007 preliminary data. ² Carbon dioxide (CO₂) emissions from U.S. Territories are added to the U.S. total, and CO₂ emissions from fuels used for international transport (both ocean-going vessels and airplanes), are subtracted to derive total U.S. greenhouse gas emissions. ³ High-global warming potential gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Table 365. Municipal Solid Waste Generation, Materials Recovery, Combustion With Energy Recovery, and Discards: 1980 to 2007

[In millions of tons (151.6 represents 151,600,000), 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	2000	2004	2005	2006	2007
Waste generated	151.6	205.2	239.1	249.8	250.4	254.2	254.1
Per person per day (lb.)	3.7	4.5	4.7	4.7	4.6	4.7	4.6
Total materials recovery	14.5	33.2	69.4	78.0	79.4	82.2	85.0
Per person per day (lb.)	0.4	0.7	1.4	1.5	1.5	1.5	1.5
Combustion with energy recovery	2.7	29.7	33.7	31.5	31.6	31.9	31.9
Per person per day (lb.)	0.1	0.7	0.7	0.6	0.6	0.6	0.6
Discards to landfill, other disposal	134.4	142.3	136.0	140.3	139.4	140.1	137.2
Per person per day (lb.)	3.2	3.1	2.6	2.6	2.6	2.6	2.5
PERCENT DISTRIBUTION OF GENERATION							
Percent of total generation	71.8	71.4	74.5	74.0	73.7	73.6	73.2
Paper and paperboard	36.4	35.4	36.7	34.6	33.9	33.6	32.7
Glass	10.0	6.4	5.3	5.2	5.3	5.3	5.3
Metals	10.2	8.1	7.9	8.0	8.0	8.1	8.2
Plastics	4.5	8.3	10.7	11.8	11.7	11.7	12.1
Rubber and leather	2.8	2.8	2.8	2.9	2.9	2.9	2.9
Textiles	1.7	2.8	3.9	4.4	4.5	4.7	4.7
Wood	4.6	6.0	5.5	5.6	5.6	5.5	5.6
Other	1.7	1.6	1.7	1.7	1.7	1.7	1.7
Total other waste	28.2	28.6	25.5	26.0	26.3	26.4	26.8
Food scraps	8.6	10.1	11.2	11.8	12.1	12.2	12.5
Yard trimmings	18.1	17.1	12.8	12.7	12.8	12.7	12.8
Miscellaneous organic wastes	1.5	1.4	1.5	1.5	1.5	1.5	1.5

Source: Franklin Associates, a Division of ERG, Prairie Village, KS, *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Prepared for the U.S. Environmental Protection Agency. See also <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

Table 366. Generation and Recovery of Selected Materials in Municipal Solid Waste: 1980 to 2007

[In millions of tons (151.6 represents 151,600,000), 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, construction and demolition wastes, sewage sludge, and junked autos and obsolete equipment wastes. Based on material-flows and construction estimating procedure and wet weight as generated]

Item and material	1980	1990	2000	2004	2005	2006	2007
Waste generated, total ¹	151.6	205.2	239.0	249.8	250.4	254.2	254.1
Paper and paperboard	55.2	72.7	87.7	86.5	84.8	83.4	83.0
Glass.	15.1	13.1	12.8	12.9	13.3	13.5	13.6
Metals: Ferrous	12.6	12.6	14.1	15.0	15.0	15.5	15.6
Aluminum	1.7	2.8	3.2	3.3	3.3	3.4	3.4
Other nonferrous	1.2	1.1	1.6	1.7	1.7	1.8	1.8
Plastics	6.8	17.1	25.5	29.5	29.2	29.8	30.7
Food scraps	13.0	20.8	26.8	29.4	30.2	31.0	31.7
Yard trimmings	27.5	35.0	30.5	31.8	32.1	32.4	32.6
Materials recovered, total ¹	14.5	33.2	69.3	78.0	79.4	82.2	85.0
Paper and paperboard	11.7	20.2	37.6	40.7	42.0	43.9	45.2
Glass.	0.8	2.6	2.9	2.7	2.8	2.9	3.2
Metals: Ferrous	0.4	2.2	4.7	5.2	5.0	5.3	5.3
Aluminum	0.3	1.0	0.9	0.7	0.7	0.7	0.7
Other nonferrous	0.5	0.7	1.1	1.2	1.2	1.2	1.2
Plastics	0.2	0.4	1.5	1.7	1.8	2.1	2.1
Food scraps	(Z)	(Z)	0.7	0.7	0.7	0.7	0.8
Yard trimmings.	(Z)	4.2	15.8	19.9	19.9	20.1	20.9
Percent of generation recovered, total ¹	9.6	16.2	29.0	31.2	31.7	32.3	33.4
Paper and paperboard	21.3	27.8	42.8	47.1	49.5	51.4	54.5
Glass.	5.0	20.1	22.6	21.2	21.0	21.3	23.7
Metals: Ferrous	2.9	17.6	33.2	34.4	33.6	33.9	33.8
Aluminum	17.9	35.9	26.9	21.6	20.7	20.3	21.8
Other nonferrous	46.6	66.4	66.3	69.6	69.0	69.3	69.3
Plastics	0.3	2.2	5.8	5.8	6.0	6.9	6.8
Food scraps	(Z)	(Z)	2.5	2.2	2.3	2.2	2.6
Yard trimmings	(Z)	12.0	51.7	62.4	61.9	62.0	64.1

Z Less than 5,000 tons or .05 percent.

¹ Includes products not shown separately.

Source: Franklin Associates, a Division of ERG, Prairie Village, KS, *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Prepared for the U.S. Environmental Protection Agency. See also <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

Table 367. Municipal Solid Waste—Generation, Recovery, and Discards by Selected Type of Product: 2007

[See headnote, Table 366]

Type of product	Generation (1,000 tons)	Recovery		Discards (1,000 tons)
		Products recovered (1,000 tons)	Percent of generation	
Paper and paperboard products ¹	83,010	45,240	54.5	37,760
Nondurable goods.	43,060	20,320	47.2	22,740
Newsprint.	7,840	6,160	78.6	1,680
Groundwood inserts.	3,140	2,380	75.8	760
Magazines	2,550	1,010	39.6	1,540
Office-type papers	6,000	4,310	71.8	1,690
Standard mail	5,910	2,380	40.3	3,530
Other commercial printing.	6,260	3,590	57.3	2,670
Containers and packaging	39,940	24,920	62.4	15,020
Corrugated boxes	31,230	22,990	73.6	8,240
Folding cartons	5,530	1,510	27.3	4,020
Glass products ¹	13,580	3,220	23.7	10,360
Containers and packaging	11,470	3,220	28.1	8,250
Beer and soft drink bottles	7,710	2,660	34.5	5,050
Wine and liquor bottles	1,670	250	15.0	1,420
Food and other bottles and jars	2,090	310	14.8	1,780
Metal products ¹	20,750	7,230	34.8	13,520
Ferrous	15,640	5,280	33.8	10,360
Aluminum.	3,350	730	21.8	2,620
Other nonferrous	1,760	1,220	69.3	540
Plastics ¹	30,730	2,090	6.8	28,640
Plastics in durable goods	10,420	500	4.8	9,920
Plastics in nondurable goods	6,680	(Z)	(Z)	6,680
Plastics in containers and packaging	13,630	1,590	11.7	12,040
Rubber and leather ¹	7,480	1,100	14.7	6,380
Rubber in tires	3,160	1,100	34.8	2,060

Z Less than 5,000 tons or .05 percent.

¹ Includes products not shown separately.

Source: Franklin Associates, a Division of ERG, Prairie Village, KS, *Municipal Solid Waste in the United States: 2007 Facts and Figures*. Prepared for the U.S. Environmental Protection Agency. See also <<http://www.epa.gov/osw/nonhaz/municipal/msw99.htm>>.

Table 368. Toxic Chemical Releases and Transfers by Media: 2002 to 2007

[In millions of pounds (4,747.2 represents 4,747,200,000), 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. The Pollution Prevention Act (PPA) of 1990 mandates collection of data on toxic chemicals that are treated on-site, recycled, and combusted for energy recovery. Owners and operators of facilities that are classified within North American Industrial Classification Code groups 31 through 33, 2121, 2122, 2211, 4246, 4247 and 562; have 10 or more full-time employees, and that manufacture, process, or otherwise use any listed toxic chemical in quantities greater than the established threshold in the course of a calendar year are covered and required to report. Includes all Persistent, Bioaccumulative, Toxic (PBT) chemicals and vanadium and vanadium compounds. Data for all the years have been revised]

Media	2002	2003	2004	2005	2006	2007
Total facilities reporting	25,108	24,533	24,317	23,965	23,300	21,966
Total on- and off-site disposal or other releases	4,747.2	4,446.4	4,245.7	4,356.0	4,309.3	4,086.2
On-site releases	4,261.6	3,960.5	3,730.8	3,821.5	3,773.0	3,538.0
Air emissions	1,614.4	1,584.9	1,542.4	1,513.3	1,409.4	1,311.6
Surface water discharges	243.4	230.7	247.7	251.9	245.2	232.0
Underground injection class I	206.5	207.2	210.3	211.5	199.8	187.6
Underground injection class II-V	20.5	22.0	27.7	20.2	20.1	21.5
RCRA subtitle C landfills	156.0	199.8	155.5	158.5	155.3	153.4
Other landfills	267.2	265.0	257.1	255.9	251.1	249.2
Land treatment/application farming	24.3	18.2	21.5	23.7	26.8	21.7
Surface impoundments	771.6	822.6	726.4	789.7	829.9	775.8
Other land disposal	957.8	610.2	542.1	596.9	635.4	585.2
Off-site releases	485.6	485.9	514.9	534.5	536.3	548.2
Total transfers offsite for further waste management	3,928.9	3,697.0	3,986.0	3,923.8	3,959.4	3,818.4
Transfers to recycling	2,021.5	1,903.0	2,066.1	2,075.7	2,155.1	2,105.1
Transfers to energy recovery	739.9	650.0	649.9	608.4	554.9	522.7
Transfers to treatment	264.1	279.1	326.8	337.3	329.3	280.0
Transfers to POTWs ²	304.0	269.8	259.4	263.4	258.3	243.1
Transfers to POTWs metal and metal compounds ²	2.0	1.9	1.7	1.8	1.8	1.9
Other off-site transfers	0.9	0.9	71.5	0.4	0.2	0.2
Transfers off-site for disposal or other releases	596.6	592.2	610.7	636.9	659.8	665.4
Total production-related waste managed	26,000.4	25,056.5	25,830.9	24,811.5	24,529.3	24,195.8
Recycled on-site	7,652.5	7,143.3	7,140.4	6,721.1	6,816.5	6,819.9
Recycled off-site	2,015.8	1,905.1	2,066.7	2,080.5	2,158.4	2,084.5
Energy recovery on-site	2,789.1	2,641.6	2,609.6	2,448.1	2,692.3	2,331.1
Energy recovery off-site	740.6	649.8	649.2	608.2	554.2	520.7
Treated on-site	7,355.7	7,616.2	8,445.0	7,908.8	7,290.0	7,678.9
Treated off-site	552.7	518.9	565.9	575.3	552.9	498.8
Quantity disposed or otherwise released of on- and off-site	4,894.1	4,581.7	4,354.2	4,469.5	4,464.9	4,261.8
Non-production-related waste managed	18.2	25.3	19.2	24.3	18.2	14.4

¹ RCRA = Resource Conservation and Recovery Act.² POTW (Publicly Owned Treatment Work) is a wastewater treatment facility that is owned by a state or municipality.

Table 369. Toxic Chemical Releases by Industry: 2007

[In millions of pounds (4,086.2 represents 4,086,200,000), except as indicated. See headnote, Table 368]

Industry	2002 NAICS ¹ code	Total on- and off-site releases	On-site release			Off-site releases/ transfers to disposal ²
			Total	Air emissions	Other surface impound- ments	
Total³	(X)	4,086.2	3,538.0	1,311.6	771.1	548.2
Coal mining	2121	13.4	13.4	0.5	0.1	(Z)
Metal mining	2122	1,154.8	1,152.4	3.3	598.6	2.4
Electric utilities	2211	1,008.4	926.4	637.6	127.3	82.0
Food/beverages/tobacco	311/312	150.7	140.7	47.2	0.2	9.9
Textiles	313/314	3.3	2.6	2.2	0.2	0.7
Apparel	315	(Z)	(Z)	(Z)	—	(Z)
Leather	316	1.3	0.4	0.3	—	0.9
Wood products	321	18.9	18.0	17.7	(Z)	0.9
Paper	322	197.8	190.7	151.1	3.8	7.2
Printing and publishing	323/51	13.0	12.7	12.6	—	0.3
Petroleum	324	72.6	66.4	41.6	(Z)	6.3
Chemicals	325	479.4	429.8	179.2	12.8	49.6
Plastics and rubber	326	50.6	43.0	42.3	(Z)	7.6
Stone/clay/glass	327	27.2	24.3	21.5	0.1	2.9
Cement	32731	10.8	10.6	8.5	0.1	0.2
Primary metals	331	487.4	194.6	45.0	25.7	292.8
Fabricated metals	332	56.3	29.9	27.8	(Z)	26.4
Machinery	333	8.7	4.8	4.7	—	3.9
Computers/electronic products	334	7.5	5.2	2.1	—	2.4
Electrical equipment	335	7.6	3.5	3.4	(Z)	4.1
Transportation equipment	336	52.9	43.1	42.1	(Z)	9.8
Furniture	337	10.3	10.2	10.2	—	0.1
Miscellaneous Manufacturing	339	7.2	3.8	3.8	—	3.4
Chemical wholesalers	4246	2.0	2.0	2.0	—	0.1
Petroleum bulk terminals	4247	2.6	2.3	2.3	(Z)	0.3
Hazardous waste	562	210.0	177.1	0.5	0.6	32.9
No codes ³	(X)	31.4	30.1	2.2	1.6	1.2

— Represents zero. X Not applicable. Z less than 50,000. ¹ North American Industry Classification System, see text, Section 12. ² Includes off-site disposal to underground injection for Class I wells, Class II to V wells, other surface impoundments, land releases, and other releases, not shown separately. ³ Includes industries with no specific industry identified.

Source: U.S. Environmental Protection Agency, 2007 TRI Public Data Release eReport. See also <<http://www.epa.gov/tri/tridata/tri07/index.htm>> (released 19 March 2009).

Table 370. Toxic Chemical Releases by State and Outlying Area: 2007

[In millions of pounds (4,086.2 represents 4,086,200,000). Based on reports filed as required by Section 313 of the EPCRA. See headnote, Table 368]

State and outlying area	Total on-and off-site releases	On-site release		Off-site releases/transfers to disposal	State and outlying area	Total on-and off-site releases	On-site release		Off-site releases/transfers to disposal
		Air emissions	Other surface impoundments				Air emissions	Other surface impoundments	
		Total ¹	Air emissions				Total ¹	Air emissions	
Total .	4,086.2	3,538.0	1,311.6	771.1	548.2	NH	4.0	3.9	3.8
U.S. total .	4,080.0	3,532.2	1,306.2	771.1	547.9	NJ	20.6	17.1	9.0
AL	113.5	89.7	47.2	15.8	23.8	NY	34.9	27.9	14.2
AK	584.7	584.4	1.4	253.2	0.3	NC	122.1	104.7	82.3
AZ	88.0	86.3	4.0	14.9	1.8	ND	22.1	13.7	4.5
AR	43.8	33.9	16.2	2.3	10.0	OH	274.4	220.8	115.1
CA	54.0	46.3	15.3	(Z)	7.7	OK	34.1	27.1	15.3
CO	24.4	19.1	2.9	3.9	5.4	OR	22.4	20.6	(Z)
CT	4.1	3.0	2.6	(Z)	1.1	PA	163.1	100.1	79.4
DE	17.4	10.3	6.9	(Z)	7.1	RI	0.5	0.2	0.2
DC	(Z)	(Z)	(Z)	(Z)	(Z)	SC	67.1	57.4	46.9
FL	120.5	113.3	61.4	14.8	7.1	SD	7.8	7.4	1.9
GA	117.2	114.2	83.3	16.6	3.0	TN	120.6	107.9	53.7
HI	3.0	2.9	2.3	—	0.2	TX	222.6	195.5	71.5
ID	68.4	67.4	4.2	13.1	1.0	UT	169.1	166.7	9.3
IL	114.3	90.9	40.7	7.2	23.4	VT	0.3	0.2	(Z)
IN	229.0	125.1	63.2	11.1	103.9	VA	67.9	63.3	40.2
IA	43.4	33.2	24.1	2.7	10.2	WA	28.4	26.1	8.9
KS	26.2	20.5	11.6	1.7	5.7	WV	85.7	68.9	53.3
KY	98.2	86.3	61.8	7.4	11.9	WI	46.3	26.7	19.9
LA	130.4	122.7	51.9	3.5	7.8	WY	15.5	14.4	2.2
ME	11.1	9.4	5.0	—	1.7				
MD	50.5	46.3	41.0	(Z)	4.3	American Samoa		(Z) (Z) (Z)	
MA	6.5	4.5	4.2	0.2	2.0	(Z) (Z) (Z)		— — —	
MI	96.2	66.7	49.4	6.5	29.6	Guam	0.3	0.2	0.1 (Z) (Z)
MN	28.1	25.2	11.3	2.5	2.8	Northern Marianas		(Z) (Z) (Z)	
MS	59.5	57.3	22.3	10.8	2.3	(Z) (Z) (Z)		(Z) (Z) (Z)	
MO	96.8	92.6	18.3	55.8	4.3	Puerto Rico		(Z) (Z) (Z)	
MT	48.3	46.5	3.9	13.4	1.8	U.S. Virgin Islands	5.2	4.8	4.8 —
NE	32.9	26.4	5.8	(Z)	6.5	(Z) (Z) (Z)		(Z) (Z) (Z)	
NV	221.5	219.0	1.4	136.5	2.5	(Z) (Z) (Z)		(Z) (Z) (Z)	

— Represents zero. Z Less than 50,000. ¹ Includes other types of release not shown separately.

Source: U.S. Environmental Protection Agency, Toxic Release Inventory (TRI) Program, 2007 TRI Public Data Release Report (released 19 March 2009). See <<http://www.epa.gov/tridata/tri07/index.htm>>.

Table 371. Hazardous Waste Sites on the National Priority List by State and Outlying Area: 2008

[As of December 31. 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 (CERCLA) of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986. For information on CERCLA and SARA, see also <<http://www.epa.gov/superfund/action/law/cercla.htm>>]

State and outlying area	Per-cent distribution				State and outlying area	Per-cent distribution					
	Total sites	Rank	Federal	Non-Federal		Total sites	Rank	Federal	Non-Federal		
Total United States	1,318	(X)	(X)	163	1,155	Nebraska	13	32	1.0	1	12
United States	1,301	(X)	(X)	161	1,140	Nevada	1	49	0.1	—	1
Alabama	15	26	1.2	3	12	New Hampshire	21	19	1.7	1	20
Alaska	5	45	0.4	5	—	New Jersey	116	1	9.3	8	108
Arizona	9	39	0.7	2	7	New Mexico	14	29	1.1	1	13
Arkansas	9	40	0.7	—	9	New York	86	4	6.9	4	82
California	97	2	7.8	24	73	North Carolina	32	13	2.6	2	30
Colorado	20	20	1.6	3	17	North Dakota	—	50	0.0	—	—
Connecticut	15	24	1.2	1	14	Ohio	40	10	3.2	5	35
Delaware	14	27	1.1	1	13	Oklahoma	9	42	0.7	1	8
District of Columbia	1	(X)	0.1	1	—	Oregon	12	36	1.0	2	10
Florida	52	6	4.2	6	46	Pennsylvania	96	3	7.7	6	90
Georgia	16	23	1.3	2	14	Rhode Island	12	37	1.0	2	10
Hawaii	3	46	0.2	2	1	South Carolina	26	17	2.1	2	24
Idaho	9	41	0.7	2	7	South Dakota	2	47	0.2	1	1
Illinois	49	7	3.9	5	44	Tennessee	14	30	1.1	4	10
Indiana	31	14	2.5	—	31	Texas	49	8	3.9	4	45
Iowa	12	33	1.0	1	11	Utah	19	22	1.5	4	15
Kansas	12	34	1.0	1	11	Vermont	11	38	0.9	—	11
Kentucky	14	28	1.1	1	13	Virginia	30	15	2.4	11	19
Louisiana	13	31	1.0	1	12	Washington	48	9	3.8	13	35
Maine	12	35	1.0	3	9	West Virginia	9	43	0.7	2	7
Maryland	19	21	1.5	10	9	Wisconsin	38	11	3.0	—	38
Massachusetts	32	12	2.6	6	26	Wyoming	2	48	0.2	1	1
Michigan	67	5	5.4	1	66	Guam	2	(X)	(X)	1	1
Minnesota	25	18	2.0	2	23	Puerto Rico	13	(X)	(X)	1	12
Mississippi	6	44	0.5	—	6	Virgin Islands	2	(X)	(X)	—	2
Missouri	29	16	2.3	3	26						
Montana	15	25	1.2	—	15						

— Represents zero. X Not applicable.

Source: U.S. Environmental Protection Agency, *Supplementary Materials: CERCLIS3/WasteLan Database* (published 6 July 2009). See also <<http://www.epa.gov/osw/inforesources/data/biennialreport/>>.

Table 372. Environmental Industry—Revenues and Employment by Industry Segment: 2000 to 2008

[218.7 represents \$218,700,000,000. Covers approximately 30,000 private and public companies engaged in revenue-generating environmental activities]

Industry segment	Revenue (bil. dol.)				Employment			
	2000	2005	2007	2008	2000	2005	2007	2008
Industry total.....	218.7	265.6	295.1	315.7	1,410,500	1,595,100	1,718,000	1,871,800
Analytical services ¹	1.8	1.8	1.9	1.9	20,200	20,000	20,000	21,100
Wastewater treatment works ²	28.7	35.6	39.2	40.8	118,800	141,100	153,200	164,200
Solid waste management ³	39.4	47.8	52.7	55.3	221,400	256,500	278,200	300,200
Hazardous waste management ⁴	8.2	8.7	9.1	9.2	44,800	45,000	45,600	45,900
Remediation/industrial services.....	10.1	11.0	12.1	12.7	100,200	96,600	103,100	111,100
Consulting and engineering.....	17.4	22.4	25.4	27.1	184,000	220,800	246,400	270,400
Water equipment and chemicals.....	19.8	24.8	27.6	28.7	130,500	153,000	166,100	179,800
Instrument manufacturing.....	3.8	4.8	5.5	5.9	30,200	35,500	39,200	43,300
Air pollution control equipment ⁵	19.0	18.8	18.3	18.0	129,600	123,400	118,900	113,900
Waste management equipment ⁶	10.0	10.1	10.8	11.2	75,500	72,900	75,400	78,500
Process and prevention technology.....	1.2	1.5	1.8	1.9	29,000	28,100	30,700	34,300
Water utilities ⁷	29.9	35.1	38.0	39.3	130,000	145,200	154,200	163,300
Resource recovery ⁸	16.0	21.0	25.1	32.0	127,000	156,600	171,900	204,900
Clean energy systems and power ⁹	13.4	22.3	27.7	31.7	69,300	100,400	115,100	140,900

¹ Covers environmental laboratory testing and services. ² Mostly revenues collected by municipal entities for sewage or wastewater plants. ³ Covers such activities as collection, transportation, transfer stations, disposal, landfill ownership and management for solid waste and recyclables. 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, majority in public sector. ⁸ Revenues generated from the sale of recovered metals, paper, plastic, etc. ⁹ Revenues generated from the sale of equipment & systems and electricity.

Source: Environmental Business International, Inc., San Diego, CA, *Environmental Business Journal*, monthly (copyright). See also <<http://www.ebiusa.com/>>.

Table 373. Threatened and Endangered Wildlife and Plant Species: 2009

[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	Mam-mals	Birds	Rep-tiles	Amphib-i ans	Fishes	Snails	Clams	Crusta-ceans	Insects	Arach-nids	Plants
Total listings	358	275	119	34	151	36	72	22	61	12	749
Endangered species, total . . .	325	254	79	22	85	25	64	19	51	12	601
United States	69	75	13	14	74	24	62	19	47	12	600
Foreign	256	179	66	8	11	1	2	—	4	—	1
Threatened species, total . . .	33	21	40	12	66	11	8	3	10	—	148
United States	13	15	24	11	65	11	8	3	10	—	146
Foreign	20	6	16	1	1	—	—	—	—	—	2

— Represents zero.

Source: U.S. Fish and Wildlife Service, *Endangered Species Bulletin*, bimonthly. See also <http://ecos.fws.gov/tess_public/Boxscore.do> (accessed 19 May 2009).

Table 374. Tornadoes, Floods, Tropical Storms, and Lightning: 1995 to 2007

Weather type	1995	1999	2000	2001	2002	2003	2004	2005	2006	2007
Tornadoes: ¹										
Number.....	1,235	1,343	1,071	1,216	941	1,376	1,819	1,264	1,103	1,098
Lives lost.....	30	94	41	40	55	54	35	38	67	81
Injuries.....	650	1,842	882	743	968	1,087	396	537	990	659
Property loss (mil. dol.) ..	411	1,990	424	630	801	1,263	537	422	752	1,408
Floods and flash floods:										
Lives lost.....	80	68	38	48	49	85	82	43	76	70
Injuries.....	57	301	47	277	88	65	128	38	23	51
Property loss (mil. dol.) ..	1,251	1,421	1,255	1,220	655	2,541	1,696	1,538	3,768	1,278
North Atlantic tropical storms and hurricanes ²	19	12	15	15	12	21	16	27	10	15
Direct deaths on U.S. mainland	17	19	—	24	51	14	34	1,016	—	1
Property loss in U.S. (bil. dol.)	5.9	4.2	8.1	5.2	1.1	1.9	18.9	93.0	2.4	38.8
Lightning:										
Deaths	85	46	51	44	51	44	32	38	48	45
Injuries	433	243	364	371	256	237	280	309	246	138

— Represents zero. ¹ Source: U.S. National Weather Service, <<http://www.spc.noaa.gov/climo/torn/monthlytornstats.html>>.

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 (NHC), Coral Gables, FL, unpublished data. For data on individual hurricanes, see the NHC Web site at <<http://www.nhc.noaa.gov/>>.

Source: Except as noted, U.S. National Oceanic and Atmospheric Administration (NOAA), National Weather Service (NWS), *Office of Climate, Water, and Weather Services, Natural Hazard Statistics*, monthly. See also NOAA Web site at <<http://www.nws.noaa.gov/om/hazstats.shtml>>.

Table 375. Major U.S. Weather Disasters: 2005 to 2008

[2.0 represents \$2,000,000,000. Covers only weather-related disasters costing \$1 billion or more]

Event	Description	Time period	Estimated cost ¹ (bil. dol.)	Deaths
2008 Widespread drought	Severe drought and heat caused agricultural losses in areas of the south and west. Record low lake levels also occurred in areas of the southeast. Includes states of CA, GA, NC, SC, TN, and TX.	Entire year 2008	Over \$2.0 bil	–
Hurricane Ike.	Category 2 hurricane makes landfall in Texas as the largest (in size) Atlantic hurricane on record, causing wind and considerable surge in coastal areas and significant flooding damage in AR, IL, IN, KY, LA, MO, OH, PA, and TX.	Sept. 2008	Over 27.0	82
Hurricane Gustav.	Category 2 hurricane makes landfall in Louisiana causing significant wind, storm surge, and flood damage in AL, AR, LA, and MS.	Sept. 2008	5.0	43
Hurricane Dolly	Category 2 hurricane makes landfall in southern Texas causing considerable wind and flood damage in TX and NM.	July 2008	Over 1.2	3
U.S. wildfires.	Drought conditions across numerous western, central, and southeastern states (15) caused thousands of wildfires that burned national acreage exceeding 5.2 million acres (mainly in the west).	Summer–Fall 2008	Over 2.0	16
Midwest flood	Heavy rainfall and flooding caused significant agricultural loss and property damage in seven states with Iowa being hardest hit with widespread rainfall totals ranging from 4 to 6 inches.	June 2008	Over 15.0	
Midwest/Mid-Atlantic storms	An outbreak of tornadoes and thunderstorms over the states of IA, IL, IN, KS, NE, MD, MI, MN, MO, OK, VA, WI, WV.	June 2008	Over 1.1	18
Midwest/Ohio Valley storms	Outbreak of tornadoes over the midwest/Ohio Valley region (IL, IN, IA, KS, MN, NE, OK, WY, and CO).	May 2008	Over 2.4	13
Southeast/Midwest tornadoes	Series of tornadoes and severe thunderstorms across the southeast and midwest states (AL, AR, IN, KY, MS, OH, TN, TX) with 87 tornadoes confirmed.	Feb. 2008	Over 1.0	57
Great Plains and Eastern Drought.	Severe drought with periods of extreme heat resulting in major reductions in crop yields, along with very low stream flows and lake levels.	Entire year 2007	5.0	(²)
Western Wildfires.	Continued drought conditions and high winds over much of the western U.S. resulting in numerous wildfires.	Summer–Fall 2007	Over 1.0	12
Spring Freeze	Widespread severe freeze over much of the east and midwest causing losses in fruit crops, field crops, and in the ornamental industry.	Apr. 2007	2.0	–
Severe storms and tornadoes	Flooding, hail, tornadoes, and severe thunderstorms across numerous eastern and southern states.	Apr. 2007	1.5	9
Freeze	Widespread agricultural freeze over a good portion of California destroying numerous agricultural crops.	Jan. 2007	1.4	1
Widespread drought	Rather severe drought affecting crops in states especially during the spring-summer, centered over the Great Plains region, with other areas affected across portions of the south and far west.	Spring–Summer 2006	Over 6.0	(²)
Severe storms and tornadoes	Outbreak of tornadoes over portions of the midwest and south during a week-long period.	March 2006	Over 1.0	10+
Numerous wildfires.	Wildfires mainly over the western half of the country, due to dry weather and high wind, burning nearly 10 million acres (new record for period since 1960).	Entire year 2006	Over 1.0	28+
Hurricane Wilma	Category 3 hurricane makes landfall in southwest Florida, causing considerable damage from major flooding and strong winds in southeast Florida.	Oct. 2005	Over 16.0	35
Hurricane Rita	Category 3 hurricane makes landfall on the Texas-Louisiana border coastal region, causing wind and surge damage along the coast and flood damage in FL, MS, LA, AR, and TX.	Sept. 2005	Over 16.0	119
Hurricane Katrina.	Category 3 hurricane makes landfall as a Category 1 near Miami, FL, and on the LA, MS coast, causing massive damage in addition to flood and wind in AL, FL, TN, KY, OH, and GA.	Aug. 2005	Over 125.0	1,300+
Hurricane Dennis	Category 3 hurricane makes landfall in western Florida causing wind and surge damage, also causing wind and flood damage to GA, MS, and TN.	July 2005	Over 2.0	12+
Midwest drought.	Midwest drought caused crop losses in AR, IL, IN, MO, OH, and WI.	Spring–Summer 2005	Over 1.0	–

– Represents zero. ¹ Represents actual dollar costs at the time of event and is not adjusted for inflation. ² Some deaths reported due to heat but not beyond typical annual averages.Source: U.S. National Oceanic and Atmospheric Administration, National Climatic Data Center, "Billion Dollar U.S. Weather Disasters, 1980–2008" (released 1 January 2009). See also <<http://www.ncdc.noaa.gov/oa/reports/billionz.html>>.

Table 376. Wildland Fires, Number and Acres: 1970 to 2008

[3,279 represents 3,279,000. There are three distinct types of wildland fires: wildfire, wildland fire use, and prescribed fire. Wildland fire is any nonstructure fire that occurs in the wildland]

Year	Total ¹		Year	Total ¹		State	Top states ranked by wildland acres burned					
							Wildland ¹	Prescribed ²				
	Fires (number)	Acres (1,000)		Fires (number)	Acres (1,000)		Fires (number)	Acres (1,000)	Fires (number)	Acres (1,000)		
1970...	121,736	3,279	1999	92,487	5,626	TX	16,713	1,570,586	35	15,315		
1975...	134,872	1,791	2000	92,250	7,393	CA	5,812	1,339,839	827	87,416		
1980...	234,892	5,261	2001	84,079	3,571	NM	1,207	487,652	106	71,930		
1985...	82,591	2,896	2002	73,457	7,185	OK	5,572	196,563	23	8,426		
1990...	66,481	4,622	2003	63,629	3,961	MT	1,424	166,842	299	36,820		
1994...	79,107	4,074	³ 2004	65,461	8,098	FL	2,939	156,102	432	402,967		
1995...	82,234	1,841	2005	66,753	8,689	WA	1,303	147,264	83	6,292		
1996...	96,363	6,066	2006	96,385	9,874	CO	1,133	141,966	184	43,048		
1997...	66,196	2,857	2007	85,705	9,328	OR	1,766	136,572	781	112,450		
1998...	81,043	1,330	2008	78,979	5,292	ID	997	116,796	511	57,365		

¹ Data are for wildland fires only. The data do not include wildland fire use and prescribed fires. ² Prescribed fire is any fire which are ignited by management action under certain predetermined conditions to meet specific objectives related to hazardous fuels or habitat improvement. ³ 2004 fires and acres do not include state lands for North Carolina.

Source National Interagency Coordination Center, "Wildland Fires and Acres (1960–2008)"; <http://www.nifc.gov/fire_info/fires_acres.htm> (accessed 23 February 2009).

Table 377. Highest and Lowest Temperatures by State Through 2003

State	Highest temperatures			Lowest temperatures		
	Station	Tempera-ture (F)	Date	Station	Tempera-ture (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	1 Jun. 27, 1915	Prospect Creek Camp . . .	-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	Coventry	-32	² Jan. 22, 1961
DE	Millsboro	110	Jul. 21, 1930	Millsboro	-17	Jan. 17, 1893
FL	Monticello	109	Jun. 29, 1931	Tallahassee	-2	Feb. 13, 1899
GA	Greenville	112	Aug. 20, 1983	CCC Camp F-16	-17	¹ 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	Congerville	-36	Jan. 5, 1999
IN	Collegeville	116	Jul. 14, 1936	New Whiteland	-36	Jan. 19, 1994
IA	Keokuk	118	Jul. 20, 1934	Elkader	-47	² Feb. 3, 1996
KS	Alton (near)	121	2 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	2 Jul. 10, 1911	Van Buren	-48	Jan. 19, 1925
MD	Cumberland & Frederick . . .	109	2 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	2 Jul. 6, 1936	Tower	-60	Feb. 2, 1996
MS	Holly Springs	115	Jul. 29, 1930	Corinth	-19	Jan. 30, 1966
MO	Warsaw & Union	118	2 Jul. 14, 1954	Warsaw	-40	Feb. 13, 1905
MT	Medicine Lake	117	Jul. 5, 1937	Rogers Pass	-70	Jan. 20, 1954
NE	Minden	118	2 Jul. 24, 1936	Oshkosh	-47	² Dec. 22, 1989
NV	Laughlin	125	2 Jun. 29, 1994	San Jacinto	-50	Jan. 8, 1937
NH	Nashua	106	Jul. 4, 1911	Mt. Washington	-47	Jan. 29, 1934
NJ	Runyon	110	Jul. 10, 1936	River Vale	-34	Jan. 5, 1904
NM	Waste Isolat Pilot Pit	122	Jun. 27, 1994	Gavilan	-50	² Feb. 1, 1951
NY	Troy	108	Jul. 22, 1926	Old Forge	-52	² Feb. 18, 1979
NC	Fayetteville	110	Aug. 21, 1983	Mit. Mitchell	-34	Jan. 21, 1985
ND	Steele	121	Jul. 6, 1936	Parshall	-60	Feb. 15, 1936
OH	Gallipolis (near)	113	2 Jul. 21, 1934	Milligan	-39	Feb. 10, 1899
OK	Tipton	120	2 Jun. 27, 1994	Watts	-27	² Jan. 18, 1930
OR	Pendleton	119	2 Aug. 10, 1898	Seneca	-54	² Feb. 10, 1933
PA	Phoenixville	111	2 Jul. 10, 1936	Smethport	-42	¹ Jan. 5, 1904
RI	Providence	104	Aug. 2, 1975	Greene	-25	Feb. 5, 1996
SC	Camden	111	2 Jun. 28, 1954	Caesars Head	-19	Jan. 21, 1985
SD	Gannvalley	120	Jul. 5, 1936	McIntosh	-58	Feb. 17, 1936
TN	Perryville	113	2 Aug. 9, 1930	Mountain City	-32	Dec. 30, 1917
TX	Monahans	120	2 Jun. 28, 1994	Seminole	-23	² 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	2 Aug. 5, 1961	Mazama & Winthrop . . .	-48	Dec. 30, 1968
WV	Martinsburg	112	2 Jul. 10, 1936	Lewisburg	-37	Dec. 30, 1917
WI	Wisconsin Dells	114	Jul. 13, 1936	Coudersport	-55	Feb. 4, 1996
WY	Basin	115	Aug. 8, 1983	Riverside R.S.	-66	Feb. 9, 1933

¹ Estimated. ² Also on earlier dates at the same or other places.Source: U.S. National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Services (NESDIS), National Climatic Data Center (NCDC), Temperature Extremes and Drought. See <<http://www.ncdc.noaa.gov/oa/climate/severeweather/temperatures.html>>.

**Table 378. Normal Daily Mean, Maximum, and Minimum Temperatures—
Selected Cities**

[In Fahrenheit degrees. Airport data except as noted. Based on standard 30-year period, 1971 through 2000]

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	50.1	81.5	66.8	60.7	91.2	77.4	39.5	71.8	56.2
AK	Juneau	25.7	56.8	41.5	30.6	64.3	47.6	20.7	49.2	35.3
AZ	Phoenix	54.2	92.8	72.9	65.0	104.2	84.5	43.4	81.4	61.1
AR	Little Rock	40.1	82.4	62.1	49.5	92.8	72.7	30.8	72.0	51.5
CA	Los Angeles	57.1	69.3	63.3	65.6	75.3	70.6	48.6	63.3	56.1
	Sacramento	46.3	75.4	61.1	53.8	92.4	73.7	38.8	58.3	48.4
	San Diego	57.8	70.9	64.4	65.8	75.8	70.8	49.7	65.9	58.1
	San Francisco	49.4	62.8	57.3	55.9	71.1	65.1	42.9	54.5	49.6
CO	Denver	29.2	73.4	50.1	43.2	88.0	64.2	15.2	58.7	35.8
CT	Hartford	25.7	73.7	50.2	34.1	84.9	60.5	17.2	62.4	40.0
DE	Wilmington	31.5	76.6	54.4	39.3	86.0	63.6	23.7	67.3	45.1
DC	Washington	34.9	79.2	57.5	42.5	88.3	66.4	27.3	70.1	48.6
FL	Jacksonville	53.1	81.6	68.0	64.2	90.8	78.4	41.9	72.4	57.6
	Miami	68.1	83.7	76.7	76.5	90.9	84.2	59.6	76.5	69.1
GA	Atlanta	42.7	80.0	62.2	51.9	89.4	72.0	33.5	70.6	52.3
HI	Honolulu	73.0	80.8	77.5	80.4	87.8	84.7	65.7	73.8	70.2
ID	Boise	30.2	74.7	52.0	36.7	89.2	62.6	23.6	60.3	41.3
IL	Chicago	22.0	73.3	49.1	29.6	83.5	58.3	14.3	63.2	39.8
	Peoria	22.5	75.1	50.8	30.7	85.7	60.7	14.3	64.6	40.9
IN	Indianapolis	26.5	75.4	52.5	34.5	85.6	62.3	18.5	65.2	42.7
IA	Des Moines	20.4	76.1	50.0	29.1	86.0	59.8	11.7	66.1	40.2
KS	Wichita	30.2	81.0	56.4	40.1	92.9	67.4	20.3	69.1	45.2
KY	Louisville	33.0	78.4	57.0	41.0	87.0	66.0	24.9	69.8	47.9
LA	New Orleans	52.6	82.7	68.8	61.8	91.1	78.0	43.4	74.2	59.6
ME	Portland	21.7	68.7	45.8	30.9	78.8	55.2	12.5	58.6	36.3
MD	Baltimore	32.3	76.5	54.6	41.2	87.2	65.1	23.5	65.8	44.2
MA	Boston	29.3	73.9	51.6	36.5	82.2	59.3	22.1	65.5	43.9
MI	Detroit	24.5	73.5	49.8	31.1	83.4	58.4	17.8	63.6	41.0
	Sault Ste. Marie	13.2	63.9	40.1	21.5	75.7	49.6	4.9	52.0	30.5
MN	Duluth	8.4	65.5	39.1	17.9	76.3	48.7	-1.2	54.6	29.3
	Minneapolis-St. Paul	13.1	73.2	45.4	21.9	83.3	54.7	4.3	63.0	35.9
MS	Jackson	45.0	81.4	64.1	55.1	91.4	75.0	35.0	71.4	53.2
MO	Kansas City	26.9	78.5	54.2	36.0	88.8	64.3	17.8	68.2	44.0
	St. Louis	29.6	80.2	56.3	37.9	89.8	65.7	21.2	70.6	46.9
MT	Great Falls	21.7	66.2	43.8	32.1	82.0	56.4	11.3	50.4	31.1
NE	Omaha	21.7	76.7	50.7	31.7	87.4	61.5	11.6	65.9	39.8
NV	Reno	33.6	71.3	51.3	45.5	91.2	67.4	21.8	51.4	35.2
NH	Concord	20.1	70.0	45.9	30.6	82.9	57.7	9.7	57.1	34.1
NJ	Atlantic City	32.1	75.3	53.5	41.4	85.1	63.6	22.8	65.4	43.3
NM	Albuquerque	35.7	78.5	56.8	47.6	92.3	70.4	23.8	64.7	43.2
NY	Albany	22.2	71.1	47.6	31.1	82.2	57.6	13.3	60.0	37.5
	Buffalo	24.5	70.8	48.0	31.1	79.6	55.9	17.8	62.1	39.9
	New York	32.1	76.5	54.6	38.0	84.2	61.7	26.2	68.8	47.5
NC	Charlotte	41.7	80.3	61.4	51.3	90.1	71.7	32.1	70.6	51.0
	Raleigh	39.7	78.8	59.6	49.8	89.1	70.6	29.6	68.5	48.6
ND	Bismarck	10.2	70.4	42.3	21.1	84.5	54.5	-0.6	56.4	30.1
OH	Cincinnati	29.7	76.3	54.2	38.0	86.4	64.0	21.3	66.1	44.3
	Cleveland	25.7	71.9	49.7	32.6	81.4	58.1	18.8	62.3	41.2
	Columbus	28.3	75.1	52.9	36.2	85.3	62.6	20.3	64.9	43.2
OK	Oklahoma City	36.7	82.0	60.1	47.1	93.1	71.1	26.2	70.8	49.2
OR	Portland	39.9	68.1	53.5	45.6	79.3	62.1	34.2	56.9	44.8
PA	Philadelphia	32.3	77.6	55.3	39.0	85.5	63.2	25.5	69.7	47.4
	Pittsburgh	27.5	72.6	51.0	35.1	82.7	60.4	19.9	62.4	41.5
RI	Providence	28.7	73.3	51.1	37.1	82.6	60.2	20.3	64.1	42.0
SC	Columbia	44.6	82.0	63.6	55.1	92.1	74.8	34.0	71.8	52.5
SD	Sioux Falls	14.0	73.0	45.1	25.2	85.6	57.2	2.9	60.3	33.0
TN	Memphis	39.9	82.5	62.4	48.6	92.1	72.1	31.3	72.9	52.5
	Nashville	36.8	79.1	58.9	45.6	88.7	69.0	27.9	69.5	48.8
TX	Dallas-Fort Worth	44.1	85.0	65.5	54.1	95.4	75.8	34.0	74.6	55.1
	El Paso	45.1	83.3	64.7	57.2	94.5	77.1	32.9	72.0	52.1
	Houston	51.8	83.6	68.8	62.3	93.6	79.4	41.2	73.5	58.2
UT	Salt Lake City	29.2	77.0	52.0	37.0	90.6	62.9	21.3	63.4	41.2
VT	Burlington	18.0	70.6	45.2	26.7	81.4	54.5	9.3	59.8	35.8
VA	Norfolk	40.1	79.1	59.6	47.8	86.8	67.8	32.3	71.4	51.4
	Richmond	36.4	77.9	57.6	45.3	87.5	67.8	27.6	68.3	47.4
WA	Seattle-Tacoma	40.9	65.3	52.3	45.8	75.3	59.8	35.9	55.3	44.8
	Spokane	27.3	68.6	47.3	32.8	82.5	57.4	21.7	54.6	37.2
WV	Charleston	33.4	73.9	54.5	42.6	84.9	65.4	24.2	62.9	43.5
WI	Milwaukee	20.7	72.0	47.5	28.0	81.1	55.9	13.4	62.9	39.2
WY	Cheyenne	25.9	67.7	45.0	37.1	81.9	57.6	14.8	53.4	32.3
PR	San Juan	76.6	82.2	79.9	82.4	87.4	85.5	70.8	76.9	74.2

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, National Environmental Satellite, Data, and Information Services (NESDIS), National Climatic Data Center (NCDC), Temperature Extremes and Drought, Weather/Climate events. See also <<http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmax.txt>> and <<http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmin.txt>> and <<http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmavg.txt>>.

Table 379. Highest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 2007]

State	Station	Length of record (years)		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual ¹
AL	Mobile	66	84	82	90	94	100	102	104	105	99	93	87	81	105	
AK	Juneau	63	57	57	61	74	82	86	90	84	73	61	56	54	90	
AZ	Phoenix	70	88	92	100	105	113	122	121	116	118	107	95	88	122	
AR	Little Rock	66	83	85	91	95	98	105	112	109	106	97	86	80	112	
CA	Los Angeles	72	91	92	95	102	97	104	97	98	110	106	101	94	110	
	Sacramento	57	70	76	88	95	105	115	114	110	108	104	87	72	115	
	San Diego	67	88	90	93	98	96	101	99	98	111	107	97	88	111	
	San Francisco	80	72	78	85	92	97	106	105	100	103	99	85	75	106	
	Denver	65	73	77	84	90	96	104	105	101	97	89	80	75	105	
CO	Hartford	53	72	73	89	96	99	100	102	102	99	91	81	76	102	
CT	Wilmington	60	75	78	86	94	96	100	102	101	100	91	85	75	102	
DC	Washington	66	79	82	89	95	99	101	104	105	101	94	86	79	105	
FL	Jacksonville	66	85	88	91	95	100	103	105	102	100	96	88	84	105	
GA	Miami	65	88	89	93	96	96	98	98	98	97	95	91	87	98	
HI	Atlanta	59	79	80	89	93	95	101	105	104	98	95	84	79	105	
ID	Honolulu	38	88	88	88	91	93	92	94	93	95	94	93	89	95	
IL	Boise	68	63	71	81	92	99	109	111	110	102	94	78	65	111	
IN	Chicago	49	65	72	88	91	93	104	104	101	99	91	78	71	104	
IA	Peoria	68	70	72	86	92	94	105	104	103	100	93	81	71	105	
KS	Indianapolis	68	71	76	85	89	93	102	104	102	100	91	81	74	104	
IA	Des Moines	68	67	73	91	93	98	103	105	108	101	95	81	69	108	
KY	Wichita	55	75	87	89	96	100	110	113	110	108	97	86	83	113	
LA	Louisville	60	77	77	86	91	95	102	106	105	104	93	84	76	106	
LA	New Orleans	61	83	85	89	92	96	100	101	102	101	94	87	84	102	
ME	Portland	67	67	64	88	85	94	98	99	103	95	88	74	71	103	
MD	Baltimore	57	75	79	89	94	98	101	104	105	100	94	83	77	105	
MA	Boston	56	69	70	89	94	95	100	102	102	100	90	79	76	102	
MI	Detroit	49	62	70	81	89	93	104	102	100	98	91	77	69	104	
MN	Sault Ste. Marie	67	45	49	75	85	89	93	97	98	95	81	67	62	98	
MN	Duluth	66	52	55	78	88	90	94	97	97	95	86	71	55	97	
MS	Minneapolis-St. Paul	69	58	61	83	95	97	102	105	102	98	90	77	68	105	
MO	Jackson	44	83	85	89	94	99	105	106	107	104	95	88	84	107	
MO	Kansas City	35	71	78	86	93	95	105	107	109	106	95	82	74	109	
MT	St. Louis	50	76	85	89	93	94	102	107	107	104	94	85	76	107	
MT	Great Falls	70	67	70	78	89	93	101	105	106	98	91	76	69	106	
NE	Omaha	71	69	78	89	97	99	105	114	110	104	96	83	72	114	
NV	Reno	66	71	75	83	89	97	103	108	105	101	91	77	70	108	
NH	Concord	66	69	67	89	95	97	98	102	101	98	90	80	73	102	
NJ	Atlantic City	64	78	75	87	94	99	106	104	103	99	90	84	77	106	
NM	Albuquerque	68	69	76	85	89	98	107	105	101	100	91	77	72	107	
NY	Albany	61	71	68	89	92	94	99	100	99	100	89	82	71	100	
NY	Buffalo	64	72	71	81	94	91	96	97	99	98	87	80	74	99	
NC	New York ²	139	72	75	86	96	99	101	106	104	102	94	84	75	106	
NC	Charlotte	68	79	81	90	93	100	103	103	104	104	98	85	80	104	
NC	Raleigh	63	80	84	92	95	97	104	105	105	104	98	88	81	105	
ND	Bismarck	68	63	69	81	93	98	111	112	109	105	95	79	65	112	
OH	Cincinnati	46	69	75	84	89	93	102	103	102	98	91	81	75	103	
OH	Cleveland	66	73	74	83	88	92	104	103	102	101	90	82	77	104	
OH	Columbus	68	74	75	85	89	94	102	100	101	100	91	80	76	102	
OK	Oklahoma City	54	80	92	93	100	104	105	110	110	108	96	87	86	110	
OR	Portland	67	66	71	80	90	100	102	107	107	105	92	73	65	107	
PA	Philadelphia	66	74	74	87	95	97	100	104	101	100	96	81	73	104	
RI	Pittsburgh	55	72	76	82	89	91	98	103	100	97	87	82	74	103	
SC	Providence	54	69	72	85	98	95	97	102	104	100	86	78	77	104	
SD	Columbia	60	84	84	91	94	101	107	107	107	101	101	90	83	107	
TN	Sioux Falls	62	66	70	87	94	100	110	108	108	104	94	81	63	110	
TN	Memphis	66	79	81	86	94	99	104	108	107	103	95	86	81	108	
TN	Nashville	68	78	84	86	91	97	106	107	106	105	94	84	79	107	
TX	Dallas-Fort Worth	54	88	95	96	101	103	113	110	109	111	102	89	89	113	
TX	El Paso	68	80	83	89	98	105	114	112	108	104	96	87	80	114	
UT	Houston	38	84	91	91	95	99	103	104	107	109	96	89	85	109	
UT	Salt Lake City	79	63	69	78	89	99	104	107	106	100	89	75	69	107	
VT	Burlington	64	66	62	84	91	93	100	100	101	98	85	75	67	101	
VA	Norfolk	59	80	82	88	97	100	101	103	104	99	95	86	80	104	
WA	Richmond	78	81	83	93	96	100	104	105	104	103	99	86	81	105	
WA	Seattle-Tacoma	63	64	70	78	85	93	96	100	99	98	89	74	64	100	
WV	Spokane	60	59	63	71	90	96	101	103	108	98	86	67	56	108	
WI	Charleston	60	79	79	89	94	93	98	104	104	102	93	85	80	104	
WI	Milwaukee	67	62	68	82	91	93	101	103	103	98	89	77	68	103	
WY	Cheyenne	72	66	71	74	83	91	100	100	96	95	83	75	69	100	
PR	San Juan	53	92	96	96	97	96	97	95	97	97	98	96	94	98	

- Represents zero. ¹ Represents the highest observed temperature in any month. ² City office data.

Table 380. Lowest Temperature of Record—Selected Cities

[In Fahrenheit degrees. Airport data, except as noted. For period of record through 2007]

State	Station	Length of record (years)		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual ¹
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual ¹		
AL	Mobile	66	3	11	21	32	43	49	60	59	42	30	22	8	3	
AK	Juneau	63	-22	-22	-15	6	25	31	36	27	23	11	-5	-21	-22	
AZ	Phoenix	70	17	22	25	32	40	50	61	60	47	34	25	22	17	
AR	Little Rock	66	-4	-5	11	28	40	46	54	52	37	29	17	-1	-5	
CA	Los Angeles	72	23	32	34	39	43	48	49	51	47	16	34	32	16	
	Sacramento	57	21	23	26	31	36	41	48	49	42	36	26	18	18	
	San Diego	67	29	36	39	41	48	51	55	57	51	43	38	34	29	
	San Francisco	80	24	25	30	31	36	41	43	42	38	34	25	20	20	
CO	Denver	65	-25	-30	-11	-2	22	30	43	41	17	3	-8	-25	-30	
CT	Hartford	53	-26	-21	-6	9	28	35	44	36	30	17	1	-14	-26	
DE	Wilmington	60	-14	-6	2	18	30	41	48	43	36	24	14	-7	-14	
DC	Washington	66	-5	4	11	24	34	47	54	49	39	29	16	1	-5	
FL	Jacksonville	66	7	19	23	31	45	47	61	59	48	36	21	11	7	
	Miami	65	30	32	32	46	53	60	69	68	68	51	39	30	30	
GA	Atlanta	59	-8	5	10	26	37	46	53	55	36	28	3	-8	-8	
HI	Honolulu	38	53	53	55	57	60	65	66	67	66	61	57	54	53	
ID	Boise	68	-17	-15	6	19	22	31	35	34	23	11	-3	-25	-25	
IL	Chicago	49	-27	-19	-8	7	24	36	40	41	28	17	1	-25	-27	
IN	Peoria	68	-25	-19	-10	14	25	39	47	41	26	19	-2	-23	-25	
IA	Indianapolis	68	-27	-21	-7	16	28	37	44	41	28	17	-2	-23	-27	
KS	Des Moines	68	-24	-26	-22	9	30	38	47	40	26	14	-4	-22	-26	
KY	Wichita	55	-12	-21	-2	15	31	43	51	48	31	18	1	-16	-21	
LA	Louisville	60	-22	-19	-1	22	31	42	50	46	33	23	-1	-15	-22	
	New Orleans	61	14	16	25	32	41	50	60	60	42	35	24	11	11	
ME	Portland	67	-26	-39	-21	8	23	33	40	33	23	15	3	-21	-39	
MD	Baltimore	57	-7	-3	6	20	32	40	50	45	35	25	13	-	-7	
MA	Boston	56	-12	-4	5	16	34	45	50	47	38	28	15	-7	-12	
MI	Detroit	49	-21	-15	-4	10	25	36	41	38	29	17	9	-10	-21	
MN	Sault Ste. Marie	67	-36	-35	-24	-2	18	26	36	29	25	16	-10	-31	-36	
	Duluth	66	-39	-39	-29	-5	17	27	35	32	22	8	-23	-34	-39	
MS	Minneapolis-St. Paul	69	-34	-32	-32	2	18	34	43	39	26	13	-17	-29	-34	
MO	Jackson	44	2	10	15	27	38	47	51	54	35	26	4	2	-	
	Kansas City	35	-17	-19	-10	12	30	42	51	43	31	17	1	-23	-23	
MT	St. Louis	50	-18	-12	-5	22	31	43	51	47	36	23	1	-16	-18	
	Great Falls	70	-37	-35	-29	-6	15	31	36	30	16	-11	-25	-43	-43	
NE	Omaha	71	-23	-21	-16	5	27	38	44	43	25	13	-9	-23	-23	
NV	Reno	66	-16	-16	-2	13	18	21	33	24	20	8	1	-16	-16	
NH	Concord	66	-33	-37	-16	8	21	30	35	29	21	10	-5	-22	-37	
NJ	Atlantic City	64	-10	-11	4	12	25	37	42	40	32	20	10	-7	-11	
NM	Albuquerque	68	-17	-5	8	19	16	40	52	50	37	21	-7	-7	-17	
NY	Albany	61	-28	-21	-21	10	26	36	40	34	24	16	5	-22	-28	
	Buffalo	64	-16	-20	-7	12	26	35	43	38	32	20	9	-10	-20	
NC	New York ²	139	-6	-15	3	12	32	44	52	50	39	28	5	-13	-15	
	Charlotte	68	-5	5	4	21	32	45	53	50	39	24	11	2	-	
	Raleigh	63	-9	-	11	23	31	38	48	46	37	19	11	4	-9	
ND	Bismarck	68	-44	-43	-31	-12	15	30	35	33	11	-10	-30	-43	-44	
OH	Cincinnati	46	-25	-11	-11	15	27	39	47	43	31	16	1	-20	-25	
	Cleveland	66	-20	-15	-5	10	25	31	41	38	32	19	3	-15	-20	
	Columbus	68	-22	-13	-6	14	25	35	43	39	31	20	5	-17	-22	
OK	Oklahoma City	54	-4	-3	3	20	37	47	53	51	36	11	-8	-8	-8	
OR	Portland	67	-2	-3	19	29	39	43	44	34	26	13	6	-3	-3	
PA	Philadelphia	66	-7	-4	7	19	28	44	51	44	35	25	15	1	-7	
	Pittsburgh	55	-22	-12	-1	14	26	34	42	39	31	16	-1	-12	-22	
RI	Providence	54	-13	-7	1	14	29	41	48	40	33	20	6	-10	-13	
SC	Columbia	60	-1	5	4	26	34	44	54	53	40	23	12	4	-1	
SD	Sioux Falls	62	-36	-31	-23	5	17	33	38	34	22	9	-17	-28	-36	
TN	Memphis	66	-4	-11	12	28	38	48	52	48	36	25	9	-13	-13	
	Nashville	68	-17	-13	2	23	34	42	51	47	36	26	-1	-10	-17	
TX	Dallas—Fort Worth	54	4	7	15	29	41	51	59	56	43	29	20	-1	-1	
	El Paso	68	-8	8	14	23	31	46	57	56	41	25	1	5	-8	
	Houston	38	12	3	22	31	44	52	62	60	48	29	19	7	3	
UT	Salt Lake City	79	-22	-30	2	14	25	35	40	37	27	16	-14	-21	-30	
VT	Burlington	64	-30	-30	-20	2	24	33	39	35	25	15	-2	-26	-30	
VA	Norfolk	59	-3	8	18	28	36	45	54	49	45	27	20	7	-3	
	Richmond	78	-12	-10	11	23	31	40	51	46	35	21	10	-1	-12	
WA	Seattle—Tacoma	63	-	1	11	29	28	38	43	44	35	28	6	6	-	
	Spokane	60	-22	-24	-7	17	24	33	37	35	22	7	-21	-25	-25	
WV	Charleston	60	-16	-12	-	19	26	33	46	41	34	17	6	-12	-16	
WI	Milwaukee	67	-26	-26	-10	12	21	33	40	44	28	18	-5	-20	-26	
WY	Cheyenne	72	-29	-34	-21	-8	16	25	38	36	8	-1	-16	-28	-34	
PR	San Juan	53	61	62	60	64	66	69	69	70	69	46	66	59	46	

— Represents zero. ¹ Represents the lowest observed temperature in any month. ² City office data.

Table 381. Normal Monthly and Annual Precipitation—Selected Cities

[In inches. Airport data, except as noted. The table data are the 30-year average values computed from the data recorded during the period 1971–2000]

State	Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
AL	Mobile	5.75	5.10	7.20	5.06	6.10	5.01	6.54	6.20	6.01	3.25	5.41	4.66	66.29
AK	Juneau	4.81	4.02	3.51	2.96	3.48	3.36	4.14	5.37	7.54	8.30	5.43	5.41	58.33
AZ	Phoenix	0.83	0.77	1.07	0.25	0.16	0.09	0.99	0.94	0.75	0.79	0.73	0.92	8.29
AR	Little Rock	3.61	3.33	4.88	5.47	5.05	3.95	3.31	2.93	3.71	4.25	5.73	4.71	50.93
CA	Los Angeles	2.98	3.11	2.40	0.63	0.24	0.08	0.03	0.14	0.26	0.36	1.13	1.79	13.15
	Sacramento	3.84	3.54	2.80	1.02	0.53	0.20	0.05	0.06	0.36	0.89	2.19	2.45	17.93
	San Diego	2.28	2.04	2.26	0.75	0.20	0.09	0.03	0.09	0.21	0.44	1.07	1.31	10.77
	San Francisco	4.45	4.01	3.26	1.17	0.38	0.11	0.03	0.07	0.20	1.04	2.49	2.89	20.11
CO	Denver	0.51	0.49	1.28	1.93	2.32	1.56	2.16	1.82	1.14	0.99	0.98	0.63	15.81
CT	Hartford	3.84	2.96	3.88	3.86	4.39	3.85	3.67	3.98	4.13	3.94	4.06	3.60	46.16
DE	Wilmington	3.43	2.81	3.97	3.39	4.15	3.59	4.28	3.51	4.01	3.08	3.19	3.40	42.81
DC	Washington	3.21	2.63	3.60	2.77	3.82	3.13	3.66	3.44	3.79	3.22	3.03	3.05	39.35
FL	Jacksonville	3.69	3.15	3.93	3.14	3.48	5.37	5.97	6.87	7.90	3.86	2.34	2.64	52.34
	Miami	1.88	2.07	2.56	3.36	5.52	8.54	5.79	8.63	8.38	6.19	3.43	2.18	58.53
GA	Atlanta	5.02	4.68	5.38	3.62	3.95	3.63	5.12	3.67	4.09	3.11	4.10	3.82	50.20
HI	Honolulu	2.73	2.35	1.89	1.11	0.78	0.43	0.50	0.46	0.74	2.18	2.26	2.85	18.29
ID	Boise	1.39	1.14	1.41	1.27	1.27	0.74	0.39	0.30	0.76	0.76	1.38	1.38	12.19
IL	Chicago	1.75	1.63	2.65	3.68	3.38	3.63	3.51	4.62	3.27	2.71	3.01	2.43	36.27
IN	Indianapolis	2.48	2.41	3.44	3.61	4.35	4.13	4.42	3.82	2.88	2.76	3.61	3.03	40.95
IA	Des Moines	1.03	1.19	2.21	3.58	4.25	4.57	4.18	4.51	3.15	2.62	2.10	1.33	34.72
KS	Wichita	0.84	1.02	2.71	2.57	4.16	4.25	3.31	2.94	2.96	2.45	1.82	1.35	30.38
KY	Louisville	3.28	3.25	4.41	3.91	4.88	3.76	4.30	3.41	3.05	2.79	3.80	3.69	44.54
LA	New Orleans	5.87	5.47	5.24	5.02	4.62	6.83	6.20	6.15	5.55	3.05	5.09	5.07	64.16
ME	Portland	4.09	3.14	4.14	4.26	3.82	3.28	3.32	3.05	3.37	4.40	4.72	4.24	45.83
MD	Baltimore	3.47	3.02	3.93	3.00	3.89	3.43	3.85	3.74	3.98	3.16	3.12	3.35	41.94
MA	Boston	3.92	3.30	3.85	3.60	3.24	3.22	3.06	3.37	3.47	3.79	3.98	3.73	42.53
MI	Detroit	1.91	1.88	2.52	3.05	3.05	3.55	3.16	3.10	3.27	2.23	2.66	2.51	32.89
	Sault Ste. Marie	2.64	1.60	2.41	2.57	2.50	3.00	3.14	3.47	3.71	3.32	3.40	2.91	34.67
MN	Duluth	1.12	0.83	1.69	2.09	2.95	4.25	4.20	4.22	4.13	2.46	2.12	0.94	31.00
	Minneapolis-St. Paul	1.04	0.79	1.86	2.31	3.24	4.34	4.04	4.05	2.69	2.11	1.94	1.00	29.41
MS	Jackson	5.67	4.50	5.74	5.98	4.86	3.82	4.69	3.66	3.23	3.42	5.04	5.34	55.95
MO	Kansas City	1.15	1.31	2.44	3.38	5.39	4.44	4.42	3.54	4.64	3.33	2.30	1.64	37.98
	St. Louis	2.14	2.28	3.60	3.69	4.11	3.76	3.90	2.98	2.96	2.76	3.71	2.86	38.75
MT	Great Falls	0.68	0.51	1.01	1.40	2.53	2.24	1.45	1.65	1.23	0.93	0.59	0.67	14.89
NE	Omaha	0.77	0.80	2.13	2.94	4.44	3.95	3.86	3.21	3.17	2.21	1.82	0.92	30.22
NV	Reno	1.06	1.06	0.86	0.35	0.62	0.47	0.24	0.27	0.45	0.42	0.80	0.88	7.48
NH	Concord	2.97	2.36	3.04	3.07	3.33	3.10	3.37	3.21	3.16	3.46	3.57	2.96	37.60
NJ	Atlantic City	3.60	2.85	4.06	3.45	3.38	2.66	3.86	4.32	3.14	2.86	3.26	3.15	40.59
NM	Albuquerque	0.49	0.44	0.61	0.50	0.60	0.65	1.27	1.73	1.07	1.00	0.62	0.49	9.47
NY	Albany	2.71	2.27	3.17	3.25	3.67	3.74	3.50	3.68	3.31	3.23	3.31	2.76	38.60
	Buffalo	3.16	2.42	2.99	3.04	3.35	3.82	3.14	3.87	3.84	3.19	3.92	3.80	40.54
NC	New York	4.13	3.15	4.37	4.28	4.69	3.84	4.62	4.22	4.23	3.85	4.36	3.95	49.69
	Charlotte	4.00	3.55	4.39	2.95	3.66	3.42	3.79	3.72	3.83	3.66	3.36	3.18	43.51
ND	Raleigh	4.02	3.47	4.03	2.80	3.79	3.42	4.29	3.78	4.26	3.18	2.97	3.04	43.05
	Bismarck	0.45	0.51	0.85	1.46	2.22	2.59	2.58	2.15	1.61	1.28	0.70	0.44	16.84
OH	Cincinnati	2.92	2.75	3.90	3.96	4.59	4.42	3.75	3.79	2.82	2.96	3.46	3.28	42.60
	Cleveland	2.48	2.29	2.94	3.37	3.50	3.89	3.52	3.69	3.77	2.73	3.38	3.14	38.71
OK	Oklahoma City	2.53	2.20	2.89	3.25	3.88	4.07	4.61	3.72	2.92	2.31	3.19	2.93	38.52
OR	Portland	5.07	4.18	3.71	2.64	2.38	1.59	0.72	0.93	1.65	2.88	5.61	5.71	37.07
PA	Philadelphia	3.52	2.74	3.81	3.49	3.88	3.29	4.39	3.82	3.88	2.75	3.16	3.31	42.05
	Pittsburgh	2.70	2.37	3.17	3.01	3.80	4.12	3.96	3.38	3.21	2.25	3.02	2.86	37.85
RI	Providence	4.37	3.45	4.43	4.16	3.66	3.38	3.17	3.90	3.70	3.69	4.40	4.14	46.45
SC	Columbia	4.66	3.84	4.59	2.98	3.17	4.99	5.54	5.41	3.94	2.89	2.88	3.38	48.27
SD	Sioux Falls	0.51	0.51	1.81	2.65	3.39	3.49	2.93	3.01	2.58	1.93	1.36	0.52	24.69
TN	Memphis	4.24	4.31	5.58	5.79	5.15	4.30	4.22	3.00	3.31	3.31	5.76	5.68	54.65
	Nashville	3.97	3.69	4.87	3.93	5.07	4.08	3.77	3.28	3.59	2.87	4.45	4.54	48.11
TX	Dallas-Fort Worth	1.90	2.37	3.06	3.20	5.15	3.23	2.12	2.03	2.42	4.11	2.57	2.57	34.73
	El Paso	0.45	0.39	0.26	0.23	0.38	0.87	1.49	1.75	1.61	0.81	0.42	0.77	9.43
UT	Houston	3.68	2.98	3.36	3.60	5.15	5.35	3.18	3.83	4.33	4.50	4.19	3.69	47.84
	Salt Lake City	1.37	1.33	1.91	2.02	2.09	0.77	0.72	0.76	1.33	1.57	1.40	1.23	16.50
VA	Burlington	2.22	1.67	2.32	2.88	3.32	3.43	3.97	4.01	3.83	3.12	3.06	2.22	36.05
	Norfolk	3.93	3.34	4.08	3.38	3.74	3.77	5.17	4.79	4.06	3.47	2.98	3.03	45.74
WA	Richmond	3.55	2.98	4.09	3.18	3.95	3.54	4.67	4.18	3.98	3.60	3.06	3.12	43.91
	Seattle-Tacoma	5.13	4.18	3.75	2.59	1.77	1.49	0.79	1.02	1.63	3.19	5.90	5.62	37.07
	Spokane	1.82	1.51	1.53	1.28	1.60	1.18	0.76	0.68	0.76	1.06	2.24	2.25	16.67
WV	Charleston	3.25	3.19	3.90	3.25	4.30	4.09	4.86	4.11	3.45	2.67	3.66	3.32	44.05
WI	Milwaukee	1.85	1.65	2.59	3.78	3.06	3.56	3.58	4.03	3.30	2.49	2.70	2.22	34.81
WY	Cheyenne	0.45	0.44	1.05	1.55	2.48	2.12	2.26	1.82	1.43	0.75	0.64	0.46	15.45
PR	San Juan	3.02	2.30	2.14	3.71	5.29	3.52	4.16	5.22	5.60	5.06	6.17	4.57	50.76

¹ City office data.

Source: U.S. National Oceanic and Atmospheric Administration, Comparative Climatic Data, annual. See also <<http://www.ncdc.noaa.gov/oa/climate/online/ccd/nrmpcp.txt>>.

**Table 382. Mean Number of Days With Precipitation of 0.01 Inch or More—
Selected Cities**

[0.01 is the smallest amount of precipitation numerically recorded, and includes the liquid water equivalent of frozen precipitation. Airport data, except as noted. For period of record through 2007]

State	Station	Length of recor (years)	Length of record (years)												Annual	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		
AL	Mobile	66	10	9	10	7	8	11	15	13	9	6	7	9	114	
AK	Juneau	63	18	16	18	16	16	15	17	17	21	19	21	21	217	
AZ	Phoenix	68	3	4	3	1	—	—	4	4	2	2	2	3	28	
AR	Little Rock	65	9	8	10	9	10	8	8	6	7	8	9	9	99	
CA	Los Angeles	72	6	6	5	3	1	—	—	1	1	1	2	3	33	
	Sacramento	68	10	8	8	5	2	1	1	1	1	1	3	7	56	
	San Diego	67	6	6	4	1	—	—	1	1	1	1	2	4	36	
CO	San Francisco	80	11	10	9	6	2	1	1	1	1	1	3	7	62	
CT	Denver	65	5	5	8	8	10	8	9	8	6	5	5	5	82	
DE	Hartford	53	11	10	11	11	12	11	9	9	9	8	10	11	122	
DC	Wilmington	60	10	9	10	10	11	10	9	8	8	7	9	9	110	
	Washington	66	10	8	10	9	11	9	9	8	7	7	8	9	105	
FL	Jacksonville	66	8	7	8	6	7	12	14	14	13	8	6	7	110	
	Miami	65	6	6	6	6	10	15	16	17	17	14	8	6	127	
GA	Atlanta	73	11	10	11	8	9	10	11	9	7	6	8	10	110	
HI	Honolulu	58	9	8	8	8	6	5	7	5	6	8	9	9	88	
ID	Boise	68	11	9	9	8	7	5	2	2	3	5	10	11	82	
IL	Chicago	49	10	9	12	12	11	10	9	9	8	9	10	10	119	
	Peoria	68	9	8	10	11	11	9	8	8	8	9	9	9	108	
IN	Indianapolis	68	11	10	12	12	12	10	9	8	7	8	10	11	120	
IA	Des Moines	68	7	7	9	10	11	10	9	9	8	7	7	7	101	
KS	Wichita	54	5	5	7	7	10	9	7	7	7	6	5	5	80	
KY	Louisville	60	11	10	12	11	11	10	10	8	7	7	10	11	118	
LA	New Orleans	59	9	8	8	6	7	11	14	13	9	6	7	9	107	
ME	Portland	67	11	9	11	11	12	11	9	9	8	9	11	11	122	
MD	Baltimore	57	10	8	10	10	11	9	9	9	7	7	8	9	107	
MA	Boston	56	11	10	11	11	11	10	9	9	9	8	9	10	120	
MI	Detroit	49	13	10	12	12	11	10	9	9	9	9	11	13	128	
	Sault Ste. Marie	66	18	14	12	11	11	11	10	10	13	14	17	19	160	
MN	Duluth	66	11	9	10	10	12	12	11	11	11	11	9	10	11	127
	Minneapolis-St. Paul	69	8	7	9	10	11	11	9	9	8	8	9	8	9	108
MS	Jackson	44	10	9	9	8	9	8	10	9	7	6	8	9	102	
MO	Kansas City	35	7	7	9	10	11	10	8	8	8	7	7	6	98	
	St. Louis	50	8	8	10	11	11	9	8	8	7	8	9	9	106	
MT	Great Falls	70	8	7	9	9	11	12	7	7	7	6	6	7	96	
NE	Omaha	71	6	6	8	9	11	10	9	9	8	6	5	6	93	
NV	Reno	65	6	6	6	4	4	3	2	2	2	4	5	6	47	
NH	Concord	66	10	9	11	11	12	11	10	9	9	9	11	10	122	
NJ	Atlantic City	64	10	9	10	11	10	8	9	8	7	7	9	9	107	
NM	Albuquerque	68	3	4	4	3	4	3	8	9	5	4	3	4	54	
NY	Albany	61	12	10	12	12	13	11	10	10	9	9	11	12	131	
	Buffalo	64	19	16	15	14	12	10	10	10	9	11	11	15	162	
	New York ¹	138	11	9	11	10	11	10	10	10	9	8	8	9	10	116
NC	Charlotte	68	10	9	10	8	9	9	11	9	7	6	7	9	104	
	Raleigh	63	10	9	10	9	10	9	11	10	10	7	7	8	9	109
ND	Bismarck	68	7	6	8	7	10	11	9	8	7	5	6	7	91	
OH	Cincinnati	60	12	11	12	12	11	10	10	9	7	8	10	12	124	
	Cleveland	66	16	14	15	14	13	10	10	9	9	11	14	16	151	
	Columbus	68	13	11	13	13	13	11	10	9	8	8	11	12	132	
OK	Oklahoma City	68	5	6	7	7	9	8	6	6	7	6	5	5	77	
OR	Portland	67	18	15	17	14	12	9	3	4	7	12	18	18	147	
PA	Philadelphia	67	10	9	10	10	11	10	9	9	8	7	9	10	112	
	Pittsburgh	55	16	13	15	13	12	11	10	9	9	10	12	15	145	
RI	Providence	54	11	9	11	11	11	10	8	9	8	8	10	11	117	
SC	Columbia	60	10	9	9	7	8	10	11	10	7	6	7	9	103	
SD	Sioux Falls	62	6	6	8	9	10	11	9	8	8	6	6	6	93	
TN	Memphis	57	10	9	10	9	9	8	8	7	7	6	8	9	100	
	Nashville	66	11	10	11	10	10	9	10	8	7	7	9	10	112	
TX	Dallas-Fort Worth	54	7	6	7	7	8	6	4	4	6	6	6	6	73	
	El Paso	68	3	3	2	1	2	3	7	7	5	4	2	3	42	
	Houston	38	10	8	9	6	8	9	9	9	8	7	8	9	100	
UT	Salt Lake City	79	10	8	9	9	8	5	4	5	5	6	8	9	86	
VA	Burlington	64	14	11	12	12	13	12	12	12	11	11	14	14	148	
	Norfolk	59	10	9	10	10	10	9	11	10	8	7	8	9	111	
	Richmond	70	10	9	10	9	10	9	11	9	8	7	8	9	109	
WA	Seattle-Tacoma	63	18	15	16	13	10	9	5	5	8	13	17	18	147	
	Spokane	60	14	11	11	9	9	7	4	4	5	7	12	14	107	
WV	Charleston	60	15	13	14	13	13	11	12	10	9	9	11	13	143	
WI	Milwaukee	67	11	9	11	12	11	10	9	9	8	9	10	10	119	
WY	Cheyenne	72	5	6	9	9	11	10	10	10	7	5	6	5	93	
PR	San Juan	52	17	13	12	13	15	15	19	18	17	17	18	19	193	

— Represents zero. ¹ City office data.

Table 383. Snow, Hail, Ice Pellets, and Sleet—Selected Cities

[In inches. Airport data, except as noted. For period of record through 2007. T denotes trace. Stations may show snowfall (hail) during the warm months]

State	Station	Length of record (years)	Length of record (years)													
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual	
AL	Mobile	65	0.1	0.1	0.1	T	T	—	T	—	—	—	T	0.1	0.4	
AK	Juneau	63	25.9	18.3	15.3	3.3	T	T	—	—	—	T	1.0	12.4	21.2	
AZ	Phoenix	62	T	—	T	T	T	—	—	—	—	T	—	T	—	
AR	Little Rock	56	2.4	1.5	0.5	T	T	T	—	—	—	T	0.2	0.6	5.2	
CA	Los Angeles	62	T	T	T	—	—	—	—	—	—	—	T	—	—	
	Sacramento	50	T	T	T	—	T	—	—	—	—	—	T	—	—	
	San Diego	60	T	—	T	T	—	—	—	—	—	—	T	T	—	
	San Francisco	69	—	T	T	—	—	—	—	—	—	—	—	—	—	
CO	Denver	63	8.1	7.4	12.3	8.7	1.6	—	T	T	1.6	3.8	8.9	7.9	60.3	
CT	Hartford	50	13.3	12.5	10.1	1.5	—	T	—	—	—	0.1	2.1	10.7	50.3	
DE	Wilmington	57	6.8	6.7	3.2	0.2	T	T	T	—	—	0.1	0.9	3.4	21.4	
DC	Washington	64	5.4	5.6	2.3	2.3	T	T	T	T	—	—	0.8	3.0	17.2	
FL	Jacksonville	60	T	—	—	T	—	T	T	—	—	—	—	—	—	
	Miami	59	—	—	—	T	—	—	—	—	—	—	—	—	—	
GA	Atlanta	68	1.0	0.5	0.4	T	—	—	T	—	—	T	T	0.2	2.1	
HI	Honolulu	52	—	—	—	—	—	—	—	—	—	—	—	—	—	
ID	Boise	68	6.3	3.6	1.7	0.6	0.1	T	T	T	T	0.1	2.3	5.6	20.4	
IL	Chicago	48	11.2	7.9	6.6	1.6	0.1	T	T	T	T	0.4	2.1	8.3	38.0	
	Peoria	64	6.5	5.1	4.2	0.8	T	T	T	T	T	0.1	2.1	6.3	25.0	
IN	Indianapolis	76	6.9	5.7	3.5	0.5	T	T	—	T	—	0.2	1.9	5.5	23.9	
IA	Des Moines	64	8.3	7.3	6.1	1.9	T	T	T	T	T	0.3	3.1	6.6	33.3	
KS	Wichita	54	4.0	4.1	2.7	0.2	T	T	T	T	T	—	1.4	3.6	15.9	
KY	Louisville	60	5.1	4.2	3.1	0.1	T	T	T	T	T	0.1	1.0	2.5	16.2	
LA	New Orleans	51	T	0.1	T	T	—	—	—	—	—	T	0.1	0.2	—	
ME	Portland	67	19.0	16.4	13.3	3.1	0.2	—	T	—	T	0.2	3.3	14.9	70.0	
MD	Baltimore	57	6.2	7.2	3.6	0.1	T	T	—	—	T	—	1.0	3.3	21.5	
MA	Boston	70	12.8	12.0	8.2	0.9	—	T	T	T	T	—	1.3	8.0	43.2	
MI	Detroit	49	10.9	9.1	6.8	1.9	T	—	—	—	T	0.2	2.5	10.0	41.4	
MN	Sault Ste. Marie	60	29.2	18.6	14.4	5.9	0.5	T	T	T	T	0.1	2.4	15.6	30.7	
	Duluth	64	17.9	12.4	14.0	6.8	0.7	T	T	T	T	0.1	1.6	12.6	15.6	
	Minneapolis-St. Paul	65	10.5	8.1	10.6	2.8	0.1	T	T	T	T	0.5	7.6	9.5	49.7	
MS	Jackson	38	0.5	0.2	0.2	T	—	—	—	T	—	—	T	0.1	1.0	
MO	Kansas City	73	5.4	4.4	3.4	0.8	T	T	T	T	T	0.1	1.3	4.5	19.8	
	St. Louis	71	5.3	4.5	3.7	0.5	T	T	—	—	T	—	1.4	4.1	19.4	
MT	Great Falls	70	9.2	8.6	10.7	7.0	1.9	0.3	T	0.1	1.5	3.5	7.6	8.0	58.3	
NE	Omaha	72	7.6	6.9	6.3	1.1	0.1	T	T	T	T	0.3	2.6	5.7	30.5	
NV	Reno	58	6.0	5.2	4.3	1.2	0.8	—	—	—	T	0.3	2.5	4.6	25.0	
NH	Concord	66	17.8	14.1	11.5	2.8	0.1	T	T	T	T	0.1	3.8	14.3	64.0	
NJ	Atlantic City	58	5.0	5.6	2.5	0.3	T	T	T	T	T	0.4	2.4	16.3	—	
NM	Albuquerque	68	2.5	2.1	1.8	0.6	T	T	T	T	T	0.1	1.2	3.0	11.3	
NY	Albany	61	17.0	13.6	11.7	2.8	0.1	T	T	T	T	0.2	4.0	14.7	63.8	
	Buffalo	64	24.3	17.9	12.4	3.2	0.2	T	T	T	T	0.7	11.0	24.0	93.7	
	New York ¹	139	7.7	8.7	5.1	0.9	T	—	T	T	T	—	T	0.9	5.6	
NC	Charlotte	68	2.2	1.8	1.2	T	T	—	—	—	T	0.1	0.5	5.8	—	
	Raleigh	63	2.8	2.6	1.3	T	T	T	T	T	—	—	0.1	0.8	7.6	
ND	Bismarck	68	7.7	6.9	8.4	4.0	0.9	T	T	T	0.2	1.9	6.7	7.0	43.8	
OH	Cincinnati	60	7.2	5.6	4.1	0.5	—	T	T	T	T	0.3	2.0	3.8	23.5	
	Cleveland	66	14.3	12.5	10.8	2.9	0.1	T	T	T	T	0.6	5.0	12.7	58.6	
	Columbus	60	8.8	6.2	4.5	1.0	T	T	T	T	T	0.1	2.2	5.4	28.1	
OK	Oklahoma City	68	3.2	2.4	1.5	T	T	—	T	T	T	T	0.6	1.9	9.6	
OR	Portland	55	3.2	1.1	0.4	T	—	T	T	T	T	—	0.4	1.4	6.5	
PA	Philadelphia	65	6.1	7.1	3.4	0.3	T	T	—	T	T	0.7	3.4	8.4	43.5	
	Pittsburgh	55	11.9	9.3	8.3	1.8	0.1	T	T	T	T	0.4	3.4	8.4	21.1	
RI	Providence	54	9.7	9.9	7.4	0.7	0.2	—	—	—	T	0.1	1.3	7.1	36.5	
SC	Columbia	59	0.6	0.8	0.2	T	T	—	T	T	T	—	T	0.3	1.9	
SD	Sioux Falls	62	6.9	8.0	9.3	3.1	T	T	T	T	T	0.9	6.0	7.0	41.0	
TN	Memphis	50	2.2	1.4	0.8	T	T	T	—	—	T	0.1	0.6	5.1	—	
	Nashville	61	3.7	3.0	1.5	—	—	T	—	T	—	0.4	1.4	10.0	—	
TX	Dallas-Fort Worth	49	1.1	1.0	0.2	T	T	—	—	—	T	0.1	0.2	2.6	—	
	El Paso	58	1.3	0.8	0.4	0.3	T	T	T	T	T	—	1.0	1.6	5.3	
	Houston	73	0.2	0.2	T	T	T	T	T	T	—	T	T	0.4	—	
UT	Salt Lake City	79	13.4	9.9	9.0	4.9	0.6	T	T	T	0.1	1.3	6.8	12.1	58.1	
VT	Burlington	64	19.4	16.6	13.9	4.2	0.2	—	T	T	T	0.2	6.6	18.7	79.0	
VA	Norfolk	57	3.0	2.9	1.0	—	T	T	—	T	—	—	1.0	7.9	—	
	Richmond	68	5.0	3.8	2.4	0.1	T	T	—	T	—	T	0.4	2.0	13.8	
WA	Seattle-Tacoma	52	4.9	1.6	1.3	0.1	T	—	T	—	T	—	1.1	2.4	11.4	
	Spokane	60	15.1	7.4	3.8	0.6	0.1	T	—	T	—	T	0.4	6.3	14.1	48.0
WV	Charleston	53	10.7	8.6	5.3	0.9	—	T	T	T	T	0.2	2.4	5.2	33.5	
WI	Milwaukee	67	13.9	9.4	8.2	2.0	0.1	T	T	T	T	0.2	3.0	10.7	47.0	
WY	Cheyenne	72	6.1	6.5	11.8	9.2	3.4	0.2	T	T	1.1	3.9	7.2	6.7	56.1	
PR	San Juan	52	—	—	—	—	—	—	—	T	—	—	—	—	—	

— Represents zero. ¹ City office data.

Table 384. Cloudiness, Average Wind Speed, Heating and Cooling Degree Days, and Average Relative Humidity—Selected Cities

[Airport data, except as noted. For period of record through 2006, except heating and cooling normals for period 1971–2000. M = morning. A = afternoon]

State	Station	Cloudiness—average percentage of days		Average wind speed (m.p.h.)			Heating degree days	Cooling degree days	Average relative humidity (percent)							
		Length of record (yr.)	Annual	Length of record (yr.)	Annual	Jan.			Length of record (yr.)	Annual	Jan.		July			
						Jan.	July			M	A	M	A	M	A	
AL	Mobile	47	72.1	58	8.8	10.1	6.9	1,667	2,548	44	87	64	82	66	89	67
AK	Juneau	47	87.9	61	8.2	8.0	7.5	8,574	—	40	80	70	78	75	79	67
AZ	Phoenix	57	42.3	61	6.2	5.3	7.1	1,040	4,355	46	49	23	63	31	42	19
AR	Little Rock	35	67.5	64	7.7	8.4	6.7	3,084	2,086	42	82	62	79	65	85	61
CA	Los Angeles	60	59.8	58	7.5	6.7	7.9	1,286	682	47	79	66	71	61	86	68
	Sacramento	49	48.5	56	7.8	6.9	8.9	2,666	1,248	20	83	46	91	70	76	29
	San Diego	55	60.0	66	7.0	6.0	7.5	1,063	866	46	77	63	72	58	82	67
	San Francisco	68	56.2	79	10.6	7.2	13.6	2,862	142	47	84	63	86	68	86	60
CO	Denver	61	68.5	50	8.7	8.7	8.3	6,128	695	38	67	40	63	48	67	33
CT	Hartford	41	77.5	52	8.4	8.9	7.3	6,104	759	47	77	53	72	57	78	51
DE	Wilmington	47	73.4	58	9.0	9.8	7.8	4,887	1,125	59	78	55	75	60	79	54
DC	Washington	48	73.8	58	9.4	10.0	8.3	3,999	1,560	46	75	54	70	55	76	53
FL	Jacksonville	47	74.2	57	7.8	8.1	7.0	1,353	2,636	70	89	56	87	57	88	58
	Miami	46	79.7	57	9.2	9.5	7.9	155	4,383	42	83	61	84	59	82	63
GA	Atlanta	61	69.9	68	9.1	10.4	7.7	2,827	1,810	46	82	56	78	58	87	59
HI	Honolulu	47	75.3	57	11.3	9.4	13.1	—	4,561	37	72	56	80	61	67	51
ID	Boise	56	67.1	67	8.7	7.9	8.4	5,809	769	67	69	43	80	70	53	21
IL	Chicago	37	77.0	48	10.3	11.6	8.4	6,493	835	48	80	64	77	70	81	61
IN	Indianapolis	64	76.0	58	9.6	10.9	7.5	5,521	1,042	47	82	66	79	72	85	65
IA	Des Moines	46	71.3	57	10.7	11.4	8.9	6,432	1,052	45	80	65	76	70	82	63
KS	Wichita	39	64.9	53	12.2	11.9	11.3	4,765	1,658	53	79	60	78	66	78	55
KY	Louisville	47	74.6	59	8.3	9.5	6.8	4,352	1,443	46	81	58	77	64	84	57
LA	New Orleans	47	72.3	58	8.2	9.3	6.1	1,417	2,776	58	87	67	84	69	90	69
ME	Portland	54	72.3	66	8.7	9.0	7.6	7,325	347	66	79	59	75	60	80	59
MD	Baltimore	45	71.2	56	8.8	9.3	7.6	4,634	1,220	53	78	54	72	57	80	53
MA	Boston	60	73.2	49	12.4	13.7	11.0	5,630	777	42	73	58	68	58	73	57
MI	Detroit	37	79.5	48	10.2	11.8	8.5	6,449	727	48	81	60	80	69	81	54
MN	Duluth	47	79.0	57	11.0	11.6	9.4	9,742	189	45	81	68	77	72	85	64
	Minneapolis-St. Paul	57	74.0	68	10.5	10.5	9.4	7,882	699	47	78	64	75	69	79	60
MS	Jackson	30	69.6	43	6.9	8.2	5.2	2,368	2,290	43	89	64	85	69	92	66
MO	Kansas City	23	67.1	34	10.6	11.1	9.2	5,249	1,325	34	80	66	76	68	83	66
	St. Louis	47	72.4	57	9.6	10.6	8.0	4,757	1,561	46	81	64	80	69	82	61
MT	Great Falls	57	78.4	65	12.5	14.8	10.0	7,675	326	45	68	45	66	61	67	30
NE	Omaha	49	69.6	70	10.5	10.9	8.8	6,312	1,095	42	81	65	78	69	83	64
NV	Reno	53	56.7	64	6.6	5.6	7.2	5,601	493	43	68	31	79	50	58	18
NH	Concord	54	75.3	64	6.7	7.2	5.7	7,485	442	41	81	53	76	58	83	51
NJ	Atlantic City	37	74.2	48	9.8	10.7	8.3	5,113	935	42	81	56	78	58	82	57
NM	Albuquerque	56	54.2	67	8.9	8.0	8.9	4,281	1,290	46	58	29	67	38	58	27
NY	Albany	57	81.1	68	8.9	9.8	7.5	6,861	544	41	80	58	77	63	80	55
	Buffalo	52	85.2	67	11.8	13.9	10.2	6,693	548	46	80	63	79	72	78	55
	New York ²	42	70.8	69	9.3	10.6	7.6	4,744	1,160	72	72	56	68	59	75	55
NC	Charlotte	49	70.2	57	7.4	7.8	6.6	3,208	1,644	46	82	53	77	55	86	56
	Raleigh	47	69.7	57	7.6	8.2	6.7	3,465	1,521	42	85	54	79	54	88	57
ND	Bismarck	56	74.5	67	10.2	10.0	9.2	8,809	471	47	80	62	76	71	83	55
OH	Cincinnati	44	77.8	59	9.0	10.4	7.2	5,200	1,053	44	82	60	79	68	85	57
	Cleveland	54	81.9	65	10.5	12.2	8.6	6,097	712	46	80	62	78	70	81	57
	Columbus	46	80.3	57	8.3	9.8	6.5	5,546	925	47	81	59	77	67	83	55
OK	Oklahoma City	44	61.9	58	12.2	12.5	10.9	3,663	1,907	41	79	61	77	63	79	57
OR	Portland	47	81.3	58	7.9	9.9	7.6	4,366	398	66	85	59	85	75	81	44
PA	Philadelphia	55	74.5	66	9.5	10.3	8.2	4,759	1,235	47	76	54	73	59	78	53
	Pittsburgh	43	83.8	54	9.0	10.4	7.3	5,829	726	46	80	58	77	76	83	54
RI	Providence	42	73.2	53	10.4	10.9	9.4	5,754	714	43	75	55	71	56	77	56
SC	Columbia	48	68.5	58	6.8	7.2	6.3	2,595	2,063	40	86	51	82	53	88	53
SD	Sioux Falls	50	71.2	58	11.0	10.9	9.8	7,746	757	43	82	66	78	71	83	61
TN	Memphis	43	67.7	58	8.8	10.0	7.5	3,033	2,190	67	80	60	77	65	83	61
	Nashville	54	72.0	65	8.0	9.1	6.5	3,658	1,656	41	82	63	78	76	87	63
TX	Dallas-Fort Worth	42	63.0	53	10.7	11.0	9.8	2,370	2,571	43	80	61	78	64	77	55
	El Paso	53	47.1	64	8.8	8.3	8.3	2,604	2,165	46	56	27	64	33	60	29
	Houston	26	75.3	37	7.6	8.1	6.6	1,525	2,893	37	89	67	84	69	91	65
UT	Salt Lake City	69	65.8	77	8.8	7.5	9.5	5,607	1,089	46	67	43	79	69	51	21
VT	Burlington	52	84.1	63	9.0	9.7	8.0	7,665	489	41	77	59	73	64	78	53
VA	Norfolk	47	71.0	58	10.5	11.4	8.9	3,342	1,630	58	78	58	74	59	81	59
	Richmond	50	72.7	58	7.7	8.1	6.9	3,878	1,466	72	83	53	79	56	84	56
WA	Seattle-Tacoma	51	84.2	58	8.8	9.5	8.1	4,797	173	47	84	62	82	74	82	49
	Spokane	48	76.4	59	8.9	8.7	8.6	6,820	394	47	78	52	86	79	64	27
WV	Charleston	47	82.2	59	5.8	6.9	4.8	5,427	1,064	59	84	57	78	63	90	59
WI	Milwaukee	55	75.3	66	11.5	12.6	9.7	7,096	616	46	79	67	76	70	81	65
WY	Cheyenne	60	71.0	49	12.9	15.1	10.4	7,289	280	47	65	44	57	50	69	37
PR	San Juan	40	80.0	51	8.3	8.3	9.6	—	5,426	51	79	65	82	64	79	67

— Represents zero. ¹ Percent of days that are either partly cloudy or cloudy. ² Airport data for sunshine.

Source: U.S. National Oceanic and Atmospheric Administration, *Comparative Climatic Data*, annual. See also <http://www.ncdc.noaa.gov/oa/climate/online/ccldpcdy.txt>; <http://www.ncdc.noaa.gov/oa/climate/online/cdd/wndspd.txt>; <http://www.ncdc.noaa.gov/oa/climate/online/ccr/nrmhmd.txt>; <http://www.ncdc.noaa.gov/oa/climate/online/cdd/nrmcd.txt>; and <http://www.ncdc.noaa.gov/oa/climate/online/ccd/relhum.txt>.